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Dear Friends,

This is my last edition as Editor of the Southwest Journal of Criminal Justice. Unfortunately, the demands of chairing a department with 900 undergraduates and 70 graduate students can be all-consuming. In an effort to make certain that the Journal receives the attention it so richly deserves, the SWACJ Board has appointed Lorie Rubenser to fill-in on an interim basis. I cannot think of anyone better to serve in this important role.

In An Examination of Guilt, Shame, Empathy, and Blaming Among a Sample of Incarcerated Male and Female Offenders, Jackson, Blackburn, Tobolowsky, and Baer explore the interesting connection between a correctional-based victim awareness program, Impact of Crime on Victim Course (ICVS), and its effect on the offender's emotion(s). The overall findings indicate that the ICVS did not have an impact on the offender's emotions; therefore, the findings will be of interest to other scholars, restorative justice proponents, and corrections administration as this topic is examined further.

In An Examination of Sexual Abuse and Suicide Ideation in Delinquent Females in the Texas Juvenile Justice System, Scott Belshaw explores the interesting connection between the race, age, sexual abuse, and family structure of female delinquents and suicide ideation. The findings indicate that: 1) white offenders are more likely to be suicidal than their non-white counterparts, 2) females who live with both parents are more likely to have suicidal thoughts than females who live with blended or extended family members, 3) females who have been sexually abused are more likely to have suicidal ideations than non-sexually abused females, and 4) as female delinquents age, the chances of becoming suicidal increase by 6%. These finding will be



of interest to juvenile justice administrators as they attempt to formulate preventative programs for at-risk female delinquents.

In Delivering Justice to the Mentally Ill: Characteristics of Mental Health Courts, Jim Mann explores the structure of the newly emerged mental health courts (MHC) whose goal is to address the unique needs of mentally ill offenders, which will prevent them from recidivating and returning to correctional custody.

In The Transition of a Texas County from "Dry" to "Wet" and a Comparison of DWI Arrest Rates Before and After, Scalen and Payne explored the interesting connection between the legalization of alcoholic beverages and DWI arrest rates. Scalen and Payne collected data from the Office of the County Attorney in Angelina County, TX on the number of DWI cases filed 24 months prior and after the legalization of alcoholic beverages.

In Major Determinants of Job Satisfaction Among Police Managers, Ercikti, Vito, Walsh, & Higgins explore the interesting connection between organizational and demographic variables and job satisfaction among police officers, specifically police managers. The findings indicate that organizational variables are better predictors of job satisfaction perceptions of police managers than demographic variables; therefore, the results will be of interest to police chiefs and police administration as they explore different avenues to increase job satisfaction among their staff.

In Medical Marijuana in the News, Vickovic and Fradella explore the interesting connection between the portrayal of medical marijuana in U.S. newspapers and the potential legal and policy implications derived from such portrayal. Overall, the findings indicate a positive portrayal of medical marijuana by newspapers, presidential administrations tend to have an impact on medical marijuana newspaper coverage, and coverage on the topic varies upon geographic region. The findings will be of interest to advocates of medical marijuana and policy makers.

Thank you for your continued support, and I am grateful for all of your over the last three years.

Regards,

Roger Enriquez, J.D.

Editor, Southwest Journal of Criminal Justice

An Examination of Guilt, Shame, Empathy and Blaming Among a Sample of Incarcerated Male and Female Offenders

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Abstract

This article examines the relationship among gender, guilt, shame, empathy and blaming among an incarcerated sample of male and female offenders who completed a correction-based Impact of Crime on Victims course (ICVC). A sample of 124 respondents (97 females and 27 males) completed pre- and post-test questionnaires assessing guilt, shame, empathy, victim- and society-blaming. Results overall indicate no significant gender differences among offenders'. Findings do indicate significant differences among violent and non-violent offenders on levels of shame and blaming and suggest that although gender-specific programs that address female issues are necessary, programs that address both criminogenic and non-criminogenic are needed.

Key Words: gender, offenders, guilt, shame, empathy, blaming

INTRODUCTION

Correction-based victim awareness programming has over the last two decades become a staple in prison rehabilitation. Although many versions of these programs exist, the most common and well known programs are victim impact panels (VIT), impact of crime on victim classes (ICVC), and Mothers Against Drunk Driving (MADD) (Gaboury & Ruth-Heffelbower,

2007). Having been heavily influenced by restorative justice principles (i.e., reparation and reintegration) (Braithwaite, 1989), these correction-based programs are viewed as necessary for increasing offenders' awareness of victims' experiences resulting from their victimization and for having a significant emotional impact on offender behavior, which is necessary for the reparation of harm (C' de'Baca et al., 2001; Jackson, 2009).

As noted by Jackson, Lucas, and Blackburn (2009), reparation of harm begins with the development of the emotion of guilt and a decrease in the emotion of shame (see also Hanson, 1996; Herbst, 2005; Jackson, 2008; Tangney et al., 1992; Weizmann-Henelius et al., 2002). Through the development of these emotions offenders may become more empathetic and may be more likely to accept responsibility for their societal transgressions and less likely to continue to blame the victim (Hanson, 1996; Herbst, 2005; Jackson, 2008; Jackson et al., 2009; Tangney et al., 1992; Weizmann-Henelius et al., 2002). Since these programs are touted as increasing offender sensitivity to victims (Gaboury & Ruth-Heffelbower, 2007; Van Ness, 2005) and as significant for having an "intense and emotional impact" on offenders (C' de'Baca et al., 2001, p. 615), the development of guilt, shame, empathy and the acceptance of responsibility then become underlying goals. However, despite the popularity of correction-based victim awareness programs and their success (although limited), they are not without their limitations.

First, critics have suggested that their curriculum emphasis has been primarily male-centered and therefore fails to account for issues that are uniquely female (Covington & Bloom, 2006). For example, many states have decided to implement correction-based programming statewide in their correctional facilities, but have not taken into consideration whether programs should be tailored based on gender. Research indicates that correctional programming should be gender-based because females, in particular, females with children, experience incarceration differently than their male counterparts; this would suggest that males and females are likely to respond to these programs differently (Hubbard & Matthews, 2008; Vanik, 2008).

Secondly, critics have argued that many of these correction-based programs take a "one-size-fits-all" approach to rehabilitation and run the risk of not appropriately classifying offenders based on criminogenic and non-criminogenic needs (Dowd & Andrews, 2000; Cauffman, 2008). The primary criticism is that violent offenders and non-violent offenders may not necessarily benefit from a broad correction-based program curriculum (Dowd & Andrews, 2000; Weizmann-Henelius et al., 2002). In fact, it has been suggested that violent offenders may need a more intensive and comprehensive rehabilitation curriculum because they are the least likely to develop empathy or remorse (Dowd & Andrews, 2000; Weizmann-Henelius et al., 2002).

Finally, with the exception of the work conducted by Jackson and colleagues (Jackson, 2009; Jackson, Lucas, & Blackburn, 2009), to our knowledge, currently there are no empirical examinations of correction-based programs impact on the development of emotions among offenders who participate in these programs. Although research consistently notes that the understanding of whether correction-based programs are having a significant impact on offender emotions is necessary, little has been done to empirically examine this research area. The research conduct by Jackson and colleagues on an incarcerated female sample, who were enrolled in a correction-based ICVC program, indicates that the programs are having some success at significantly impacting offender's level of guilt, shame, externalization, empathy, and

blaming. However, they conclude that future research should examine if there are significant gender differences among offenders who participate in correction-based ICVC programs.

The goal of the present study is to address these limitations, specifically those related to the “one-size-fits-all” approach that is currently used in the offering of ICVCs among incarcerated populations. It is important to determine whether gender and other factors impact an offender’s success in these programs. Using data from a sample of incarcerated male and female offenders who were enrolled in an ICVC, we empirically test whether females differ from males and violent offenders differ from non-violent offenders in their development of guilt, shame, empathy and subsequent decreases in their propensity to blame the victim or society.

FACTORS IMPACTING CORRECTIONAL PROGRAMMING

During the past 20 years, the correctional departments throughout the U.S. have experienced a significant increase in its female population. In 2006, the number of women in prison increased 4.5% reaching 112, 498 prisoners. This overall was greater than the male growth rate of 2.7% for 2006 and larger than the entire female annual growth rate of 2.9% from 2000 to 2005 (Sabol & Couture, 2008). Particularly disconcerting is that the crimes for which females are convicted are becoming more violent and in the wake of their incarceration are numerous children. In fact in a recent report, the number of children under the age of 18 with a mother in prison more than doubled since 1991, which is an increase of 131% in comparison to an increase of 77% among fathers in prison (Glaze & Maruschak, 2008).

Despite these daunting statistics and the clear gender demographic change in the prison system, correctional educational programming and intervention continues to remain male-centered. However, there has been a significant impetus (albeit slow) to develop more effective programming for female offenders. The major philosophy driving this change is the research currently being conducted on “gender-specific” or “gender-responsive” issues in correctional institutions (Bloom, Owen, & Covington, 2004; Hubbard & Matthews, 2008). Researchers argue that due to the specific and well defined gender differences among males and females, programmatic rehabilitation efforts that are accepted as adequate for male offenders may not be appropriate or effective for female offenders. It is further argued that due to gender differences, female’s rehabilitation experience in comparison to males is more likely to be impacted by their experience with violence and by their role as a mother. This is of particular interest since many correctional institutions are currently utilizing correction-based rehabilitation programs that place a significant amount of focus on cognitive-oriented programming designed to have an intense emotional (i.e., develop guilt, shame, and empathy) impact on offenders in order to change offender behavior (California Youth Authority, 2008; Gaboury & Ruth-Heffelbower, 2007; Hanson, 1996). However, without acknowledging the unique experiences of female offenders the impact of these programs may prove to be less than robust. As noted by Cahill (2001), a male-centered paradigm fails to consider the two unique things that make women different from men—their ability to have children and their experience with violence both as a victim and as a perpetrator.

Victimization and Violence

The role of children and violence in women’s lives significantly shapes their concerns about the soci-political environment in which they exist (Mackintosh, Myers, & Kennon,

2006; Poehlmann et al., 2008; Vainik, 2008). Women’s concerns about the safety, nurturing, and developing of their children have a significant impact on their ability to be successful in a male-centered structure. Further, since women under a male-centered paradigm are “rapable” and are constantly having to re-negotiate their safety with the males in their lives, their pathways to violence and trajectories after life-changing violent events both as a victim and perpetrator are uniquely different from males (Belknap, 2001; Cahill, 2001; Watterson, 1996). For example Snell and Morton (1994) noted that between 1986 and 1991, the number of violent women sentenced to prison increased from 8,045 to 12,400 despite their overall proportional decrease. Further, when examining the victims of violent females, over two-thirds of the victims were relatives, intimates or someone they knew. Women in prison for homicide were almost twice as likely to have killed a husband, ex-husband, or boyfriend. They were also more likely to have killed relatives (i.e., father, cousin or sibling). Juxtapose these statistics with the amount of physical and sexual abuse that females in prison have experienced throughout their lifetime, and then violence dispensed by women upon intimates and relatives becomes somewhat understandable. In comparison to men, women were more than three times more likely to indicate past physical abuse. For example, more than 4 in every 10 women incarcerated reported that they had been abused at least once prior to incarceration (Snell & Morton, 1994). Additionally, an “estimated 50% of women in prison who reported abuse said they had experienced abuse at the hands of an intimate, in comparison to 3% of men” (Snell & Morton, 1994, p. 6). These statistics highlight the underlying premise of Cahill’s argument that women are “rapable” and due to their vulnerability, much of their violence can be viewed as pre-emptive or defensive. Nonetheless, because of mandatory criminal justice policies and the United States “get tough” approach to crime and violence, women are receiving longer sentences than they have in the past. This outcome directly impacts their relationships with their children.

Children

Female offenders, specifically female offenders with children, experience incarceration differently than females without children and their male counterparts (Bloom et al., 2004; Watterson, 1996). Their experience is often shaped by the fact that they will more than likely lose custody of their children while incarcerated or their ability to visit with their children is severely limited or nonexistent (Vainik, 2008). In fact, “twenty-five states have termination of parental rights or adoptive statutes that are triggered once a custodial parent is incarcerated” (Vainik, 2008, p. 9). Although male offenders have children as well, they, unlike women, are typically not the primary parent upon incarceration. Glaze and Maruschak (2008) report that among parents in state prisons who lived with their children prior to incarceration, mothers were almost three times as likely to indicate that they were the primary caregivers to their children. Thus, upon incarceration, their concern for the whereabouts, safety, and placement of their children significantly impacts their incarceration experience, particularly their success in rehabilitative programming and their subsequent acceptance of responsibility for their crime. For example, Jackson and colleagues (2009) found in their study of female offenders enrolled in an ICVC class, that offenders with children were least likely to develop feelings of guilt, experienced more shame and were more likely to blame society for their incarceration. They concluded that in order for cognitive correction-based programs to be successful at changing offender behavior, particularly among women, there should be an increased emphasis on

developing the emotions of guilt and empathy among offenders and that these programs should also make their curriculums more gender-specific. This argument is also addressed by Bloom et al. (2004) who also stated that “at each stage in the criminal justice process, the differences between female and male offenders affect behavioral outcomes and the ability of the system to address the pathways to offending and thus achieve its goals” (p. 33). Although there are various caveats underlying these arguments (i.e., socialization and women’s focus on relationships) (see O’Leary & Wright, 1986), the two issues that are specifically highlighted are the impact of children on incarcerated women and their experience with violence.

In an attempt to address these programmatic shortcomings many correctional institutions are adopting “gender-neutral” correction-based programming (e.g., ICVC classes) that emphasizes a multi-prong curriculum designed to address both criminogenic and non-criminogenic issues among offenders. It should be noted that the gender issues are not intentionally being ignored by correctional program administrators, but due to the shortage of resources (time, money, personnel, and space) gender-neutral programs are currently the best option (Jackson et al., 2009). Therefore, the hope is that by utilizing a gender-neutral “one-size-fits all” approach, the program will eventually address some, if not all of the offenders’ needs (Cauffman et al., 2004). However, as pointed out by Bloom et al. (2004), “gender-neutral” or “genderless” multi-prong rehabilitation/intervention programs are still male-based and continue to ignore the issues that are uniquely female and thus ultimately fail to achieve the goal of having an intense emotional impact (i.e., the development of guilt, shame, and empathy) which is necessary for changing offender behavior.

CONCEPTUALIZING GUILT, SHAME, AND EMPATHY

It is well recognized in both academia and popular culture that males and females differ significantly in their experiences and development of guilt, shame, and empathy (Ferguson & Crowley, 1997a; Gray, 1993; Tangney & Dearing, 2000; Toussaint & Webb, 2005). Further, these emotions and how they affect males and females differently have been documented in the literature as being significantly correlated with victim-blaming (Jackson, 2008), forgiveness (Toussaint & Webb, 2005), recidivism (Hanson & Tangney, 1995), aggression (Cauffman et al., 2004; Lutwak, et al., 2001; Tangney et al., 1992), violence (McAlinden, 2005; O’Leary & Wright, 1986), victimization (Eisikovits & Enosh, 1997), and offender behavior (Cauffman et al., 2004). More specifically, current criminal justice research has recognized the emotions of guilt, shame, and empathy as pertinent to offender rehabilitation and reducing recidivism. For example, Hosser, Windzio, and Greve (2008) after interviewing 1,243 offenders from six prisons noted that feelings of guilt at the beginning of the prison term was significantly correlated with reduced recidivism, whereas feelings of shame were correlated with higher rates of recidivism. Prelog and colleagues (2009) using the Shame Guilt Reactivity Index (SGRI) examined the impact of shame on reducing recidivism and noted that although there were issues with construct validity, their results were promising and concluded that more research in this area should be conducted. Tangney and Dearing (2002) in a study examining guilt and shame noted that shame and guilt are significant predictors of crime and concluded that interventions targeting intense emotional development can help in reducing criminal behavior and recidivism. Berman (2004) examined a reasoning and rehabilitation program that evaluated the role of empathy on reducing recidivism and noted that offenders who completed

the program were also less likely to recidivate. As research indicates guilt, shame and empathy are significant variables for predicting and preventing crime and depending on which emotion guilt or shame offenders experience they may be more likely to persist or desist in criminal behavior. However, as noted by Jackson and colleagues (2008), these concepts are not easily defined. Therefore, the following sections are designed to conceptualize guilt, shame and empathy for the purposes of this study.

Guilt

The conceptualization of guilt has received varying amounts of attention from a variety of disciplines. Despite the various pedagogic approaches, all fields concur that guilt generates reparative behavior among individuals because of its internal focus. For example, researchers from the field of psychology have defined guilt as a response to the violation of internal norms (Harris, 2003; Tangney, 1991). When individuals are aware of their own personal norm violation, they are also more likely to make some attempt to repair the wrong (Leith & Baumeister, 1998; Tangney, 1991). As stated by Leith and Baumeister (1998), “Guilt stimulates people to counteract the bad consequences of their actions, for example, by confessing, by apologizing, or by making amends” (p. 3). Consequently, individuals who have the emotional response of guilt are more likely to emotionally relate to the victim (i.e., feel empathy) and are more likely to experience a need to repair the wrong (Tangney, 1991). In the process of generating reparative behavior, individuals are also more likely to accept responsibility for their actions and are less likely to ascribe their transgression on others.

Shame

Conversely, when individuals’ attention is externally focused, they are more likely to experience shame. Shame, unlike guilt, often forces individuals to run and hide or avoid situations that force them to confront their wrong-doings (Tangney, 1991). When individuals are shamed, they are more likely to experience feelings of failure and avoidance and develop other behaviors that may lead to further transgressions. Thus, “shame involves critical, painful scrutiny of the self as a whole, and the resultant distress may inhibit any simple or pragmatic effort to deal with the immediate situation” (Leith & Baumeister 1998, p. 3-4). Pattison (2000) concurs with the definition presented by Leith and Baumeister and provides a similar definition of shame:

Shame drastically limits or curtails the scope of concern, involvement and action with regard to other people.... [*shame*] focuses attention acutely upon the global self and its own self-consciousness, not upon particular acts or possible courses of action. It blocks out awareness of other people and their feelings and needs, except insofar as these impinge upon the self. It inhibits empathy because the self is too engaged in its own internal processes and particularly its own sense of feeling bad (p. 125-126).

Therefore, shame and shame-proneness are self-conscious, self-evaluative emotions that occur in a social context. Shame unlike guilt focuses on a global assessment of the self, while guilt concerns specific behaviors rather than the whole person. People experiencing shame feel less control over particular situations and will often engage in withdrawal behaviors. Shame

can also lead to other negative outcomes such as loss of self-efficacy, increased negative self-appraisal and loss of identity within social groups (Tangney, 1990, 1991, 1994; Tangney et al., 1992). These negative effects of shame can also cause the shamed individual to lose his or her ability to relate to or understand others' pain or hurt (i.e., empathy). Further, these negative feelings can be exacerbated, depending on the "degree or type" of shameful act committed (Greenspan, 1995). Shame-prone individuals, in particular those who have committed acts that are serious character violations (i.e., murder, rape, or assault) may be more apt to respond with an avoidance reaction (denial of victim or victim-blaming), in lieu of an empathic response. Consequently, shame is not likely to produce the pro-social and relationship-enhancing responses that are attributed to guilt.

Empathy

The concept of empathy along with guilt and shame has also been beset with issues regarding conceptualization and empirical measurement. For example, Davis (1983) points out that despite its common use in everyday language, empathy is not easily defined. Davis proposes four basic dimensions of empathy. The first dimension is fantasy in which, individuals are viewed as being able to transpose (imaginatively) themselves into feelings and actions of a fictional character. The second dimension is perspective taking, defined as the ability to place oneself into another's situation and comprehend his or her experiences. The third dimension is empathetic concern. From this perspective individuals are viewed as being concerned about the welfare of others and are able to share the pain of their adversity. The final dimension is personal distress, which is defined as the anxiety that one develops upon hearing or learning of the suffering or distress of another. Although Davis (1983) identified more than one type of empathy, many researchers have adopted the "perspective taking" dimension as a common definition of empathy (Leith & Baumeister, 1998). Following precedents, for the purposes of this study empathy will be defined as follows:

A shared emotional response between an observer and stimulus person, a response that requires three interrelated skills or capacities: (a) the cognitive ability to take another person's perspective, (b) the cognitive ability to discriminate or to accurately read cues regarding another person's particular emotional experience, and (c) the affective capacity to personally experience a range of emotions (because empathy involves the sharing of another's affective experience in one form or another). (Tangney 1991, p. 598)

Thus empathy would be described as deriving from the emotional feeling of guilt. Through guilt, the transgressor is able to self-reflect and empathize with the victim. This also allows the transgressor to understand his or her role in the causing of harm, which may reduce his or her chances of placing blame on the victim or society at large. Individuals who are guilt-prone are more likely to experience empathy and can begin to understand the true extent of the harm caused by their actions; they are also more likely to be motivated to take moral responsibility for their actions; whereas, individuals who are shame-prone are less empathetic and are also less likely to accept responsibility for their actions. Additionally, and as relates to the present study, the relationship among guilt, shame and empathy is enhanced by gender, children and type of crime committed (i.e., violent versus non-violent). It has been noted in the literature that

females in comparison to males are more likely to indicate higher levels of both guilt and shame and are more likely to be empathetic (Toussaint & Webb, 2005). It has also been identified in the literature that violent offenders are less likely to develop empathy and more likely to express increased levels of shame (Jackson, 2008; Weizmann-Henelius et al., 2002).

In summary, despite the debate over conceptualization, researchers continually suggest that in order to develop a thorough understanding of the impact of correction-based rehabilitation programs on offender behavior, empirical and theoretical examinations of the development of emotional responses (i.e., guilt, shame, and empathy) among offenders is necessary (Lutwak et al., 2001; Rojek, Coverdill, & Fors, 2003). Therefore, the primary research objective of this study is to examine a correction-based ICVC program to empirically test if offenders, after participating in the ICVC course experienced a significant emotional change. An additional goal is to evaluate if the relationship among guilt, shame, and empathy with victim-blaming is mediated or accounted for by gender, children and/or offender violence.

METHOD

ICVC Program

Beginning in 1999, the Missouri Department of Corrections implemented a victim education program, ICVC, based on a program developed by the California Youth Authority (California Youth Authority, 2008). The goals of the ICVC program are the following: (a) teach offenders about the effects of trauma victimization; (b) increase offenders' awareness of the negative impact of their crime on their victims and the community; (c) encourage offenders to accept responsibility for their harmful actions; (d) provide a forum for victims and victim service providers to educate offenders about their harmful behavior, with the hope of preventing a future re-offending; and (e) build linkages between criminal and juvenile justice agencies¹. Underlying these goals is an attempt to have an intense emotional impact on participating offenders and to encourage offenders to accept responsibility for their transgression and to decrease their propensity to blame others for their anti-social behavior (Stutz, 1994). ICVCs are currently conducted among incarcerated offenders and offenders sentenced to the various forms of community corrections. The target audiences of ICVCs in the community are young adult felony offenders and offenders who have demonstrated a need for this type of program who are on probation or parole or soon to be released from prison.

The court and community corrections officers select offenders for the classes primarily through referrals. Classes held in the community are taught by corrections staff or private vendors; whereas classes held in institutions are taught by inmate facilitators or correctional staff. Classes vary on meeting times depending on whether the program is community-based, institutionalized, in a male or female facility, or available resources. During the class and consistent with curriculum guidelines, several crime-related issues are addressed: property offenses, drugs and society, domestic violence, child maltreatment, assault, sexual assault, drunk driving, robbery, and homicide. The material is presented by the use of text, videotaped victim stories, and guest victim speakers. When guest victim speakers participate, the program

1. Only the goals of the ICVC program are identified in this study because other studies have thoroughly described the Missouri Department of Corrections ICVC program. For a full description of the ICVC program utilized by the Missouri Department of Corrections, see Jackson and Bonacker (2006), Jackson (2008) and Jackson et al. (2009).

resembles the *Victims as Leaders* model, which allows for victims' voices to be represented through other victims or victim advocate groups without the victims and the offenders meeting face-to-face. This model has been described as giving victims' voices authenticity and allows victims the opportunity to have a significant impact on offender's behavior and on the dialogue of healing (Shaheed, 2006).

Participants

Data for this study was collected from adult females incarcerated in the Women's Eastern Reception and Diagnostic Center (WERDC) in Vandalia, Missouri over a period of six months (August 2006 through January 2007) and a sample of adult males incarcerated in the Eastern Reception and Diagnostic Correctional Center (ERDCC) in Bonne Terre, Missouri over a period of twelve months (March 2007 through March 2008). The women and men participating in this program were all due to be released within 120 days. During this time, WERDC conducted four separate one-week ICVC courses serving approximately 240 female offenders or 60 female offenders per one-week class. ERDCC conducted five separate four-week courses serving approximately 125 male offenders or 25 male offenders per four-week class. These study sites were selected because of their proximity and the availability of ICVC classes provided for the offender population².

The participants' offenses consisted of a range of deviant behavior: manslaughter, burglary, driving under the influence (DUI), drug violations, robbery, assault, fraud, leaving the scene of an accident, and tampering with a motor vehicle. The initial sample consisted of 163 offenders out of the 365 possible participants (125 males and 240 females) who were in the ICVC classes. Due to program attrition, the final sample consisted of 124 respondents (97 females and 27 males) who completed the survey at both pre- and post-test, which equates to an overall response rate of 33.9%. The overall attrition rate for the sample was approximately 24%. This attrition rate within the sample can be attributed to violations, administrative segregation, or failure to complete the class through non-participation (for an overall description of population demographics by gender and pre- and post-test see Table 1).

Current Focus

The primary research objective is to examine a correction-based victim awareness program—impact of crime on victims class (ICVC) to empirically test if participants experienced a significant emotional change. A secondary goal is to explore if offenders' level of guilt, shame, and empathy significantly influences their propensity to blame others. A third goal is to examine if females differ from males and violent offenders differ from non-violent offenders in their development of guilt, shame, empathy, and blaming. A final goal is to examine if offenders' (children vs. no children, male vs. female and violent vs. nonviolent) level of guilt, shame, or empathy significantly influences their propensity to blame the victim or society. Specifically, we addressed the following questions: (a) Is there a significant difference in offenders' pre- and post-test scores on guilt, shame, empathy, and blaming?; (b) Do guilt,

2. The Missouri Department of Corrections was responsible for the funding of this ICVC program. Offenders were encouraged to enroll in the program prior to release on a first-come first-served basis. If the program became a stipulation of the offender's probation and the offender had not completed the ICVC program while incarcerated, the cost would be the responsibility of the offender. The cost for the ICVC program ranges from \$300 to \$400.

shame, and empathy yield different estimates of blaming?; (c) Is this difference attributable to gender, violence, or children?; and (d) Do children, violence, and/or gender mediate or account for the influence of guilt, shame and empathy on blaming?

Administration of Instrument

The surveys for the ICVC participants were administered in person by the first author who visited both the men's and women's facilities after approval had been obtained from the appropriate Missouri State officials. Prior to taking the survey, all participants were informed that their participation was voluntary and that they could choose not to complete the survey or refuse to answer any specific questions. Participants at the beginning of the ICVC class (pre-test) received a booklet that included an informed consent form and a cover sheet with written instructions for completing the survey. ICVC participants were re-tested (post-test) following completion of the class. All survey data were numerically coded by using the last four digits of the offender's social security number to ensure that the offender's pre- and post-test surveys matched.

Measures

Independent Variable(s)

Test of Self-Conscious Affect for Socially Deviant (TOSCA-SD). The TOSCA-SD³ is a revision of the adult TOSCA developed for use with incarcerated respondents, as well as individuals from other "socially deviant" groups (Hanson & Tangney, 1995). Although there is some debate about whether the TOSCA is an appropriate measure of guilt and shame, Tangney (1991) concluded that scenario-based measures (such as the TOSCA) are nevertheless adequate measures of guilt and shame proneness (see also Ferguson & Crowley, 1997b). Like the TOSCA, TOSCA-SD employs a scenario-based approach to assess individual differences in shame-proneness and guilt-proneness. The TOSCA-SD consists of 13 scenarios designed primarily to assess the respondent's shame and guilt reactions to each situation. Each scenario is followed by several alternative responses representing brief phenomenological descriptions of shame, guilt, and defensive responses with respect to the specific scenario. Rather than relying on the often misused terms "shame" and "guilt," these TOSCA-SD items represent brief phenomenological descriptions of a shame or guilt experience, as defined in the theoretical, phenomenological, and empirical literatures (Lutwak et al., 2001; Tangney & Dearing, 2002). Respondents were asked to rate on a 4-point Likert scale (1= very likely to 4= very unlikely), their likelihood of responding in each manner indicated, allowing for the possibility that feelings of shame and guilt may co-occur in connection with a given situation. The TOSCA has been shown to have acceptable internal consistency (alpha = .76 and .66 for shame and guilt, respectively) (Tangney et al., 1992) and the TOSCA shame and guilt scales have been shown to be correlated in previous studies ($r = .44$) (Tangney, 1990; 1991). TOSCA shame-proneness scores, but not guilt-proneness scores, have been related to a range of psychopathologies (Tangney, 1990, 1991). In a study by Jackson and Bonacker (2006) examining guilt, shame, and empathy development among victim impact training participants, TOSCA-SD reliabilities for the shame (negative self-appraisal and behavioral avoidance) and guilt measures were .89, .81, and .74 respectively. The reliability scores for this study on shame sub-scales (negative self-appraisal and behavioral avoidance) and guilt were .64 for negative-self appraisal, and .63 for behavioral avoidance and .85 for guilt.

3. For a complete copy of the TOSCA-SD and its coding sheet see Tangney and Dearing (2002).

Mehrabian Emotional Empathy Scale. Mehrabian Emotional Empathy Scale (MEES) is a measure of general empathy (Mehrabian & Epstein, 1972). It contains 33 statements that respondents are required to rate in a range +4 (very strong agreement) to -4 (very strong disagreement). In developing this scale, Mehrabian and Epstein (1972) selected only items that did not correlate with the Marlowe Crowne Social Desirability Scale (Crowne & Marlowe, 1960), so as to ensure the scale was not confounded by social desirability. The MEES has been used in previous research on rapists and sex offenders (Tierney & McCabe, 2001) and has demonstrated a reliability alpha of .84. Due to its length, Jackson (2008) when examining guilt, shame, and empathy among a sample of incarcerated females, modified the MEES from the original 33-items to a scale of 22-items. The modified MEES utilized in his study demonstrated a reliability alpha of .78. Therefore, the same modified MEES scale used to measure empathy in Jackson (2008) was utilized with this sample. The modified scale in this sample consists of 22 items from the original MEES (12 negative and 10 positive)⁴ and, unlike the original MEES which was measured on a scale ranging from +4 (very strong agreement) to -4 (very strong disagreement), the scale for this study was modified and measured on a 4-point Likert scale of 1 (very unlikely) to 4 (very likely) of which the negative empathy response items were reverse-scored. Despite the changes, the scale still utilizes the primary questions of each dimension from the multidimensional construct (see Jackson (2008) for survey constructs). Cronbach's alpha for the empathy scale for the current sample is .54, which is considerably lower than previous studies using the modified MEES. Due to its theoretical importance, it will remain in the final analysis⁵.

Offender Violence. Offender violence was defined as homicide or as some other violent crime, which included attempted homicide, assault, robbery, kidnapping, or any crime that resulted in physical harm of another person (for precedent see Weizmann-Henelius et al., 2002). Offenders were originally asked an open-ended question about the type of offense that they had committed in order to be placed in prison (i.e., "What offense did you commit to be placed in prison?"). The responses were then dichotomized into the dummy variable "violent offense": (1) Yes and (2) No (see Table 1 for percentages, means, and standard deviations). Approximately 45 offenders or 36.2% (25 female and 20 male offenders) of the 124 offenders within the sample were categorized as violent offenders⁶.

Dependent Variable(s)

Victim- and Society-Blaming. Part of the goal of the ICVC programs is to get offenders to accept responsibility for their own actions and decrease their propensity to blame others. This study utilizes both a victim- and society-blaming measure to assess offenders' level of blaming.

4. Modifications of the scale were necessary due to the length of the survey and due to the population being surveyed. The scale has been pre-tested and has demonstrated a consistent Cronbach's alpha (.78) (see Jackson, 2008).

5. Although it is suggested that an alpha of .70 or greater is desired, Bernardi (1994) suggests that if the scale is necessary for the theoretical argument it is possible to use scales with alphas below .70, particularly since alphas are heavily influenced by sample size. Further, given the restricted nature of the sample (i.e., incarcerated, different facilities, and different program lengths), an alpha of .54 is acceptable for this type of research. Nonetheless, the results are to be interpreted with caution.

6. Typical of studies similar to this one, often when offenders are convicted of multiple offenses in a single arrest and subsequent prosecution, only the most serious offense is used in the analysis of the data (Polaschek et al., 2005). Thus, consistent with prior research, this study also utilized the most serious offense in the analysis. If offenders indicated in their litany of charges a violent offense, their response was categorized as "violent".

TABLE 1. SAMPLE DESCRIPTION AND FREQUENCY (N = 124)

Variables	Values	Frequency	
		Females (N = 97)	Males (N = 27)
Race	1 = Non-minority	68 (70.1%)	7 (25.9%)
	2 = Minority	29 (29.9%)	20 (74.1%)
Education	1 = No HS Diploma	28 (28.9%)	8 (29.6%)
	2 = HS Diploma	30 (30.9%)	14 (51.8%)
	3 = Some College	31 (32.0%)	2 (7.4%)
	4 = College Degree	5 (5.2%)	1 (3.7%)
	Missing	3 (3.1%)	2 (7.4%)
Marital Status	1 = Married	17 (17.5%)	5 (18.5%)
	2 = Not Married	80 (82.5%)	22 (81.4%)
Income Before	1 = Below \$19,000	59 (60.8%)	14 (51.8%)
	2 = \$19,000-29,999	25 (25.8%)	8 (29.6%)
	3 = \$30,000-39,999	4 (4.1%)	2 (7.4%)
	4 = \$40,000-49,999	5 (5.2%)	1 (3.7%)
	5 = More than \$50,000	2 (2.1%)	1 (3.7%)
	Missing	2 (2.1%)	1 (3.7%)
First Felony	1 = Yes	53 (54.6%)	17 (62.9%)
	2 = No	44 (45.4%)	9 (33.3%)
	Missing		1 (3.7%)
Violent Offense	1 = Yes	25 (25.8%)	20 (74.0%)
	2 = No	71 (73.2%)	6 (22.2%)
	Missing	1 (0.01%)	1 (3.7%)
Prior ICVC	1 = Yes	13 (13.4%)	7 (25.9%)
	2 = No	83 (85.6%)	19 (70.3%)
	Missing	1 (1.0%)	1 (3.7%)
Restitution	1 = Yes	6 (6.2%)	3 (11.1%)
	2 = No	91 (93.8%)	23 (85.2)
	Missing		1 (3.7%)
Employed	1 = Yes	34 (35.1%)	14 (51.8%)
	2 = No	63 (64.9%)	12 (44.4%)
	Missing		1 (3.7%)
Children	1 = Yes	14 (14.4%)	16 (59.2%)
	2 = No	83 (85.6%)	11 (40.7%)
Age	Years	range 18-66	range 20-56

The scales utilized to measure both victim- and society-blaming were modeled after the stable victim- and society-blaming scales provided by Mulford, Lee, and Sapp (1996). These scales were selected primarily for their demonstrated reliability and their victim-neutral approach to measuring victim- and society-blaming. This was important because of the range of offenses committed by the participants within the sample. Victim-blaming scales that focused on a particular type of victim (e.g., rape, domestic violence or violence in general) would be limited in their application and possibly create a sympathetic perceptual bias toward victims. Subjects were asked to think for a moment about people who are affected negatively by social problems and the society in which these people live. The victim items (“People have poor personalities”; “People have loose morals”; “They are being punished by God”; and “People have inherited weaknesses”) placed blame on persons who suffer, while the societal items (“Human service agencies are too slow to help them”; “They suffer unintentionally because of actions/personalities of others”; “Turf battles between agencies make matters worse”; and “Federal government doesn’t help them enough”) place blame on the society. Scale items were measured on a 5-point Likert scale ranging from 1 (highly disagree) to 5 (highly agree). Cronbach’s alpha for the victim-blaming scale was .69 and for the society-blaming scale was .68, which is consistent with previous research (Mulford, Lee, & Sapp 1996).

Socio-demographic Variables. Beyond the inclusion of theoretically relevant variables, this study controls for several demographic factors including offender ethnicity/race, marital status, education, prior ICVC participation, age, prior felony, number of children, restitution, income prior to incarceration, prison employment, and whether the offense was violent or non-violent. In the final analysis, all variables were treated as dummy variables, with the exception of age, education, and the income prior to incarceration variables which remained polytomous (see Table 1 for overall percentages).

RESULTS

Before the analysis, data were prepared to meet the assumptions of the models (that is homogeneity of covariance, normality, and, whenever possible, outliers). Data collected in the pre- and post-test interviews were analyzed using a multiple analysis of covariance (MANCOVA) approach. A MANCOVA approach allows for the testing of the multiple dependent variables while controlling for Type I errors (see Table 2 and 3 for pre- and post-test means and standard deviations and correlations of guilt, shame, empathy and victim- and society-blaming scales). This approach was chosen because of the the primary unit of analysis selected for the current study was the difference in dependent variables’ post-test scores, taking into account any differences in the pre-test scores (Mertler & Vannatta, 2005). Further, since both current and prior literature indicate that age, race, income, education, prior felony, violent offense, number of children, restitution, prior ICVC participation, and marital status are associated with the dependent variables, they were treated as covariates within the MANCOVA model (Tangney & Dearing, 2002).

Pre- and Post-test Differences on Guilt, Shame, Empathy and Blaming

MANCOVA was conducted to determine if there was a significant effect between the pre- and post-test scores on guilt, shame, empathy, and victim- or society-blaming. MANCOVA results revealed no significant differences among pre- and post-test categories on the combined

TABLE 2. PRE- AND POST-TEST MEANS AND STANDARD DEVIATIONS OF EXTERNALIZATION AND VICTIM-BLAMING (N = 124)

Variables	Female (N = 97)		Male (N = 27)	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Guilt	X = 46.14 SD = 6.06	X = 48.05 SD = 5.30	X = 45.66 SD = 4.66	X = 47.40 SD = 5.37
Shame Sub-Scale: Negative Self-Appraisal	X = 15.63 SD = 3.70	X = 16.12 SD = 4.47	X = 13.76 SD = 3.65	X = 14.85 SD = 3.40
Shame Sub-Scale: Behavioral Avoidance	X = 12.02 SD = 3.67	X = 11.16 SD = 2.93	X = 12.03 SD = 3.77	X = 12.03 SD = 3.83
Empathy	X = 56.10 SD = 6.33	X = 55.04 SD = 5.52	X = 55.00 SD = 6.50	X = 54.22 SD = 5.69
Victim-Blaming	X = 14.82 SD = 3.20	X = 15.71 SD = 3.62	X = 15.03 SD = 3.11	X = 16.42 SD = 3.12
Society-Blaming	X = 12.38 SD = 3.39	X = 12.62 SD = 3.98	X = 11.76 SD = 2.86	X = 13.53 SD = 3.07

Note: X = mean; SD = Standard Deviation

dependent variables. The covariates restitution (Wilks’ $\Lambda = .936$, $F(6,193)=2.20$, $p<.044$, multivariate $\eta^2 = .064$), ethnicity (Wilks’ $\Lambda = .876$, $F(6,193)=4.56$, $p<.000$, multivariate $\eta^2 = .124$), and violent offense (Wilks’ $\Lambda = .916$, $F(6,193)=2.96$, $p<.009$, multivariate $\eta^2 = .084$) significantly influenced the combined dependent variables. There was also a significant violent offense x gender interaction (Wilks’ $\Lambda = .921$, $F(6,193)=2.76$, $p<.013$, multivariate $\eta^2 = .079$) and a significant violent offense x child interaction (Wilks’ $\Lambda = .915$, $F(6,193)=2.97$, $p<.008$, multivariate $\eta^2 = .085$) on the combined dependent variables. Analyses of covariance (ANCOVA) were conducted on each dependent variable as a follow-up test to MANCOVA. Restitution ($F(1,198)= 8.03$, $p<.005$, partial $\eta^2 = .039$) category differences were significant for empathy. Felony ($F(1,198)= 7.32$, $p<.007$, partial $\eta^2 = .036$) category differences were significant for guilt. Ethnicity category differences were significant for guilt ($F(1,198)= 12.35$, $p<.001$, partial $\eta^2 = .059$) and the shame sub-scale negative self-appraisal ($F(1,198)= 24.09$, $p<.000$, partial $\eta^2 = .108$). Age ($F(1,198)= 7.54$, $p<.007$, partial $\eta^2 = .037$) category differences were significant for society-blaming. Violent offense category differences were significant for empathy ($F(1,198)= 8.35$, $p<.004$, partial $\eta^2 = .040$) and society-blaming ($F(1,198)= 4.72$, $p<.031$, partial $\eta^2 = .023$). The violent offense x gender interaction category differences were significant for the shame sub-scale negative self-appraisal ($F(1,198)= 5.04$, $p<.026$, partial $\eta^2 = .025$) and victim-blaming ($F(1,198)= 7.35$, $p<.007$, partial $\eta^2 = .036$). The violent offense x children interaction category differences were significant for guilt ($F(1,198)= 6.30$, $p<.013$, partial $\eta^2 = .031$), the shame sub-scale behavioral avoidance ($F(1,198)= 5.66$, $p<.018$, partial $\eta^2 = .028$), empathy ($F(1,198)= 4.22$, $p<.041$, partial $\eta^2 = .021$) and society-blaming ($F(1,198)= 6.27$, $p<.013$, partial $\eta^2 = .031$). Overall the findings do not indicate that offenders indicated a significant difference between their pre- and post-test scores.

TABLE 3. BIVARIATE CORRELATIONS OF GUILT, SHAME, EMPATHY AND VICTIM- AND SOCIETY-BLAMING (N=124)

Variables	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	
X1. Age	1																		
X2. Children	.097	1																	
X3. Education	-.019	.069	1																
X4. Restitution	**-.166	*.135	*.152	1															
X5. Employed	-.007	.071	**-.224	.053	1														
X6. Prior ICVC	-.002	.018	.046	.065	.084	1													
X7. Income prior to prison	**187	.087	**320	.019	*.136	**196	1												
X8. First felony	**202	.113	.063	.000	.051	-.026	-.005	1											
X9. Violent Offense	.044	**178	-.050	-.035	.094	.105	-.025	*.128	1										
X10. Pre- and Post-Test	.000	.041	.007	-.014	.012	*.150	.024	-.020	-.011	1									
X11. Victim-Blame	-.061	-.031	.096	-.017	*.133	-.087	.031	-.065	.017	**169	1								
X12. Society-Blame	**207	-.097	.004	-.084	.032	.048	-.003	-.015	-.001	.082	**176	1							
X13. Guilt	-.094	-.032	.089	.090	-.081	-.012	.035	-.193	-.019	**174	**238	-.013	1						
X14. NSA	-.003	.001	-.006	.032	.119	.051	-.060	-.077	*.133	.064	.012	**178	**366	1					
X15. BA	*.135	1.22	*.167	*.136	*.140	.018	-.122	.082	-.070	-.105	**283	**190	**374	**184	1				
X16. Empathy	.090	-.047	-.093	**218	.090	-.044	-.012	.033	-.065	-.062	**212	*.136	**246	**190	**404	1			
X17. Minority	.111	-.043	.040	.012	-.121	-.042	-.042	.077	**353	-.008	-.020	.000	**274	**408	.009	-.030	1		
X18. Married	*.162	-.045	.080	.075	.028	*.164	*.132	.094	.024	.033	.009	.099	.015	-.044	-.083	-.020	.023	1	
X19. Gender	.042	**251	*.141	-.034	*.154	-.049	.061	-.106	**433	.000	.052	.011	-.027	-.123	.054	-.058	**378	-.028	1

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); BA—Behavioral Avoidance; NSA—Negative Self Appraisal.

Guilt, Shame, and Empathy Influences on Blaming

MANCOVA was conducted to determine the effect of guilt, shame, empathy, gender, pre- and post-test, and violent offense on the combined dependent variables victim- or society-blaming. MANCOVA results revealed significant differences among the shame sub-scale behavioral avoidance (Wilks' $\Lambda = .965, F(6,193)=3.46, p<.033$, multivariate $\eta^2 = .035$) and empathy (Wilks' $\Lambda = .961, F(6,193)=3.90, p<.022$, multivariate $\eta^2 = .039$) on the combined dependent variables. There were no significant differences among the variables gender, pre- and post-test, guilt or violent offense on the combined dependent variables. There were however significant violent offense x gender (Wilks' $\Lambda = .956, F(6,193)=4.48, p<.013$, multivariate $\eta^2 = .044$) and violent offense x children (Wilks' $\Lambda = .966, F(6,193)=3.40, p<.035$, multivariate $\eta^2 = .034$) interactions on the combined dependent variables. ANOVA was conducted on each dependent variable as a follow-up test to MANCOVA. Restitution ($F(1,194)= 4.37, p<.038$, partial $\eta^2 = .022$) and age ($F(1,194)= 6.42, p<.012$, partial $\eta^2 = .032$) category differences were significant for society-blaming. The shame sub-scale behavioral avoidance category differences were significant for both victim- ($F(1,194)= 3.93, p<.049$, partial $\eta^2 = .020$) and society-blaming ($F(1,194)= 3.98, p<.047$, partial $\eta^2 = .020$). Empathy ($F(1,194)= 7.36, p<.007$, partial $\eta^2 = .037$) and pre- and post-test ($F(1,194)= 3.95, p<.048$, partial $\eta^2 = .020$) category differences were significant for victim-blaming. There were also significant violent offense x gender category differences for victim-blaming ($F(1,194)= 7.79, p<.006$, partial $\eta^2 = .039$) and significant violent offense x children category differences for society-blaming ($F(1,194)= 4.37, p<.038$, partial $\eta^2 = .022$). Overall the findings indicate that offenders that indicated higher levels of shame were more likely to blame both society and the victim for their transgressions, while offenders that indicated higher levels of empathy were less likely to blame the victim.

Gender, Violence and Children as Mediating Effects on Blaming

A path model (Figure 1) using Analytic Moment Structures (AMOS) was conducted to determine if violent offense, gender, or children either mediated or accounted for the influence of guilt, shame, and empathy on the combined dependent variables victim- and society-blaming. AMOS provides full information maximum-likelihood estimates of model relationships and allows for the simultaneous testing of the effects of exogenous variables on endogenous variables in the specified structural equation model. *This method is preferred over multiple regressions for two primary reasons.* First, the statistical indices of the overall fit of the model to the data are generated by regression programs. Second, several noteworthy and informative results are simultaneously calculated by AMOS, including direct, indirect, and total effects (Arbuckle & Wothke, 1999). Since pre- and post-test results revealed no significant overall impact among the combined variables guilt, shame, empathy, and victim- and society blaming, the path analysis is unique to post-test results only.

First, we calculated separate variance-covariance matrices for all variables in the model, using a two-tailed test of significance at the .05 level as the criterion. Bivariate correlations indicated that the relationships between variables were in the predicted directions (See Table 3). Preliminary analyses using MANCOVA indicated that gender, violent offense, and children demonstrated a significant interaction on victim- and society-blaming suggesting that the effects were either mediated or accounted for by the offender's gender, violent offense, or their children.

DISCUSSION

The article set out to examine the following questions (a) Is there a significant difference in offenders' pre- and post-test scores on guilt, shame, empathy, and blaming?; (b) Do guilt, shame, and empathy yield different estimates of blaming?; (c) Is this difference attributable to gender, violence, or children?; and (d) Do children, violence, and/or gender mediate or account for the influence of guilt, shame and empathy on blaming?

Several findings emanate from our analysis. First, our results suggest that overall the participants in ICVC program did not demonstrate a significant difference among their pre- and post-test scores. Given documented research that offender cognitive-oriented programming does have an intense emotional impact on offenders and has some success in changing offender behavior (C' de'Baca et al., 2001; Gaboury & Ruth-Heffelbower, 2007) the results of this study are noteworthy. The findings from this sample would suggest that more comprehensive and expanded programs may be necessary in order to obtain more robust conclusions about the impact of ICVCs on emotional development. Currently, the 1-week and 4-week programs are producing some interesting and positive findings but until research can be conducted with more expanded programs it is difficult to predict with some level of certainty that the ICVC program is accomplishing its underlying goal of changing offender behavior. Second, our results suggest that offenders who indicated higher levels of shame (shame sub-scale behavioral avoidance) were more likely to blame both the victim and society for their transgressions; whereas offenders that indicated higher levels of empathy were less likely to blame the victim. These findings are consistent with previous research that has consistently noted that shame as an emotion encourages individuals to avoid accepting responsibility for their behavior and instead place blame on some external entity (Hanson & Tangney, 1995; Jackson et al., 2009; Tangney, 1990; Tangney et al., 1992); whereas individuals who are more empathetic are less likely to blame the victim and more likely to understand the harm they may have caused (Jackson, 2006; 2008; Tangney & Dearing, 2002). Also as noted by Tangney and colleagues, individuals who exhibit shame are more likely to avoid confronting the stimuli that may have led to their "shameful" status. Examining the socio-political environment that prisoners contend with in the U.S., the status of offender in-and-of itself is viewed as failing to abide by societal laws, thus invoking the emotion of shame (Braithwaite, 1989). Further, due to society's exclusionary treatment of offenders, the role of shame is further exacerbated among individuals under the control of the criminal justice system. This exclusionary process has been consistently noted in the literature as being more conducive to generating blame and anger among offenders rather than healing and reconciliation (Braithwaite, 1989).

Third, our results suggest that overall there were no significant pre- and post-test differences among male and female offenders or among parents and non-parents. However, violent offense did demonstrate a significant impact on the combined dependent variables empathy and society-blaming. Although prior research has noted gender differences have a significant impact on offender participation and success in rehabilitation programming (Covington & Bloom, 2006; Hubbard & Matthews, 2008), our results suggest otherwise. In fact, our results, although contrary to some research, is consistent with Cauffman et al. (2004) and Cauffman (2008) who suggest that although gender-specific treatment methods can be effective for female offenders, researchers should understand that females are not a homogenous group and thus treatment efforts should be designed to address individual needs and not just gender issues. This is

noteworthy because, based upon our results; violent offenders appear to generate the most significant impact on the independent variables. This finding would indicate that programs that are comprehensive and designed based upon offenders' criminogenic and non-criminogenic needs will more than likely produce more robust outcomes in comparison to the "one-size-fits-all" approach or gender-specific programs (Cauffman, 2008; Dowd & Andrews, 2000). Other research has also suggested that female offenders, specifically female offenders with children, experience incarceration differently than female offenders without children (Mackintosh et al., 2006; Poehlmann et al., 2008). Although this may be the case when examining a female population only (see Jackson et al., 2009) the results are not duplicated among a male and female sample overall. Conversely, violent offense appeared to demonstrate the most significant impact on the combined dependent variables. Based upon our findings and consistent with previous research (Dowd & Andrews, 2000; Gudjonsson & Petursson, 1991; Jackson et al., 2009; Weizmann-Henelius et al., 2002) violent offenders in comparison to non-violent offenders were less likely to develop empathy and more likely to blame society for their transgressions.

Additional points of interest are the significant interactions among the variables violent offense, gender, and children. As our results indicate, there was a significant interaction between violent offense and gender on the shame sub-scale negative self-appraisal, between violent offense and children on guilt, the shame sub-scale behavioral avoidance, empathy, and society blaming. There were also significant interactions between violent offense and gender on victim-blaming and between violent offense and children on society-blaming. These findings suggest that violent females were more likely to negatively self-appraise themselves for having committed a crime that led to their incarceration. Further, non-violent offenders with children experienced more guilt and empathy in comparison to violent offenders without children who experience more shame in the form of behavioral avoidance. Subsequently, non-violent offenders with children were also more likely to blame society for their transgressions; whereas violent males in general were more likely to blame the victim. These findings are consistent with Jackson et al., (2009) who noted that females with children, after completing the ICVC program, were more likely to experience more guilt and shame and were also more likely to blame society for their transgressions. Jackson and colleagues concluded that due to the loss of control over their children, offenders may have found it difficult to focus on bettering themselves when they were not sure of the whereabouts and safety of their children. Further, due to the "state's" role in the placement of children, the "state" became the scapegoat for the offender's predicament. According to Fisk and Taylor (1991) when individuals are suffering from the consequences of their wrongdoing, they often look for a third party to attribute blame. Other researchers have suggested that, for women, the role of parenting and how they are viewed as mothers while incarcerated is of ultimate importance (Poehlmann et al., 2008). Due to their incarceration, women in comparison to men are more likely to experience shame, more likely to have been the primary caretaker of children prior to their arrest, and are subsequently more likely to be impacted negatively by the loss of parental rights or control (Belknap, 2001). Other researchers have suggested that violent offenders in general lack empathy and due to the social interaction of violence, many violent offenders may view themselves as the victim who just happened to win the violent confrontation. Thus they are less likely to assume responsibility for their crime regardless of their gender (Gudjonsson & Petursson, 1991; Kroner & Mills, 2004). Nonetheless, based upon our analysis, the role of violence appears to have a significant impact on the results of this study.

These findings are consistent with current research that has noted the difficulty of reforming violent offenders through the utilization of the “one-size-fits-all” curricula (Dowd & Andrews, 2000). Our results also provide further support for the need to develop more comprehensive programs that address both criminogenic and non-criminogenic needs specifically (Dowd & Andrews 2000). Although the AMOS model suggests some weak gender differences on empathy, shame, and victim-blaming, offender violence appears to have the most significant impact on victim- and society-blaming both directly and indirectly. Thus, our results are consistent with Cauffman and colleagues, who noted that although it is important to focus on some gender issues primarily because female offenders in comparison to male offenders are more likely to need mental health counseling and treatment, it is also important to understand that the path and trajectories of violence between males and females are nonetheless similar. Therefore, programs that provide comprehensive treatment for the causes of violence in offenders’ lives may prove to be more productive in changing offender behavior in comparison to programs that are gender-specific.

Limitations of the Study

There are several limitations of this study that should be mentioned. First, the survey is a self-report study and is limited by the well documented limitations (e.g., underreporting, exaggeration, incomplete answers, etc.) of self-report surveys (for a complete summary of limitations see Mosher, Miethe, & Phillips 2002). A second limitation is that the sample is an available sample of male and female respondents in the ICVC classes who may have been more inclined to complete surveys. Since the survey was voluntary, only those respondents who were more inclined to complete the survey participated. A third limitation of this study is the Cronbach’s alpha for the empathy scale. Although it is possible to utilize a scale with an alpha below .70, it nonetheless places constraints on the analyses and limits the ability to generalize to other institutions with similar programs (Bernardi, 1994). A final limitation is the overall male sample size and the attrition rate of 24%. However, this sample size is not unusual for studies that utilize a panel-design to evaluate cognitive programs with offender populations or for cognitive programs that utilize males and females as comparison groups (Cauffman et al., 2004; Polaschek et al., 2005). Nonetheless, the sample size has an overall impact on the analysis and results of this study; therefore, the extent to which our results and conclusions generalize to other states and correctional facilities remains an open question.

CONCLUSION

Data from the current study indicates that overall, the ICVC program did not significantly impact offenders’ behavior. Although the program has demonstrated minimal impact in previous studies among a female sample (Jackson, 2008; Jackson et al., 2009), the ICVC program among a sample of male and female offenders, appears to be limited in its ability to have an intense emotional impact. This conclusion is noteworthy because ultimately correction-based programs are designed for generating guilt, shame, and empathy—given their heavy focus on explaining the victims’ experience after being victimized. Although, this finding is interesting, it is not unusual. For example research has indicated consistently that intervention programs in the corrections field often have little to no impact on changing offender behavior either

due to the implementation process or the methodologies employed to examine programmatic effectiveness (Hubbard & Matthews, 2008).

Greenspan (1995) noted that some acts are so shameful that individuals may never attempt to reconcile their wrongdoings. Based upon our analysis, it may be likely that some offenders, particularly violent offenders, experience higher levels of shame in comparison to non-violent offenders. Violent offenders are also in comparison to non-violent offenders more likely to blame the victim and/or society. Given these findings, ICVC programs that continue to utilize the “one-size-fits-all” curricula are failing to have a significant emotional impact on offenders. Although programs such as ICVC are necessary and conceptually noble, they unfortunately appear to have the same programmatic shortcomings of many of their correctional rehabilitation program predecessors. Until they are better designed to address comprehensively offenders’ criminogenic and non-criminogenic needs, their impact will continue to be minimal at best (Dowd & Andrews, 2000). Thus, future programmatic efforts should be directed at expanding resources for program implementation, providing more comprehensive counseling, and increasing the length of the program. Conversely, future research efforts should be directed toward further examining whether females and males should be exposed to different program curricula or if, with more intensive counseling efforts, both females and males can benefit from a “one-size-fits-all” curriculum that places significant emphasis on addressing the pathways and trajectories to violence.

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An Examination of Sexual Abuse and Suicide Ideation in Delinquent Females in the Texas Juvenile Justice System

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Abstract

The Center for Disease Control (2009) reports that suicide is the second leading cause of death among people between the ages of 15 to 24 in the United States. This research examines the strength of suicidal ideation among a cohort of delinquent girls in Texas. This study examined 2004 data provided by the Texas Juvenile Probation Commission on referrals to the juvenile justice system in Texas (N=6,850). Variables such as race, age and family structure were also examined to determine the strength and effect that sexual abuse has on a juvenile becoming suicidal. The results revealed that family structure, race and sexual abuse have a moderate effect on suicidal thoughts among females in the juvenile justice system. Implications for practice are further explained.

Key Words: female juvenile delinquency, suicide, sexual abuse, victimization

INTRODUCTION

The Center for Disease Control (CDC) reports that suicide is the second leading cause of death among juveniles between the ages of 15 and 24 (CDC, 2009). Nearly thirty percent of high school adolescents claimed to have “thought seriously” about attempting suicide during the previous year. Eight percent of students said they had attempted to kill themselves (CDC, 2009). With the issue of suicide at the forefront, children who are abused by a caregiver or a trusted individual suffer long-lasting damage. According to the Office of Juvenile Justice Delinquency Prevention (2002), a young person that is in between the ages of 7 and 17 years old are more likely to be a victim of suicide than homicide. With results like this, it is becoming clear that adolescent suicide and abuse might be interrelated.

In the life of a juvenile, adolescence is often referred to as a chaotic time with sudden biological and social changes (Barber, 1994). Conflict is part of normal development during adolescence (Tubman & Learner, 1994). This conflict usually pertains to developmental experiences such as chores, finances, dissatisfaction with physical appearance and even

experimentation with substances (Galambos, 1992); however, these juveniles also have to deal with conflicts involving family relations, school difficulties, curfews, dating issues, friends and sexual behavior, which typically cause disagreements between parents and their teenagers (Barber, 1994). For most juveniles, these conflicts are a natural part of growing up and learning to become an adult.

Experiences with abuse are alarmingly high among teenage females involved with the criminal justice system, with statistics showing up to ninety-two percent having fallen victim to one form of physical, emotional or sexual abuse, and fifty-six percent reporting sexual abuse (Acoca, 1998; see also Holsinger, Belknap, & Sutherland, 1999). Research on suicide for adolescents between 15 and 19 years old reveals that during the 1950s to 1990s, the rate of suicides went up by 300 percent and between 1990 and 2003, that rate went down by 35 percent (CDC, 2009). The possible effect of this abuse can manifest itself in problems in the future.

This research will begin to ask the question why delinquent females in the juvenile justice system are becoming suicidal. This research serves to begin conversation of how important the need is to address the plethora of problems that these delinquent girls face on a daily basis. The problem might be suicide, but what is the underlying cause of this problem? This is where this research begins. This study fills a gap in the literature by focusing on a sample of delinquent children rather than exploring the entire population of youth. This can allow administrators in the juvenile justice system to formulate programs that will focus on these abused children and prevent them from entering the justice system in the first place.

REVIEW OF THE RELEVANT LITERATURE

Suicide ideation or thinking is a leading risk factor in completed suicides; moreover, experts believe that suicide ideation is psychologically harmful in and of itself (Gould et al. 2003). For 2001, the rate was 1.5 suicides per 100,000 children between the ages of 10 and 14 (CDC, 2009). Death rate by suicide goes up in late adolescence and this incline continues into the early twenties, without dependence upon race or gender. In the 1999 Youth Risk Behavior Survey, a national sampling of adolescents (primarily high-school students), nine percent of the respondents reported a suicide attempt and eighteen percent reported having seriously considered suicide in the past year (Chatterji, Kaestner & Markowitz, 2003). To further illustrate this problem, community surveys indicate that between 12 and 25 percent of school-aged youth engage in suicide ideation, ranging from nonspecific thoughts about suicide to suicide planning with the intent to die (Brent et al., 1994).

The bulk of the suicide literature concludes that suicide ideation is symptomatic of risk factors that include prior sexual and physical abuse (Brown & Cohen, 1999). Along with severe abuse within the family, these risk factors become more of a concern when the adolescent is involved with the criminal justice system. It is relatively clear that childhood abuse may result in many future problems, including an increase in risk for death by suicide. Past studies have shown that a link between sexual abuse and suicide might exist (Glowinski, Bucholz & Nelson, 2001; Roy, 2003; Joiner, 2004), but the research has not addressed the specific cause or relationship that it has with suicidal behavior, more specifically the relationship it has with at-risk juveniles.

Risk factors are defined as factors that would increase the chances that a juvenile might engage in suicidal behavior (Gould, Greenberg, Velting & Shaffer, 2003). These factors

are generally categorized into personal characteristics, adverse life circumstances, family characteristics, socio-environmental and contextual characteristics. Gould et al. (2003) has identified five personal characteristics that increase an adolescent's likelihood of engaging in suicidal behavior: these are (1) psychopathology or psychiatric conditions and substance abuse; (2) a history of prior suicide attempts which, according to Gould, is one of the strongest predictors of a juvenile engaging in future suicidal behavior; (3) cognitive and personality factors, including hopelessness and lack of interpersonal problem-solving ability; (4) sexual orientation (primarily being homosexual and rejected by family and peers); and (5) biological factors such as problems with serotonin functioning.

The bulk of the research seems to also focus on the specific risk factors or clinical indicators of suicide ideation, however, little of it focuses on utilizing a juvenile justice population when examining this abuse and suicide ideation. Researchers have concluded that several contributory indicators associated with suicide ideation in the juvenile justice system include mood and substance abuse disorders, guilt, aggressive behaviors, shame and parenting difficulties (Teplin, Abram, McClelland & Dulcan, 2002; Wasserman et al., 2002). These factors, along with others, can be risks for suicidal ideation and other serious antisocial disorders. Examples of these other factors can include school difficulties and the degrees of exposure to suicidal behavior that the adolescent is subjected to at home or in the media (Gould et al., 2003). Gould et al.'s (2003) research concludes that that parental psychopathology plays a strong role in the transference of this suicidal ideation from parent to child. Suicide ideation is high if the child is consistently exposed to a parent's extreme depressive state or abuse is present in the home. The adolescent becomes desensitized to suicide as an escape and adopts it as an option to end the psychological pain.

Numerous research studies have examined the risk factors and suicide attempts by age, race, educational level, family history, religion, socioeconomic level, sexual orientation, and other demographic variables (D'Augelli, Hershberger, & Pilkington, 1996). These studies focused on the person who may be at risk, but does not specify why a specific adolescent might be more prone to suicide. Adolescents who have an increased risk of suicide have substance abuse issues, psychiatric and medical problems, stress and antisocial behavior (D'Augelli, Hershberger, & Pilkington, 1996; Levy, Jurkovic, & Spirito, 1995).

Childhood sexual abuse might be more related to suicide deaths than any other types of abuse because victims experience more physical pain with sexual abuse than with other types of abuse, such as neglect (Joiner et al., 2006). Brent et al. (1994) examined the relationship between childhood suicidal ideation and abuse, finding that victims of suicide attempts had a higher rate of childhood and adolescent abuse than that of a control group of non-abused adolescents. In other words, abuse might play a role in a child's rationale for contemplating suicide. To further illustrate the risk factor research, Roy (2003) examined 280 individuals with a prior history of alcohol problems and determined that physical abuse was linked with the number of suicide attempts during the subjects' lifetimes. Kendler et al. (2000) found that females in the United States who reported childhood sexual abuse have a markedly higher risk for developing a broad range of psychological problems.

MacMillan et al. (1997) in Canada also found a link between childhood abuse and suicide attempts, major depression and anxiety disorders. Dinwiddie (2000) shows that those who reported childhood sexual abuse were more likely to be diagnosed with depression, conduct

and panic disorders or alcoholism, as well as being more likely to report suicidal ideation and having a history of at least one suicide attempt. Santa Mina and Gallop (1998) researched over 10 years of clinical studies and concluded that females with a history of childhood sexual abuse are vulnerable to nonfatal suicidal ideation. In Joiner's (2006) research utilizing variables such as individual medical history, family psychiatric history and problems, family of origin issues, childhood abuse and parental history of suicide attempts predicted respondent suicide attempts (Joiner et al., 2006). Joiner et al. (2006) also found the effects of physical abuse and sexual abuse were relatively similar to one another. Gould et al. (2003) argues that there is very little relationship between socioeconomic status and suicide. Suicidal behaviors often cross the lines of class and even race.

In the last few years, suicide rates among older teen girls, those aged 15-19 has increased 32 percent; rates for males in that age group rose 9% (CDC, 2009). These numbers also mimic the population of non-juvenile justice related population. Either way, girls are taking their lives at a much faster rate than boys. Examining this issue, we look to see what variables play a factor in this.

METHODS

Data

A large, diverse sample of delinquents was utilized in this research. This study examined 2004 data collected by the Texas Juvenile Probation Commission (TJPC) from referrals to local juvenile probation departments. The sample was then limited to only females that were referred to the juvenile justice system in Harris County, Texas, between the ages of 10 and 17 years old (N=6,850). No juvenile in our sample was or exceeded the age of 18 years old because Texas law does not consider these young people to be juveniles for the purpose of referral to the juvenile justice system. The mean age of the entire sample of juvenile females is 15.24 years with a standard deviation of 1.27 years.

Measuring Instrument

MAYSI-2 (Massachusetts Youth Screening Instrument - Second Version)

The MAYSI-2 is a screening tool used to assist in the identification of various types of mental/emotional disturbance, distress or patterns of problem behavior (Grisso & Barnum 2000). The primary goal of this assessment tool is to alert the administrator to potential needs and triage for high-priority immediate response. According to its authors, the MAYSI-2 is not intended to render diagnoses but merely to identify youths who may have special mental health needs including suicidal thoughts. Like any other screening instrument, the MAYSI-2 "serves as a first look at the possibility of a youth's special mental health needs, but it does not seek to diagnose mental disorders or to provide information on which important and long-term interventions should be decided" (Grisso & Barnum 2000). In Texas, the MAYSI-2 was mandated by state law in 2001 to be administered to all juveniles referred to local juvenile probation departments at formal intake by certified juvenile probation officers who have been trained to administer the instrument (Espinosa, Schwank, & Tolbert, 2003). The MAYSI-2 is categorized into various subscales. These subscales are alcohol/drug use (AD), angry-irritable (AI), depressed-anxious (DA), somatic complaints (SC), Suicide Ideation (SI), thought disturbance (TD, in boys only), and traumatic experiences (TE). For the purposes of this research, the SI subscale was analyzed. The

level of suicide ideation is based upon scores on the MAYSI – 2 (Massachusetts Youth Screening Instrument- Second Version). Subsequently, these responses were given to the juvenile probation department upon the child's intake into the juvenile justice system. The primary variable being measured is the relationship that sexual abuse has on a girls' suicidal thinking. Suicide ideation is extracted from reported responses to the MAYSI standardized instrument.

Measures

Independent Variables

The data was coded to account for the independent and dependent variables, respectively. These variables are race, age, sexual abuse and family structure. The codes include that race, white/caucasian is 0 and 1 for minority (non-whites). Hispanic, African Americans, and Asians were included in the non-white category. This sample included only children 10 through 17 years of age. Children under the age of 10 and over the age of 17 (at the age of initial entry into system) were excluded because in the State of Texas these ages would not be included in the juvenile justice system. The next variable is sexual abuse. All abuse was self-reported to the assessment and intake officer when the child enters the juvenile justice system at arrest. In the data that was provided by the Texas Juvenile Probation Commission, the sexual abuse variable is re-coded from: Y=Yes, N=No, S=Suspected and U=Unknown to Yes and No, with No including the unknown responses. This was done to consolidate the Children suspected as being victims of child abuse were converted to Yes because the abuse was, although not officially reported, likely to have occurred based upon the decision of the juvenile probation officer conducting the assessment interview. The main reason for this recoding of the original variables was to dichotomize for the purposes of statistical analysis. The next variable is the child's family structure. The code includes if the child lives two parent household or in an extended or blended family arrangement. Our goal is to see how much of an influence living arrangements, in a nuclear family or extended family has on our dependent variable.

Dependent Variable

The dependent variable consists of the suicide ideation score on the MAYSI-2. This variable was coded the MAYSI suicide ideation score (SI: 0=No, 1=Yes). The MAYSI -2 classifies suicide ideation on a severity scale from 0 to 5 (0=no suicide ideation, 1=low risk for suicide ideation, 3-5=warning to possible severe suicide ideation). Juveniles that scored 0 were classified as no suicidal ideation and all other scores were considered suicide ideation. This was to include all degrees of severity within suicide ideation. We consider all reports of suicidal thoughts from low to severe to be relevant, for this study, not just varying degrees. The SI scale of the MAYSI-2 has five questions. Three of the questions specifically address a juvenile's thoughts about harm and two of the questions involve depressive symptoms that may present increased risk for suicide. One of the items, question 5, is shared with the depressed-anxious scale. The following are the questions asked within the SI scale section:

1. Have you wished you were dead?
2. Have you felt like life was not worth living?
3. Have you felt like hurting yourself?
4. Have you felt like killing yourself?
5. Have you given up hope for your life?

Due to the dependent variable (suicide ideation) being measured as a dichotomy, logistic regression was chosen as the appropriate statistical method of estimation for the multivariate analysis (Fox, 2008).

FINDINGS

This analysis utilized a data set that consisted of all female juveniles who have been referred to the juvenile justice system in Harris County, Texas. Table 1 indicates that these children have reported sexual abuse at a much lower rate than reported being suicidal. Table 1 also indicates that non-white minorities make up almost three-fourths of the entire sample. In Harris County, Texas whites do not make up the majority racial composition.

TABLE 1. FREQUENCY DISTRIBUTION OF JUVENILE FEMALES IN SAMPLE. (N=6,850)

Variables	%	Means	Frequency
Race		.74*	
White	26.1		1790
Non-White (Minority)	73.9		5060
ChildLiv (Child Lives With)		.89**	
Both Parents (Mother/Father)	10.8		740
Other (Blended/Extended Family)	89.2		6110
SuspectE (Sexual abuse)		.09***	
No Reported Sexual Abuse	90.7		6214
Reported Sexual Abuse	9.3		636
SISCORE (MAYSI Suicide Ideation Score)		.18****	
No Suicide Ideation	82.3		5636
Suicide Ideation	17.7		1214

*Minority=1 **Other (Blended/Extended Families)=1 ***Sexual Abuse=1 ****Suicide Ideation=1

The findings indicate that female juveniles who live in a two parent household are comprised of a mother and father only consist of only one tenth of the entire population. Suicidal delinquent females were also more likely to live with their mother and father than other blended family situations. However accounting for sexual abuse, over ninety percent of the population reported having no history of sexual abuse. Juvenile female delinquents, who were involved in the juvenile justice system in Harris County, exhibited a rating of suicidal ideation 18% of the time (See table 1). Of the 636 reported incidents of sexual abuse of juveniles that were referred into the juvenile justice system, almost 20% of those have reported some form of suicide ideation.

Minority or non-white offenders represent a larger portion of offenders in the juvenile justice system in Harris County, Texas, however they report a lower rate of suicidal ideation than their white counterparts. Specifically in this sample, white females were more likely to be suicidal than minority females that are referred to the juvenile justice system. There is a 4.2% difference between white and minorities being suicidal and being sexually abused.

TABLE 2. RELATIONSHIP BETWEEN PREDICTOR VARIABLES AND SUICIDAL IDEATION

Variables	% No Suicide	% Suicide Ideation	Chi-Square
Race			24.525***
White	78.4	21.6	
Non-White (Minority)	83.6	16.4	
ChildLiv (Child Lives With)			200.317***
Blended/Extended family	84.5	15.5	
Both Parents (Mother/Father)	63.5	36.5	
SuspectE (Sexual abuse)			7.01**
No Reported Sexual Abuse	82.7	17.3	
Reported Sexual Abuse	78.5	21.5	

*p <.05 **p <.01 *** p <.001

While evaluating the sexual abuse variable, children are more likely to become suicidal when they have reported to youth authorities that they have been sexually abused. According to the data included in Table 2, 15.5 % of females that have reported being suicidal live in an extended or blended family arrangement rather than with a two parent household consisting of their mother and father only. While still examining the relationship between living arrangement, suicidal ideation and sexual abuse, a two parent, mother and father living arrangement accounted for more than twice the percentage of suicide ideation in comparison to an extended or blended family (Blended/Extended Family: 15.5 and Both Parents: 36.5, respectively). This could propose a strong negative influence that a two parent living relationship might have on suicidal females in the juvenile justice system.

In Table 3, the variables that were examined in this study were significant and show little sign of multicollinearity, however, the largest correlation, negatively speaking, exists between the suicidal score and child lives with variables (-.171, sig). As indicated in Table 3, the age column indicates a weak negative correlation with the other predictor variables. An explanation could be that the age range of the juveniles was modified to include juveniles that only ranged in age from ten through seventeen years old. Due to a low correlation of these variables, confidence is high that these variables will not produce collinearity when running a regression model.

TABLE 3. VARIABLE CORRELATIONS ANALYSIS

Variables	RACE	CHILDLIV	SUSPECTE	AGE	SISCORE
RACE		.057***	.005	-.099***	-.060***
CHILDLIV			.022	-.034**	-.171***
SUSPECTE				-.032**	.032**
AGE					-.050
SISCORE					

*p <.05 **p <.01 *** p <.001

Examining the child sexual abuse variables, the research indicates that children who were sexually abused were significantly more likely to report suicidal ideations (odds ratio: 1.37, sig). In other words, if a child is sexually abused, she was more likely to become suicidal than not. For every yearly increase in age a juvenile female is 6% more likely to report suicidal ideations (odds ratio: 1.064, sig). The strongest regression relationship is the child's living arrangement variable. In our research, a child that lives with both of her parents is 32% as likely to report suicidal ideations (-1.126, sig). Minorities were only 75% as likely to report suicidal ideation as their white counterparts. Our data indicates that sexually abused juveniles and non-sexually abused juveniles report a close rate of suicidal ideation. These variables have a difference of only 4.2%. In understanding the effect that suicidal ideation has on delinquent girls, the model indicates that race and the family living arrangements do have an effect on a child's suicidal ideation. This increase would be going from a mother/father relationship to a blended family dynamic. We might conclude that sexual abuse and age could increase a female's likelihood of becoming suicidal. Prevention programs that focus on family relationships to address sexual abused children are needed to combat this epidemic.

TABLE 4. LOGISTIC REGRESSION ESTIMATES FOR THE DETERMINANTS OF SUICIDE IDEATION (N=6,850)

Variable	β	SE	Wald	Exp (B)
Race	-.279	.071	15.613	.757**
Child Lives With	-1.128	.085	177.615	.324*
Suspect Sexual Abuse	.321	.104	9.595	1.379*
Age	.062	.026	5.762	1.064*
Constant	-1.352	.413	10.708	.259*

*p <.05 **p <.01 *** p <.001

Pseudo R²= .048

Variance Inflation Factor (VIF): 1.007

Outcome variable: Suicidal Ideation (SI)

Discussion and Research Limitations

This study was conducted to examine a factor of why juveniles in the juvenile justice system might become suicidal. This research further examined the effects that race, family structure, and age have on the suicidal ideation variable. This study utilized the MAYSI-2, a brief screening tool utilized by criminal justice professionals, to identify problems with juveniles who have been placed into the juvenile justice system. The findings reveal that there is a moderate positive relationship between sexual abuse of juveniles and their suicidal thoughts. The findings indicated that the strongest relationship found was that females in the juvenile justice system who live with a single parent or other blended or extended family members were less suicidal than juvenile females who live in a two-parent home consisting of the mother and father only. This research is not asserting that living in a mother/father relationship is any better or worse than a blended family. This only explains that the family dynamic has a strong effect on troubled teens and needs to be thoroughly explored. A consideration for juvenile justice agencies might be focusing on the impact that a family relationship has on the children. According to this research, the family relationship is important to the health and well-being

of adolescents, especially sexually abused females. This could also illustrate that divorce or severing the mother/father relationship could have a negative indirect effect on the females, especially one in the juvenile justice system, thoughts of suicide; however, this research found that a blended or extended family structure could have a positive impact, leading fewer girls in this age group to contemplate suicide. This could be due to the sheer numbers of family members the blended or extended family members have versus two parent households.

The data also indicates that females who were sexually abused might be more likely to report and exhibit suicidal thoughts than non-sexually abused females. The research would indicate that the 9.3 percent of known sexually abused juveniles is probably a lot higher due to failure to report prior abuse history to criminal justice personnel. An overwhelming majority of these delinquent girls come from blended and extended families. Univariate analysis also indicates that 17.7 percent of the population of juveniles report having some form of suicidal tendency prior to entrance into the juvenile justice system. At first glance, 17.7 percent does not seem to be a lot, however when comparing this with the overall population, the study found that 1,214 juvenile females in the juvenile justice system report having suicidal tendencies. This is a lot of suicidal at-risk females in only one county in Texas. Suicide is becoming a serious problem, especially with females who have histories of physical, mental and emotional abuse in their pasts.

Limitations of this Research

This research study examines the influence of sexual abuse among juvenile females between the ages of 10 and 17 in the Texas juvenile justice system. No juveniles under the age of 10 were considered in this research. This is because juveniles under the age of 10 are more likely not to be charged in juvenile court with a criminal charge. Juveniles who are over the age of 17 are generally sent to adult court for processing in lieu of juvenile court. This research also includes only females and not males. The rationale for this is that female juvenile offenders are an under-researched population and further research is desperately needed to understand the rationale of female suicide ideation than boys. This research also only includes females in the largest county in Texas, Harris, not other counties or states. The sample of females in the largest county in Texas serves as a good representative sample for all the counties in Texas because Harris County encompasses rural and city populations. Another reason this county was examined is that it is also the third most populous county in the United States and, according to the United States Census, Harris County consisted of 29 percent of the total population under the age of 18 years old. The problem is that utilizing a population of females in Harris County, Texas might not represent a population of juveniles in upstate New York; however, this research has been clear about utilizing a population of delinquent females exclusively from Texas. This research is only focusing on a population of juvenile females who are in the juvenile justice system in Texas, nothing more than that. Further research might be needed to include studies that will consider the above geographic limitations.

This research utilized only four control variables within this analysis. In order to increase the statistical significance of the regression outcomes more control variables are needed. However, this research examines these five variables only. These variables were selected because some of the data that was collected from the TJPC was missing. When TJPC collected the data from all 254 counties not all the variables were accurately reported. Prior delinquency measures were not used in this research project. This was for two reasons: (1) agency data that was

obtained was often incomplete. This type of data obtained is often raw and the specific offense information for each offender was not always available. (2) This research only examined the juveniles who entered the juvenile justice system at the time of intake and did not follow them after they were released from the system. This research was conducted to examine females in the juvenile justice system, not recidivism rates.

Harris County was singled out in this research for two reasons. First, this is primarily due to the inaccuracy of the data that other counties in Texas reported. Harris County had the most complete data out of any county in Texas. Second, this county is the most populous county in Texas and its offender demographics are consistent with the rest of the state. This research is also limited to the MAYSI-2 screening instrument. This research is built on the foundation of this instrument. The self-reporting nature of the data also presents some limitations. Self-report data faces the following issues: the use of inconsistent instruments, inaccurate reporting, response set, deficient research designs and poor choice of settings or subjects. Other limitation of self-reported data includes telescoping, untruthfulness and social desirability. The juveniles who take this exam upon intake might be just telling the facility staff what they want to hear. Another limitation utilizing the MAYSI-2 exam is the nature of the way it is given to juveniles who are incarcerated. This exam is given to juveniles within a few days upon intake into a juvenile justice institutional setting. Administering this test so early in the incarceration period might not give an accurate reading of juveniles' thoughts about suicide. It is clear from the research that a juvenile is most likely to be suicidal early in the stage of her incarceration due to the uncertainty and fear of being incarcerated (Espinosa et al., 2003).

CONCLUSION AND POLICY IMPLICATIONS

Suicide is the second leading cause of death among juveniles and young people between the ages of 14 and 25 (Center for Disease Control, 2002). As stated earlier suicide rates among older teen girls, those aged 15-19 has also increased 32 percent; rates for males in that age group rose 9% (Center for Disease Control, 2002). This research supports this outlining that suicide ideation amongst a population of girls in the juvenile justice system is increasing. More attention needs to be paid to the biological and social changes that a juvenile goes through during the puberty years. Juveniles must have a place to be able to express their concerns and a healthy adult who can offer sound advice and guidance to these adolescents. Children who engage in these risky behaviors often have no place to turn when confronted with problems such as drug abuse, sexuality problems, relationship issues, etc. These problems often escalate into situations in which the female might feel that the only alternative is taking her life. Parents often feel a tremendous amount of guilt when the child takes her own life and often wondering if there was anything that could have been done to prevent it. This research serves as a starting point to answering their question by saying, yes, something can be done to prevent your child's suicide.

Several suicide measures have been established as risk factors for completed suicide. Nevertheless, it should also be emphasized that the evaluation of a juvenile's risk for suicide should never be based upon a score of a single scale (Brown, 2009). Rather, a comprehensive assessment should be conducted in order to evaluate an individual's risk for suicide (Brown, 2009).

There is need for specific programs in juvenile justice systems for sexually abused girls to address the sexual abuse problem while they are incarcerated or under supervision of the state, rather than utilizing generic therapists. This research indicates that when a juvenile is sexually abused, the chances that she will become suicidal increase. There is a strong need for juvenile justice personnel to target these sexually abused girls and provide treatment for the abuse rather than placing them in group therapy to address other problems (i.e. anger problems, drug issues etc.). Sexual abuse is generally the contributing factor that leads them to engage in destructive behaviors (drug abuse, suicidal thoughts, promiscuous behaviors etc.). Targeting the abuse is just as needed as targeting a disease rather than just the symptoms alone.

Typically, female juvenile offenders are viewed as troublemakers, “bad seeds” or criminals first and victims second or not at all (Chesney-Lind, 1997). While having been sexually abused does not excuse a female juvenile’s delinquent behavior and suicidal ideation, it explains those things and these girls would benefit from being treated not only as offenders, but also as victims. Sexual crimes are crimes of power, and sexual crimes against children are crimes of power over some of the most vulnerable, and by definition, nearly powerless, members of society. During instances of sexual abuse, children can be made to feel powerless by having the well-being of someone they love, or of themselves, threatened; likewise, the offenders may stress to the children that if the children report the abuse, nobody will believe the allegation because it originated from a child rather than from a known and trusted adult. Sexual abuse of children, then, is not only a crime of physical depowering of the child but also of emotional depowering. Both of these aspects of sexual abuse must be addressed for the child to begin healing. Children who are sexually abused during these important developmental years shape their everyday lives around the abuse and the ways it is addressed or not addressed. Sexual abuse is different from other types of abuse, such as physical abuse or neglect, because its indicators are not always visible to the untrained eye; children can be reluctant to report sexual abuse for fear of not being believed, or for fear that someone they care about may be harmed; and false or misleading reports of the abuse have cast many a doubtful light on youths who do report sexual abuse, particularly teenage girls.

All of these resulting circumstances contribute to the emotions, behaviors, delinquency and suicidal ideation of female juvenile offenders. To truly reduce delinquency, recidivism, and suicidal ideation in the juvenile female population, it is imperative to target sexual abuse for treatment. This is just as necessary as targeting a disease rather than addressing its symptoms. In consideration of this information, the policy suggestion that should follow would dictate that frontline juvenile justice staff must be more thoroughly trained about sexual abuse of juveniles in order to more effectively address the abuse with the victims. This training would include, but is not necessarily limited to: recognition of symptoms of sexual abuse; initial screening of juveniles to detect possible sexual abuse; procedures for referring juveniles who have disclosed sexual abuse to providers who may more thoroughly address the abuse; and techniques for managing day-to-day behavior, including continued delinquency, substance abuse or emotional outbursts of juveniles who have disclosed sexual abuse. Addressing past sexual abuse with a juvenile can lead to improved behavior and emotional state as well as a decrease in suicidal ideation.

Future research could utilize the effect that sexual abuse has on males in the juvenile justice population. It is hypothesized that males would probably internalize the abuse at a much higher rate than females. Research like this could offer a clearer, definitive answer to this problem.

Future studies could also include more variables into the design by looking at abuse and criminal offenses. Do abused children commit more violent offenses than non-abused juveniles? In other words, does a history of prior abuse contribute to a juvenile’s propensity to become more violent than non-abused juveniles? Does a juvenile, who has an extensive criminal history, including violent charges, have a history of being sexually abused? If this child was abused did the abuse play a pivotal role in that child becoming violent? Future research could examine the psychological effects that sexual abuse has on a child and its role in a child becoming criminal. This is an issue that needs to be more thoroughly explored and could possibly explain the high rate of violent juveniles in the institutional component in the juvenile justice system.

Another future research that might be explored would be the relationship between a child being sexually abused and their conduct in a juvenile justice facility. Does a child that has been sexually abused by a caregiver have a greater chance of institutional misconduct than other non-abused juveniles? Researchers have stated that there has been a serious lack of inquiry into the conduct of institutional misconduct of juveniles (Delisi, 2003). To bridge this gap, researchers could focus on the abuse variable and its contribution to misconduct in juvenile justice facilities. More research is also needed to examine the suicide ideation variable utilizing screening instruments other than the MAYSI-2. In comparing this research with other screening instruments, researchers can gauge which screening instrument offers the most accurate determination of suicide ideation, rather than just relying on one. Juvenile justice research tends to focus on the rationale of why a juvenile graduates into the adult criminal justice system. A child that is sexually abused might be more likely to become arrested for offenses later on in life. The research clearly indicates that if a child is abused they are at a greater risk of being placed into the juvenile justice system. Does this also apply to the adult criminal justice system? These are some of the future research ideas that can be used to bring the gap between risk characteristics and possible future problems, either jail or suicide..

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BIOGRAPHICAL SKETCH

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Delivering Justice to the Mentally Ill: Characteristics of Mental Health Courts

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Abstract

The involvement of the criminal justice system with mentally ill offenders was profoundly affected by the Wyatt v. Stickney decision which resulted in large numbers of mental hospital patients returning to the community during the mid-1970's. This paper presents an overview of the mentally ill offender problem and the fairly recent development of Mental Health Courts (MHC's). An examination of the characteristics of mental health courts was conducted by examining data provided by the Criminal Justice/Mental Health Consensus Project. Results indicated a core set of elements, but wide variability exists among MHC's across the country.

Key Words: mental health courts, diversion programs, mentally ill offenders, Criminal Justice/Mental Health Consensus Project

INTRODUCTION

Nearly 280,000 people or 1 in 15 persons arrested or detained in jail have a serious mental condition that affects their public behavior. There are four times as many people with mental illness sent to jail than committed to state mental hospitals. While many are treated in jail, most are discharged without adequate psychiatric referrals upon release (Biewen & Smith, 2000; Lurigio, Fallon, & Dincin, 2000). This situation has its roots based in a 1972 federal court decision, Wyatt v. Stickney, which held that state psychiatric hospitals could not 'warehouse' mentally ill patients without offering some degree of rehabilitation. Ricky Wyatt was a fifteen year old youth committed to an Alabama state hospital due to 'ungovernable' behavior. He was heavily medicated to prevent him from acting out, but no other treatment plans were enacted. The state hospital at the time was understaffed and little care was provided for patients. Physical facilities were also inadequate. Wyatt testified he often had to sleep on wet floors. The goals of this class action lawsuit were to establish a constitutional right to treatment on behalf of people with mental illness and mental retardation, and to set minimum standards of operations for patients in state hospitals. The resulting decision established a right to treatment which offered progress towards release from involuntary commitment (Carr, 2004; Wyatt v. Stickney, 1971). Unfortunately, Alabama's blight of overcrowded conditions and lack of clinical staff to

adequately provide treatment was mirrored by other states. When the federal court mandated an individualized and appropriate course of treatment for all patients, many state hospitals opted to release a large number of their patients rather than violate the judicial directive (Perez, Leifman, & Estrada, 2003). Compounding the problem, state governments saw the release of patients as an excuse to save tax dollars by closing some of their state hospitals or consolidating other patients in central locations (Perez, Leifman, & Estrada). The spiraling down effect of state hospital populations resulted in a decrease of over 70% of state and county psychiatric beds from 1972 to 1990. During this time, the states closed 58 psychiatric hospitals, resulting in longer wait lists for hospital admission and continued overcrowding (Health Programs Directors Research Institute, 2004). Unfortunately, the resulting effect of the deinstitutionalization of mental hospitals flooded the communities with mentally ill individuals. The local community mental health resources were designed for outpatient treatment of fairly stable individuals with mental disorders. They were not equipped or prepared for the influx of more severely disturbed former inpatient clients. Furthermore, a large number of the former inpatients did not want or seek treatment for their mental illnesses once they were released. As a result, the number of mentally ill individuals increased in the communities and their unconventional behavior came to the attention of local law enforcement.

This paper reviews some of the perspectives of the criminal justice system regarding mentally ill offenders. With the assistance of the Criminal Justice/Mental Health Consensus Project, information and resources have been garnered to bridge the gap between criminal justice and mental health service. Special attention will be paid to the composition of mental health courts as they seek to respond to this special population.

Criminal Justice Perspectives of the Mentally Ill

Police Perspectives

Generally police appear to accept a responsibility for responding to calls involving mentally disturbed individuals. Their frustrations lie in feeling unsupported in managing this responsibility. Cooper, McLearn, & Zapf (2004) presented police officers with a vignette of a mentally ill person behaving irrationally on a street corner and asked what disposition they would take with this person. Most opted to initiate the involuntary hospitalization process or contact a mental health liaison for support, but complained that community assistance with these options was often limited. This perception was supported in a survey of five police departments in Indiana which revealed that the actual dispositions for the mentally ill subjects were at odds with the outcomes the officers felt appropriate. The officers also acknowledged that more training was needed to handle these kinds of calls (Wells & Schafer, 2006). In addition to training, the education level of officers appears to have an impact on their handling of mental ill individuals. Those with a college degree are more likely to connect the mentally ill individual with a psychiatric referral rather than arrest or resolve the situation informally (LaGrange, 2003).

An example of one of the more drastic informal solutions has taken the form of physically transporting homeless mentally ill persons into another jurisdiction (King & Dunn, 2004). This process of "dumping" results from either pressure to aggressively enforce certain nuisance type offenses or is fostered by a frustration with dealing with the same person over and over again. However, this practice dislodges the mentally ill person from any support

system that was currently in place, regardless how informal that might have been. Moreover, the displaced person may become victimized in the new location or become violent and victimize others due to inability to cope with their new surroundings (King & Dunn). In any event, the mental health issues have not been solved.

The Correctional Perspective

While many police departments have working relationships with hospitals to care for obviously mentally ill individuals detained by officers, other departments must rely on their jails to provide a safe and secure placement until a disposition can be made. If the person at the time of apprehension is acutely psychotic, there are obvious precautions for the jail staff to provide. However, many mentally ill individuals are arrested while they are stable, and their mental illness does not become apparent until they have been in jail for a period of time. It is estimated that the jail population has two to three times as many individuals with severe mental disorders than the general population (Teplin, 1990). The most common diagnoses include schizophrenia, schizoaffective disorder, major depression (with and without suicidal ideations), and bipolar disorder. Of these, the majority were also found to have a co-diagnosis of substance abuse (Abram & Teplin, 1991; Elbogen, Mustillo, Van Dorn, Swanson, & Swartz, 2007; Loveland & Boyle, 2007; White, Goldkamp, & Campbell, 2006). Mentally ill inmates pose special concerns for jail staff and administrators. A major goal for jails is to provide a safe and secure environment for staff and inmates alike. The often unpredictable behavior and special needs of mentally ill inmates threatens that goal and places an undue burden on jail operations. While some mentally ill offenders come to the attention of police for disturbing the peace and minor property crimes, others are arrested for serious felonies and violent crimes. Having a severe psychiatric disorder does not prevent one from also having strong criminal tendencies.

Adams and Ferrandino (2008) emphasized the need to balance the needs of treatment and control when managing mentally ill offenders in jail. In order to accomplish this, they recommended using appropriate psychological screening instruments during in-processing and providing adequate training about psychiatric disabilities to staff. Furthermore, by developing amicable liaisons between mental health and correctional staff, more flexible options for managing the behavior of mentally ill offenders could be generated.

Probation officers are responsible for mentally ill offenders who are released on pre-trial supervision or given probation in lieu of incarceration. Supervision in the community presents certain advantages over detention in jail. Mentally ill offenders have greater access to psychiatric services, able to obtain or maintain their jobs, and continue to receive support from family and friends. On the other hand, as with the jail, mentally ill offenders present a strain on probation resources. Probation officers are challenged not only to supervise risk behaviors that might lead to criminal acts, but also monitoring the symptoms of the mentally ill offender. Recidivism due to technical violations among mentally ill offenders tends to be higher than that of general probationers. Lack of compliance with medication, failure to complete mandated treatment, problems at work and home, and self medication with alcohol and illegal drugs typify the reasons for revocation (Castillo & Alarid, 2010).

To cope with the unique challenges of supervising mentally ill offenders, some probation departments have established a core of specially trained probation officers to manage this

caseload. Skeem, Emke-Francis, and Loudon (2006) examined the features of mental health specialty supervision as compared to traditional supervision. They found that specialty officers were provided with additional training, worked exclusively with mentally ill offenders, had significantly reduced caseloads, were actively involved in engaging the offenders in treatment, and provided them with a variety of community resources and skills to be mainstreamed into society. Probation supervisors acknowledged that the specialist supervisors were more effective than traditional probation supervisors, but doubtful about their ability to sustain a low caseload limit over time (Skeem, Emke-Francis, and Loudon).

The Judicial Perspective

When the mentally ill come to the attention of the police, several courses of action may be enacted. They may be arrested for a crime, detained in jail for their safety, transported to a hospital for observation and stabilization, referred to a mental health clinic, or merely released after the situation has been calmed. If the person is detained due to criminal behavior or mental instability, the courts become involved. Judges are faced with deciding how best to balance the needs of the mentally ill person with the needs of the community. Teasing out the criminal intent from underlying psychological disorders may move the case from criminal court to civil court for involuntary commitment to a psychiatric facility. Before proceeding with a criminal trial, mentally ill defendants may need to undergo psychiatric treatment in order to competently engage and assist in their defense. Some jurisdictions have created "Competency Courts" to facilitate this treatment process and avoid undue confinement in jail (Finkle, Kurth, Cadle, & Mullan, 2009). As with any criminal case, the pretrial / presentence reports provided by the probation office offer the judge information about the defendant's criminal and personal background. It is especially important to document past mental health contacts for mentally ill defendants to help the judge discern the degree of mitigation afforded to their psychological condition.

Compounding the judicial decision process is the issue of dual diagnoses. About 34% to 75% of mentally ill defendants have significant problems with alcohol and drug abuse, in addition to their primary psychiatric disorder (Lugigio, 2000; Swanson, Borum, Swartz, Hiday, Wagner, & Burns, 2001; Timmerman & Emmelkamp, 2001; White, Goldkamp, & Campbell, 2006). While insanity due to mental defect may be a legal defense, drinking and drug use is not. However, due to the side effects of psychotropic medications, many mentally ill patients prefer to self medicate their symptoms with alcohol or other drugs of their own choosing. The potential need for substance abuse treatment and psychiatric medication compliance become an important consideration in court mandated interventions.

The time and attention spent examining the mental disabilities of defendants extends the court docket and increases the time they will remain in the criminal justice system. To ameliorate this problem, a number of diversion programs have been attempted. The central focus of these programs is to offer supervised mental health services in lieu of prosecution. Diversion may be offered at the pre-booking stage or at post-booking. Following intake screening, those meeting the criteria of having a significant mental health disorder may be offered diversion. If defendants accepts diversion, they are referred to community mental health facilities for treatment and follow-up planning (Boccaccini, Christy, Poythress, & Kershaw, 2005). Similar to probation, persons under diversion must abide by the conditions

mandated by the court for a period of time set by the judge. Upon satisfactorily completing these conditions, criminal charges may be dropped.

Mental Health Courts

Traditional courts may use diversion as a tool to ease their docket load, but there has been a growing trend to develop “problem solving” courts which specialize in certain types of cases. Drug offenses, domestic violence, and immigration cases are examples in which specialized courts have been established to address specific needs (Das, 2008; Mirchandani, 2006; Mullany & Peat, 2008). Mental health courts have developed to address the special needs of mentally ill offenders and stop them from re-cycling through the criminal justice system. While they vary across jurisdictions, some common characteristics of mental health courts (MHC's) include the following fundamentals (Redlich, Steadman, Monahan, Robbins, & Petrila, 2006; Thompson, Osher, Tomasini-Joshi, 2007):

- (a) a specialized court docket to manage mentally ill defendants,
- (b) mental health screening for acceptable candidates,
- (c) voluntary enrollment in the program,
- (d) community based treatment plans with supervised compliance by the courts,
- (e) periodic review of treatment plans by community and judicial members,
- (f) incentives and sanctions for compliance (or noncompliance) with the conditions of the court,
- (g) criteria for satisfactory completion of the program.

MHC's are a fairly recent but rapidly developing addition to the criminal justice system. With the first two established in 1997, they had grown to more than 100 by 2006 (Redlich, et al). This growth has been stimulated by federal grants and support by the Bureau of Justice Assistance (BJA), most notably through the Justice and Mental Health Collaboration Program (JMHCP) grants. As part of the Mentally Ill Offender Treatment and Crime Reduction Act (MIOTCRA) signed by President Bush in 2004, JMHCP grants provide funding to state and local governments to develop collative programs between criminal justice and mental health systems (Bureau of Justice Assistance, 2009). The overall goal is to increase public safety by partnering criminal justice resources with mental health treatment resources aimed at providing specific needs tailored to the mentally ill offender. Government funding is authorized for programs intervening in misdemeanor or nonviolent felony offenses by those diagnosed with a mental illness or co-occurring mental health and substance abuse disorders. To this end, JMHCP grants and related BJA funding have been used to establish mental health courts as well as transitional and re-entry mental health programs for incarcerated offenders returning to the community. Development of law enforcement strategies and specialized training for criminal justice personnel interacting with mentally ill offenders, and other diversion programs have been included to provide a more comprehensive approach to managing mentally ill offenders (Bureau of Justice Assistance, 2009). An adjunct resource has been the Criminal Justice/Mental Health Consensus Project which is coordinated by the Council of State Governments Justice Center. Since 2002 the Consensus Project has actively provided on-site technical assistance, research, dissemination of information, and policy development for merging local criminal justice and mental health strategies. The Consensus Project has provided “how to” manuals for the development and program evaluation of

mental health courts, as well as a database for collecting information on existing MHC's (<http://www.justicecenter.csg.org/>).

Due to the rapid development of MHC's and the support provided the BJA and the Consensus Project, a closer examination of the prevalence and composition of these courts is warranted.

METHOD

An online database of collaborative criminal justice/mental health programs from across the country has been established through the Criminal Justice/Mental Health Consensus Project. Local agencies are invited to complete and submit a semi-structured survey about their programs which manage mentally ill offenders entering the criminal justice system. Within the database, different types of mental health initiatives may be examined (Justice Center, n.d.). One of the more common initiatives listed was mental health courts whose services and directives crossed several organizational lines among criminal justice agencies and mental health services. An examination of MHC's was conducted using the information provided by the Consensus Project database.

The Criminal Justice/Mental Health Consensus Project home page (<http://consensusproject.org/>) was accessed to locate the database. The database offered searches on existing programs established for law enforcement, courts, corrections, and community support programs. For the purposes of this study, a search for mental health courts was conducted. By clicking on each state individually, a list of the mental courts within the state was provided. A short narrative and descriptive information about each court was also offered. The descriptive information for the mental health courts in each state was compiled. Frequency data was collected about the court's operation in terms of the types of charges it accepted, demographic clientele, frequency and size of dockets, and the participants involved in the management of these courts.

FINDINGS

At the time of this study, a total of 196 mental health courts had completed surveys and were entered into the Criminal Justice/Mental Health Consensus Project database. The survey information submitted by the MHC's varied considerably in terms of completeness and descriptive details. The findings presented here provide a summary of the information made available. Table 1 provides the MHC's reporting information. There were 105 MHC's that reported the type of criminal cases they accepted. The majority of these courts (85%) accepted misdemeanors and 74% allowed felonies cases to be seen. Some forms of violent felonies were accepted by 20% of the courts, but only 1% heard cases involving significant violence. While primarily used as a diversion program, many of the MHC's accepted convicted misdemeanor (47%) or felony (41%) probation violators as well. The MHC's varied widely also in the clinical eligibility criteria. Seventy-nine courts reported type of clinical problems accepted, with the most common (43%) corresponding to their state's definition consistent of a “serious and/or persistent mental illness.” Of the remaining courts, about one-third stated they accepted offenders with both Axis I (clinical) disorders and Axis II (personality and mental retardation) disorders, while 29% accepted offenders with only Axis I disorders. Clinical exclusion criteria were reported by 56 MHC's. Most of the courts (64%) refused to hear cases in which substance

abuse was a primary disorder. Other exclusion criteria included developmental disabilities (39%) and traumatic brain injuries (46%). Most of the MHC’s (59%) held court weekly. Only 10% met daily and 6% convened monthly. Of the 68 MHC’s reporting the type of setting in which they were located, 56% described their location as urban, 32% as rural, and 21% as suburban. The most common outcome of successfully completing the MHC’s conditions resulted in the dismissal of charges (81% of 83 courts providing this information). Other

TABLE 1. CHARACTERISTICS OF MENTAL HEALTH COURTS

Total MHC’s providing information to the CJ/MHCP database = 196

105 MHC’s (54%) reported the type of criminal cases accepted:
85% accepts misdemeanors
35% accepts ordinance offenses/violations
74% accepts felonies
55% accepts felonies (property)
62% accepts felonies (nonviolent)
20% accepts felonies (violent)
41% accepts felony probation violations
47% accepts misdemeanor probation violations
1% other (significant violent, sex, arson crimes)
91 MHC’s (46%) reported docket frequency
59% meets weekly
9% meets bi-weekly
6% meets monthly
8% meets twice monthly
10% meets every day
2% meets 4 days a week
3% meets every other week
3% reported other
68 MHC’s (35%) reported the jurisdiction type:
56% in urban jurisdiction
32% in rural jurisdiction
21% in suburban jurisdiction
92 MHC’s (47%) reported the number of participants
48% has 0-50 participants
23% has 51-100 participants
11% has 101-200 participants
5% has 201-500 participants
7% has more than 500 participants
7% did not report the number of participants because the court was less than 1 year old

(Continued on next page)

**TABLE 1. CHARACTERISTICS OF MENTAL HEALTH COURTS
(CONTINUED)**

Total MHCs providing information to the CJ/MHCP database = 196

79 MHC’s (40%) reported the clinical eligibility criteria
29% accepts only Axis I diagnoses
33% accepts Axis I and II diagnoses
43% stated that it must correspond to the state criteria for “serious and/or persistent mental illness”
3% had no clinical requirements
4% stated other
56 MHC’s (29%) reported the clinical exclusion criteria
64% excludes any primary substance use disorders
39% excludes any developmental disabilities
46% excludes any traumatic brain injuries
1% excludes juveniles
83 MHC’s (42%) reported the outcome upon successful completion
81% will dismiss the charges
40% will reduce the time in supervision
37% will reduce the charges
30% will expunge the records
82 MHC’s (42%) reported the outcome upon unsuccessful completion
30% require the deferred sentence served
49% require the case be returned to the original court for processing
38% require the case returned to the original court for sentencing
33% require the case be processed by the MHC for charges held in abeyance
74 MHC’s (38%) reported the source of funding
57% receive state funds
24% receive municipal funds
31% receive federal funds
39% receive state mental health funds
20% receive court fees
3% receive county funds
15% receive regional mental health funds
5% receive municipal mental health funds
12% receive private foundation funds
8% receive tax levy
4% reported other

(Continued on next page)

**TABLE 1. CHARACTERISTICS OF MENTAL HEALTH COURTS
(CONTINUED)**

Total MHCs providing information to the CJ/MHCP database = 196

91 MHC's (46%) reported their group members

86% include the public defender
88% include the prosecutor
26% include a line-level enforcement official
29% include a state mental health agency representative
29% include a housing provider
35% include a consumer of mental health services
29% include a pretrial services staff
99% include a judicial officer (e.g. a judge or magistrate)
79% include a court administrator/program director
12% include a state mental health agency head
57% include a substance abuse treatment provider
25% include a consumers' advocate
44% include a supervisory-level law enforcement official
31% include a corrections officer
30% include a corrections department head
82% include a community mental health service provider
19% include a victims' advocate/representative
12% reported other

Note: MHC = Mental Health Court

CJ/MHCP = Criminal Justice/Mental Health Consensus Project

outcomes could include a reduction in supervision time (40%), a reduction in charges (37%), and expunging the criminal record (30%). When the offender failed to abide by the MHC's conditions, 49% of the MHC's returned the case to the original court for processing, while 38% returned the offender to the original court for sentencing. Funding for the MHC's was received from a wide range of sources. Seventy-four MHC's reported funding sources. The three most common funding resources reported were the state government (57%), state mental health funds (39%), and federal funds (31%). The composition of the mental health court team included a cross-section of professionals as reported by 91 MHC's. At first glance the MHC resembled any other court. A judge or magistrate headed all but one of the MHC's, and a prosecutor and public defender were included in 88% and 86% of the MHC's respectively. A court administrator or program director was assigned to 79% of the MHC's, and pretrial services staff were available to 29%. Other criminal justice personnel included a supervisory level law enforcement official (44%), corrections supervisor (30%), and law enforcement and correctional staff (57%). Mental health staff was represented by a state mental health agency administrator or representative (41%), community mental health service providers (82%), and substance abuse treatment providers (57%). Additionally, community advocates and support personnel were a part of several MHC's. A consumer of mental health services was invited

on the MHC team in 35% of the courts, as were victims' advocates (19%) and other consumer advocates (25%). A housing placement specialist was incorporated into 29% of the MHC teams.

DISCUSSION

In general the mental health court is organized along the lines of the traditional court with a judge, prosecutor and defense attorney. Court administrators and various law enforcement and correctional staff are in place as one would expect in a court of law. However, the MHC is a court that does not hinge on the letter of the law, but rather the spirit of the law. It seeks to understand where criminal culpability is overshadowed by mental instability, and then address both conditions. To aid in this quest, mental health and drug abuse professionals lend their support. Additionally, over a quarter of the MHC's recognized the need for a housing specialist to find community placements for mentally ill offenders, thus providing a stable environment which also facilitates their supervision and avoid homelessness. The MHC's have attracted a fair number of advocates, both for the victims of crimes and the consumers of mental health services. Approximately 60% of the MHC's reported mental health advocates being a part of their advisory board. This is not surprising considering organizations such as the National Alliance on Mental Illness (NAMI) are committed to insuring that individuals suffering from mental disorders receive the same treatment and consideration as other individuals with physical disabilities and medical disorders would be afforded. NAMI has been a grassroots advocate active in lobbying for the rights of mental health consumers on many governmental fronts, including campaigning for extended funding for MHC's (National Alliance on Mental Illness, 2003).

What is somewhat surprising is the relatively large percentage of MHC's (64%) that rejected offenders with a primary diagnosis of substance abuse. Given the large number of dual diagnosed mentally ill offenders who self-medicate their symptoms, it appears that MHC's are overlooking a significant need. Often it is difficult to discern which came first, the mental illness or the substance abuse. There is also the concern that the substance abuse disorder is masking a more serious mental illness. However, the MHC's must shepherd their resources for the most appropriate cases. Furthermore, substance abuse cases can be referred to Drug Courts if also available in the county. The only caveat being whether or not the Drug Court excludes individuals with mental disorders, in which case the mentally ill are caught in a Catch-22 dilemma. Many MHC's also narrowed the diagnostic scope to exclude offenders with developmental disabilities or traumatic brain injuries. Their exclusion may be due to the highly specialized assessment and treatment approaches each require. However, there is a concern that individuals with developmental disabilities are at a severe disadvantage when they enter the criminal justice system, and the sanctions imposed on them are disproportional to their transgressions (Cockram, 2005; Cockram, Jackson, & Underwood, 1998). Similarly offenders with traumatic brain injury (TBI) present a screening and management challenge. Shiroma, Ferguson, and Pickelsimer (2010) roughly estimated that up to 60% of the offender population could demonstrate some evidence of mild to severe TBI. Considering the higher than normal frequency of accidents, fights, and drug related toxicity incurred by offenders, the TBI rate would be expected to be greater than normal. However, the inclusion criteria used by epidemiologic studies that were examined varied widely and cast doubt on the true

prevalence of the infirmity. The findings of Shiroma, Ferguson, and Pickelsimer also suggested there could be an overlap between TBI symptoms, AXIS I disorders, and criminal behavior. In another study of psychiatric inpatients, it was found that patients with a history of closed head injuries and a co-occurring substance abuse disorder were more likely to have a history of violence in the community (Dinn, Gansler, Moczynski, & Fulwiler, 2009). This could be related to those who suffer a head injury affecting the frontal lobe region of the brain where impulse control is regulated.

Of greater concern is the exclusion of an AXIS II (personality) diagnosis in 29% of the MHC's. While the AXIS I diagnosis of a mental illness is the predominant concern, many offenders have a secondary diagnosis of a personality disorder, typically antisocial personality disorder. The lifestyle of chronic criminals easily fits into the diagnosis of AXIS II category of Antisocial Personality Disorder. The common features of this diagnosis include a pervasive pattern of disregard for the rights of others occurring since age 15 as observed by repeated arrests, lying, impulsivity, irritability and/or aggressiveness, reckless disregard for the safety of self or others, irresponsibility, and a lack of remorse for their conduct which harms others (American Psychiatric Association, 2000). The exclusion of personality disorders may reflect the view that the court will not entertain those with criminal traits regardless of the presence of symptoms of other mental disorders. Similarly, the court could perceive those with personality disorders in addition to other mental illnesses to be poor risks for treatment. Considering the scenario of stabilizing the clinical disorder only to have the antisocial personality traits become more active, might create some credence to this view.

Government funding restrictions and the concern for public safety prevent most MHC's from accepting violent offenders. Nevertheless, it can be argued that violent mentally ill offenders have a greater need for coordinated services due to their potential for harm to the public. Unfortunately, adequate controls and supervision methods to safely monitor seriously violent offenders in the community are limited, as is the staff to carry them out. As MHC's evolve, developing nondiversion responses or split sentences may provide a means for more closely managing their mental health needs without jeopardizing public safety.

MHC's are more likely to be found in urban areas. The lack of availability of MHC's in rural areas may be due to the lack of mental health resources. Despite an equal or greater proportionate mental illness rate to urban areas, rural communities have not been able to attract psychologists, psychiatrists, or social workers in meaningful numbers. Mental health professionals in rural areas rarely have the option to specialize in certain disorders, but must become general practitioners (Bray, Enright, & Easling 2004; Campbell & Gordon, 2003; Merwin, Hinton, Dembling, & Stern, 2003). These limitations are likely to restrict the range of options available to MHC's. Nevertheless, about one-third of the reporting MHC's identified themselves as being in a rural area, which indicates that these obstacles can be overcome.

In line with many diversion programs, successful completion of the court's conditions allow the dismissal of charges in the large majority of MHC's. Those maintaining charges typically reduce the sanctions or the length of supervision time. However, less than a third will expunge the criminal record of the offense. Those who fail to abide by the MHC's conditions or obtain additional charges are typically returned to the original court of record for sentencing or continuation with the trial. If the offender was accepted by the MHC after a sentence was

imposed (as per a plea bargain agreement) and recidivated, the original sentence was typically imposed.

CONCLUSION

Responding to the needs of the mentally ill offender is not only frustrating for criminal justice personnel but for members of the community as well. While many approaches, officially and unofficially, have been attempted, the advent of mental health courts appears to offer a comprehensive structure to cope with this sensitive problem. The 196 mental health courts listed in the Criminal Justice/Mental Health Consensus Project provide evidence of a growing concern for treating mentally ill offenders humanely and competently, without sacrificing public safety. This study provided a general idea of the prevalence and characteristics of MHC's. Because the database used was limited to frequency information, the scope of this study was limited to providing a basic description of MHC's. More information is needed regarding the rationale behind their organizational plans, acceptance of cases, and interventions used. Unlike drug courts and substance abuse, mental illness encompasses a large number of disorders, each with different symptoms and treatment approaches. Each mentally ill offender is unique and this study cannot review the uniqueness of the clients being served. The tasks faced by MHC's are multidimensional and complex. In contrast with Drug Courts where sobriety and recidivism are the distinct focuses of attention, MHC's must appraise a combination of psychiatric symptoms and their risks towards re-offending, often coupled with the additional symptoms of substance abuse. Future research is needed into the dynamics of dual diagnoses as well as the interactions of AXIS I and AXIS II disorders in mentally ill offenders. MHC's serving as a diversion program from the traditional criminal justice system rely on offenders to make an informed decision about their legal rights and consent to treatment. However, a great many of the offenders are incompetent to make those decisions and the MHC judge must consider civil commitment to a clinical setting until their competency is restored, prior to deciding any criminal issues (Stafford & Wygant, 2005). This presents the question of the functioning level in general of the offenders entering the MHC process. Might their level of functioning affect the recidivism rates of the MHC's? While there have been some positive case studies of individual MHC's reducing recidivism, there are few studies measuring the overall effectiveness of MHC's in general to reduce re-offending (Herinckx, Swart, Ama, Dolezal, & King, 2005; Moore & Hiday, 2006).

Law enforcement and corrections have long been involved in problem solving through developing problem oriented policing and development of correctional treatment programs. The arrival of problem solving courts is a current evolutionary step in the criminal justice progress. As they develop, these courts present administrators additional problems as well. How many special problem courts can a county support – drug, mental health, homeless, domestic violence courts? How much do these courts overlap? When funds are limited, which one takes priority? How does local politics influence policy makers in regards to establishing or maintaining these courts? In the future, perhaps we will see a generic special offender court. Due to the diversity of disorders and human problems in which the MHC's work, they provide a ripe proving ground to determine what works.

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BIOGRAPHICAL SKETCH

Jim Mann is assistant professor of criminal justice at Lamar University. For several years he served as a Chief Psychologist in the Federal Bureau of Prisons with experience in developing and administering intervention programs for prison inmates. His research interests are directed towards the search for evidence based programs in criminal justice, especially those centered on mentally ill offenders.

The Transition of a Texas County from “Dry” to “Wet” and a Comparison of DWI Arrest Rates Before and After

Walt Scalen

Stephen F. Austin State University

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Abstract

On November 7, 2007 Angelina County, Texas held a wet/dry election; the measure passed and Angelina County became a wet county. This policy change created quasi-experimental conditions for testing pre- and post-legalization DWI arrest rates. Using data supplied by the Office of the County Attorney in Angelina County we compared DWI arrests for 24 pre-legalization months to 24 post-legalization months. T-test results indicate that there is not a statistically significant difference between the pre- and post-legalization DWI arrest means ($p < 0.63$). The null finding does have significant policy implications regarding wet/dry elections – going wet may not produce the safety hazards opponents argue they will.

Key Words: DWI, wet, dry, prohibition, alcohol

THE PROBLEM

The correlation between specific crimes and alcohol use is a matter of vigorous debate. The literature on the subject yields conflicting findings and suggests a number of intervening or confounding variables. Some studies have compared driving while intoxicated (DWI) arrest in “wet” counties to those in “dry” counties within the same state. By “wet” we mean few if any restrictions on sales of alcohol and by “dry” we mean specific and often substantial restrictions on alcohol sales within a given jurisdiction. Other studies have made alcohol related driving accidents in dry and wet counties the major basis of comparison. Some research has attempted to connect the dots between a large number of variables including police practices, drinking habits, and even religious preferences. Unquestionably the problem of alcohol use and its relationship to social problems is complex; however, focusing on specific changes over a given time period may offer the greatest promise for discerning cause and effect.

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Abstract

On November 7, 2007 Angelina County, Texas held a wet/dry election; the measure passed and Angelina County became a wet county. This policy change created quasi-experimental conditions for testing pre- and post-legalization DWI arrest rates. Using data supplied by the Office of the County Attorney in Angelina County we compared DWI arrests for 24 pre-legalization months to 24 post-legalization months. T-test results indicate that there is not a statistically significant difference between the pre- and post-legalization DWI arrest means ($p < 0.63$). The null finding does have significant policy implications regarding wet/dry elections – going wet may not produce the safety hazards opponents argue they will.

Key Words: DWI, wet, dry, prohibition, alcohol

THE PROBLEM

The correlation between specific crimes and alcohol use is a matter of vigorous debate. The literature on the subject yields conflicting findings and suggests a number of intervening or confounding variables. Some studies have compared driving while intoxicated (DWI) arrest in “wet” counties to those in “dry” counties within the same state. By “wet” we mean few if any restrictions on sales of alcohol and by “dry” we mean specific and often substantial restrictions on alcohol sales within a given jurisdiction. Other studies have made alcohol related driving accidents in dry and wet counties the major basis of comparison. Some research has attempted to connect the dots between a large number of variables including police practices, drinking habits, and even religious preferences. Unquestionably the problem of alcohol use and its relationship to social problems is complex; however, focusing on specific changes over a given time period may offer the greatest promise for discerning cause and effect.

Angelina County, Texas had faced the wet/dry issue on many occasions. The results were always and predictably the same. The county would remain dry. Historically, these elections were not close as the county had successfully maintained a prohibition against the off-premise sale of alcoholic beverages since 1936, a few years after national prohibition had been repealed. An election scheduled for November 7, 2006 produced the customary arguments. Those supporting the legalization of the sale of beer and wine in Angelina County argued that outcomes would be positive including the reduction of DWI arrests, while the opponents of the proposal predicted ominous consequences such as an increase in DWI arrests. After months of vigorous debate, the election was held and the results were surprising: the citizens of Angelina County voted to do something they had not done before, to end the seventy year ban on the sale of beer and wine and become a wet county. So, who was right, the proponents or the opponents of the measure? Did DWI rates increase or did they decrease? Our study seeks to answer these questions.

LITERATURE REVIEW

DUI & DWI Arrest Rates

One of the earlier studies that attempted to discern the relationship between DWI arrest rates and the availability of alcoholic beverages was conducted by a group of professors at Middle Tennessee State University in 1975 (Schnelle et al, 1975). The researchers examined three dependent variables: rates of automobile accidents, arrests for public drunkenness, and DWI arrest rates. The independent variable was the decision of several counties in Tennessee to legalize the sale of alcoholic beverages. Data were collected 12 months prior to the wet/dry elections and 12 months after the decision to go wet was made. The rates of accidents, arrests for public drunkenness, and DWIs were adjusted for population growth, and a pre-intervention/post-intervention model was constructed for analysis of the data. A statistical analysis (t-tests) revealed that the legalization of liquor had no effect on the three social measures in any of the communities in which legalization of liquor took place. In essence, no systematic effects of the legal reform on the dependent measure were found. However, in the Schnelle study there are a few confounding variables that might explain the absence of significant findings. While liquor was not sold in three of the communities in the study prior to the wet/dry elections, beer was. Beer was also available in a fourth community that did have a wet/dry election during the study. In addition, Schnelle, et al pointed out the local news media in all communities were filled with warnings about increased accident and crime rates should the voters approve the sale of liquor. These warnings could have had a psychological effect on the public and sensitized them to possible risks and altered driving practices. Nevertheless, a statistically significant relationship between accident rates, arrest for public drunkenness, and DWI arrests and the legalization of liquor sales were not supported by the available data.

Stitt and Giacomassi (1992) distinguished between the density of on-premise alcohol outlets (bars, restaurants, private clubs) and off-premise alcohol outlets (liquor stores and other packaged-goods outlets) and their relationships to the incidence of driving under the influence (DUI) arrests and other alcohol related crimes in all 50 states. They hypothesized that their findings would be similar to Canadian studies that established a relationship between DUI arrests and on-premise consumption of alcohol. This was not the case. After reviewing statistical records for all fifty states for the years 1982-1984, the researchers found negative

relationships between the density of both on-premise alcohol outlets and off premise alcohol outlets and rates of arrests for DUI and alcohol related crimes.

Stitt and Giacomassi (1992) offered several explanations for these findings. First, the density of on-premise or off-premise outlets for alcohol could reflect the public sentiment towards alcohol consumption and thereby affect the level of strictness in law enforcement. For example, fewer outlets per capita may reflect greater anti-alcohol sentiment and stricter enforcement of alcohol ordinances, which may result in higher rates of alcohol related arrests. The reverse could be true for high density areas. Age was also found to be a factor. Liquor law violations were found to be significantly higher in states with a larger percentage of population between the ages of 15 to 24 and a high legal drinking age. In addition, though the authors did not raise the issue, government produced national statistics on crime are typically dependent on voluntary reporting of local law enforcement departments and may be of questionable accuracy.

Powers and Wilson (2004) focused primarily on the relationship between the access to alcohol and DUI arrest rates. They point out that alcohol access has been debated in the United States since the early 1800s, and many moral, health, and traffic safety problems have been associated with alcohol consumption. They note that about 10% of the counties in the United States remain dry. Are those jurisdictions safer than those that have few if any restrictions on the availability of alcohol? The authors note that prohibition places limits on commercial activity and, thereby, limits individual freedom, stunts economic growth, and stigmatizes communities as excessively moralistic. Therefore, much is at stake in knowing whether prohibition actually reduces crime and traffic accidents.

Powers and Wilson (2004) focused on the 75 counties in Arkansas, over half of which remain dry. Also of interest is the fact that Arkansas is growing faster than the national average. The authors note that others (Dull and Giacomassi 1988, and Rush et al, 1986) have concluded that dry counties have lower rates of fatal and nonfatal motor vehicle accidents and property accidents. These findings and others like them suggest a causal relationship between alcohol availability and alcohol-related crime. However, contrary findings (Dull and Giacomassi 1986, and Elizondo 1998) suggest higher rates of DUI and other alcohol-related problems in counties where alcohol sales were prohibited.

Powers and Wilson (2004) also note that DUI arrest rates in the United States in recent years have declined for every age group. Additionally, the number of drivers and vehicles on American roads has increased significantly since Prohibition, therefore, making the probability that there are more drunk drivers on the road than ever before. In other words, the authors recognize that the relationship between the availability of alcohol and DUIs is not a simple one, and it is likely impossible to control for all relevant variables. The authors point out that despite the history of contrary findings on the issue of alcohol consumption and public safety, alcohol remains one of the most regulated products in the United States in terms of licensing, rules on legal age, limitations on times of availability, and restrictions on advertising. Furthermore, penalties for DUI violations have increased across the country including heavy fines, license revocation, and mandated periods of incarceration. The authors point out that all these factors impact the relationship between alcohol availability and DUI arrest rates.

Powers and Wilson (2004) hypothesized that a multiplicity of factors related to the situational prevention of DUI and alcohol related accidents and offences would lead to the conclusion that countywide prohibition would result in reduction of DUI arrest rates and related problems.

Therefore, dry counties would likely have a lower incidence of DUI arrests than wet counties. Initially their examination of available data found that wet counties had significantly higher DUI arrest rates than dry counties; however, when controlling for important law enforcement variables such as varying levels of police enforcement, activity, and coverage, the differences in DUI arrest rates between wet and dry counties were no longer statistically significant. While the researchers expected to find evidence that county-level prohibition of alcohol sales might impact DUI rates, no such evidence was found.

While the Schnelle et al (1975), Stitt and Giacomassi (1992), and Powers and Wilson (2004) findings are significant, they only considered DWI/DUI arrest rates in their analyses. Because alcohol availability has been linked to additional negative social consequences (alcohol related accidents), it is important to consider these effects as well.

Negative Social Consequences

In 1993, Winn and Giacomassi (1993) acknowledged the difficulty that previous studies have had in regard to finding statistically significant connections between the availability of alcohol and negative social consequences including alcohol related arrests and accidents. They point out that a myriad of previous studies have produced “contradictory, weak, or inconclusive findings,” and that “no clear relationship has been found between consensual alcohol prohibition and a variety of behaviors and conditions commonly associated with alcohol abuse” (Winn and Giacomassi 1993, 785). It is their stated intention to continue the search for significant findings. The researchers focused on the connection between alcohol availability and alcohol-related and non-alcohol related traffic accidents. They examined data from all 120 counties in Kentucky, and identified nine control variables including population density, church affiliations, per capita income, miles of road, types of roads, police officers per 1000 population, police officers per mile of road, and percentage of minorities in the populations. After a rather sophisticated statistical analysis the researchers concluded that counties that prohibit alcohol sales have significantly lower alcohol-related motor vehicle accident rates. There were some contradictory findings, however. Dry counties had higher rates for non-alcohol related fatal accidents.

Brown et al, (1996) examined the effect of county-level alcohol prohibition on fatal alcohol-related motor vehicle accidents. Data were collected from all 254 counties in the state of Texas; 53 designated as dry and 201 identified as wet. Controlling for a number of variables including income, population, race, religion, and political affiliation, the researchers found that wet counties experience 2.145 more fatal alcohol-related motor vehicle accidents per year than dry counties, a finding of debatable significance. However, on the issue of border availability the data support the finding that individuals who drive outside of their county to drink have a higher probability of being involved in an accident while drinking and driving in a wet county. This supports the notion that counties with more availability have more accidents. The analysis of available data also revealed some interesting, but not surprising outcomes. For example, counties with a higher percentage of Baptists tend to be dry, while counties with more Catholics tend to be wet. Urbanized counties were more likely to be wet, and politically liberal counties as measured by percent of Democratic voters were more likely to be wet. And counties where tourism was found to be an issue were more likely to be wet.

Baughman et al, (2000) acknowledge that in previous years a major goal of public policy in the United States has been to reduce the health and safety risks associated with alcohol

abuse, especially vehicle accidents caused by drunk driving. The authors acknowledge that while previous studies have examined a large range of variables associated with alcohol related accidents and arrest, little has been focused on the possible differences between beer and wine and more potent alcohol beverages and their relationship to safety issues. Baughman et al. examined available data from all 254 Texas counties over the period 1975-1996. The data clearly revealed that on average dry counties had fewer accidents per-capita than counties allowing the sale of alcohol. However, detailed analysis revealed that counties allowing off-premise and on-premise consumption of alcohol had nearly 16 more accidents per year than similar counties that only allowed off-premise sales of all alcohol or counties that only allow for beer and wine. Of particular interest is that access to higher alcohol-content liquor seemed to present a significantly higher risk to highway safety than beer and wine.

Limitations & Public Expectations

In general, research on the relationship between the availability of alcoholic beverages and DWI rates has yielded inconclusive results. In most cases wet counties have been compared to dry counties. In some studies a multiplicity of related factors has been thrown into the mix. Some have focused on a few counties. Others have included data from all counties in a state, or analyzed national statistics. A variety of statistical techniques have been used, some quite sophisticated. Often the quantity and complexity of the data has been impressive, but findings always seem to fall short of expectations. However, a fundamental methodological principle is that finding “nothing” is finding “something.”

It apparently seems logical to a number of Americans and several researchers that restrictions on the sale of alcoholic beverages should and will reduce the number of DWI arrests and alcohol related accidents. A review of the literature on this subject suggests otherwise. One thing is clear; the relationship between prohibition and negative social consequences is complex if it exists at all. It is also notable that only one study (Schelle et al, 1975) attempted to measure the effect of a wet/dry election using a single county as the unit of analysis. Schelle collected data on arrests for driving while intoxicated, arrests for public drunkenness, and the total number automobile accidents 12 months prior to the election and 12 months after the election. While findings were negligible, perhaps a longer period is required for changes to start manifesting themselves. Our study will focus on one county and analyze 24 months of data prior to a wet/dry election and 24 months of data after the election. Our focus will be DWI arrest rates. Surely a county that has been dry for 47 years will not remain the same after alcohol becomes more readily available.

DATA & METHODS

On Tuesday, November 7, 2006 voters in Angelina County, Texas voted to end prohibition on the off-premise sale of alcohol and become a wet county. This change in policy created quasi-experiment conditions for determining the effects of alcohol availability on DWI arrests in Angelina County pre- and post-legalization.

The data came to us from the Office of the County Attorney in Angelina County and represent the number of DWI cases filed during a given month. Our analysis began with DWI cases filed in November of 2004 and ends with DWI cases filed in October of 2008. This gives us a total *N* of 48 months – 24 pre-legalization and 24 post-legalization months. Summary

statistics for this variable are presented in Table 1. The minimum and maximum values (14 and 47 respectively), as well as the standard deviation (7.74), indicate substantial variability in the number of DWI cases filed from one month to another. In addition to this variable, a dummy variable (0 = dry and 1 = wet) was created for the purpose of comparing pre- and post-legalization DWI cases filed.

TABLE 1. SUMMARY STATISTICS

Variable	Observations	Mean	Std. Dev.	Min	Max
DWI Cases Filed	48	31.75	7.71	14	47

Because our interest is the affect of alcohol availability on DWI cases filed, we will compare pre- and post-legalization filed cases means. Simple means comparison tests (t-tests) of the DWI cases filed will be used to make this determination. This procedure is represented in the following formula:

$$t = (x - \mu_0) \sqrt{n} / s$$

where x is the DWI average, μ_0 is the null hypothesis (zero difference between pre- and post-legalization means), n is the number of observations (months in the study), and s is the number of DWI cases filed.

RESULTS

The results are interesting. On a month-to-month basis there does not appear to be any pattern to the number of DWI cases filed pre- and post-legalization. Results from the t-test analysis confirm that there is not a statistically significant difference between the pre- and post-legalization DWI means (p < 0.63). In fact, as can be seen in Table 2, the pre-legalization mean is actually higher than the post-legalization mean (32.29 and 31.21 respectively), though not significantly higher.

TABLE 2. TWO-SAMPLE T-TEST

Group	Observations	Mean	Std. Dev.	95% Confidence Interval	
Pre-Legalization	24	32.29	9.14	28.43	36.15
Post-Legalization	24	31.21	6.12	28.62	33.79
Probability = 0.63					

Given the t-test results, we fail to reject the null hypothesis that there is no difference in pre- and post-legalization means. Pre-election warnings of increasing incidents of DWI if prohibition was lifted in Angelina County are unfounded.

There two possible explanations for these findings. First, lifting the prohibition on off-premise alcohol sales in Angelina County reduced the need for individuals to travel to neighboring wet counties to purchase alcohol. This lessened travel time on the road and the probability of being pulled over. Second, and a more plausible explanation for the lack of change in DWI arrests, is that hard liquor is still not sold in Angelina County. Individuals wishing to purchase hard liquor are still required to travel to adjacent wet counties to do so. Given Angelina County’s prior on-premise alcohol sales, nothing behaviorly has changed.

More research including measures of on- and off-premise drinking and average county miles driven might help further explain our findings.

CONCLUSION

Prior to the wet/dry election on November 7, 2006, Angelina County was often referred to as the “wettest dry county in Texas,” (Korosec, 2006). While beer and wine or hard liquor could not be sold or purchased in stores within the boundaries of the County, it was freely sold by the drink in 20 restaurants and clubs (Korosec, 2006). Furthermore, alcohol in all forms could be easily obtained by a relatively short (10-15 minutes) “trip to the river.” Therefore, Angelina County was legally and technically dry but it was functionally and practically wet. As in most studies prior to this one, the assumption that dry is being compared to wet is a false one. In fact, alcohol use is so extensive, systemic, and common the term dry is a misnomer. The true effects of prohibition do not exist. It is no surprise, therefore, that study after study finds no statistically significant relationship between availability and DWI arrests or alcohol related accidents. After Angelina County became wet nothing changed because the county was essentially wet before the election. Future studies will likely encounter similar difficulties in testing the effects of alcohol availability unless authentic examples of prohibition can be found.

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BIOGRAPHICAL SKETCHES

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Medical Marijuana in the News

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Abstract

This study examines how the United States newspaper media represents medical marijuana. The literature review highlights the history of marijuana, the social control of marijuana, the medicalization of marijuana use, and the relevance of agenda-setting theory to media coverage of medical marijuana. An ethnographic content analysis of newspaper articles concerning medical marijuana revealed seven distinct typologies of media representations of the subject matter. The results reveal that (64.2%) of the overall content treated medical marijuana positively; that changes in presidential administrations appear to have had an effect on newspaper coverage of medical marijuana; and that geographical regions of the United States differ in their coverage of news and editorial content of medical marijuana articles. The legal and policy implications of the findings are explored.

Key Words: medical marijuana, medicalization, law and social control, agenda-setting theory

MEDICAL MARIJUANA IN THE NEWS

Marijuana has been referred to as both a “devil weed” and a “miracle drug.” Although the debate on the legalization of marijuana for personal use has raged for decades (e.g., Joffe & Yancy, 2004; Leinwand, 1971), the issue of medical marijuana (i.e., the use of marijuana for medicinal purposes) has become one of the most passionately debated policy issues of the early 21st century in the United States. The debate has been spurred, in part, by the fact that at least 14 states have legalized medical marijuana even though federal law prohibits such use of the drug (Mikos, 2009). National public opinion polls throughout the past 15 years have consistently demonstrated that between 60% and 85% of adults support the medicinal use of marijuana upon the recommendation of a physician (American Association of Retired Persons [AARP], 2004; American Civil Liberties Union [ACLU], 1995; NBC News/Wall Street Journal, 2009; Stein, 2002). Yet, news reports often make it clear that medical marijuana use presents

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a variety of issues that go beyond the debate over legalization. Through a content analysis of newspaper articles, this exploratory study attempts to provide a framework for identifying the issues that repeatedly emerge in news reports concerning medical marijuana and attempts to analyze these issues with an eye toward improving public policy.

REVIEW OF THE LITERATURE

Marijuana, the common name for the cannabis sativa plant, is a vegetal substance that contains more than 460 known chemicals, over 60 of which are unique cannabinoids (Ben Amar, 2006; Julien, Advokat, & Comaty, 2008). Cannabinoids naturally occur in the nervous and immune systems of animals. They bind to cannabinoid receptors and are structurally related to delta-9-tetrahydrocannabinol, also known as THC, the major psychoactive ingredient in marijuana (Ben Amar; Lambert & Fowler, 2005). The prevalence of marijuana use in the United States is highlighted by the fact that it is the most used illicit drug in America (U.S. Department of Health and Human Services, 2007).

The Social Control of Marijuana

Marijuana has been governed by formal social controls for many years in the United States (Becker, 1955). The first federal drug legislation was passed in 1906 in the form of the Pure Food and Drugs Act (1906), a law which required that intoxicating substances be included on labels, including cannabis (Gieringer, 1999; Matthew, 2009). Eight years later, the Harrison Act of 1914 required registration and payment of an occupational tax by all persons who imported, produced, dealt in, sold, or gave away opium, cocaine or their derivatives (Bonnie & Whitebread, 1970; Matthew). Although marijuana was not regulated by the Harrison Act, state laws began to do so in the same year the Harrison Act was passed. Between 1914 and 1931, 21 states restricted the sale of marijuana as part of their general narcotics law; 4 states outlawed its cultivation, and 1 prohibited its use for any reason (Bonnie & Whitebread). These early anti-marijuana laws received little public attention.

The Marihuana Tax Act of 1937 was the first federal law specifically targeting marijuana.¹ The Act required anybody who cultivated, distributed, or used marijuana to pay a \$1 per ounce tax for industrial or medicinal use, and \$100 per ounce for recreational use (Matthew, 2009). Although the Act did not criminalize marijuana use, the use of regulatory social controls via taxation increased the price of marijuana to such a degree that the tax decreased the use of marijuana for both medicinal and recreational use (Marshall, 2005). Around the same time, the U.S. federal government also began efforts to portray marijuana negatively in an attempt to increase informal social controls over marijuana use. For example, in 1936, the government commissioned the documentary *Reefer Madness*, a film which depicted high school students smoking marijuana then experiencing psychotic breaks in which they engaged in violent acts that included killing their parents (Marshall). The following year, an article co-authored by the Commissioner of the Federal Bureau of Narcotics depicted marijuana as a poison that caused young individuals to leap to their deaths (Anslinger & Cooper, 1937). These propaganda efforts facilitated a societal paranoia concerning marijuana use. Congress capitalized on this paranoia in the early 1950s by shifting formal social controls from the regulatory style to the penal style (see, e.g., Black, 1984; Owen, Fradella, Burke, & Joplin, in press), as evidenced by the passage

1. There are two accepted ways of spelling marijuana: “marijuana” and “marihuana.”

of The Boggs Act of 1951, the Narcotic Control Act of 1956, and The Comprehensive Drug Abuse Prevention and Control Act of 1970 (Bonnie & Whitebread, 1970; Matthew, 2009). The portion of the latter law formally regulating illicit drugs is commonly referred to as the Controlled Substances Act. It differentiated five “schedules” of drugs which varied in terms of each controlled substance’s abuse potential, known effects, perceived harmfulness, and level of accepted medical use. Marijuana was classified as a Schedule I controlled substance, a category which is supposed to be reserved for substances demonstrating a high potential for abuse while having no accepted medical utility, such as LSD and Heroin (Bonnie & Whitebread, 1974; Matthew). Marijuana’s inclusion in Schedule I sparked much debate (Khatapoush, 2002, Koch, 1999, Marshall, 2005); numerous attempts to reschedule marijuana, however, have been unsuccessful.

Medicalization

Marijuana was listed in the *U.S. Pharmacopeia* from 1870 until 1941 (Khatapoush, 2002). Medicinal use of marijuana remained legal in much of the United States until the Controlled Substances Act was enacted in 1970. Yet, that same time period saw a resurgence of interest in the use of marijuana for medicinal purposes, spurred largely by injured U.S. soldiers returning from the Vietnam War who spoke highly of marijuana’s pain-relieving qualities (see Ferraiolo, 2007; Koch, 1999). Between 1978 and 1984, the public pressured legislatures in dozens of states to recognize the medicinal value of marijuana (Koch). According to Pacula, Chriqui, Reichman, and McElrath (2002, p. 417), “By the end of 1982, 31 states and the District of Columbia had passed some sort of legislation that addressed the use of medicinal marijuana.”

In 1985, the Food and Drug Administration approved Marinol and Nabilone, which are Schedule II prescription drugs that contain THC (Clark, 2000). The introduction of these drugs advanced the movement to legalize medical marijuana because some believed these new drugs could not provide the same effects as using marijuana (Pecula et al., 2002). Moreover, these advocates argued that marijuana did not induce users to experience several of problems associated with the two new prescription drugs. Specifically, Marinol and Nabilone users complained that the effects of the pills were too strong and wore off quickly; they were too expensive; and they could be difficult for nauseous patients to digest (Clark).

The use of marijuana by cancer patients in order to relieve their chemotherapy-induced nausea further pressured the legalization of medical marijuana (Ferraiolo, 2007; Koch, 1999, Pecula et al., 2000). The AIDS epidemic also had a considerable impact because individuals realized that marijuana could cheaply and effectively treat the AIDS wasting syndrome (Ferraiolo; Koch). This series of events eventually led to the passage of one of the most significant pieces of state legislation concerning medical marijuana: The Compassionate Use Act (CUA) was enacted in 1996 when California residents passed Proposition 215 with 56 percent of the vote (Khatapoush, 2002). The law allowed individuals to cultivate and possess marijuana, which was one of the most significant aspects considering that the prior attempts at medical marijuana legislation fell short of actually providing individuals with marijuana. Subsequent legislation in California established a program for voluntary registration of qualified medical marijuana patients through a statewide identification card system (Brown, 2008). The U.S. federal government, however, was quick to point out that marijuana was still a Schedule I controlled substance under federal law (Koch, 1999). That fact, however, did not deter 13 other states (Alaska, Colorado, Hawaii, Maine Michigan, Montana, Nevada, New Jersey, New

Mexico, Oregon, Rhode Island, Vermont, and Washington) from following California's lead in enacting medical marijuana laws (ProCon.org, 2010).

The federal government officially maintains there is no scientific evidence proving marijuana has legitimate, therapeutic uses (Koch, 1999; Seamon, Fass, Maniscalco-Feichtl, & Abu-Shraie, 2007; U.S. Food and Drug Administration, 2006). Yet, there are numerous "scientific studies that document the medical efficacy and safety of smoked marijuana [that] are published in peer-reviewed medical journals and are available through the National Library of Medicine" (Carter & Mirken, 2006, p. 46; see also ProCon.org, 2010). Several therapeutic findings have been consistently noted in this body of literature, including treatment for pain, nausea and vomiting, wasting syndrome and appetite stimulation, neurological symptoms (including muscle spasticity), and glaucoma (Abrams et al., 2007; Carter & Mirken, 2006; IOM, 1999; Pacula et al., 2002; U.S. General Accounting Office, 2002). Moreover, the substance is remarkably nontoxic and has minimal side effects compared with medicines for which it may be substituted (Grinspoon). Accordingly, in 2009, the American Medical Association (AMA) reversed its 72-year-old policy concerning medical marijuana and urged that marijuana's status as a Schedule I controlled substance should be reviewed (see Bennett, 2009). In 2004, the American Nurses Association (ANA) had taken an even stronger position when it recommended that patients have "safe access to therapeutic marijuana/cannabis" because it has been safely "used medicinally for centuries" and "has been shown to be effective in treating a wide range of symptoms and conditions" (as cited in ProCon.org, 2010).

The Intersection Role of Politics and Media

Politicians have often capitalized on the media's ability to help shape public perceptions of drugs. "Presidents can obviously provide necessary outlet for public concern.... Thus, presidential policy rhetoric can indirectly induce moral panics by influencing public opinion" (Hawdon, 2001, p. 422). Indeed, media coverage not only can influence what the public deems important, but also can shape the public's views on a given topic (McCombs & Reynolds, 2002; Mastroianni & Noto, 2008). Perhaps this point is best exemplified by the way in which Ronald Reagan's rhetoric garnered public support for the "War on Drugs" (Hawdon; Krug, 1989). Conversely, it should not be surprising that Stryker (2003) found that coverage negatively depicting marijuana use increased in 1996 when Bob Dole claimed that Bill Clinton, his opponent in the U.S. presidential election, condoned the use of marijuana, and, conversely, media coverage positively depicting marijuana use increased the following year when the federal government announced it would fund a study exploring the medical use of marijuana.

In addition to national news coverage of political rhetoric on major policy issues, the news content of regional and local media outlets can similarly manifests local political attitudes and outcomes (e.g., Gentzkow & Shapiro; Gerber, Karlan, & Bergan, 2006). Empirical research has even demonstrated that news organizations slant coverage of particular policy issues to conform to or influence the politics of a geographical region targeted by a particular media outlet (e.g., Branton & Dunaway, 2009). Finally, local newspapers also allow the general public to express their opinions in editorials, letters to the editor, and similar forums, thereby providing "a unique opportunity to study opinion expression of the citizenry" (Hoffman & Slater, 2007, p. 58).

By the start of the 21st century, people had come to rely on the mass media for 80% of their information about news and public affairs (Yang & Stone, 2003). And while newspaper readership and television news viewership have both declined in the past few years, according to a study by The Pew Research Center for the People and the Press (2008), the republication of news articles on the internet has resulted in roughly 81% of Americans receiving daily news updates. Thus, although the medium in which news stories are delivered may be evolving, the content of news coverage remains important since news articles and commentary provide people with information about timely topics, such as medical marijuana. An analysis of the content of medical marijuana news stories and editorials should not only shed light on current media views on the subject, but also should provide insights into the problems reported by jurisdictions which have implemented medical marijuana laws—findings which have implications for law and public policy.

The Purpose of the Present Research

With increasing public support for medical marijuana, there is a corresponding increase in the potential for additional states to pass medical marijuana laws. There is, however, still much opposition and concern about new medical marijuana laws. This study is intended to capture the pulse of the nation concerning medical marijuana through a content analysis concerning newspapers articles from across the country dealing with medical marijuana. Specifically, the researchers sought to investigate the following research questions:

1. How is the issue of medical marijuana being portrayed in U.S. newspapers beyond reporting poll results of the percentage of respondents favoring or opposing the legalization of marijuana use for medical purposes?
2. Are variations in the substantive treatment of medical marijuana in the news (positively, negatively, or neutrally) related to any notable factors, such as the primary theme of the article, the President in office at the time of publication, or the region of the country in which the newspaper story was published?
3. Are there lessons that can be learned from a review of newspaper articles that might help improve law and public policy concerning medical marijuana?

RESEARCH METHODOLOGY

Data Collection

The research sample utilized for this study was collected using LexisNexis Academic. That service's "U.S. Newspaper and Wires" database was searched using the terms "medic* /5 mar*uana." This search phrase was used in order to encompass both of the common spellings of the word: "marijuana" or "marihuana," as well as variations on the word "medical," such as "medicinal." The search of the two words within a five-word proximity of each other was employed to reach data that might have referred to the subject matter in a manner other than "medical marijuana," such as "medicinal use of marijuana" or "marijuana for medical use." The search examined one full year of newspaper data starting on June 15, 2008 and ending June 15, 2009. These dates were selected so that media coverage in the last few months of the presidency of George W. Bush could be compared with the first few months of Barack Obama's

presidency. The search yielded a total of 1,930 newspaper articles. From this population, a random sample of 321 articles was selected and subjected to content analysis.

Data Coding and Analyses

Qualitative content analysis

The 321 articles selected for the research sample were reviewed using ethnographic content analysis (Altheide, 1996). This method is particularly appropriate since multiple articles were reviewed in an attempt to discover emergent patterns and differing emphases among and between the articles reviewed. Consistent with the method as set forth by Altheide, the research involved a focus on narrative data in which both categorical and unique data were obtained from each article studied. Articles were then classified based on the patterns that emerged during the analysis.

The qualitative analysis was conducted in three phases. First, cases in the sample were analyzed and separated into one of three groups. The first category was termed “not relevant.” Articles assigned to this category were those in which some variation on the term “medical marijuana” appeared, but had nothing to do with the substance of the article. Of the 321 articles in the research sample, 50 (15.5%) articles were irrelevant to the research question and were, therefore, discarded.² Within the 271 remaining, relevant articles, a distinction was made based upon the importance of medical marijuana to the substance of the article. Articles in which medical marijuana was discussed only briefly were coded as “mentioned in passing” (N=100; 31.3%). In contrast, those articles in which medical marijuana was the focus of the news feature or editorial were coded as “key” (N=171; 53.2%).

In the second phase of the research, the 271 articles in which medical marijuana evidence was discussed (whether mentioned in passing or as the key focus of the new feature or editorial) were further broken down based on the type of treatment given to the topic. Treatment was coded as being positive, negative, or neutral. To be classified as “positive,” the author of the article has to praise or offer support either for the medicinal use of marijuana or for medical marijuana laws. To be classified as “negative,” the author had to criticize or argue against the medicinal use of marijuana or for medical marijuana laws. Articles which neither praised nor criticized medical marijuana were coded as “neutral.” The neutral category included all news features in which a journalist reported on a medical marijuana story either without offering a pro or con spin to the story or by presenting both pro and con arguments in an objective fashion. Using these definitional criteria, one researcher independently coded these 271 articles as positive, negative, or neutral. Then, a random sample of 90 articles (33% of the 271) was independently coded by a second researcher. An impressively high level of inter-rater reliability was achieved, as both researchers coded all but 2 of the 90 articles (97.8%) identically.³

2. These articles were also reviewed for duplications, such as if a story by the Associated Press chain had run in several markets. The researchers intended to discard any duplicate articles (thereby counting it as one story), but no such duplicates were found among the 321 articles randomly selected. Accordingly, no duplicate articles were discarded.

3. The two articles on which the researchers disagreed concerned news stories in which a reporter presented positive and negative information about medical marijuana, but one coder felt the reporting was reasonably neutral while the other felt that although both sides were presented, the overall tone of the article leaned more one way than the other. The researchers discussed the two articles until they were able to mutually agree upon their proper coding.

In the third and final phase, qualitative comparisons among and between the cases that fell into each of the categories were conducted. Because feature news stories by reporters are qualitatively different from opinion pieces (e.g., “op-eds” and letters to the editor), they were pre-coded into a public opinion category. Consistent with Altheide’s (1996) methodology, all of the other news features were compared and contrasted without predefined content analysis categories, thereby allowing for the emergence of central themes that are explored in detail in the results and discussion section of this article.

Quantitative data analyses

Articles were also coded for two additional variables. First, because the Bush and Obama administrations differed significantly in their views regarding the role of the federal government enforcing the provisions of the Controlled Substances Act of 1970 in states that had legalized the medicinal use of marijuana, articles were coded for which president was in office at the time of publication. Of the articles in the research sample, 125 (46.1%) were published in the last few months of George W. Bush’s presidency and 146 (53.9%) were published after Barack Obama took office. A chi-square analysis were used to assess the significance of the associations between the president in office at the time of the article’s publication and the substantive treatment of medical marijuana in the article (i.e., positive or negative).

Second, articles were coded by the regions of the country in which the article was published. These different regions included; West, Mid-West, South, and North according to the United States Census Bureau (2000). Seven articles were excluded from this variable because they were published in national newspapers. A chi-square analysis were used to assess the significance of the associations between the region of publication and the substantive treatment of medical marijuana in the article (i.e., positive or negative).

RESULTS

Typologies

As Table 1 illustrates, six distinct typologies emerged during the qualitative analysis of the 271 relevant cases in the research sample; miscellaneous articles were grouped together in a catch-all category.

TABLE 1. TYPOLOGY VARIABLE

Variable	Number of Cases	Percent
Dispensaries	14	5.2%
Legal and Regulatory Issues	75	27.7%
Crime	21	7.75%
Opinions	51	18.8%
Passage of medical marijuana laws	67	24.7%
Politicians’ Stances	21	7.75%
Miscellaneous	22	8.1%
<i>N</i>	271	100.0%

Politicians' Stance on Medical Marijuana (N = 21; 7.7%)

Because medical marijuana has become an important political issue, politicians are often forced to take a position on the legal status of medicinal marijuana use. As Table 2 demonstrates, politicians favoring legalization of medical marijuana slightly outnumbered those who opposed it.

TABLE 2. POLITICIANS' STANCE ON MEDICAL MARIJUANA

	Positive	Negative	Neutral	
Key to Article	1	2	0	3 (14.3%)
Mentioned in Passing	10	6	2	18 (85.7%)
	11(52.4%)	8 (38.1%)	2 (9.5%)	21 (100%)

Politicians' views on legalization appear to be a function of two primary causes: (1) their own personal experiences with people who have sought to use marijuana for medicinal purposes; and (2) the general political will of their constituents. Consider the change in Representative Jerry McNerney's views on medical marijuana. Although he formerly supported the arrest and prosecution of medical-marijuana users in light of federal law and policy, McNerney changed his position after visiting with patients who benefited from using marijuana (Richman, 2008). His spokesman explained that:

In the past year, the congressman has met several patients with debilitating illnesses that use doctor-prescribed medical marijuana. Hearing their stories, he feels that he cannot in good conscience deny doctor-prescribed treatment to a person that experiences excruciating pain on a daily basis. (p. 1)

It is important to note that McNerney represents California's 11th district, which comprises much of the San Francisco Bay area. This locale is known for being supportive of the medical marijuana movement. The fact that McNerney represents a state in which an overwhelmingly majority of voters support medical marijuana allows his views to be in accord with the voters without fearing the voter backlash.

In contrast, Connecticut Governor M. Jodi Rell politically opposed medical marijuana so much that she vetoed a bill that would have legalized the use of medical marijuana in her state.

Although she said that she, as a cancer survivor, had sympathy for those who wanted to use marijuana for pain management, she said that her sympathy could not overcome her concerns that those seeking to obtain the drug would need to break the law to purchase it. (Keating, 2009, p. 5)

Rell likely vetoed the bill because, unlike in some state, polls failed to demonstrate significant support for medical marijuana in Connecticut (Keating). This absence of voter support appears to have influenced Rell's political stance on medical marijuana more than her own experiences as a cancer survivor.

Legal and Regulatory Issues (N = 75; 27.7%)

Since the passage of the CUA in 1996 in California, various legal and regulatory issues regarding medical marijuana have arisen in the states which have legalized medical marijuana. Table 3 shows that the articles discussing such issues positively outnumber those presenting a negative opinion by a margin of nearly 2 to 1.

TABLE 3. LEGAL AND REGULATORY ISSUES

	Positive	Negative	Neutral	
Key to Article	18	3	3	24 (32.0%)
Mentioned in Passing	32	19	0	51 (68.0%)
	50 (66.7%)	22 (29.3%)	3 (4.0%)	75 (100%)

As discussed in the literature review, the laws of the 14 states which recognize some form of medical marijuana contradict federal law. Federal agents have conducted numerous raids of marijuana dispensaries in these states, primarily in California. These raids were covered in 13 of the key articles concerning legal and regulatory issues, comprising 31.7% of the key articles.⁴ Such raids, which resulted in federal drug charges being levied against owners or operators of dispensaries operating in accordance with state law, prompted local politicians to lament the actions of the federal government.

It's just unfortunate that we have this discrepancy between the state and federal laws.... If the federal courts are going to give the states the right to make their own decisions on these issues, then they have to give us the right to continue with that. (Yohe-Mellor, 2008, p. 5)

During his presidential campaign, Barack Obama promised to stop federal raids on state medical marijuana dispensaries which were operating in accordance with state laws. This pledge was mentioned in 12 of the key articles concerning legal and regulatory issues, which comprised 29.3% of the key articles.⁵ In one of these articles, White House spokesman Nick Shapiro explained that:

The President believes that federal resources should not be used to circumvent state laws, and as he continues to appoint senior leadership to fill out the ranks of the federal government, he expects them to review their policies with that in mind. (Dinan & Conery, 2009, p. 48)

In March of 2009, U.S. Attorney General Eric Holder announced that the Obama administration would "effectively end the Bush administration's frequent raids on distributors of medical marijuana" and focus federal drug enforcement on "traffickers who falsely masqueraded as medical dispensaries and 'use medical marijuana laws as a shield'" (Johnston & Lewis, 2009, p. A20).

4. See also Cathcart, 2009; Dinan & Conley, 2009; Egelko, 2008; Egelko, 2009a; Jacob, 2009; Ma, 2008; Parsley, 2008; Sherry, 2008; Simerman, 2009a; Stancliff, 2008; Tam, 2009a; Yohe-Mellor, 2008.

5. See also Cathcart, 2009; Dinan & Conley, 2009; Egelko, 2009; Huntley, 2009; "Inside the Times," 2009; Simerman, 2009b; Stanton, 2008; Tam, 2009a; Woo, 2009a.

Newspapers also reported on civil challenges to state laws brought by county governments. For example, San Diego and San Bernardino counties challenged provisions in California law which required counties to issue identification cards which protect holders from arrest by state or local police when acting in accordance with the laws concerning medical use (Egelko, 2009b). Notably, the U.S. Supreme Court refused to consider an appeal by the counties, effectively upholding the California statutory and regulatory framework (*San Diego County, Cal. v. San Diego NORML*, 2009).

Another recurring theme concerning legal and regulatory issues raised by medical marijuana laws concerns the challenges medical marijuana use poses under other existing regulatory frameworks. For example, the California Department of Motor Vehicles revoked a medical marijuana user's driver's license after determining that she was unfit to drive because of her habitual use of the drug (Egelko, 2008). Similarly, at the University of Colorado at Boulder, a student who possessed a medical marijuana card successfully fought campus authorities over a threatened suspension which included mandatory community service and drug testing after university officials discovered marijuana in his dormitory room. After his ordeal, the university revised its policies to accommodate Colorado's 8-year-old medical marijuana law (Sherry, 2008). These articles illustrate that although some states allow individuals to possess and use marijuana for medicinal purposes, there are complex regulatory issues that need to be addressed to harmonize social policies regulating everyday activities with the lawful use of medical marijuana.

Another major legal and regulatory theme that appeared in numerous articles in the research sample concerned media attempts to explain the details of medical marijuana laws to readers. One such article summarized medical marijuana use guidelines issued by the California Attorney General (Tam, 2008a). Nine additional articles in the research sample similarly explained regulatory guidelines. Collectively, these 10 articles comprised 24.4% of the key articles in the legal and regulatory category.⁶ Several of these news stories covered guidelines concerning regulatory standards for cultivation and sale for dispensaries (Lagos, 2009). These articles illustrate the important role that the media plays in disseminating and explaining changes in regulatory social controls.

Passage of Medical Marijuana Laws (N = 67; 24.7%)

More than a quarter of the articles in the research sample discussed either medical marijuana laws pending approval by voters or legislatures, or confusion caused in the wake of recent passage of a medical marijuana law. As Table 4 illustrates, the overwhelming number of articles in this category were positive. But qualitative analysis revealed that the major division between positive and negative articles often concerned whether the article was reporting on a pending medical marijuana law or reporting problems with a recently enacted one.

TABLE 4. PASSAGE OF MEDICAL MARIJUANA LAWS

	Positive	Negative	Neutral	
Key to Article	36	5	0	41 (61.2%)
Mentioned in Passing	20	4	2	26 (38.2%)
	56 (83.6%)	9 (13.4%)	2 (3.0%)	67 (100%)

6. See also Barber, 2009; Bemstein, 2008; Lagos, 2009; Stancliff, 2008; Tam, 2008b, 2008c, 2009b; Woodward, 2008.

Most of the articles concerning pending laws were positive,⁷ while the articles dealing with confusion over new medical marijuana laws were decidedly negative.⁸ The overwhelming positive news coverage of potential medical marijuana legislation is consistent with the various polls which consistently demonstrate that the majority of adults in the United States favor the medicinal use of marijuana upon the recommendation of a physician (AARP, 2004; ACLU, 1995; Angus Reid Poll, 2009; NBC News/Wall Street Journal, 2009; Stein, 2002). Some of the positive articles relayed stories of users who found relief from their symptoms by using marijuana, such as this story of an Alabama boy:

After Michael illegally obtained marijuana to cope with his pain, his father began to see a change in Michael: he was not suffering as much, not as riled up and in pain all the time and, most importantly, he was at peace with himself and his condition. Up to that point, Bobby Phillips had been a staunch opponent of marijuana legalization. Now, he saw things in a new light. (Taylor, 2009, p. 25)

In contrast, many of the negative articles concerned the passage of a medical marijuana law in Michigan during the time period examined in this study. One such article highlighted the fact that medical marijuana would soon be legal to use, but still be illegal to obtain since Michigan's medical marijuana law did not include a legal avenue for individuals to obtain medical marijuana (Shaw, 2008). Another article questioned whether inmates with legitimate health problems should be able to use marijuana ("Poll: Stem Cells," 2008). Such articles illustrate the need for new regulatory social controls to replace the penal social controls in effect prior to legalization.

The other negative articles in this category questioned the effectiveness of marijuana as a medicine. The article "First Pot Cards Ok'd," for example, included a discussion by a physician who, referencing studies which failed to prove the drug's effectiveness, urged evaluating other pain-killing methods before the use of medical marijuana (Armentrout, 2009).

We have to say that sucking a burning weed into your throat isn't the optimal drug delivery system. There is nothing in marijuana that is not available in other medications. There is a high risk for diversion and abuse. And it is smoke, which studies have shown has more dangerous chemicals than tobacco. (p. 36)

Public Opinion (N = 51; 18.8%)

There are strong differences of public opinion concerning the use of marijuana for medical purposes, as Table 5 illustrates.

The negative public opinion articles concerning medical marijuana focus on opinions that medical marijuana causes more harm than good. One of the harms repeatedly cited by opinion

7. See also Andren, 2009; Canon, 2009; Crawford, 2009; "Judge Throws Out Medical Marijuana Ordinance," 2009; Livio, 2008; Mucha, 2009; Polta, 2009; B. Scott, 2009; Taylor, 2009.

8. See also "101 Apply for Pot Cards," 2009; Agar, 2008; Armentrout, 2009; Bohn, 2009; "Briefs," 2009; Ford-Mitchell, 2008; "It's Time to Legalize," 2008; "Medical Marijuana Signups Start," 2009; "Medical Pot Cards Issued, 2009; "Poll: Stem Cells," 2008; "Proposal 1 Wording," 2008; Shaw, 2008; "What the Law Means," 2008.

TABLE 5. PUBLIC OPINION

	Positive	Negative	Neutral	
Key to Article	25	15	1	41 (80.4%)
Mentioned in Passing	8	2	0	10 (19.6%)
	33 (64.7%)	17 (33.3%)	1 (2.0%)	51 (100%)

writers is that medical marijuana laws can facilitate the use marijuana for recreational use.⁹ One article entitled “Doesn’t Add Up” argued: “Research has shown that in San Diego, for example, just two percent of those with medical marijuana ID cards can be categorized as having a serious illness. The remaining ninety-eight percent do not” (“Doesn’t Add Up,” 2009, p. 9). Such opinion pieces illustrate public perception that the legality of medical marijuana use has increased the availability of the drug for nonmedical use as well. This appears to be an especially acute concern with regard to the potential impact on youth (Sabet, 2008).

We oppose this legislation because it will send the wrong message to our children. We have seen firsthand the devastation that drugs and alcohol bring not only to the individuals who use these substances, but to their families and friends as well. Those of us who work in law enforcement are concerned that this legislation will result in increased availability of marijuana to young people, along with a reduction in the stigma associated with the drug. (“Calling Marijuana Medicine,” 2009, p. 10)

The writer also expressed concern that the increased availability of marijuana for medicinal purposes would reduce the stigma associated with drug, thereby negative affecting informal social controls of drug use (“Calling Marijuana Medicine”).

Opinion pieces written by opponents of medical marijuana frequently reference a connection to crime as one of their arguments against legalization. The editorial “Pot Ruse Must End” highlights this fear and discusses how those who grow marijuana for medicine are endangered because “druggies” want to steal their plants (“Medical Pot Ruse,” 2008). The author of the editorial stated that:

A man with a medical marijuana prescription confronted a pot pirate in his garden late at night, and the suspect fired a shot at the grower, who was naked and running around in his yard. The next night, the same grower said somebody else tried to steal his medical marijuana. He went outside and fired shots at suspects as they drove away in a vehicle, he claimed. Let’s face it: Gunfire is never exchanged by people fighting over Lipitor, NyQuil or Lexapro. This is more than just medicine. (p. 5).

Those who favor medical marijuana reference many different reasons in support of legalization. The most cited reason for why it should be legalized is the fact that it has many beneficial qualities for several symptoms and disorders experienced by numerous individuals nationwide. Of the 25 articles in which medical marijuana was the key focus of an editorial advocating for medical marijuana, 16 (64%) focused on the reported medicinal benefits of the

9. See also Anderson, 2008.

drug.¹⁰ Some of these opinion pieces explain how the medical community’s support for medical marijuana use has continued to grow and solidify, especially in cases of pain caused by cancer, HIV/AIDS, multiple sclerosis, and other conditions (Carter & Bigelow, 2008). Some writers offer first-hand accounts of the benefits of using medicinal marijuana, often with regard to combating the effects of chemotherapy (“It’s Time to Legalize,” 2008).

One of the more interesting public opinion articles revealed how some law enforcement officials favor legalization of medical marijuana use because, as the title of the editorial explains, “Another View: I Shouldn’t Have to Arrest Sick People.” The author, a policeman, discusses how banning medical marijuana use means that seriously ill or handicapped individuals would be subject to arrest and prosecution. The author goes on to state that:

Although I do not personally support this, it is my job to enforce the law as written, and there is currently no legal way to be in possession of marijuana. It seems that some in law enforcement, as well as many others who oppose this bill, want to be disconnected from the reality of what it is trying to do. House Bill 648 is meant to protect those with debilitating illnesses and handicaps from being handcuffed, arrested and labeled as criminals for using marijuana when it is recommended by their doctors. . . . Neither state legislators nor the police should stop a sick patient from following his doctor’s advice. (Jardis, 2009, p. 31)

Financial reasons are also frequently raised in support of medical marijuana. Some of these editorials focus on the amount of money spent by local, state, and the federal governments—an estimated \$10.7 billion—arresting, prosecuting, and punishing marijuana offenders (Swan, 2009). Others focus their arguments on the tax revenues lost by keeping the \$113 billion-per-year marijuana industry underground (“Clio Should Move Slowly,” 2009).

Dispensaries (N = 14; 5.2%)

As Table 6 shows, nearly two-thirds of the news articles on medical marijuana dispensaries expressed negative views. The reasons for this are interesting, as the negative sentiments expressed appear to be a function of the lack of regulatory social controls in California after medical marijuana was legalized.

TABLE 6. DISPENSARIES

	Positive	Negative	Neutral	
Key to Article	5	8	0	13 (92.9%)
Mentioned in Passing	0	1	0	1 (7.1%)
	5 (35.7%)	9 (64.3%)	0 (0.0%)	14 (100%)

All of the key articles concerning medical marijuana dispensaries focused on those located in California. Much of the news coverage concerned California dispensaries that were either operating illegally or acting as a source for other illegal activities. Unlike the articles in the crime typology which focus on the alleged link between medical marijuana and crime unrelated

10. See also Alexander, 2009; Bujouves, 2008; Carter & Bigelow, 2008; “Change Course on Pot Laws,” 2009; “Clio Should Move Slowly,” 2009; “Feigned Outrage,” 2009; “It’s Time to Legalize,” 2008; “Letters,” 2009; “Letters to Barack Obama,” 2009; “Letters to the Editor,” 2008a; “Letters to the Editor,” 2008b; “Obama is Right on Medical Marijuana,” 2009; “Saturday Readers’ Forum,” 2008; Stackpole, 2008; Swan, 2009; “Your Opinions, 2009.

to the operation of dispensaries, articles in this category focus on medical marijuana dispensaries that were operating illegally and criminal activities associated with illegal dispensary operations, such as possession of unregistered firearms at the dispensaries or robberies of dispensaries (Harris & Maher, 2009; Sweeney, 2009).¹¹ Notably, negative media coverage of dispensaries operating illegally calls public attention to potential dangers surrounding medical marijuana dispensaries. This, in turn, can lead people to oppose having medical marijuana dispensaries in their communities (Sweeney). Some articles from states other than California reference the problems encountered with medical marijuana dispensaries in California and offer suggestions for how legislators and regulators could establish a regulatory framework for the operation of dispensaries that would avoid some of the problems experienced in California (Needham, 2009).

One of the more interesting positive articles concerning medical marijuana dispensaries explained the operations of Oaksterdam University, a school in northern California which teaches students how to grow and process marijuana, use it in baked goods, and manage medical marijuana dispensaries within the boundaries of state law (Lowrey, 2008).

Crime (N = 21; 7.7%)

Separate from crimes related to the operation of marijuana dispensaries, the media also reports stories in which medical marijuana is linked to crime in the community-at-large (i.e., beyond dispensaries). Not surprisingly, all of the cases in this category treated the subject matter negatively or neutrally. Of the 13 articles in this category in which medical marijuana was the key focus of the article, 8 (61.5%) reported on either a robbery or murder.¹² Several of these articles describe individuals who were targeted for criminal victimization because they possessed medical marijuana (“Man in Ski Mask,” 2008; Fraley, 2009).

The fact that medical marijuana articles regarding crime are overwhelmingly negative is consistent with other research on media representation of crime (see Chermak & Chapman, 2007; Dowler, Fleming, & Muzatti, 2006; Reiner, 2002). It should be noted, however, that only 21 articles in the research sample (7.7%) addressed a connection between crime and medical marijuana. This suggests that the media is not exploiting any such link through over-reporting, a significant difference from the ways in which media generally report crime.

Miscellaneous (N = 22; 8.1%)

Twenty-two articles in the research sample discussed issues that were not subsumed in the six primary categories in the typology. In spite of the disparate themes raised in these miscellaneous articles, the overwhelming majority of them reported on positive aspects of medical marijuana (see Table 7). Within the miscellaneous category, two themes repeatedly appeared.

TABLE 7. MISCELLANEOUS

	Positive	Negative	Neutral	
Key to Article	6	4	0	10 (45.5%)
Mentioned in Passing	12	0	0	12 (54.5%)
	18 (81.8%)	4 (18.2%)	0 (0.0%)	22 (100%)

11. See also “In Brief,” 2009; Lockett, 2008; “Whittier May Ban,” 2009.

12. See also Johnson, 2009; “Medical Pot News,” 2008; Salonga, 2009; T. Scott, 2009; Sweeney, 2009; Vau Dell, 2008.

First, five of the miscellaneous articles raised questions about the impact of legalized medical marijuana on the workplace.¹³ For example, state appellate court rulings in California and Oregon previously held that an employee could be fired for testing positive for marijuana (Lane, 2008). Would the same hold true for patients who legally used the drug for medicinal purposes? These articles highlight the need for changes in regulatory and therapeutic social controls to accommodate such users.

Second, in addition to the public opinion pieces discussed earlier which made tax revenue arguments in support of the legalization of medical marijuana, four news articles also made such arguments.¹⁴ All four of these articles reported on the debate in Oakland, California where the city council approved a 1.8 percent business tax, or \$18 on every \$1,000 in gross receipts, earned by Oakland’s medical marijuana dispensaries, a measure anticipated to generate more than \$300,000 each year in revenue for the city (Woodall, 2009, p. 7).

Other Factors Shaping the Characterization of Medical Marijuana in the Print Media

Pearson’s chi-Square analyses were performed to detect if media treatment of medical marijuana (i.e., positive vs. negative representations of medical marijuana in newspaper articles) significantly differed under two variable conditions: (1) the president in office at the time the articles were published; and (2) the region of the country in which the newspaper was published

Presidency

As Table 8 illustrates, there was more positive reporting on medical marijuana in the first few months of the Obama presidency than there was during the last few months of the presidency of

TABLE 8. PRESIDENCY

	Bush	Obama	Total
Positive	72	102	174 (64.2%)
Not Positive (Negative or Neutral)	53	44	97 (35.8%)
	125 (46.1%)	146 (53.9%)	271 (100%)

George W. Bush. A Pearson’s Chi-Square analysis suggests that these differences are significant ($\chi^2 = 4.407$; $p < 0.05$; $\Phi = .128$).

Region of the Country

As Table 9 shows, there were significant differences in the substantive treatment of medical marijuana in newspaper articles from different regions of the country ($\chi^2 = 11.553$; $p < 0.01$; $\Phi = .209$). The number of positive articles in the Mid-West and South emphasizes the growing support for medical marijuana throughout the country. The only geographical region in which significant numbers of articles portrayed medical marijuana negatively was the West. This was due to the large number of articles in California newspapers which were critical of the state’s relaxed and inconsistent regulations concerning medical marijuana, most especially with regard to the operation of dispensaries.

13. See also Cole, 2009; Draeger, 2009; McManus, 2009; “Oregon Employers Say,” 2009.

14. See also “Oakland to Tax Pot,” 2009; “State House Dome: Gay Marriage Pact,” 2009; Woo, 2009b.

TABLE 9. REGION OF THE COUNTRY

	North	South	Mid-West	West	Total
Positive	29	18	51	70	168 (63.6%)
Not Positive (Negative or Neutral)	16	06	15	59	96 (36.4%)
	45 (17.0%)	24 (9.1%)	66 (25.0%)	129 (48.9%)	264 (100%)

DISCUSSION

The examination of newspaper articles from throughout the country offers insight into the many issues regarding medical marijuana and the ways in which the media represents these issues. Overall, as Table 10 shows, 173 (63.8%) of the articles treated medical marijuana

TABLE 10. TYPOLOGY OUTCOMES

Typology		Positive	Negative	Neutral	Totals
Politicians' Stance	Key	1	2	0	3 (14.3%)
	Passing	10	6	2	18 (85.7%)
	Total	11 (52.4%)	8 (38.1%)	2 (9.5%)	21 (100%)
Legal and Regulatory Issues	Key	18	3	3	24 (32.0%)
	Passing	32	19	0	51 (68.0%)
	Total	50 (66.7%)	22 (29.3%)	3 (4.0%)	75 (100%)
Enactment of Medical Marijuana Laws	Key	36	5	0	41 (61.2%)
	Passing	20	4	2	26 (38.2%)
	Total	56 (83.6%)	9 (13.4%)	2 (3.0%)	67 (100%)
Public Opinion	Key	25	15	1	41 (80.4%)
	Passing	8	2	0	10 (19.6%)
	Total	33 (64.7%)	17 (33.3%)	1 (2.0%)	51 (100%)
Dispensaries	Key	5	8	0	13 (92.9%)
	Passing	0	1	0	1 (7.1%)
	Total	5 (35.7%)	9 (64.3%)	0 (0.0%)	14 (100%)
Crime in Retaliation to Medical Marijuana	Key	0	13	0	13 (61.9%)
	Passing	0	7	1	8 (38.1%)
	Total	0 (0.0%)	20 (95.2%)	1 (4.8%)	21 (100%)
Miscellaneous	Key	6	4	0	10 = 45.5 (%)
	Passing	12	0	0	12 = 54.5 (%)
	Total	18 (81.8%)	4 (18.2%)	0 (0.0%)	22 = 100 (%)
Totals	Key	91	50	4	145
	Passing	82	39	5	126
	Total	173 (63.8%)	89 (32.9%)	9 (3.3%)	271

positively. This finding, when coupled with the insights gained from a qualitative review of the content of the articles in the research sample, have implications for law and public policy.

Implication for Law and Social Control

Evolution of Formal Social Controls

Formal social controls regarding medical marijuana have changed significantly since the passage of California's CUA. Specifically, penal social controls have been minimized as a growing number of states have enacted laws legalizing medical marijuana. The passage of these laws strongly suggests that marijuana use has been transformed, through the process of medicalization, from a deviant act to one which is now generally accepted as a legitimate form of medical treatment. As both medical literature and the popular press increasingly advocate for the medicinal use of marijuana (as evidenced by the articles in this study), formal social controls have shifted, as predicted by Conrad and Schneider (1980; see also Conrad, 1992), from the penal style to the therapeutic style and regulatory style. As the analyses of articles in the research sample illustrate, however, these shifts in the styles of formal social control have created a new set of questions which the law has yet to address through regulatory social controls and revised penal social controls.

First, the legalization of marijuana for medical purposes without a solid regulatory framework has created confusion for growers, distributors, and patient-users alike. California's medical marijuana situation is a prime example of the confusion caused by a lack of regulatory framework. News reports from California repeatedly evidence that the state experiences problems with individuals cultivating marijuana under the guise of medical marijuana while distributing it for non-medicinal purposes; cultivating marijuana in excess of the amounts specified by the state's medical marijuana law; and medical marijuana dispensaries operating illegally. These problems demonstrate the need for a more comprehensive framework of regulatory social controls to replace older penal controls.

Second, shifts in social norms that affect non-penal social controls may not yet have evolved to keep pace with the changes in penal social controls. For example, employers need to figure out how their employees' use of medical marijuana will affect workplace rules. This very issue was recently highlighted when a Walmart employee in Michigan was fired after testing positive for marijuana. He presented a state card authorizing his marijuana use for sinus cancer and a brain tumor, but he was terminated nonetheless (Bradley, 2010).

Third, changes in formal social controls at the state level have not yet caused changes in formal penal social control at the federal level. While the Obama administration has curtailed federal enforcement of the Controlled Substances Act of 1970 with regard to medical marijuana, the fact remains that this federal law continues to classify marijuana as a Schedule I controlled substance—one which has no currently accepted medical value (DEA, 2009). This significant discrepancy between federal law and the 14 states with medical marijuana laws were key to more than a quarter of the articles in the research sample, collectively demonstrating the need for harmonization of federal and state laws.

Evolution of Informal Social Controls

Informal social control of marijuana use has shifted dramatically as the drug has become incorporated into otherwise conventional ways of life in America (Hathaway & Atkinson, 2001). The articles which discussed the passage of medical marijuana laws emphasized

the growing acceptance of medical marijuana. As more states condone marijuana use for medicinal purposes, the social stigma previously associated with the drug is continuously evaporating. The fact that there are many politicians who support medical marijuana, including President Obama, serves as strong evidence of this change in social norms. In fact, changes in drug enforcement policy under President Obama, especially with regard to federal raids on medical marijuana dispensaries and federal prosecutions for the distribution, possession, and use of medical marijuana, appear to have changed the way in which medical marijuana is portrayed in the media. To wit, during the time when President Obama was in office, compared to when President Bush was in office, the articles were significantly more positive ($\chi^2 = 4.407$; $p < 0.05$; $\Phi = .128$).

On the other hand, critics of medical marijuana call attention to this shift in social norms and argue that relaxation of formal social controls for medical marijuana have corresponding weakening of informal social controls governing drug use. In fact, the public opinion articles in the research sample repeatedly raised concerns that the legalization of medical marijuana sends the wrong message to youth concerning drug use.

Policy Implications

This study offers insight into the issues experienced by states that have medical marijuana laws, as well as states debating whether or not to pass a new law. This research also emphasizes the importance of including provisions for legally acquiring cannabis in new medical marijuana laws (Shaw, 2008).

In order to provide individuals with a way to obtain medical marijuana, it is necessary to develop precise guidelines for cultivation. Guidelines must specify how much marijuana may be grown. Also, the guidelines must address the issues of where marijuana may be cultivated in regards to the proximity of buildings like schools. Of course, medical marijuana dispensaries could provide a place where individuals could receive high-quality marijuana and be able to discuss the product with knowledgeable individuals. However, in order for dispensaries to operate appropriately, a comprehensive set of regulations must be promulgated to avoid the types of problems that California has experienced with its dispensaries.

The current state of limbo that besets this country's medical marijuana laws sets the stage for gray markets. Gray markets emerge for drugs when a substance occupies the middle space between the rigid ideological poles of prohibition and legalization. Some segments of the market function illegally while other portions of the market operate within the boundaries of the law (Sifaneck & Kaplan, 1995). Gray markets for drugs often emerge when a comprehensive and coherent set of regulatory social controls have not been created or when such controls are not uniformly enforced (see Duke & Gross, 2006; Leuw & Marshall, 1994; Sifaneck & Kaplan). For example, there are many instances in which individuals legally purchase medical marijuana that was grown illegally.

Often the lines of licit and illicit marijuana production and sales are blurred because of current policies. The issue in the United States, especially California, is similar to the current situation in the Netherlands. The existence of coffee shops in the Netherlands, where the selling of cannabis for personal consumption has been tolerated since 1976, has created a gray market. Because these coffee shops needed a supply of marijuana, some countries, like Belgium, increased their domestic cannabis cultivation (Decorte, 2007). Although the

cultivation was illegal, the product was eventually being sold legally in Dutch coffee shops (see also Korf, 1990). The Dutch experience with a gray market for marijuana is similar to the gray market which exists in California with regard to illegal cultivation for legal distribution in the form of medical marijuana. To address such gray areas, future policies either need to increase formal social controls (whether penal, regulatory, or therapeutic) of medical marijuana, or relax existing social controls by legalizing marijuana entirely. But, in reality, neither approach would likely eliminate the gray market for marijuana completely. Consider the consequences of legalization. One of the major reasons behind the drive for legalization is the potential tax revenues (Bussewitz, 2010). If marijuana sales were to be taxed, a number of new questions would arise. What would the tax rate be? Would people be able to grow their own marijuana tax free? How would tax revenues be collected by distributors? Answers to such questions, among others, would require a comprehensive set of regulatory social controls. Full compliance with such rules, however, is unlikely. There still would be a gray market because some people who cultivate marijuana would not comply with various licensure and regulatory requirements, especially those concerning taxation, because compliance would be expensive; thus, some growers would find it more cost effective to illegally cultivate and distribute their crop on the gray market.

Study Limitations

Several limitations to this study must be acknowledged. First, the conclusions in this study were drawn based on analyses of a random sample of 321 articles which appeared in U.S. newspapers during a one-year period of time. The time frame was purposefully selected to capture potential attitudinal shifts as one conservative U.S. presidency ended and a more liberal presidency began. Although the sample accounts for 16.62% of the 1,930 articles published in the relevant time period, these articles may or may not be representative of the totality of articles published that year. Similarly, analyses performed on data drawn from a longer time-frame (e.g., the last four years of the Bush presidency compared to the first four years of the Obama presidency) could potentially produce nuances that were not evident when examining only a single year of data. Further research on a larger sample of articles from a longer time period might yield a richer data set upon which more generalizable analyses could be based.

Second, although ethnographic content analysis provides much more rich data than traditional quantitative content analysis alone can do, it still has the limitation of being a review of a fixed medium. In the present study, the media reviewed were newspaper articles. Those articles yield valuable insight into shifts in the American psyche, especially through the lens of agenda-setting theory. However, the data are limited by the time, space, diligence, and biases that the authors of the articles may have brought to their work. Future research on public perceptions of medical marijuana use should include survey and interview data, both of which could provide a more comprehensive understanding of the changing perceptions regarding the research topic.

Third, the data analyzed in this study were limited by the fact that data could be coded only as nominal-level variables. The level of measurement only allowed for the reporting of percentages and Person's Chi Square analyses. To compensate for these statistical limitations, this study incorporated ethnographic content analysis to provide rich, qualitative

information. This method, in turn, allowed for both in-depth and thematic explorations of media coverage of medical marijuana (Altheide, 1996).

Fourth, content analysis requires the researcher to code data. While guided by the methodological framework of the practice, data coding media necessarily involves some degree of subjective decision-making which can impair the reliability of the study. To minimize this potential limitation, a second researcher coded a random sample of the articles in this study's research sample. An impressively high level of inter-rater reliability of 97.7% was achieved, suggesting that the potential for coding biases and/or errors in this study is minimal.

CONCLUSION

The overall positive treatment ($N= 173$; 63.8%) of medical marijuana in the articles in this study suggests a major transformation has occurred. The news during the height of the "War on Drugs" was concerned with the link between crime and illicit drug use, as well as an attempt to influence people to refrain from drug use for public health reasons. The message today is quite different. Most of the articles reviewed in this study were not concerned with preventing medical marijuana use, but rather focused on nuanced aspects of implementing policies and regulations governing medical marijuana use. With 14 states now having medical marijuana laws, it is important for these laws to be comprehensive and well thought out. It is crucial for medical marijuana laws to offer precise guidelines concerning the many issues regarding medical marijuana, especially cultivation and dispensaries. These guidelines must be enforced in order for them to be effective. The many concerns that are correlated with the passage of a medical marijuana law must be addressed, and it is important for there to be various outlets for individuals to receive information about the several characteristics of medical marijuana. With the proliferation of medical marijuana laws, there is a growing sentiment towards the legalization of marijuana. This potential legalization of marijuana produces various different concerns.

It is imperative to understand that the legalization of marijuana would generate a myriad of issues. In order to limit the confusion and the fears by the general public, it is essential to carefully examine the many aspects that are associated with the legalization of marijuana. One of the major aspects that must be carefully attended to is the potential taxation of marijuana sales. It is important to recognize that the legalization of marijuana would not eliminate the illicit market for marijuana due to the costs associated with regulatory compliance. The gray market notwithstanding, the legalization of marijuana could potentially provide a much needed source of tax revenue and decrease the legal confusion originating from the current marijuana policies. The current policies cannot continue to be stagnant due to the uncertainty of the laws, they must progress one way or the other, and do so with careful planning and execution.

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Henry F. Fradella is a Professor of Law and Criminal Justice at California State University, Long Beach, where he also chairs the Department of Criminal Justice and serves as the President of the Phi Beta Kappa, Rho of California. He earned a B.A. in psychology from Clark University, a Master's in Forensic Science and a law degree (Juris Doctorate) from The George Washington University, and a Ph.D. in Justice Studies from Arizona State University. His research interests include law and social control, as well as the use of both forensic and social scientific evidence in courts of law. He has published six books and over sixty articles and scholarly comments and reviews in these areas, as well as several pieces of criminal justice pedagogical scholarship in the *Journal of Criminal Justice Education*. Dr. Fradella served three terms as the Legal Scholarship Editor of West's *Criminal Law Bulletin* and has served as a past Guest Editor of the *Journal of Contemporary Criminal Justice*. He received the Western Society of Criminology's Fellow's Award in 2009.

Major Determinants of Job Satisfaction Among Police Managers

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Abstract

This research examines the levels of job satisfaction among police managers. The findings indicate that police managers have higher levels of job satisfaction than the research on their line level counterparts indicates. Years of service, feedback on the job, and involvement in COP and/or Compstat programs were significant predictors of job satisfaction among this sample of police managers. It appears that involvement in COP and/or Compstat programs has the ability to enrich the jobs of police managers.

Key Words: Job Satisfaction, Compstat, Community Oriented Policing

MAJOR DETERMINANTS OF JOB SATISFACTION AMONG POLICE MANAGERS

One significant aspect of public sector organizations that has been addressed in recent years is job satisfaction. It has drawn this interest because of the complex issues that face governmental agencies in the coming years due to limited funding and the need for stability. Job satisfaction has an influence on productivity in different ways. As defined by Locke (1976), job satisfaction is a positive state originating from the appraisal of someone's work or work experiences. Positive changes in working groups, supervision, incentives, and the work itself can increase the productivity and the quality of services in organizations (Argyle, 1972). However, job dissatisfaction can lead to lower productivity, efficiency, effectiveness and poor employee morale (More, et.al. 2006).

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LITERATURE REVIEW

Police Job Satisfaction

Although the concept of job satisfaction has been extensively investigated in other professions, empirical research conducted on job satisfaction among police officers has been limited (Bennett, 1997; Dantzker, 1994; Zhao et al., 1999). As Bennett maintained, job satisfaction is a “neglected but important and timely topic in police studies” (1997, p. 296). Buzawa et al. (1994) stated that research on job satisfaction in policing is newer than similar research involving other professions: only about 20 published articles treating job satisfaction as a dependent variable pertain directly to policing.” Dantzker (1994) argued that police job satisfaction literature is methodically and topically limited. Griffin, Dunbar, and McGill noted that “job satisfaction, which has long been recognized in private industry as a prerequisite for successful job performance, has been merely a slogan in police organizations” (1978, p. 77). Even a decade later, most criminal justice researchers agree that research on job satisfaction among police officers is subject to further investigation.

There are several reasons why job satisfaction is important to police organizations. First, negative attitudes toward work can adversely affect job performance in both the quantity and quality of services provided. Thus, poor performance can impact police-community relations by adversely affecting public attitudes toward the police (Buzawa, Austin, & Bannon, 1994). In addition to a moral obligation to demonstrate concern for its employees and promote positive work-related attitudes, job satisfaction promotes lower stress levels and, accordingly, fewer symptoms of stress (e.g., absenteeism, burnout, and alcoholism) (Hoath et al., 1998: 338). Police officers can experience high rates of employee turnover due to their low job satisfaction (Zhao et al. 1999). Loo’s (2004: 162) study of 135 male Canadian police managers determined that a substantial portion of the respondents (34.1%) fit the profile of high burnout “distressed police managers” that warranted some significant type of organizational intervention. As a result of high employee turnover, increased recruitment and training expenses for new police applicants may harm the limited budgets of law enforcement agencies, thus endangering the effectiveness of public safety. Consequently, research on job satisfaction among police officers may provide valuable information that can improve the quality of police services.

According to Herzberg (1959), different factors combine to create job satisfaction and dissatisfaction among employee. He identified these as either motivators or hygiene factors. Motivators promote job satisfaction. They include: (a) achievement, (b) responsibility, (c) the work itself, (d) recognition, and (e) advancement/promotion. Hygiene factors do not directly lead to job satisfaction among employees. However, their absence may lead to job dissatisfaction. They consist of: (a) organizational policies, (b) supervision and leadership, (c) pay or salary, (d) work conditions, (e) communication with supervisors/work partners. Herzberg contended that employees need to reach an acceptable level of hygiene factors to feel neutral about their jobs. Therefore, employers should seek ways of eliminating dissatisfaction resulting from hygiene factors and focus on improving the motivators in the work environment to increase job satisfaction. Zhao and his colleagues (1999: 154) stated that Herzberg’s (1968) two-factor theory of job satisfaction “provides a useful theoretical framework for empirically assessing officers’ job satisfaction.” They further suggested that

a comprehensive examination of job satisfaction not only should cover organizational (work environment) variables but also certain job characteristics and employees’ demographic characteristics.

Hackman and Oldham (1975) suggest that changes in intrinsic work environments lead to higher levels of motivation and satisfaction among employees. Their theory includes three constructs: (1) core job characteristics, (2) critical psychological states, and (3) outcomes. Core job characteristics include: (a) skill variety, (b) task identity, (c) task significance, (d) autonomy, and (e) feedback. If employers adequately provide these five job characteristics, employees will experience three critical psychological states: (1) meaningfulness of the job, (2) responsibility of outcomes of work activities, and (3) knowledge of work outcomes. These three critical psychological states then lead to positive outcomes, such as: (a) higher internal motivation, (b) higher growth job satisfaction, (c) higher general job satisfaction and (d) increased productivity and less absenteeism and turnover. They also argued that employees experience satisfaction when they have autonomy and discretion on the job. Timely and/or positive feedback regarding their job activities as well as the knowledge that their work outcomes are helpful for others also promotes job satisfaction. In addition, job challenges that require a variety of skills enrich and enlarge the job and elevate job satisfaction. Hackman and Oldham (1980) developed a measurement scale, the Job Diagnostic Scale (JDS) to measure job satisfaction levels of employees using the five core job characteristics.

Prior research regarding the major determinants (demographic and organizational variables) on police job satisfaction is inconsistent. Consensus has not been reached about which demographic variables significantly predict job satisfaction. Zhao et al. (1999) pointed out that there has been very limited research on the relationship the work environment has on police and their job satisfaction levels. The most commonly used demographic variables in police job satisfaction are: age, gender, race, educational attainment, rank, and length of service (Zhao et al., 1999). For example, while some researchers maintained that age is significantly correlated with job satisfaction among police officers (Dantzker, 1994), other researchers offered mixed findings (Buzawa et al., 1994). Similarly, researchers reported inconsistent findings with gender (Aremu & Adeyolu, 2003; Bennett, 1997; Burke & Mikkelsen, 2004; Buzawa et al., 1994; Dantzker, 1994; Grant, Garrison & McCormick, 1990).

Dantzker’s (1994) job satisfaction survey of twelve police departments in six states (N = 552) indicated that police officer participants had low overall job satisfaction levels. They reported the greatest dissatisfaction with the pay and the least dissatisfaction with supervisory support. Police officers between the ages of 20 and 25 were more satisfied than other age groups. The male police officers had higher job satisfaction levels than female police officers. The men were more likely to change police departments, while the women were more likely to accept a job offer different from policing. Police officers with the rank of sergeant had the lowest satisfaction level compared to other police officers. While the education level of police officers did not have a significant impact on job satisfaction levels, the findings indicated a weak relationship between education and job satisfaction. Finally, ethnicity/race and age had the greatest impact on the police officers’ perceptions of job satisfaction. Black officers reported greater satisfaction than did their white colleagues.

Other studies found that education had an inconsistent affect upon police job satisfaction. Some researchers found a positive correlation between education level and job satisfaction

among police officers (Dantzker, 1992; Carlan, 1999). Lefkowitz (1974) reported a negative relationship between job satisfaction and education level of police officers. Other researchers reported that education level did not have a significant effect on job satisfaction among police officers (Griffin, Dunbar, & McGill, 1978). The same inconsistent pattern was present for rank and length of service. Some researchers reported a negative relationship between rank and length of service and job satisfaction among police officers (Buzawa et al., 1994; Dantzker, 1992, 1994; Hoath, Schneider & Starr, 1998; Brunetto & Farr-Wharton, 2003) while others reported the opposite (Burke, 1989) or no relationship (Bennett, 1997).

Organizational psychologists have investigated job satisfaction and its influence on different organizational factors, such as absenteeism, employee turnover, productivity, pay, skill variety, task identity, autonomy, supervision, and promotion. Commonly used organizational variables to measure job satisfaction perceptions among police officers: a) equipment, b) pay, c) promotion, d) work environment (skill variety, task identity, task significance, autonomy, and feedback), e) supervisor relations, f) work-family conflict, g) stress, and h) management policies (Dantzker, 1994).

These organizational variables have had differing impacts upon police job satisfaction. Slovak (1978) found that work satisfaction among police officers was multidimensional and was mostly determined by: (a) equipment/preparation, (b) compensation /advancement, and (c) management/organization. Dantzker and Surrrette (1996) determined that the police officers were least satisfied with pay and availability of in-service training but they were most satisfied with their present assignment and immediate supervisor support. Dantzker (1997) reported that organizational size had an impact on police officer job satisfaction. Police officers from agencies that employed less than 100 sworn officers had the highest job satisfaction levels among the three groups of agencies. Police officers from agencies that employed more than 500 sworn officers had the lowest job satisfaction levels among the three groups of agencies. Brunetto and Farr-Wharton (2002) found that pay, dealing with clientele, and organizational management practices (promotion, appraisal, and other procedures) decreased police officer job satisfaction. Howard, Donofrio and Boles (2004) reported that work-family conflict was a strong predictor of different aspects of police job satisfaction.

Mire (2005) surveyed 87 police officers from Lafayette, Louisiana to determine correlates of their job satisfaction. In addition to demographic variables, organizational (e.g., task identity, skill variety, task significance, autonomy, and feedback), and personality variables (e.g., neuroticism, extraversion, and openness) were considered. Age, years of service, and rank was significantly correlated to job satisfaction. Also, all of the five organizational variables had significant correlations with job satisfaction, explaining 13% of the variance. Personality variables could explain only 10% of the variance in police job satisfaction.

Another organizational variable is the stated purpose of the department. Innovations in policing, such as community policing, have contributed to job satisfaction. The relationship between the two, however, is complex. Some studies have examined the impact of community oriented policing upon job satisfaction. Adams, Rohe, and Arcury (2002) found that community police officers were more positive about their assignments, more accepting of different policing strategies, more optimistic about the impact of COP on police-community relations, and were more satisfied with their jobs compared to traditional police officers.

Halsted, Bromley, and Cochran (2000) reported that deputies with strong orientations for community service had higher job satisfaction levels than deputies with strong crime control orientations. Ford and his colleagues (2003) determined that a sample of Midwestern police officers' job satisfaction was directly related to their commitment to their organization. Yet, their level of commitment to a community policing strategy was unrelated to their job satisfaction but strongly related to their behaviors in support of the strategy.

Another organizational paradigm is offered by Compstat (Walsh, 2001, p. 352):

At the core of the Compstat process is a computerized information dissemination system, which is expected to process, map and analyze weekly crime and disorder statistics. This information is then sent to operational managers in a timely fashion, usually once a week. These operational managers are empowered and held accountable to focus, manage, and direct their organizational sub-unit's problem-solving process towards addressing the crime and disorder issues associated with this data.

THE PRESENT STUDY

The present study considers the impact of these variables upon police job satisfaction. The purpose of this study was to investigate the major determinants (demographic and organizational variables) of job satisfaction among police managers. The major research questions were:

1. What is the relationship between organizational variables (skill variety, task identity, task significance, autonomy, and feedback) and the job satisfaction perceptions of police managers?
2. What is the relationship between demographic variables and organizational variables explaining the variance in the job satisfaction perceptions of police managers?
3. What is the impact of participation in COP/COMPSTAT programs on the job satisfaction perceptions of police managers?

METHODS

Sample and Procedures

The data for this study were obtained from police managers attending the Administrative Officers' Course (AOC) or the Commanding Officer Development Course (CODC) offered by the Southern Police Institute (SPI) under the Department of Justice Administration at the University of Louisville. This convenience sample of 136 officers (91% response rate) represented 24 states. After approval from the Institutional Review Board, the managers voluntarily completed a self-report survey that contains several measures.

Measures

Job Satisfaction

We used Dantzker's (1993) job satisfaction scale as the dependent measure for this study. The measure consisted of 23-items, and the respondents indicated their agreement

to the items using a 5-point Likert-type format that was anchored by strongly disagree (1) to strongly agree (5). The measure captured job satisfaction information on six dimensions of job satisfaction (i.e., supervision, salary, recognition, equipment, education, and job position). Dantzker (1993) used this version of the measure as a unidimensional measure of job satisfaction. The internal consistency for the measure was appropriate 0.85, and higher scores indicated higher levels of job satisfaction.

Task Identity

We used a measure of task identity. The measure is a subscale that came from Burke's (2007) version of the job diagnostic scale. The items that comprised this measure were: My job allows me the opportunity to complete the work I started; My job is arranged so that I have a chance and the ability to talk with customers/clients/and users; My job is arranged so that I have an understanding of how it relates to the business mission. The respondents indicated their responses to these items using a 7-point Likert-type scale that was anchored by strongly disagree (1) to strongly agree (7). Higher scores indicated more identification with a particular task. The internal consistency for this measure was low 0.43, but this is consistent with the Burke's (2007) use of the measure.

Task Significance

Our measure of task significance is a subscale that came from Burke's (2007) version of the job diagnostic scale. The items that comprised this measure were: My job is one that may affect a lot of other people by how well the work is performed; My job has the ability to influence decisions that significantly affect the organization; My job influences day-to-day company success. The respondents indicated their responses to these items using a 7-point Likert-type scale that were anchored by strongly disagree (1) to strongly agree (7). Higher scores indicated more significance with a particular task. The internal consistency for this measure was low 0.63, but this is consistent with the Burke's (2007) use of the measure.

Skill Variety

Our measure of skill variety is a subscale from Burke's (2007) job diagnostic scale. The items that make up our skill variety scale are: My job provides me much variety; While performing my job I get the opportunity to work on many interesting projects; My job gives me the opportunity to use many new technologies. The respondents indicated their responses to these items using a 7-point Likert-type scale that were anchored by strongly disagree (1) to strongly agree (7). Higher scores indicated more skill variety with a particular task. The internal consistency for this measure was 0.72 and was acceptable.

Autonomy

We used a measure of autonomy that was a subscale from Burke's (2007) job diagnostic scale. The items that we used for this measure were: My job lets me be left on my own to do my own work; My job provides me the opportunity of self-directed flexibility of work hours; I am able to act independently of my supervisor in performing my job function. The respondents indicated their responses to these items using a 7-point Likert-type scale that were anchored by strongly disagree (1) to strongly agree (7). Higher scores indicated more autonomy with a particular task. The internal consistency for this measure was low 0.46, but this is consistent with the Burke's (2007) use of the measure.

Feedback

We used a measure feedback that was a subscale from Burke's (2007) job diagnostic

scale. The items that we used for this measure were: My job by itself provides feedback on how well I am performing as I am working; My job provides me with the opportunity to both communicate with my supervisor and to receive recognition from them as well; I receive feedback from my co-workers about my performance on the job. The respondents indicated their responses to these items using a 7-point Likert-type scale that were anchored by strongly disagree (1) to strongly agree (7). Higher scores indicated more feedback. The internal consistency for this measure was low 0.59, but this is consistent with the Burke's (2007) use of the measure.

Demographics

We used a number of demographic measures in our study. For instance, we used sex (0) female and (1) male. Marital status was captured using (0) not married and (1) married. Ethnicity was captured using (0) non-white and (1) white. We captured education using a 3-point scale: (1) low [some college, HS diploma, or GED], (2) medium [college graduate], and (3) high [some professional and professional graduate]. We captured rank using a 3-point scale: (1) low [sergeant], (2) medium [lieutenant], and (3) high [captain or major]. The age of the officer and years of service was captured using an open-ended format.

ANALYSIS

The analysis plan for this article takes place in a series of steps. The first step is a presentation of the descriptive statistics that will allow us to discuss the distribution of the measures. The descriptive statistics that we use are the mean and the standard deviations. The second step in the analysis is a presentation of the bivariate correlations of the measures. This will allow us to examine the association between the measures. Further, the bivariate correlations will also provide an early indication of multicollinearity. The third step is a presentation of regression analysis. Because the data are cross-sectional, the regression analysis provides information about the link between the job satisfaction (i.e., dependent measure) and the other measures (i.e., independent measures). Because multiple independent measures are being used in this study and many of them come from one diagnostic, multicollinearity is an important issue. To examine for multicollinearity, we will use the tolerance measure. Freund and Wilson (1998) argued that tolerance measures that 0.20 and below indicate multicollinearity.

RESULTS

Step 1: Descriptive Statistics

The descriptive statistics for this study are presented in Table 1. The table shows that the average age of the officers is 40 years old, and 85 percent of the officers were male. The officers have 15 years of service. The officers have an average score that indicates that they are college graduates. Eighty percent of the officers that reported were white, and 83 percent of the officers were married. The average scores indicated that the officers agreed with the statements for skill variety, task identity, task significance, autonomy, and feedback. Finally, the average level of job satisfaction was high.

TABLE 1. DESCRIPTIVE STATISTICS

Variable	Mean	Standard Deviation
Age	40.93	5.79
Education	2.04	0.75
Seniority	15.60	5.52
Skill Variety	5.52	1.01
Task Identity	5.88	0.83
Task Significance	5.70	0.85
Autonomy	5.47	1.02
Feedback	5.39	1.01
Sex	0.85	0.36
Marital Status	0.83	--
Rank	1.60	0.74
Race	0.80	--
Job Satisfaction	82.04	10.76

Step 2: Correlations

Table 2 presents the correlations of the measures. The correlations indicate that job satisfaction is associated with skill variety (r=0.30), task significance (r=0.29), autonomy (r=0.23), and feedback (r=0.34). This suggests that the scales of job diagnostics have a link with job satisfaction. In addition, COMPSTAT has a correlation (r=0.18) with job satisfaction. While these correlations indicate that there is an association between the theoretical independent measures and job satisfaction, we believe that it is important to point out that largest correlation occurs between feedback and autonomy (r=0.43). With this being the largest correlation, we believe that multicollinearity is not an issue in these data, but we will reserve our final judgment until the regression analysis.

Step 3: Regression Analysis

Table 3 presents the regression analysis for the present study. These results indicate that three measures have a link with job satisfaction. To clarify, the more seniority that an officer has the less job satisfaction they have with their job (b=-0.61, Beta=-0.31). As feedback increases job satisfaction increases (b=2.86, Beta=0.26). Finally, the use of COMPSTAT increased job satisfaction (b=8.30, Beta=0.23). This finding is consistent with previous research that COP officers had higher levels of job satisfaction and perceptions of autonomy than traditional officers (Adams, Rohe, and Arcury, 2002).¹ In addition, the tolerance levels were all above 0.20, suggesting that multicollinearity was a problem with these data.

1. We were concerned about the small sample size and the number of independent variables. We performed a series of simulation studies in an attempt to determine if the parameters (i.e., slopes [b]) and standard errors were biased. We did not find bias in the parameters and standard errors. To operationalize our simulations, we used our results from the regression analysis, and had it replicated across 1000 samples. This allowed us to calculate bias per the suggestions from Muthen and Muthen (2002). We did this in two programs—Mplus and SAS, so our simulations are really 2000 samples from two different programs; thus, we feel confident that bias is not present given the small sample size.

TABLE 2. CORRELATION ANALYSIS

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	
1. Age	1.00													
2. Education	0.12	1.00												
3. Seniority	0.68*	0.04	1.00											
4. Skill Variety	0.13	-0.03	0.11	1.00										
5. Task Identity	0.10	0.06	0.06	0.45*	1.00									
6. Task Significance	0.08	-0.08	0.08	0.43*	0.22*	1.00								
7. Autonomy	0.15	-0.04	0.20*	0.23*	0.30*	0.21*	1.00							
8. Feedback	0.04	-0.14	0.15	0.39*	0.19*	0.34*	0.43*	1.00						
9. Sex	0.05	-0.05	0.22*	0.03	0.01	0.03	-0.10	0.03	1.00					
10. Marital Status	-0.04	-0.03	-0.05	-0.15	-0.17*	-0.20*	0.14	-0.02	-0.30*	1.00				
11. Rank	0.36*	-0.02	0.35*	0.17*	0.05	0.23*	0.12	-0.04	0.21*	-0.06	1.00			
12. Race	-0.14	0.02	-0.02	0.02	-0.02	0.10	0.08	0.13	0.01	0.02	-0.09	1.00		
13. COMPSTAT	-0.09	-0.01	-0.03	0.08	-0.04	0.00	-0.00	0.00	-0.08	0.09	0.08	0.11	1.00	
14. Job Satisfaction	0.05	-0.04	-0.06	0.30*	0.14	0.29*	0.23*	0.34*	0.05	-0.10	0.09	-0.01	0.18*	1.00

*p≤.05

TABLE 3. REGRESSION ANALYSIS

Variable	B	Std. Error	Beta	Tolerance
1. Age	0.38	0.21	0.20	0.48
2. Education	-0.04	0.90	-0.00	0.95
3. Seniority	-0.61*	0.23	-0.31	0.48
4. Skill Variety	0.87	1.07	0.08	0.61
5. Task Identity	-0.35	1.20	-0.03	0.72
6. Task Significance	1.97	1.20	0.15	0.70
7. Autonomy	1.15	1.01	0.11	0.70
8. Feedback	2.86*	1.06	0.26	0.65
9. Sex	2.87	2.60	0.10	0.80
10. Marital Status	-1.39	2.55	-0.05	0.80
11. Rank	0.77	1.36	0.05	0.74
12. Race	-1.17	2.25	-0.04	0.93
13. OMPSTAT	8.30*	2.94	0.23	0.94

*p<.05

DISCUSSION

Generalizations about the research findings are limited by the nature of the sample itself. The previous studies on this subject were limited to rank and file, line officers. By virtue of their rank, police managers enjoy some privileges along with their increased responsibility. For example, they may have better work conditions than line officers such as: private work spaces, cars, equipment, greater autonomy, higher salaries and flexible work hours. Thus, these enhancements may account for their high level of job satisfaction. Burke and Mikkelsen (2004) found that police officers operating on a system of continuous shift work had low job satisfaction perceptions. Also, the participants' rank may provide them with status and good connections within their business environment which may increase job satisfaction.

Another possible explanation for the high job satisfaction perceptions of these police managers is related to their desire to excel. The majority of the participants in this study were police managers who volunteered for higher education and training for their careers in policing. They may pursue and expect a bright career in policing in the future. Their departments have sent them to these training programs to prepare them for advancement and assignment to more responsible positions. Their successful participation in these programs may enhance their careers. For example, the Administrative Officers Course (AOC), given by SPI, is required as a prerequisite for appointment to the position of police chief by many municipalities throughout the United States. In fact, former graduates of the AOC currently direct law enforcement agencies throughout the United States and abroad. Therefore, the participants of this study may have reported higher levels of job satisfaction due to their commitment to their professions. For example, Hoath, Schneider, and Starr (1998) reported that of the police officers surveyed, careerists were the most satisfied with their jobs.

The first research finding was that demographic variables (age, gender, education, rank, and years in the present department) were not significant predictors of job satisfaction.

This finding was consistent with previous job satisfaction studies in policing. Demographic differences provide little or no explanation as determinants of job satisfaction among police officers (see Zhao et al., 1996). This conclusion also appears to be true for these police managers.

The results of the study also revealed that the five organizational variables (skill variety, task identity, task significance, autonomy, and feedback) could explain 18% (a medium effect size) of the variance in job satisfaction perceptions of police managers. Feedback ($\beta = .257, p < .05$) was the only statistically significant predictor of job satisfaction among these variables. This pattern also was also present in Mire's (2005) study. He determined that organizational variables explained 34% of the variance in job satisfaction, while reporting a much lower effect for demographic variables. Overall, the organizational variables were better predictors of job satisfaction among police managers than demographic variables – another finding that is consistent with the previous studies of line officers (Zhao et al., 1999; Chiou 2004; Mire, 2005).

Finally, the multivariate statistical analyses demonstrated that the job satisfaction perceptions of police managers who are participating in COMPSTAT program were significantly higher than those managers who were not participating in these programs. Compstat programs were positively related to job satisfaction perceptions of police managers. Managers who are involved COMPSTAT are expected to provide leadership and operationally be accountable for these innovations (Kelling and Bratton, 1993). This suggests that the implementation of COMPSTAT programs may lead to job enrichment for police managers. The regression analysis further revealed that years served in the present department, feedback, and Compstat were the major determinants of job satisfaction perceptions of police managers in this study.

Of all of the demographic variables, years served in the present department are the only one that made a statistically significant contribution to job satisfaction. New police officers in the department reported the highest levels of job satisfaction, while officers with more years of experience in the present department reported the lowest levels of job satisfaction. This result suggests that the longer the participants worked in the police departments, the more likely they would be to have low job satisfaction perceptions. This finding is consistent with Buzawa's (1984) and Buzawa et al.'s (1994) studies which revealed that tenure (longevity in each department) was inversely related with job satisfaction levels of patrol officers. A possible explanation for the significant negative relationship between years served in the present department could be related to the loss, over time, of the excitement and ideals that police officers possess at the beginning of their career. Also, departmental procedures, limited promotions, pay, and other work conditions may negatively influence the job satisfaction perceptions of career minded police officers over the years. Command level police managers and city managers should look for ways of keeping their management staffs' job satisfaction levels high or at least steady, which in turn would provide better services for the community.

Feedback refers to “the degree to which carrying out the work activities required by the job results in the employee obtaining direct and clear information about the effectiveness of his or her performance” (Hackman & Oldham, 1975, p.162). Police managers who thought their co-workers and supervisors provided adequate feedback reported high job satisfaction perceptions. Finding ways to create work environments to get continuous feedback from

their co-workers might increase job satisfaction and in turn encourage better performance from police managers.

The results indicate that feedback and COP and Compstat programs had a positive influence on job satisfaction perceptions of police managers. Similarly, implementing COMPSTAT programs in police agencies can increase the job satisfaction perceptions of police managers. Finally, on a cautionary note, the results indicated that years of service in the present department have a negative influence on the job satisfaction perceptions of police managers.

The results of this study indicate that police managers were generally satisfied with their jobs. It was further determined that organizational variables were better predictors of the job satisfaction perceptions of police managers than demographic variables (with the exception of years of service). The major determinants of job satisfaction were identified as feedback, years of service in the present department, and implementation of COP and/or Compstat programs. It is hoped that these findings will assist police chiefs, city managers, and human resource professionals who are seeking ways to increase the job satisfaction levels and performances of their personnel. By taking these findings under advisement and incorporating these results into decisions being made about how to improve job satisfaction and thus job performance, all law enforcement agency personnel should benefit.

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Explaining the Fear of Crime Among College Women, in their own Words

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Abstract

Women have consistently been shown to have higher levels of fear of crime than men, despite their lower victimization risks for all crimes except rape and sexual assault. A number of different explanations have been offered to explain why women are so fearful. The current research sought to examine support for the shadow of sexual assault hypothesis among college women using responses to open-ended survey items asking college women to explain their fear of crime. The results suggest great variety in the explanations of why women are fearful. Although some support for the shadow of sexual assault hypothesis was found, many other explanations for women's fear emerged as well.

Key Words: fear of crime, shadow of sexual assault hypothesis, college women

INTRODUCTION

During the past 50 years, fear of crime has emerged as a popular topic of academic study. Researchers have examined how various factors impact fear of crime and have tried to determine who is most fearful, why they are fearful, and what can be done to educate the public about their actual victimization risk, which is often much lower than their fear of crime (see Hale, 1996 for a thorough review of fear of crime research). The body of research that has emerged from this line of inquiry has indicated that there are certain groups in society, including women, the elderly, individuals of low socioeconomic status, minorities, and urbanites that have greater

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levels of fear of crime than other groups in society (Hale, 1996). Across fear of crime research, women have received a great deal of attention from researchers attempting to unravel why certain groups in society are more fearful of crime. Women are particularly interesting because they often report levels of fear of crime that are two to three times higher than men's, despite the fact that they have a lower victimization risk than men for almost all nonsexual crimes (Reid & Konrad, 2004).

There are numerous explanations for this paradox. These explanations are based on women's physical vulnerability and inability to physically prevent an attack and the difficulties in recovering from an attack (Baumer, 1978; Hindelang, Gottfredson, & Garofalo, 1978; Keane, 1995; Parker & Ray, 1990), the underreporting of certain crimes that are typically committed against women, such as rape, sexual assault, and intimate partner violence (Skogan, 1987), women's role in a feminist society as a "helpless victim" (Goodey, 1997; Hollander, 2001), and lastly, the idea that women are so fearful of rape and sexual assault that they become more fearful of other crimes (Ferraro, 1995, 1996). This last explanation is the framework for the current research, and the argument centers around the idea that because any type of victimization (i.e., larceny, robbery, robbery, assault) could potentially result in rape or sexual assault, women are more fearful of all crimes, despite their lower victimization rates (Ferraro, 1995, 1996).

This explanation, coined the shadow of sexual assault hypothesis by Ferraro (1995), has been tested and supported among women in the general population in the United States as well as college women. These studies have consistently reported quantitative results that have supported this explanation and indicated that fear of rape and sexual assault was a consistent significant predictor of fear of other crimes, including larceny, burglary, robbery, and both simple and aggravated assault. What these studies have not reported, however, is any type of qualitative analysis examining the shadow of sexual assault hypothesis. The current research attempts to fill this gap through content analysis of college student responses to an open-ended survey item asking them about their perceptions of their fear of rape and sexual assault and the impact that this fear has on their fear of other crimes. The article proceeds with a review of the literature, focusing specifically on fear of crime and gender, explanations for women's heightened levels of fear, and the shadow of sexual assault hypothesis. The methods for data collection also are discussed, and are followed by results from the data analysis that includes verbatim narratives taken directly from the student responses. The article concludes with a discussion of the findings along with some cautious policy implications and directions for future research.

LITERATURE REVIEW

Fear of Crime and Gender

One of most salient individual characteristics impacting fear of crime is gender (Ferraro, 1995; Reid & Konrad, 2004). Women consistently have been found to have higher levels of fear of crime across contextual settings and operational definitions (Sacco, 1990) and the vast majority of research that has examined fear of specific types of victimizations has found that there are significant gender effects for all types of victimization as well as for overall measures of fear of crime (e.g., Bankston & Thompson, 1989; Ferraro & LaGrange, 1992;

Warr, 1984). Women's reported levels of fear of crime have been found to be two to three times higher than the level of fear of crime reported by men, despite the fact that men have a higher risk of victimization for almost all nonsexual violent crimes, including robbery and aggravated assault (Reid & Konrad, 2004). There are only two crimes for which women have higher victimization rates than men: rape and sexual assault.

Several explanations for women's heightened fear of crime have been offered. One explanation is that women's higher levels of fear stem from their inherent vulnerability, meaning that they might be less able to defend themselves in the event of an attack and they might not have the financial resources to replace any property lost as a result of the attack (Baumer, 1978; Hindelang et al., 1978; Tulloch & Jennett, 2001). Smith, Torstensson, and Johansson (2001) have argued that this alleged vulnerability has both an objective and a subjective interpretation. Objectively, women generally tend to be less able to defend themselves due to lack of self-defense training and their physical size. At the subjective level, women might be more at-risk than men because of subtle or blatant reminders of their vulnerability and their "lower" status in a patriarchal society through verbal and visual harassment.

Another explanation for women's higher levels of reported fear of crime is rooted in a feminist framework. Feminist criminologists have explored the ways in which the gender gap in fear of crime might "reflect women's location in a gendered world" (Stanko, 1995, p.46). This line of feminist thought argues that gender plays a role in all aspects of our daily lives including how we act as workers, parents, and even criminals (Steffensmeier & Allan, 1996). Thus, gender might also structure how an individual's behavior as a crime victim plays out (Hollander, 2001). By subscribing to these assumptions, women might have increased levels of fear because they believe that if they are ever in a situation where they are being victimized that they are going to be a helpless victim with no mechanisms for self-defense.

A final explanation for women's elevated levels of fear of crime, and the explanation that is the crux of the present research, emerges from the belief that any personal victimization against a woman has the potential to escalate into rape or sexual assault (Ferraro, 1996; Warr, 1984). Research has shown that women's rape and sexual assault rates are ten times higher than men's, and as a result of this elevated risk of victimization, they are more likely to be fearful of rape or sexual assault (Ferraro, 1995, 1996). Several studies have concluded that women in various age groups fear rape more than any other crime, including murder (Ferraro, 1996; Hickman & Muehlenhard, 1997; Warr, 1984).

The Shadow of Sexual Assault Hypothesis

Warr (1984) argued that there are perceptually contemporaneous offenses that people might associate with other victimizations (e.g., burglary of one's home while present could lead to assault or murder). Ferraro (1995, 1996) expanded Warr's (1984) idea of perceptually contemporaneous offenses to what he labeled the "shadow of sexual assault hypothesis." He argued that, for women, rape is a perceptually contemporaneous offense to most offenses (Ferraro, 1995, 1996). Ultimately, Ferraro (1995, 1996) argued that women's fear of rape and sexual assault is one of the most salient factors influencing their fear of other crimes.

Several studies have found support for this argument across different populations, including women in the general population and college women. Ferraro (1996) first tested his hypothesis among women in the general population in the United States. He found that women were more afraid than men of all crimes and that fear of rape and sexual assault had a positive relationship with fear of other crimes (including robbery, burglary, and larceny/theft), indicating that as women's fear of rape and sexual assault increased, their fear of other crimes also increased.

Several other researchers also have tested Ferraro's hypothesis, but among college women. Examining fear of crime, and particularly the role that fear of rape and sexual assault plays in impacting fear of other crimes, is particularly relevant among college women due to their increased risk of being the victim of rape and sexual assault. Research has indicated that college-aged women (i.e., those 18-25) have the highest rates of rape and sexual assault victimization. Further, the National College Women Sexual Victimization (NCWSV) study found that the rate of completed rapes on college campuses is about 36 attempted or completed rapes per 1,000 students. For a college or university with 10,000 students, this meant that over 350 rapes per academic year could potentially occur on that campus. Across the other types of sexual victimization measured in the NCWSV study, the rates of victimization ranged from 9.5 (for threat of rape) to 66.4 per 1,000 (for attempted sexual contact without force) (Fisher, Cullen, & Turner, 2000). Taken together, these results suggest that rape, both attempted and completed, and sexual assault are prevalent on the college campus.

Fisher and Sloan (2003) were the first to replicate Ferraro's research among college women. They found support for his argument, and in particular, found that the positive relationship between fear of rape and sexual assault was strongest when considering crimes that involved face-to-face contact between the victim and the offender, such as robbery and assault. Wilcox, Jordan, and Pritchard (2006) also examined the shadow hypothesis among college women, although they differentiated between fear of crime committed by a stranger and fear of crime committed by an acquaintance. Their findings indicated further support for Ferraro's (1995, 1996) argument as well as Fisher and Sloan's (2003) research. They found that fear of both stranger and acquaintance perpetrated rapes were associated with fear of other crimes; however, the only two crimes that they examined were stalking and physical assault. Thus, they were not able to examine the impact of fear of rape and sexual assault on a wider spectrum of crime types. Despite this limitation, their research does support the argument that fear of rape and sexual assault increases women's fear of other crimes.

Further support for the shadow hypothesis also was found by Hilinski (2009). In her study of college women, she found that women were more fearful of theft, robbery, burglary, and simple and aggravated assault than men; further, when the correlates of fear were examined, the results indicated that a greater fear of rape and sexual assault corresponded with a greater fear of other crimes. Hilinski further expanded on previous research by examining the shadow of sexual assault hypothesis across victim and offender relationship (i.e., did the relationship between the victim and the offender mitigate the relationship between fear of rape and sexual assault and fear of other crimes). She found that, even when the offender was an acquaintance, there was still a significant, positive relationship between women's fear of rape and sexual assault and their fear of other crimes.

Although there have been several quantitative studies examining the shadow of sexual assault hypothesis, no research to date has explored the shadow of sexual assault hypothesis through qualitative data. The current research attempts to fill this gap by conducting content analysis of women's responses to open-ended survey items asking them about the relationship between their fear of rape and sexual assault and their fear of other crimes. It is important to analyze this hypothesis using qualitative data because it allows for a more in-depth understanding about the unique characteristics of this relationship and how college women perceive this relationship.

METHODS

The goal of the current research was to examine the shadow of sexual assault hypothesis in college women's own words. To do this, data gathered from open-ended survey items were analyzed. The data were gathered through an Internet survey administered to college students enrolled at a medium-sized public university in the northeast United States (hereafter referred to as State University) during fall 2006 and spring 2007. A total of 3,500 randomly selected male and female students were invited, via e-mail, to complete the survey; of these students, a total of 375 completed the survey, which focused on fear of crime among college women. The data analyzed here, however, were gathered from responses to two open-ended items that were specifically directed towards women only. These two items asked women to describe their fear of rape and sexual assault in relation to their fear of other crimes, included theft, robbery, simple assault, and aggravated assault.¹ Respondents were given an unlimited amount of space to answer the questions, so they were able to fully articulate their thoughts with no limitations on the number of words or characters they could enter.

Ultimately, 123 women responded to these items. Responses to these items were coded using an open coding strategy. The initial codes included themes from the shadow of sexual assault hypothesis, however, any emergent themes were also coded, and these codes were applied iteratively to the data. This coding process is discussed in more detail below; further, the most recurring themes are presented and illustrated with verbatim narratives drawn directly from the responses.²

FINDINGS

The goal of the current research was to examine the shadow of sexual assault hypothesis through the words of college women. The data analyzed were provided by 123 college women in response to the question "If you are a woman, please explain whether you think that your fear of rape or sexual assault makes you more afraid of other crimes, such as theft, robbery, or assault." The original focus of the research was the shadow of sexual assault hypothesis; thus, this open-ended item was intended to garner responses from women

1. The full text of these items reads:

If you are a woman, please explain whether you think that your fear of rape or sexual assault makes you more afraid of other crimes, such as theft, robbery, or assault.

If you are a woman, please explain whether you think your fear of theft, robbery, and assault makes you more afraid of rape or sexual assault.

2. These narratives are verbatim transcriptions that include both spelling and grammatical errors present in the student responses.

about their agreement or disagreement with this idea. However, upon analysis of the data, it became very clear that there were many different explanations for women's fear that emerged from the women's responses to this question, not just agreement or disagreement with the shadow of sexual assault hypothesis. Thus, the initial coding incorporated themes from the shadow of sexual assault hypothesis, including responses that supported and refuted the idea that a woman's fear of rape and sexual assault makes her more fearful of other crimes. Additionally, preliminary analyses also revealed emergent codes, supporting other explanations for women's fear, derived from the student responses that were then iteratively reapplied to the data.

The women who responded to the open-ended items ranged in age from 18 to 49 years (the mean age was 21.9 years) and the vast majority were Caucasian. Most of these women lived off-campus, with roommates, were employed, were less likely to participate in extracurricular activities but were more likely to participate in other activities and entertainment functions, including attending parties and frequenting bars.

The Shadow of Sexual Assault Hypothesis

Overall, the majority of the women who responded to this question identified some level of support for the idea that their fear of rape or sexual assault impacts their fear of other crimes. One of the most frequent responses from women was that their fear of rape or sexual assault made them more afraid of other crimes. They reported that if they were being raped or sexually assaulted, they believed that there was a good chance of their attacker committing other crimes. For example:

- Fear of sexual assault absolutely increases my fear of other crimes because it makes me view every crime as a personal, invasive act, whether the crimes actually are or not.
- Yes it makes me more afraid because if someone were to sexually assault me I would think they would also not be afraid to also steal from me.
- Because if someone is going to rape or sexually assault me, there wouldn't be anything holding them back from theft, robbery, or assault. Sexual attacks seem more serious and frightening than other kinds of crime.
- Fear of rape or assault makes me more afraid of other crimes because either way, someone is taking advantage of me, especially if I'm weaker.
- Fear of theft/robbery/assault definitely make me more fearful of sexual assault because if those "less personal" crimes happen in the first place, the chances that the criminal behavior escalates into an unplanned (on part of the criminal) sexual assault increases simply because I am a woman who has now been placed in the vulnerable position of victim.
- If you're more apprehensive about one crime occurring, then you are naturally more apprehensive about other crimes.

Some responses, however, did not support the assertion that fear of rape and sexual assault is related to fear of other crimes. Some women strongly disagreed with this relationship, often on the grounds that the crimes were completely unrelated or were motivated by different needs (i.e., theft and robbery are motivated by a financial need, while assault might be motivated by anger or a need for power). For example:

- I do not think fear of other crimes makes me any more afraid of sexual assault. They are not related crimes, and offenders of these crimes are not motivated by the same factors.
- Theft and robbery don't always lead to rape. A person could steal a woman's purse because they need the money
- As I said before, I think they are completely separate issues. It would be a very unlucky person to have all of those things happen to them at the same time, so I think the likeliness of all of those things happening to someone at the same time makes me less fearful of it.
- I do not think my fear of rape or sexual assault makes me more afraid of other crimes because those are crimes that may be committed for different reasons. People steal or rob others for money and they don't commit assault because they want money. They do it because they are mad or upset or drinking.
- If those types of crimes are occurring it is usually monetarily based...rape is a crime of power and personal violation.

Victimization and Fear

In addition to the responses that indicated support or nonsupport for the shadow of sexual assault hypothesis, there were other emergent themes discovered in the data that provide some further explanation of women's fear of crime. One theme that emerged, not surprisingly, was that prior victimization also played a role in the construction of women's fear. Women who had been victimized once were often more fearful because they had first-hand knowledge of physical, emotional, and psychological damage that resulted from the victimization experience, and were aware that the crime could happen again.

- Yes, because the experience itself left me personally jittery more about life in general for a while.
- Having been recently sexually assaulted I'm afraid of everything. I don't leave my room and frequently miss class because I'm afraid to go out.
- Having been recently sexually assaulted i'm always afraid it will happen again.

Conversely, some women stated that their prior victimization experiences had prepared them for the possible victimization for any crime, and are because of this, they are less afraid.

- No, I do not think my fear of rape/sexual assault makes me more fearful of other crime. I was drunk once and basically forced to have sex with someone and now I know that I won't let that happen again, drunk or not. I am not afraid of any type of crime.
- I have been the victim of rape in the past and because of that I don't go to bars or parties or make myself able to be targeted again.

Women's Vulnerability and Fear

Another theory that has been offered to explain why women are so much more fearful of crime than men is based on the typical size differences between men and women, and the inability of a woman to defend herself against a, presumably larger, man. This argument, rooted in a feminist framework, underlies the patriarchal society that we live in. In all

aspects of society, feminist scholars argue that women are viewed to be of a lesser status than men. This status difference is evident in the roles women play as victims—women are unable to defend themselves against bigger, stronger men who are trying to hurt them. For example, women stated:

- Just knowing that the men are going to be a lot bigger than the women that they would try to rob and what not.
- No, it doesn't make me more afraid. Same as the first question. Just being a woman makes you more afraid of things.
- Most men are bigger than me so there is no way I could defend myself against a man who is attacking me. This makes me afraid of crime because men commit the most crimes.
- I have a tiny stature and lack of strength. I think it would be easier for a guy to try either one of those crimes (rape and sexual assault) on someone like me. I am fearful of walking alone at night sometimes.

Interestingly, however, some women stated that they were not fearful of crime because they were prepared to defend themselves if they should ever be victimized and took precautions to protect themselves.

- I don't think it makes me more afraid because I feel I know how to handle myself in a situation like that.
- For some people it may but for me personally not it doesn't. Fear is the main reason most assaults and crimes happen. A criminal is much more likely to target an insecure individual who is likely to fear them than some one who carries themself with confidence and shows no fear.
- I don't think it does. I grew up with brothers and I lived on a farm so if people try to mess with me, I'm pretty sure they'd regret it. I figure if they go after someone, they are going to go after an easy target and I'm not.

This inherent vulnerability also plays into the thought process that what is lost through theft or robbery can be recovered or replaced (i.e., a purse, backpack, or other belongings). When a woman is raped, however, she loses something that is difficult, and in some cases, impossible to recover. Women identified the significant impact rape and sexual assault would have on your life as one of the reasons they are so fearful of being victimized.

- I think that crimes such as robbery, theft could lead to something worse. having any of the previously named crimes happen to you is tramatic enough but rape or sexual assault takes it to an entirely different level. To be robbed, you can replace material things like your purse, and everything in it. But no one including yourself can take something like sexual assault back.
- I think that rape is a step above a robbery or assault so I think that a general fear of theft, robbery, assault would lead to a greater fear of rape. Just the personal nature of rape and how much I would imagine it impacts your life, I would consider it a more frightening type of assault. I don't think that the two are necessarily related but I suppose a fear of assault may impact a fear of rape or sexual assault.

- I think I am more afraid to be raped than robbed because I take the precautions to prevent being robbed such as leaving my stuff laying around. If it was a personal attack whether robbery or assault I think I would be fearful but I think you can get over robbery.
- I am more afraid of someone taking away my most prized possession, which would be my sense of self and safety, than any of my material things. Being assaulted means that my wounds will heal in time, but being raped, my wounds would never heal from that.
- You can replace the items in your purse, but if someone rapes you that is something you never get over.

Finally, some women stated that they were afraid of crime in general simply because they were a woman or had been taught to be fearful.

- I don't think either crime makes me more afraid of the other, I'm just afraid in general of both because im a woman.
- Just being a woman makes you more afraid of things.
- My parents always told me to protect myself and be afraid of being hurt by someone, so I am more afraid because of what they taught me.
- Because I'm a woman, I always think that something bad could happen to me.

In looking across the responses, it became evident that the shadow of sexual assault hypothesis, while somewhat supported, was certainly not the only explanation for college women's fear of crime. The responses indicate that college women vary greatly on what makes them fearful or why they are fearful. The responses further indicate that it is not correct to assume that all college women are fearful of crime, as some specifically stated that they were not fearful for various reasons. These findings are discussed in more detail below; also included are directions for future research and cautious policy implications based on the findings.

DISCUSSION

Although the original intent of this analysis was to determine if the shadow of sexual assault hypothesis was supported when college women were given the opportunity to explain their fear of crime, it is evident that a multitude of explanations detail why women are fearful. There was some support for the shadow hypothesis, but there were also some students who strongly disagreed with the assertion that fear of rape and sexual assault impacts a woman's fear of other crimes. Further, in support of many other theories that have attempted to explain why women are fearful of crime, a number of other explanations were offered, including women's vulnerability and inability to fight off an attacker, the role that previous victimization plays in their current fear, difficulties in recovering anything that is lost or damaged due to rape or sexual assault, and general fear because they are a woman.

There is no shortage of studies indicating that women have higher levels of fear of crime than men (see Bankston & Thompson, 1989; Ferraro, 1995; Ferraro & LaGrange, 1992; Reid & Konrad, 2004; Sacco, 1990; Warr, 1984); what is not entirely clear, however, is why women are more fearful than men, even though they have much lower victimization rates than men for all crimes except rape and sexual assault. A number of different explanations have been offered to explain this paradox and many of these explanations emerged as responses to the open-ended items analyzed in the current research.

The Shadow of Sexual Assault Hypothesis

The results indicated that there was some support for the shadow of sexual assault hypothesis. Many women responded that they agreed that, to an extent, their fear of rape and sexual assault increased their fear of other crimes, specifically theft, robbery, and assault. Many women specifically made the connections that Ferraro (1995, 1996) presented in his work: that any crime could result in sexual assault and that if someone was committing a "less personal" crime such as theft, there would be little to prevent their actions from escalating into a personal offense such as rape or sexual assault. This supports Ferraro's (1995, 1996), Fisher and Sloan's (2003), Hilinski's (2009), and Wilcox et al.'s (2006) quantitative research examining the shadow of sexual assault hypothesis. These results provide an additional layer of support to the shadow of sexual assault hypothesis that was not present before; now, in addition to quantitative findings supporting this argument, women, in their own words, have affirmed this idea.

However, with every level of agreement comes disagreement. There were a small number of women who responded that they did not think that their fear of rape and sexual assault was related to their fear of other crimes. Many of these responses were worded quite strongly to suggest that because the motivation for these crimes was so different (e.g., several women wrote that the motivation for theft or robbery was financial need, but the motivation for rape or sexual assault is power). Because the women perceived the motivations for these crimes to be so different, they did not consider them to be on the same level. One explanation for this disagreement could be because women perceive theft or robbery to be a more common offense than rape or sexual assault. If they have an "it won't happen to me" mentality, it would stand to reason that they would not perceive these crimes to be similar in terms of fear or motivation. Further, many women grossly underestimate their risk for rape or sexual assault, further reaffirming the argument that they do not fully recognize the potential risk they face, based on their age and their everyday activities (Hughes, Marshall, & Sherrill, 2003).

Prior Victimization and Fear

Another explanation for women's fear of crime that emerged from the responses was the result of a prior victimization. Several women wrote that they were afraid of all crimes, including theft, assault, burglary, and rape/sexual assault because they had been victimized in the past. This explanation is not surprising; it would follow that if you are victimized once, the experience would likely be related to increased levels of fear of all crime in the future. Once an individual is victimized, the "it won't happen to me" mentality is shattered and they are fully aware that they are at risk of victimization. Experiencing one type of victimization likely causes a heightened awareness of any type of victimization, resulting in increased levels of fear of all crimes and altering daily activities. For example, one woman wrote that she does not leave her dorm room and frequently misses class because she is afraid to go out in public after being sexually assaulted. These findings are supported by prior research that has concluded that prior victimization is a strong predictor of perceived risk and fear (Fisher, Sloan, & Wilkins, 1995; LaGrange, Ferraro, & Supancic, 1992; Ollenburger, 1981; Smith & Hill, 1991; Taylor & Hale, 1986).

However, once again, there was some disagreement with the idea that prior victimization results in an increase in fear among college women. Some women wrote that because

they had been the victim of rape or sexual assault in the past, they felt prepared to defend themselves and took precautions so that they would not be in vulnerable situations. As such, they felt that they were not fearful of crime because they felt that they would never again allow themselves to be victimized. This is an interesting outlook, as it goes against research that has suggested the prior victimization is one of the most significant predictors of future victimization (e.g., Daigle, Fisher, & Cullen, 2008; Ellingworth, Hope, Osborn, Trickett, & Pease, 1997; Farrell, Phillips, & Pease, 1995; Hope, Bryan, Trickett, & Osborn, 2001; Lauritsen & Davis-Quinet, 1995). In fact, Daigle et al. (2008) found that a small proportion of college women experience a large proportion of violent and sexual victimization. However, these findings are in line with a body of research that suggests that prior victimization is a poor predictor of fear of crime or is not related to fear of crime at all (Garofalo, 1979; Hill, Howell, & Driver, 1985; Hindelang et al., 1978). With respect to the role prior victimization plays in fear of crime, the results presented here are in line with the results of many of the quantitative studies examining this relationship. That is, they are mixed and do not provide any clear conclusions on the existence or direction of the relationship between prior victimization and fear of crime.

Feminist-Based Explanations of Fear of Crime

There have also been feminist-based explanations for women's fear of crime. These explanations center on the idea that women are inherently more vulnerable than men (both physically and emotionally), and as such, would not be able to physically defend themselves if they were being attacked and would not be able to recover emotionally and psychologically if they were attacked (Baumer, 1978; Hindelang, et al., 1978; Tulloch & Jennett, 2001). Further, feminist based explanations assert that as we live in a patriarchal society, men and women take on different gendered rolls in their everyday lives (Stanko, 1992; Steffensmeier & Allan, 1996). These gendered roles extend from everyday activities to how individuals act as both criminals and victims (Hollander, 2001). Following this line of thought, men are portrayed as the victimizers and women are portrayed as helpless victims, unable to defend themselves. These explanations were reflected in the responses analyzed here. Many women noted that fear arises out of the knowledge that men are bigger and stronger than women, so they are able to overcome the physically to victimize them. They also identified the difficulties in recovering from crime, particularly rape and sexual assault, as a source of fear. Many felt that it is easy to replace your purse or other belongings, but would be nearly impossible to fully recover from rape or sexual assault. These responses affirm the argument that in a patriarchal society, men hold so much power over women that their lives will never be the same if they are the victim of rape or sexual assault.

Like the other explanations, however, some women felt that they were not afraid of crime because they were able to defend themselves. These women felt that because they were not insecure, were prepared to handle a situation where they might become victimized, and took steps to ensure that they did not appear to be an easy target, that they were unlikely to be victimized. Because of their preparation, they stated that they were not fearful of crime. It is interesting to note, however, that these women interpreted their precautions and preparation as a factor that diminished their fear. This begs the question: what caused them to take these precautions and prepare themselves to fight back against victimization in the first place? Many women are taught to be fearful simply based on their gender. This also fits

into the feminist explanations of fear of crime, which argue that a woman's role as a victim in a gendered, patriarchal society is to be helpless and unable to defend herself. Women are often taught this from a young age, so their fear of crime in general follows them throughout their lives. It would follow that if women are taught that they are inherently vulnerable and will be unable to defend themselves if they are ever attacked, they were, at one point, fearful of being victimized. This fear might have been the impetus for them to learn how to defend themselves and what precautions to take to reduce their risk of victimization.

Overall, the results presented here seem to generate more questions than they answer. Although the original intent of the research was to examine the shadow of sexual assault hypothesis, it is evident from the findings that this explanation is one of many that articulate why women are more fearful of crime than men. Perhaps there is not one single explanation that can fully explain women's fear; it might be that it is a combination of different explanations that describe the sources of women's fear, and it is inappropriate to try to isolate one particular cause. Future research should continue to explore these explanations, using both quantitative and qualitative research methods. The ability for women to provide answers to open-ended questions in their own words provided a rich source of data that quantitative analysis would not necessarily have been able to capture.

Although the current research has expanded our knowledge of fear of crime, particularly among college women, by asking them to describe this fear in their own words, it is not without its limitations. The sample size is small; however, because these responses were analyzed using qualitative analytical techniques, this is less of a problem than if quantitative analyses were used. Inherent to qualitative research is also a lack of generalizability. There may be certain characteristics of the women who responded to the open-ended items that differ from those of the general population of State University and the college women population in general. These results can be viewed as a starting point for further qualitative exploration of women's fear.

Cautious policy implications can also be generated from these findings. Most policy implications that have been generated out of fear of crime research have focused on addressing risk of victimization, including self-defense training and other precautionary behaviors to reduce their risk of victimization. These implications, while valid and relevant, have arguably not addressed fear of crime. These suggestions might reduce a woman's risk of being victimized, but it is unclear whether reducing victimization risk results in a reduction in fear of crime. To this end, Warr (2000) argued that policies aimed towards reducing women's fear of crime should focus on addressing the root causes of the fear, which is often an individual's perceived risk of being victimized. In many cases, particularly among women, perceived risk is actually much higher than actual risk. Thus, Warr has argued that if women are provided with accurate information about their actual risk of victimization, their fear of being victimized might be more in line with their actual risk of victimization and they will not be so consumed with fear.

Although Warr (2000) has made salient suggestions for addressing women's fear of crime, the results presented here suggest that there is not one simple explanation for why women are afraid of crime. Rather, the explanations seem to vary, and some women even identify reasons why they are afraid of crime that are similar to reasons identified by women are not fearful of crime. Future research should continue to explore the complex phenomenon of

fear of crime, particularly among women; once it becomes clearer why women are fearful of crime, these root causes can be addressed, as suggested by Warr, to mitigate women's fear and provide them with accurate information about their risk of victimization.

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