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I, Valerie R Bell M.A., hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Criminal Justice.

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Gender-Responsive Risk Assessment: A Comparison of Women and Men

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Gender-Responsive Risk Assessment:

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ABSTRACT

Risk assessment is an integral part of corrections. Risk assessment allows practitioners to not only predict the likelihood of success for an offender placed in the community but also to identify areas which will likely reduce risk if treated. Many scholars have argued that such areas also known as criminogenic needs differ for men and women (Bloom, Owen & Covington, 2003). In responding to these arguments scholars have created a risk assessment designed specifically for female offenders (The Women's Risk/Needs Assessment or WRNA) (Van Voorhis, Salisbury, Wright, & Bauman, 2008). This dissertation builds on existing gender-responsive studies by examining the predictive validity of gender-neutral and gender-responsive risk/needs variables as well as gender-responsive strengths in a sample of male and female offenders in community correctional facilities using the WRNA. Results indicate that there are differences in the prevalence, co-occurrence, and predictive validity of gender-neutral and gender-responsive risk/needs and gender-responsive strengths for men and women. This study replicates the results of prior studies regarding gender-neutral risk assessment for male offenders. Additionally, this research demonstrates the importance of gender-responsive issues in the risk prediction of female offenders.

DEDICATION

This dissertation is dedicated to the memory of my mother and father, Doris and Jimmie Bell.

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To my husband Steve whom I met while pursuing this degree, I look forward to knowing you without the stress of graduate school in our lives. I hope that I can be as much support to you in your academic career as you have been to me in mine. You are the most amazing man I know.

Finally, to my son Chad, you have made this work more important to me than you will ever know. You have made it real and personal. Thank you for allowing me to be a part of your life.

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CHAPTER ONE

INTRODUCTION

Risk assessment is an integral part of community corrections. In many correctional systems a risk assessment is performed to examine the likelihood of success if an offender is placed in the community. Two main reasons exist for assessing risk prior to a correctional placement determination. First and foremost is public safety. At many decision points, concern for public safety underscores the necessity of knowing which offenders are at high risk of reoffending. Second, criminogenic risk factors identified in the risk assessment become targets for change that give the community correctional system the opportunity to reduce the offenders' risk of recidivism. Although the present study is concerned with assessment of risk, it focuses primarily on the second reason for risk assessment. This research focuses on the identification of criminogenic needs (dynamic risk factors) for both men and women. The focus, in this regard, is whether these criminogenic needs (dynamic risk factors) are the same for both men and women.

A number of scholars have argued that criminogenic needs are not the same for men and women. For example, as part of an effort by the National Institute of Corrections (NIC), Bloom et al. (2003) researched the existing knowledge regarding best practices with women offenders. This research produced a guide for professionals to follow in their work with women in the criminal justice system. Included in those suggestions are the importance of acknowledging that differences exist between men and women. The authors argue that behavioral differences occur as a result of gender socialization, gender roles, and gender inequality in this society. Some of the areas argued to be different for men and women include health care, substance abuse, mental health, abuse, poverty, education, employment, communication, relationships, and parental stress.

This dissertation builds on that research by examining areas thought to be pertinent only to women. These "gender-responsive" variables include self-efficacy, parental stress, parental involvement, relationship dysfunction, child abuse, adult physical abuse, family support, unsafe housing, dynamic mental health, mental health history, educational assets, relationship support, and anger/hostility. This research examines these variables in a sample of men and women to compare their relationship with recidivism for each group. Addressing a concern that some of the gender-responsive variables may be pertinent to males as well, later discussion in this chapter will identify research that supports an examination of these variables with men in community corrections.

HISTORY OF RISK ASSESSMENT

Criminogenic needs only appeared on risk assessment instruments within the past two decades. Historically, risk assessments have passed through several stages known as generations (Bonta J. , 1996; 2002). The first generation of risk assessment involved clinical assessment (VanBenschoten, 2008). Although intuitively one would expect clinicians to be good predictors of offender behavior, this was not the case. Clinical assessment proved to be inaccurate and practitioners sought a better means of assessment (Austin & McGinnis, 2004; Goldberg, 1970; Grove & Meehl, 1996; Meehl, 1986; 1959; Simourd, 2004). This concern initially was observed in diagnoses of mental illness.

In a study comparing clinical and actuarial assessment of mental health, Goldberg (1970) found support for actuarial assessment. This study used models based on the decision-making of 29 clinical psychologists and found that the actuarial decision-making models worked better to differentiate between neurotic and psychotic patients than the psychologists themselves. Goldberg argued that the shortcomings inherent in humans make the judgment of the

psychologists less reliable than the actuarial assessment based on their decision-making model. He further argued that the actuarial assessment uses what is a good model for decision-making but removes the unreliability of humans. Meta-analyses have since found objective, non-clinical (actuarial) assessments to be superior to clinical judgment (Ægisdóttir, et al., 2010; Grove, Zald, Lebow, Snitz, & Nelson, 2000).

The second generation of risk assessments is atheoretical, empirically based, and static[1]. Perhaps the most well-known and widely used static risk assessment is the Salient Factor Score (SFS) (Hoffman & Beck, 1974). The SFS includes six items: prior convictions, prior commitments, age, time since last offense/commitment, probation/parole escape/violator, and history of heroin/opiate dependence. Original research found the SFS to be a valid predictor of recidivism (Hoffman, 1982, 1983; Hoffman & Adelberg, 1980; Hoffman & Beck, 1974, 1976, 1980, 1985; Hoffman, Stone-Meierhoefer, & Beck, 1978; Hoffman & Stone-Meierhoefer, 1979; Janus, 1985). Additionally, a study examining the validity of the SFS after seventeen years of use found that it was still a valid assessment of success on parole for both males and females (Hoffman, 1994).

Other second generation risk assessments also have been found to have predictive validity. The HCR-20, a second generation risk assessment designed to predict risk of violence, has been found to be predictive of both violent recidivism and institutional violence (Belfrage, Fransson, & Strand, 2000; Strand, Belfrage, Fransson, & Levander, 1999). The Statistical Index of Recidivism (SIR) also was found to have predictive validity with regard to general recidivism and violent recidivism (Bonta, Harman, Hann, & Cormier, 1996).

[1] Static risk assessments are those comprised of factors which do not change such as criminal history and seriousness of current offense.

Simply put, research has provided support for the predictive power of second generation risk assessments. Why then, have criminal justice researchers sought a third generation risk assessment? The answer to this question involves the goal(s) of risk assessment. If the goal of using a risk assessment is limited strictly to predicting recidivism, then a second generation risk assessment is a valid tool. However, should a practitioner wish to examine areas of risk that might be amenable to treatment and thus risk reduction, a second generation risk assessment is inadequate for the task. This is due to the factors which comprise a second generation risk assessment: static risk factors (criminal history, history of drug use). Second generation risk assessments are composed primarily of static risk factors which are not amenable to change.

In response, third generation risk assessments include risk factors that may be changed and thus facilitate efforts to reduce recidivism. There are two types of risk factors in the field of risk assessment: static and dynamic. Static risk factors, as noted above, are those items which do not change. For example, a well-known and highly predictive risk factor included in all risk assessment instruments is history of criminal behavior. Prior behavior is an excellent predictor of future behavior. However, prior behavior cannot be changed and therefore provides no assistance in reducing risk.

Dynamic risk factors, also known as criminogenic needs (Andrews, Bonta, & Hoge, 1990), are those risk factors which can be changed. For example, one of the most highly predictive dynamic risk factors is antisocial beliefs. The belief that stealing from others is not only acceptable but favorable increases the likelihood that one will participate in stealing. Through appropriate treatment this belief may be changed to the belief that stealing from others is unacceptable and disadvantageous, thus reducing the risk that an offender will steal.

A number of third generation risk assessments currently exist. One of the most well-known third generation risk assessments is the Level of Service Inventory (Andrews & Bonta, 1995). The LSI includes both static (criminal history, age of first offense) and dynamic (antisocial attitudes, employment, companions) risk factors providing both an assessment of risk and needs to target for change to reduce risk.

Principles of Effective Intervention

In order to adequately understand the necessity of a third generation risk assessment, it is important to provide a brief discussion of the principles of effective intervention. The principles of effective intervention (risk, need, and responsivity) have been identified by Andrews et al. (1990). The risk principle states that treatment should be targeted to those individuals who are at highest risk of recidivism. In order to treat those offenders, it is first necessary to accurately identify them. This can be done through the use of any validated risk assessment instrument. Low risk groups are comprised of those offenders who exhibit fewer of the risk factors found in risk assessments. Moderate risk groups have more risk factors, and high risk groups demonstrate the greatest number of risk factors. High risk offenders respond better to intensive treatment than low risk offenders (Andrews, 1989; Andrews & Bonta, 2010; Lowenkamp, Holsinger, Brusman-Lovins, & Latessa, 2004). Additionally, low risk offenders do well with minimal services and, in some cases, exhibit poorer outcomes with intensive service (Andrews & Dowden, 2006; Hanley, 2006; Lowenkamp & Latessa, 2002). Thus, identification of risk level is important for managing the limited resources available to correctional treatment.

The need principle states that once the higher risk offenders are identified, treatment should target dynamic risk factors associated with recidivism (Andrews et al., 1990). These dynamic risk factors are known as criminogenic needs (antisocial attitudes, antisocial peers). The

need principle further states that non-criminogenic needs (self-esteem, transportation) are only weakly associated with recidivism. Thus, to reduce recidivism through treatment, it is necessary to identify and target criminogenic needs.

The third principle is the responsivity principle. The responsivity principle states that the type of treatment provided to an offender should be matched to the offender's learning style in order to achieve the best possible results from that treatment (Andrews et al., 1990; Andrews & Dowden, 2006, 2007; Andrews, Zinger, et al, 1990). There are two types of responsivity: general responsivity and specific responsivity. General responsivity encompasses the idea that offenders are different from non-offenders and it is important to recognize this difference when implementing treatment. Included in this difference is the idea that appropriate types of treatment will produce better results. For example, meta-analysis indicates that cognitive behavioral or social learning programs provide better results with offenders than other types of treatment programs (Andrews & Dowden, 2006; Andrews, Zinger, et al., 1990). Research on the varying types of treatment provided to offenders indicates that the best results can be seen when a specific set of criteria is found in the treatment. Better results are achieved when the providers of the treatment exhibit warmth, tolerance and flexibility while still adhering to rules and procedures. Providers must also model anti-criminal attitudes, reinforce offenders for demonstrating them, and give opportunities for offenders to practice them.

Specific responsivity involves the personal attributes of the individual offender and may be thought of as barriers to treatment. Specific responsivity includes those individual personality attributes that may make a certain type of treatment more or less likely to be effective with that individual. It should be noted, at this point, that researchers have found that, in some situations, responsivity issues may be more important than has previously been thought. Recent research

found a cumulative effect of responsivity issues (Hubbard & Pealer, 2009). In a study of 257 adult men in a community-based correctional facility, researchers found that, although individual responsivity issues were not related to intermediate program outcomes (reduction in cognitive distortions), combinations of these issues were stronger predictors of outcomes than risk level. Of particular importance were low self-esteem, depression, and sexual abuse history. Research such as this supports the argument that, although criminogenic needs are important, there may be room for research into other areas that may supplement or add to the already identified criminogenic needs. Existing research has, however, supported the use of existing instruments.

A great deal of research has supported one of the most well-known third generation instruments (the LSI-R) with a number of differing populations. Most relevant to this research, the LSI-R has been found to be valid among both women (Coulson, Ilacqua, Nutbrown, Giulekas, & Cudjoe, 1996; Flores, Lowenkamp, Smith, & Latessa, 2006; Folsom & Atkinson, 2007; Manchak, Skeem, Douglas, & Siranosian, 2009; Van Voorhis, Wright, Salisbury, and Bauman, 2010; Vose, Cullen, & Smith, 2008) and men (Bonta, 1989; Bonta & Motiuk, 1990, 1992; Hollin & Palmer, 2003; Holsinger, Lowenkamp, & Latessa, 2006; Kroner and Mills, 2001; Lowenkamp, Holsinger, & Latessa, 2001; Simourd, 2004). In addition to individual studies, meta-analytic research that statistically examines the results across a number of individual studies has found support for the predictive validity of gender-neutral risk factors (Dowden & Andrews, 1999; Gendreau, Little, & Goggin, 1996; Smith, Cullen, & Latessa, 2009). It is important to note, however, that some researchers argue that it is impossible to know if risk assessment is as good as it could be for women offenders given that risk assessments have been created for and primarily validated on samples of men (Holtfreter & Cupp, 2007).

The fourth (or current) generation moves risk assessment forward primarily by tying dynamic risk factors to case management. That is, the case management goals are derived from the risk domain scores identified in the risk assessment (Andrews & Bonta, 2006; Andrews, Bonta, & Wormith, 2004; 2006). Some examples of fourth generation risk assessments include the Level of Service/Case Management Inventory (LSCMI; Andrews, et al. Wormith, 2004), the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS; Brennan, Dieterich, & Oliver, 2004), the Correctional Assessment and Intervention System (CAIS; National Council on Crime & Delinquency, 2004) and the Women's Risk/Needs Assessments (WRNA; Van Voorhis, 2010; Van Voorhis et al., 2008; Wright, Salisbury, & Van Voorhis, 2007). With the exception of the WRNAs, which were designed for women, fourth generation gender-neutral risk assessments predict the recidivism of both male (Brennan, Dietrich, & Ehret, 2009; Heilbrun, et al., 2008; Wormith, Olver, & Stevensen, 2007) and female offenders (Brennan, et al., 2009; Heilbrun, et al., 2008). Research into the predictive validity of the WRNA with female offenders has shown that the addition of gender-responsive variables in the WRNA increases the predictive validity of the earlier gender-neutral risk assessments (Van Voorhis, 2010; Van Voorhis, et al., 2010; Van Voorhis et al., 2008; Wright et al., 2007).

Creating Gender-Responsive Assessments for Women Offenders

Although risk assessment has evolved to support treatment and case management of offenders, most existing risk assessments were created through research based on samples of men. Except for the WRNA, all of the risk assessments cited above used strictly men or a combination of men with a smaller sample of women in their construction validation research. Although a number of studies have supported the predictive validity of such instruments with women (Bonta, Pang, & Wallace-Capretta, 1995; Smith et al., 2009; Van Voorhis et al., 2010),

some researchers argue that other reasons exist to justify the creation of risk assessments specifically for women offenders.

Feminist criminologists have long argued that criminology has based its theories on an androcentric view of crime. In an examination of the sentencing of men and women in the courts, Daly (1994) uses the gendered pathways perspective. The pathways perspective argues that women find their way into the criminal justice system through distinct pathways that differ from those of men, that the androcentric view of traditional criminological theories is inappropriate for women, and that it is necessary to consider the social aspects of the lives of women in order to adequately understand their reasons for offending.

A joint effort between the University of Cincinnati and the National Institute of Corrections created an instrument for women offenders with the goal of addressing some of these issues: the Women's Risk/Needs Assessment (WRNA) (Van Voorhis, 2010; Van Voorhis et al., 2008; Wright et al., 2007). The WRNA includes the areas identified by traditional criminological theory (static and dynamic risk factors) as important for predicting recidivism. The WRNA also includes areas based on the pathways perspective that have been identified as important to the etiology of women's criminal behavior (gender-responsive risk/needs) (Chesney-Lind, 1997; 2000; Chesney-Lind & Rodriguez, 1983; Chesney-Lind & Shelden, 1992, 2004). Specifically, the WRNA includes a number of areas identified by feminist criminologists as important to the pathways of women offenders: self-efficacy, parental stress, parental involvement, relationship dysfunction, child abuse, adult physical abuse, family support, unsafe housing, dynamic mental health, mental health history, educational assets, relationship support, and anger/hostility. Preliminary research has provided support for the predictive validity of these gender-responsive needs with women in the criminal justice system (Van Voorhis, et al., 2010).

Efforts at developing gender-responsive assessments for women in corrections began in 1999 with a pilot study in the Colorado Department of Corrections followed by three larger projects in Maui, Minnesota, and Missouri that began in 2004 (Van Voorhis et al., 2010). The research included several different settings: three prison samples (Colorado, Minnesota, and Missouri), three probation samples (Maui, Minnesota, and Missouri), and two prerelease samples (Colorado and Missouri). Two types of assessments were used in the research with the WRNA. In her review of the four studies, Van Voorhis (2010) refers to these as Supplement One and Supplement Two. Supplement One includes a survey with gender-responsive variables including: self-efficacy, self-esteem, parental stress, relationship dysfunction, child abuse, and adult physical abuse. Supplement Two includes the survey scales from Supplement One but adds interview items including: family support, unsafe housing, anxiety/depression, psychosis, educational assets, relationship support, relationship conflict, anger/hostility, child abuse, and adult physical abuse.

These variables in the WRNA include measures designed to identify areas of risk and areas of strength. Included in the measures of strength are self-efficacy, parental involvement, relationship support, family support, and educational assets. For the purposes of measuring strengths, self-efficacy is defined as the belief an offender has in her/his ability to complete specific tasks. Thus the self-efficacy scale includes questions tapping whether or not the offender is able to stick with difficult tasks, able to handle unexpected problems that occur, and follow through on projects after beginning them.

The parental involvement scale measures the degree to which participants are actively involved in the lives of their child/ren. The scale asks questions designed to identify how much

interaction the offender has with his or her child/ren as well as how the offender feels about her/his ability to be a good parent.

The relationship support scale desires to obtain information about any support the offender may have from a significant other in his or her life. The scale consequently asks if the offender has a significant other in his or her life and, if so, the length of the relationship as well as the level of contentment the offender has in the relationship.

The family support scale is designed to extend the gender-neutral measure of family through examination of the offender's relationship with the family of origin. Thus the scale includes questions asking about the level of conflict in the family of origin, the amount of contact the offender currently has with the family of origin as well as the amount of support currently provided by the family.

Finally, the educational assets scale seeks to determine if the offender has any educational strength upon which to build. Questions in this scale therefore ask if the offender has a high school diploma, general equivalency diploma (GED), or any other educational or vocational training.

Gender-responsive measures of risk include parental stress, relationship dysfunction (survey), child abuse, adult physical abuse, unsafe housing, dynamic mental health, mental health history, and anger/hostility. Although some of these items (mental health history, dynamic mental health issues) are included in gender-neutral risk assessments, the WRNA addresses these areas in ways that extend the scope of the measures. In the case of mental health history the scale asks very specific questions designed to aid the offender in identifying whether or not any mental health problems have existed in the past. For example, questions ask whether the offender has ever attempted suicide, seen a mental health professional, or been placed in a

medical or mental health facility for any type of mental health problem. The scale of dynamic mental health issues extends gender-neutral assessments by asking questions about behaviors related to current mental health issues such as excessive worry, inability to sleep or seeing or hearing things that are not really there.

The gender-responsive variable of parental stress acknowledges that being a parent may cause strain. For offenders, such strain may represent a risk factor. The parental stress scale measures the level of difficulty the offender experiences in relation to being a parent. Questions from this scale include how much support the offender has from others in parenting, the existence of any behavioral problems for any of the children which may make them particularly difficult to parent, and how much stress the offender feels regarding being a parent.

The relationship dysfunction scale questions the offender regarding the existence of any relationships that may be placing the offender at higher risk for committing an offense. Questions asked in the relationship dysfunction scale address current and past relationships which cause the offender emotional pain, increase the likelihood of getting into trouble, and cause the offender to neglect other relationships or responsibilities in her or his life.

Child abuse and adult physical abuse are measured in both the interview and survey scales included in the WRNA. The interview questions simply ask the offender if he/she has ever experienced physical or sexual abuse as an adult or as a child. However, because offenders may not recognize that the experiences they have had or are currently having in their lives are abusive, the WRNA interview provides a brief introduction that is read to the offender which defines abuse for them. The definition provided prior to the questions in the interview defines abuse as "…hitting, slapping, pushing, kicking, and threatening to hurt you. Abuse also includes being forced to do something humiliating or embarrassing, being ridiculed, insulted, or harassed

on a fairly regular basis" (13). The survey items include questions measuring similar behavioral types of abuse. Given the likelihood of reticence on the part of the offender to discuss such issues (Carlson, 2006; Holmes & Slap, 1998; Myers, 1989; Nasjleti, 1980; Oosterhoff, Zwanikken, & Ketting, 2004), providing discreet means of disclosing such information through the inclusion of self-report surveys is likely to provide a more accurate measure of past and current abuse.

Unsafe housing is defined using both subjective and objective questions to determine the safety of the offender's current (if on probation) or past (if incarcerated) home. Subjectively, the offender is asked if the home environment and the neighborhood felt safe. Objectively, additional questions ask if any substance abuse or violence is present in the home.

Finally, anger/hostility is defined in reference to its impact on behavior. The anger/hostility scale uses both subjective judgment and behavioral questions. Questions included in the scale address the offender's opinion of his/her temper as well as whether or not any difficulties had been experienced in the past as a result of angry or hostile behavior.

It is not altogether clear that the "gender-responsive" variables are not relevant to men as well as women. The WRNA research focused exclusively on women with no control groups for male offenders. As a result, little is known about the prevalence of the gender-responsive needs among men or whether, when present, any of these needs are risk factors predictive of men's recidivism. Researchers have argued that the lack of gender-responsive risk assessment may result in an egregious situation for women offenders (Van Voorhis & Presser, 2001). Given the greater number of men in the correctional system, however, the absolute number of men experiencing similarly egregious situations may approximate or exceed the number of women even though the prevalence may be less.

THE PRESENT STUDY

To address this limitation, this dissertation examines the WRNA risk/needs factors for their comparative applicability to male and female offenders under community supervision. The study examines the prevalence and predictive validity of each of the gender-responsive risk/needs factors for separate groups of males and females. Support for these research goals can already be seen in the criminological research. First, the gendered pathways identified by Daly (1994) are not silent on the applicability of some of the gender-responsive variables to men. Second, the extant literature on each of the gender-responsive needs, not necessarily confined to criminology or corrections, suggests that several of them may be key to the criminality of men.

Gendered Pathways for Women and Men

Of course Kathleen Daly's (1994) qualitative work is most frequently cited as support for women's gender-responsive risk assessment. In her review of court records of 40 women offenders, Daly identified five gender-responsive pathways: the street woman, the harmed and harming woman, the drug-connected woman, the battered woman, and the other woman.

The street woman pathway describes ten women in the sample. These are primarily women who ran away from abusive households and turned to the street life to survive. Thus, most of these women participated in crimes such as prostitution, theft, and drug dealing. Additionally, for many women in the street woman pathway, abuse experienced in childhood continued on in adulthood in dysfunctional relationships. The street women pathway thus supports examination of family support, child abuse, adult abuse, housing safety, and dysfunctional relationships.

Fifteen women in Daly's sample comprise the harmed and harming pathway. The harmed and harming women experienced abuse in childhood followed by substance abuse and

mental health issues as adults. These women often became angry and violent while intoxicated and experienced a great deal of difficulty coping with daily life. Support is provided for further examination of child abuse, mental health, and anger as potential risk factors for these women.

The five women in the battered woman pathway also experienced abuse as children which continued into adulthood. For these women their involvement with the criminal justice system was a direct result of fighting back against their victimizer. Had these women not been involved with violent, abusive partners, they would not have been in the system. Thus, in addition to childhood abuse, dysfunctional relationships, adult abuse, and housing safety are of particular interest in the likelihood of recidivism for the battered woman pathway.

Six women in the sample are described as drug-connected women. These women were identified as being addicted to drugs and involved in manufacturing and/or distributing drugs in the context of an intimate or familial relationship. Family support and relationship dysfunction are of keen interest in examining the risk of recidivism for these women. The final pathway was simply labeled other women, although it has also been identified as women who were economically motivated (e.g., see Morash & Schram, 2002). This group of four women committed crimes for economic gain. Daly (1994) found these women unique because they lacked any notable abuse history, were not drug-addicted, and were not violent. It has been argued elsewhere that the offending context for this group of women more closely resembles male offending patterns than gendered causal pathways (Reisig, Holtfreter, & Morash, 2006).

The literature seldom notes that Daly's sample also included 40 men. Daly found four pathways for men in her sample. Two of men's pathways do not provide a great deal of support for the gender-responsive variables. Eleven men fit the street pathway which involves drug addiction and problems in school as the pathway to the street. Additionally, the drug-connected

pathway includes three men who were seen as occasional recreational drug users that happened to be in the wrong place at the wrong time resulting in some interaction with the criminal justice system. However, the pathways of the harmed and harming men and the costs and excesses of masculinity both provide support for further investigation into some of the gender-responsive variables and their relationship to recidivism.

In Daly's sample, eight men fit the harmed and harming men pathway. The files of these men described chaotic and abusive childhoods and aggressive adults. Daly surmises that abuse is likely although not reported for more of these men. The existence of problematic childhoods, child abuse and aggression in the files of these men provides support for further investigation of the gender-responsive variables of childhood abuse, family support, and anger/hostility.

The final pathway Daly identified in the male sample included fourteen men and is described as the costs and excesses of masculinity. The pathway of the costs and excesses of masculinity is plainly identified by violence, although the violence is expressed through various behaviors. Explosively violent men in this pathway lash out at family or friends in anger; bad luck men commit violent acts as a result of interactions with other men; and masculine gamers use violence as recreation or a means to impress other men. Support for further research into the importance of the gender-responsive variable of anger/hostility is clearly provided by this pathway.

The various pathways found by Daly in her research argue for further investigation of a number of different gender-responsive variables. Family support, child abuse, adult abuse, housing safety, relationship dysfunction, mental health, and anger are seen in the pathways of women felony offenders whereas childhood abuse, family support, and anger are clearly demonstrated in the pathways of men in this felony court sample. However, as noted earlier, the

pathways research is not the only source of support for investigation into the gender-responsive variables with male and female offenders in the community. Additional evidence emerges from research embedded within the social sciences.

Research Support

As noted by Daly and other feminist criminologists (e.g., Joanne Belknap, Meda Chesney-Lind, Barbara Bloom, Barbara Owen, & Stephanie Covington), traditional criminology has tended to ignore the impacts of gender on criminal behavior. In an effort to address the lack of research on gender-responsive variables and their effect on men in the criminal justice system, a brief review of the literature in the general social sciences is provided. An in-depth review of this literature is provided in Chapter Two.

Most of the gender-responsive needs are addressed in research that finds some applicability to men. This literature is not always clear about whether the needs are risk factors for men, however. Moreover, in some cases the needs (e.g., parenting) may not map well to the definition of the gender-responsive factor (e.g., parental stress). However, studies do exist of self-efficacy, parental stress, parental involvement, relationship dysfunction, relationship support, child abuse, adult abuse, family support, unsafe housing, dynamic mental health, mental health history, educational assets, and anger/hostility among male as well as female offenders.

Self-efficacy has been argued by some researchers to be important to the success of offenders in the community (Taxman, 2004). Preliminary research using the WRNA supports this argument for women offenders. Self-efficacy was negatively related to rearrests and incarceration for the probation samples at all three locations. However, the results for pre-release and prison samples varied. In Colorado, Supplement 1 was positively related to misconducts but

was negatively related to misconducts at the other two sites. Such results may suggest that a situational effect exists for self-efficacy.

Although social scientists have only relatively recently examined self-efficacy and its impact on success for offenders in the community, recent research has identified self-efficacy as a protective factor for offenders returning to the community. For example, researchers have found self-efficacy to be predictive of longer survival in the community for male offenders following boot camp (Benda, Toombs, & Peacock, 2003). Additionally, research in the social sciences in general has found self-efficacy to be supportive of reductions in the following areas: antisocial attitudes and cognitive distortions among adult male offenders (Hubbard & Pealer, 2009), male offender sexual recidivism rates (Thornton, Beech, & Marshall, 2004), male and female aggression (Donnellan, Trzesniewski, Robins, Moffit, & Caspi, 2005), male and female drinking behavior (Sitharthan & Kavanagh, 1990), and male and female marijuana use (Stephens, Wertz, & Roffman, 1993).

Self-efficacy was not the only gender-responsive variable to exhibit situational effects. Parental stress was positively related to all negative outcomes (rearrests and incarcerations) for all of the probation samples and for both supplements in the WRNA validation research (Van Voorhis, et al., 2010). However, the parental stress variable showed no relationship in the WRNA research to the outcome variables for the prison or prelease samples, perhaps indicating that parental stress is of primary importance to the female offender but only if they are in the community and actually have responsibility for their children.

Whereas researchers have sought to determine the importance of parenting to the success of women offenders, no such research has examined the effects of parental stress on the recidivism of male offenders. The closest that researchers have come to examining parental

stress is to examine the maintenance of the parenting relationship for incarcerated male offenders. This research has indicated that, for incarcerated fathers, maintaining a relationship with children is positively related to post-release success (Brenner, 2003; Lanier, 1993; Lanier & Fisher, 1990; Waller, 1974).

Along with the maintenance of parental relationships, researchers have examined the maintenance of family ties. Specification of this variable has primarily been limited to an examination of the impact of visitation for male inmates. Such research supports the importance of family connections to reductions in recidivism (Adams & Fisher, 1976; Hairston, 1990; Holt & Miller, 1972; Homer, 1979; Howser, Grossman, & MacDonald, 1983; Schafer, 1994). This research is, however, of limited value for this examination of family because the measure of family in this research is not the same as the measure of family support in the WRNA.

An important difference in the WRNA gender-responsive scale of family support is that the WRNA measure of family support examines the quality and kind of family support an offender receives rather than simply the existence of family in the life of an offender. Thus, where previous research has simply identified that an offender is receiving family visits, the WRNA examines the content and quality of family support. Research thus far supports the value of family support for predicting a number of outcomes with female offenders.

Supplement 1 found family support to be negatively correlated with rearrests at two years for the probation samples in Maui, while Supplement two found a negative correlation between incarceration and family support at two years for the probation sample in Missouri. Family support was also negatively correlated with prison misconducts for Supplement 2 at one year for the prison sample in Missouri. Finally, family support was negatively correlated with technical violations and incarceration for Supplement 2 in Missouri. Given the unique manner in which

family is operationalized in the WRNA scales and the negative correlations across a variety of situations for women offenders, research is clearly needed to further examine the potential of this resource for predicting reductions in recidivism.

Unlike the family support variable, the child and adult abuse variables appeared to have a more complex relationship with prediction of outcome variables for women sampled in the WRNA research. The relationship was positive and strongest for child abuse in the prison samples, less strong for the prerelease samples and non-significant for the probation samples. The only significant relationships for child abuse were with women incarcerated in prison. Adult abuse was significant for the probation sample in Minnesota and the prerelease sample in Colorado using Supplement 1. Adult abuse was also significantly correlated with technical violations and incarcerations for the prerelease sample in Missouri using Supplement 2.

Although research regarding abuse and the probability of recidivism for men is limited two studies have found sexual abuse to be predictive of shorter survival times in the community following completion of boot camps (Benda, Harm, & Toombs, 2005; Benda et al., 2003). The lack of research regarding outcomes may be related to the difficulty involved in finding victims of such abuse. Men are often hesitant to admit to being abused due to fear of being persecuted for a lack of masculinity and the fear of being thought of as a homosexual (Carlson, 2006; Holmes & Slap, 1998; Myers, 1989; Nasjleti, 1980; Oosterhoff et al., 2004). The WRNA addresses this issue by allowing offenders to admit to such abuse indirectly through the use of behaviorally focused survey questions thus allowing the offender to provide such information in a manner more discreet than a direct interview.

On a related topic, research into the WRNA found dynamic mental health symptoms of anxiety/depression and psychosis to be correlated with incarceration for probationers, prisoners,

and pre-release samples using Supplement 2 in Missouri. Research examining the importance of mental health in the prediction of recidivism is ambiguous. Some research sampling male offenders has found mental illness to be non-significant in predicting recidivism (Bonta, Hanson, & Law, 1998; Mateyoke-Scrivner, Webster, Hiller, Staton, & Leukefeld, 2003; Porporino & Motiuk, 1995; Rice & Harris, 1995; Rice, Quinsey, & Houghton, 1990; Steadman & Morrisey, 1982; Sturgeon & Taylor, 1980; Teplin, Abram, & McClelland, 1994; Villeneuve & Quinsey, 1995). Other research has supported a connection between mental health status and recidivism when mental health was more specifically defined to a particular diagnosis or personality type (Listwan, Sperber, Spruance, & Van Voorhis, 2004; Listwan, Van Voorhis, & Ritchey, 2007; Pruesse & Quinsey, 1977; Quinsey, Warenford, Pruesse, & Link, 1975). Researchers who created the WRNA argue that behavioral indicators of mental health issues (present and past) perform better with offending populations (Van Voorhis, et al. 2010). The use of behavioral questions to examine the relationship between mental health (past and present) and the likelihood of future recidivism supports further investigation of this relationship.

The results of the relationship dysfunction variable were not as clear as were the mental health findings in the WRNA research. Although a significant relationship existed between relationship dysfunction and the outcome variables in the Minnesota probation sample and the Colorado and Minnesota prison samples, relationship dysfunction was not significant for the prerelease samples. It thus appears that, similar to the parental stress and abuse variables, the relationship dysfunction variable may be impacted by the environment.

No research was found that investigated any connection between relationship dysfunction and recidivism for male offenders. However, research has established that a positive relationship may operate as a protective factor for the male offender (Horney, Osgood, & Marshall 1995;

Laub & Sampson 2003; Sampson & Laub 1993; Shover 1996; Warr 1998). Such research has stressed the importance of the quality of the relationship that moved men away from crime during their lifetime. The WRNA questions the offender specifically about the quality of the relationship to determine whether it is a positive or negative influence in the life of the offender. Such in-depth examination of the quality of the relationships of offenders provides insight into the possibility that just as positive relationships serve as a protective factor for men, so may negative relationships serve as a predictor of risk to recidivate.

Anger is an area that may be tied to relationship dysfunction as in the samples in Daly's work of women on the harmed and harming pathway and men on the costs and excesses of masculinity pathway. Some support was found for the importance of anger in the WRNA research. In Missouri, using Supplement 2, anger was significantly related to returns to prison for the probation sample, to misconducts for the prison sample, and to incarceration at 12 and 24 months in the pre-release sample.

Anger has not been highly researched in regard to its impact on recidivism for male offenders. Although some research has failed to find any significance for male inmates and recidivism (Loza & Loza-Fanous, 1999), researchers have argued that it is important to keep in risk assessments for case management purposes (Loza, MacTavish, & Loza-Fanous, 2007). In the case of anger, for the purposes of offender risk assessment an argument can be made that the relative lack of research demands further investigation of this variable.

Research examining the effects of cognitive-behavioral treatment provides the largest amount of data investigating the relationship between anger and recidivism. Although not directly testing the ability of anger to predict recidivism, these studies provide indirect support for the importance of a relationship between anger and recidivism. Such research has identified a

relationship between programs that treat anger issues and reductions in recidivism for samples of men (Curulla, 1991; Dowden, Blanchette, & Serin, 1999; Ely, 2004; MacKenzie, Bierie, & Mitchell, 2007; Richards, Kaplan, & Kafami, & 2000), men and women (Finn, 1998; Landenberger & Lipsey, 2005), and women (Eamon, Munchua, & Reddon, 2001).

Similar to the anger variable, much research examining correctional education programs has provided support for the value of providing education to offenders as part of an effort to promote desistance. For example, researchers examining the effects of educational programs on 5,204 male and 548 female inmates over a three year period following release into the community found that completion of a GED program while incarcerated was related to longer survival time in the community. Other research evaluating the effects of correctional education programs have found positive results as well (Burdon, Messina, & Prendergast, 2004; Burke & Vivian, 2001; Chappell, 2004; Fabelo, 2002; Gordon & Weldon, 2003; Haulard, 2001; Huebner, DeJong, & Cobbina, 2010; Hull, Forrester, Brown, Jobe, & McCullen, 2000; Jensen & Reed, 2007; Kaiser, 2010; Nuttall, Hollmen, & Staley, 2003; Sedgely, Scott, Williams, & Derrick, 2010; Torre & Fine, 2005). Such research is promising. However, researchers also argue that many program evaluations are so methodologically weak as to make definitive conclusions regarding the effects of correctional education programs impossible (Cecil, Drapkin, Mackenzie, & Hickman, 2000; Wilson, Gallagher, & MacKenzie, 2000).

Support for further examination of the importance of education in predicting recidivism can also be found in the literature, however. Examination of a group of offenders (76 women and 197 men) participating in a day reporting center found level of education to be a significant predictor of recidivism for both women and men (Kim, Joo, & Mccarty, 2008). Other research has found years of education to be predictive of recidivism for men but not for women (Benda,

2005). Perhaps at least some of the reason for such disparate results can be found in the manner in which education is assessed.

The WRNA educational scales further the examination of education by questioning the offender as to deficits and strengths in ways that gender-neutral assessments have not. The offender is questioned about difficulties with reading and diagnoses of disorders relevant to educational ability such as attention deficit disorders. In the educational assets scale the WRNA takes note of any certifications the offender may have attained or semesters of college that have been completed. The WRNA thus delves more deeply into areas which are of importance regarding the offender's ability to attain education and therefore identifying possible strengths. Although only examined in the Missouri sample thus far, the gender-responsive variable of educational assets has found some support. Specifically, although non-significant for prison misconduct, educational assets had a significant, inverse relationship with recidivism for the probation and prerelease samples in Missouri (Van Voorhis, et al., 2010).

Housing is another area in which the WRNA measures a domain differently than that of gender-neutral risk assessments. Gender-neutral risk assessments generally identify housing as important only in that the offender has housing and it is not in a neighborhood likely to promote criminal behavior (Andrews & Bonta, 1995). The WRNA examines housing as a safety issue (Van Voorhis, et al., 2010). The WRNA research thus far has found unsafe housing to be significantly related to recidivism in both the Maui and Missouri probation samples (Van Voorhis, et al., 2010).

It may be that the predictive validity of housing can be improved through the use of measures that assess housing differently. For example, researchers have found that although measures of housing are predictive they are not particularly strong predictors of recidivism

(Rettinger & Andrews, 2010). Research using a simple dichotomous measure of housing has found it to be the strongest predictor of parole success or failure for women (Schram, Koons-Witt, Williams, & McShane, 2006). In their research the authors found that the odds of failure for the 546 female parolees in this study increased by 995% if they experienced unstable housing. Further investigation of a variable that has exhibited an effect of this magnitude is clearly warranted.

SUMMARY AND RESEARCH QUESTIONS

The brief summary in this chapter has provided an overview of a body of research arguing for the examination of a number of gender-responsive risk/needs and strengths for men as well as women. As such, this dissertation seeks to add to the existing literature by examining gender-neutral and gender-responsive risk/needs and strengths in a sample of women and men residing in community correctional facilities. Criminologists have argued it to be unnecessary to examine gender-responsive variables as risk/needs factors for women (Andrews & Bonta, 2006) and yet, research with the WRNA has found them to add significantly to risk prediction models for women (Van Voorhis et al., 2010). So may it also be the case for men. It is important to explore the possibility that although the gender-responsive issues may be less prevalent for men, they may be valuable in identifying factors for some men that are important to helping them remain crime free in their future.

The following research questions will be addressed:

1. How do males and females compare in terms of the extent to which they evidence gender-neutral and gender-responsive risk/needs?
2. Do the risk/needs co-occur in similar ways for males and females?
3. Are the gender-responsive risk/needs predictive for both males and females? If not:

a. What are the optimal predictors for men?

b. What are the optimal predictors for women?

4. What is the predictive validity of the WRNA risk scale for women? How well does it predict for men?

CHAPTER TWO

INTRODUCTION

A growing body of literature now supports the argument that certain gender-responsive variables are important to the pathways for women into criminal behavior. In this body of literature, criminologists suggest that female offenders are unique from male offenders in that certain gender-responsive issues exist for women that do not exist for men (Belknap, 2007; Bloom et al., 2003; Chesney-Lind & Shelden, 2004; Covington, 2000; Daly, 1992, 1994; Owen, 1998; Reisig et al., 2006; Richie, 1996; Steffensmeier & Allan, 1996; Van Voorhis, Bauman, Wright, & Salisbury, 2009; Van Voorhis, et al., 2010; Van Voorhis, Salisbury, Bauman, Holsinger, & Wright, 2008). This research has generally highlighted the importance of the gender-responsive variables included in the Women's Risk/Needs Assessment (WRNA): self-efficacy, parental stress, parental involvement, relationship dysfunction, child abuse, adult abuse, family support, unsafe housing, dynamic mental health, mental health history, educational assets, relationship support, and anger/hostility. These researchers have argued that these gender-responsive risk/needs and strengths are unique to women. This dissertation seeks to determine if the gender-responsive risks/needs and strengths are truly unique to women, or, if these areas may apply to male offenders as well.

As the following review of research will demonstrate, many of the gender-responsive domains of risk/needs and strengths have been examined by researchers and some support has been found for their importance to men in the general population as well as in samples of offenders. Prior to the examination of the literature however, a discussion of some of the differences in measurement of variables is appropriate.

Variable Measurement Differences

The WRNA includes a number of variables in its gender-responsive scales that are also seen in gender-neutral risk assessments: relationships, family, housing, mental health, and education. A brief discussion of these variables prior to investigation of the literature is valuable for the purposes of understanding fundamental differences between the WRNA and gender-neutral risk assessments.

Relationships have appeared prominently in the lives of offenders. Gender-neutral risk assessments include measures of this domain in their scales (Andrews & Bonta, 1995; Brennan et al., 2004). However, oftentimes, research has sought only to identify the existence of a relationship and contact of the offender with a significant other (Visher & Travis, 2003). Little research in this area has sought to identify the quality of the relationship. In contrast, the WRNA questions the offender not just about the existence of a relationship but also about the length of the relationship, the satisfaction the offender has in the relationship, as well as the negative impacts the relationship has on the life of the offender. Research indicating a poor quality marriage can actually increase crime speaks to the importance of examining such issues (Laub, Nagin, & Sampson, 1998).

Family support is another area that gender-neutral risk assessments include but the WRNA scales operationalize differently. As with the research on relationships, family research has generally focused primarily on the existence of family. Most of the research in this area asked offenders about the existence and quantity of contact with family and examined the number of letters, phone calls, and visits received by the offender (Adams & Fisher, 1976; Glaser, 1964; Hairston, 1990; Holt & Miller, 1972; Ohlin, 1951). While all of these measures are indicators of family support, such measures say nothing about the influence of the family on the

offender. The offender may have had a great deal of contact with the family but that family may be antisocial. Thus, although there is a body of literature examining family support among women and men offenders, it is clear that more research is needed regarding the relationship between recidivism and family support. Alternatively, the WRNA asks the offender about the quality of the family relationship, the existence of support, and what kind of support is offered.

In a similar manner, housing is an area that gender-neutral risk assessments have long identified as a secondary risk factor for offenders in the community. Given the importance of antisocial associates and substance abuse (Andrews & Bonta, 2010), the location of an offender's accommodations are seen as important as they impact these other domains. The WRNA also views housing as it is important to other domains. Housing safety is argued to be a key risk/need in the lives of women who have often experienced trauma in the home. Thus the WRNA scale examines housing safety as an issue. The housing safety scale asks not only about the neighborhood environment but questions the offender as to the environment inside the home with regards to physical safety and substance abuse. Such questions are not generally examined in gender-neutral risk assessments.

Another domain measured significantly differently by the WRNA is that of mental health. A concern exists that the failure of mental health issues to predict recidivism may be related to the aggregation of mental health into one category as opposed to asking questions specifically related to particular mental health issues. Researchers have argued that asking about mental health issues in behavioral language is more likely to achieve accurate results (Van Voorhis, et al. 2010). For example, asking an offender if she/he is sleeping too much or too little (one potential indicator of depression) may be a more accurate measure of depression than simply asking if he/she is feeling depressed. The WRNA addresses this issue by measuring

mental health history and current symptoms of depression and psychosis through the use of behaviorally focused questions designed to provide a more accurate measure of the presence of any mental health issues in the past or present.

The dynamic mental health questions center on behaviors related to anxiety and depression. Additionally, the mental health history questions are focused on such issues as seeing a mental health counselor, past diagnoses, and the use of mental health medication. Asking questions that are focused on behavior rather than focusing on diagnoses may provide new information as to the importance of mental health in the prediction of risk.

Research with the WRNA has, as yet, only examined the predictive validity of dynamic mental health and mental health history with a limited number of female offenders (Wright et al., 2007). However, the research in Missouri is promising. Samples of prisoner, pre-release, and probation offenders indicated a relationship between misconducts and recidivism for all but the 24 month outcomes for the pre-release sample. Symptoms of depression, anxiety and psychosis were correlated with measures of adjustment to incarceration and recidivism.

Finally, gender-neutral risk assessments have included scales of educational needs in their instruments. The WRNA measures educational needs but rather than focusing only on the amount of formal education completed by the offender, the WRNA additionally questions the existence of any education-related disabilities the offender may have or special needs classes the offender may have attended indicating a greater level of need than simply the lack of formal education. In addition to measuring traditional risk/needs factors in a unique manner, the WRNA examines a number of domains not assessed by gender-neutral risk assessments.

An area which the WRNA adds to the risk assessment model is that of strengths. As part of a focus on the strengths that may exist for women offenders the WRNA examines the

existence of any educational assets that these women may build on in their efforts at desistance. The WRNA educational assets scale thus asks if the offender has completed any semesters of college or if they have received any certifications which may aid in acquiring employment. Such strengths are an area that may aid in the desistance of male offenders as well. Support for such an argument exists in the literature and will be further discussed as the literature is examined later in this chapter (Niven & Stewart, 2005).

Another strength examined by the WRNA is parental involvement. For many incarcerated women, the loss of children is a particularly painful area (Belknap, 1996; Kiser, 1991). While this area is painful for these women, it may also be that involvement with their children can be predictive of the level of motivation an offender has to desist from crime. The parental involvement scale measures the level of involvement an offender has with his/her children. Questions included in the scale ask if the offender has custody, is involved in important decisions regarding the child, and how often the offender has contact with the child.

This is an area that has generally been neglected in the literature for male offenders, perhaps due to the fact that a greater percentage of women offenders are primary caretakers for their children. However, research indicates that most state (52%) and federal (63%) inmates have children under the age of 18 (BJS, 2009). Although women (62%) in state prison are more likely to report being a parent than men (51%), due to the larger numbers of men in prison the absolute numbers of fathers in prison are much greater than mothers. Additionally, according to the Substance Abuse and Mental Health Services Administration (SAMHSA) (2010) 42.8% of women on probation or parole are parents and 57.2% of men on probation or parole are parents. Although it may seem counterintuitive that the rates of fathers on probation or parole are higher than mothers on probation or parole, looking at the breakdown of parolees and probationers who

are parents clarifies the issue somewhat. When the numbers are broken down by single parents versus those parenting with a partner, it can be seen that 19.5% of mothers on probation or parole are parenting alone whereas 7.3% of fathers on probation or parole are parenting alone. The larger percentage of fathers on parole are parenting with a partner (49.9%) compared to the mothers on probation or parole (23.3%). Such high rates of parenting by offenders in the criminal justice system argue in support of further investigation of the impacts of parenting on likelihood of success for these offenders.

The final gender-responsive strength is self-efficacy. Taxman (2004) has argued that offenders on probation and parole in the community live under conditions which may have unintended iatrogenic effects. When the community corrections system requires offenders to participate in treatment, be employed, pay fines and restitution, and meet with their probation/parole officers in addition to numerous other restrictions, the result may be to undermine the self-efficacy of offenders regardless of whether such restrictions are appropriate. She further notes that it may be a lack of self-efficacy making it difficult for offenders to reintegrate into society. She thus supports a focus on self-efficacy as part of an effort to enable offenders to desist from crime.

Self-efficacy is included in the WRNA based on its recognition as a protective factor for women offenders (Carp & Schade, 1992; Case & Fasenfest, 2004; Chandler & Kassebaum, 1994; Koons, Burrow, Morash, & Bynum, 1997; Morash, Bynum, & Koons, 1998; Prendergast, Wellisch, & Falkin, 1995; Rumgay, 2004; Schram & Morash, 2002; Task Force on Federally Sentenced Women, 1990). Such inclusion speaks to the importance of self-efficacy, as noted above, in enabling offenders in desisting from crime. Research examining the predictive validity of the WRNA has provided some support for the argument that self-efficacy acts as a protective

factor for female offenders (Salisbury, Van Voorhis, & Spiropolous, 2009; Van Voorhis, et al., 2010).

In research with the WRNA probation samples self-efficacy was generally related to reductions in recidivism. The relationship was less clear in the prison and pre-release samples where the relationship was primarily non-significant except for the Colorado sample where self-efficacy actually increased the likelihood of misconducts. Little other research exists to offer any insight into the importance of self-efficacy as a protective factor in regards to recidivism. What research does exist provides some support and argues for further investigation of this gender-responsive variable (Bahr, Harris, Fisher, & Armstrong, 2010; Benda et al., 2006, 2003). The WRNA examines self-efficacy as it relates to one's capacity to accomplish tasks. This is exactly the self-efficacy Taxman (2004) cites as important to offenders in the community corrections system.

The final two areas that the WRNA adds to risk assessment are abuse and anger/hostility. Research examining abuse has provided a great deal of support for the argument that women in the criminal justice system have experienced more physical and sexual abuse during their lives than male offenders or the population in general (Harlow, 1999; McClellan, Farabee, & Crouch, 1997). However, some researchers note that underreporting may be occurring at a greater rate for men as a result of socialization which encourages men to hide their vulnerabilities (Dimock, 1988; Holmes & Slap, 1998).

Additionally, it is important to note that although such events may be more common for women, the actual numbers of men are greater. Recent research following the passage of the Prison Rape Elimination Act (PREA) indicates that although the rate of sexual victimization of women in prisons (6.8% to 4.8%) and jails (4.6% to 3.4%) is higher, the actual numbers of men

experiencing such victimization is higher (Beck & Harrison, 2009). The rates translate to 1,357,100 male inmates in prison, 100,600 female inmates in prison and 678,100 male jail inmates and 99,100 female jail inmates who have experienced sexual abuse during their incarceration. Research by Daly (1994) into pathways of felony court offenders indicated that the existence of abuse and victimization in the lives of offenders is paramount to the entry of certain offenders into crime.

The research by Van Voorhis and her colleagues identified some areas in which child abuse was an important factor (incarceration samples). However, the results of relationships between adult and childhood victimization were mixed in the other samples (prerelease and probation) and warrant further investigation. As regards other empirical evidence, it is difficult to say what the relationship may be between recidivism and abuse in child or adulthood as most quantitative research comes from fields other than criminal justice.

Researchers in other fields such as psychology and social work note that abuse is a sensitive topic. Many people, including both women and men, would prefer not to discuss such a sensitive issue. Thus, an additional problem with research examining abuse is that abuse often goes underreported (Kilpatrick, Saunders, & Smith, 2003; Kimerling, Rellini, Kelly, Judson, & Learman, 2002; Oosterhoff et al., 2004). This issue has been addressed by the WRNA through the use of surveys and sensitive wording and may therefore help to uncover the actual numbers of abused offenders.

One final domain the WRNA has included as a predictor of risk is anger/hostility. Although anger has not been included in gender-neutral risk assessments, cognitive-behavioral treatment has been known to include anger as a focus of treatment for offenders (e.g., Aggression Replacement Training (Goldstein, Glick, & Gibbs, 1998). The WRNA asks the offender

behaviorally oriented questions regarding whether or not the offender has hit anyone in the past and if such events involved intervention by police or social service agencies. The research thus far for the anger/hostility scale in the WRNA supports further investigation of this variable and positive correlations were found in all three samples (prison, prerelease, and probation) for misconducts, incarceration, and recidivism.

Research with the WRNA thus far has provided support that the gender-responsive variables do aid in prediction of recidivism. Overall models examined by Van Voorhis and her colleagues (2010) indicate that inclusion of these variables improves the ability of the model to predict recidivism. Such results support further investigation. Although the research investigating the predictive validity of the WRNA gender-responsive scales has provided support for the ability of the variables to predict negative outcomes for women, it does not speak to the importance of these variables for men. However, an examination of the social science research investigating a number of the gender-responsive variables provides further illumination regarding their importance for men.

LITERATURE REVIEW

Self-Efficacy

In 1977 Bandura proposed a theory of self-efficacy and behavioral change. He argued that levels of self-efficacy determine the amount of effort an individual will expend towards behavior changes as well as the length of time they devote to that effort. Although qualitative support exists for the importance of self-efficacy (Carp & Schade, 1992; Case & Fasenfest, 2004; Chandler & Kassebaum, 1994; Koons et al., 1997; Morash et al., 1998; Prendergast et al., 1995; Rumgay, 2004; Schram & Morash, 2002; Task Force on Federally Sentenced Women, 1990), little quantitative data exists to support this research.

Research examining the predictive ability of the WRNA endorses self-efficacy as a protective factor for women offenders in the community (Van Voorhis, et al., 2010). Although gender-neutral risk assessments have generally considered self-efficacy to be a measure of personal distress (Andrews & Bonta, 2006) some gender-neutral researchers are now looking at self-efficacy as a variable important to the immediate situation (Andrews & Bonta, 2010). Basically, this argument identifies self-efficacy as an important factor in the offender's belief as to whether or not he/she is able to commit a particular crime. An alternative view of the same idea is considered in the WRNA domain. Van Voorhis and her colleagues have sought to examine self-efficacy as a measure of confidence in one's ability to accomplish a specific task. Self-efficacy is thus considered a strength in that sufficient self-efficacy is necessary to enable one to desist from criminal behavior.

Studies of behaviors analogous to crime, such as smoking and drug and alcohol use, have mixed results when examining the role of self-efficacy in behavior change. Baer, Holt, and Lichtenstein (1986) studied 77 women and 69 men participating in a smoking cessation program. Participants self-reported smoking behavior and the self-reports were confirmed by calls to family as well as carbon monoxide tests at pre-treatment, post-treatment, and 6 months post-treatment. Results indicated that measures of self-efficacy were related to reductions in smoking but not to abstinence at 6 months. In the study, higher measures of self-efficacy during follow-up predicted longer periods of abstinence. It is unfortunate that the researchers provide no information regarding gender in the results.

Condiotte and Lichtenstein (1981) examined 78 smokers (40 women & 38 men) pre-treatment and 3 months post-treatment. Results indicated that higher levels of self-efficacy were related to continued abstinence during treatment as well as longer periods of abstinence post-

treatment. Again, no information was reported as to gender differences. Additional research has provided support for the positive impact of self-efficacy with smokers but none of these studies details information regarding differential effects based on gender (DiClemente, 1981; Godding & Glasgow, 1985; Gwaltney, Shiffman, Balabanis, & Paty, 2000; Shiffman et al., 2000).

A recent study of predictors of smoking relapse surveyed 1,296 ex-smokers in four countries (Australia, Canada, United Kingdom, and United States) (Herd, Borland, & Hyland, 2009). Participants included smokers whose abstinence ranged from one day to greater than three years. The study results indicated that abstinence was related to self-efficacy. This study is unique from the others in that the researchers reported that there was no effect of gender.

Similar difficulties are seen in the research examining the relationship between drug and alcohol use and self-efficacy. Although a number of studies have provided support for the importance of self-efficacy in desistance from drugs and alcohol (Rounds-Bryant, Flynn, & Craighead, 1997; Sitharthan & Kavanagh, 1990) many have not reported gender effects. Those studies examining drug and alcohol abstinence and self-efficacy that have reported analyses of gender have generally found gender to be non-significant (Stephens et al., 1993; Vielva & Iraurgi, 2001).

One area of corrections that has examined the importance of self-efficacy is mental health. Levels of self-efficacy have been shown to be predictive of mental health symptoms in prison. In a study of 260 incarcerated women (35) and men (225) in Scandinavia, researchers found self-efficacy to be related to mental health status. Inmates with mental health issues experienced more mental health problems if they were also low in self-efficacy (Friestad & Hanse, 2005). Higher self-efficacy has also been found to improve self-reported health status in a sample of 51 incarcerated men (Loeb & Steffensmeier, 2006). This sample of older inmates

indicated that those older male inmates with high self-efficacy regarding health management issues were more likely to report positive outcomes regarding their health.

Finally, some researchers have found support for a relationship between self-efficacy and various outcomes in the criminal justice field. In a test of strain theory using a sample of 400 males and females (ages 12-24), Baron (2004) found that certain types of strain can combine with varying levels of self-efficacy to produce greater or lesser amounts of crime. For example, homelessness combined with lower self-efficacy produced more crime but violent victimization combined with higher self-efficacy also produced more crime. Furthermore, these effects were increased for males in the sample.

A recent evaluation of the *Moving On* program for female probationers has also provided support for the importance of self-efficacy (Gehring, Van Voorhis, & Bell, 2010). One of the targets for change included in the *Moving On* program is self-efficacy. Researchers found that participants in this gender-responsive cognitive-behavioral treatment program had significantly reduced negative outcomes in almost all cases.

Finally, two studies regarding the importance of self-efficacy and boot camps are particularly relevant to this research. In a study of 784 male inmates in a boot camp in the southern United States, Benda et al. (2006) found that the likelihood of being a dropout diminished significantly with increases in self-efficacy. An earlier study including 572 male boot camp graduates indicated that self-efficacy discriminated between technical parole violators and three other outcomes (non-recidivist, felony recidivist, and drug violators). Those with higher self-efficacy were more likely to be technical parole violators than any of the other three outcomes.

One last research article is worth reviewing regarding needs that have been placed in the category of responsivity such as self-efficacy. Hubbard and Pealer (2009) examined a sample of 257 adult male offenders participating in treatment targeting antisocial attitudes. Results found that although individual responsivity characteristics were not related to success in the treatment program, the number of responsivity issues an offender had was important. The more responsivity issues an offender had, the less likely he was to experience any benefit from the program. Research results regarding the importance of these issues help make an argument for further examination of the potential for understudied areas such as self-efficacy and its relationship to recidivism.

Although, as can be seen in the above review, there is a paucity of research specifically regarding the relationship between self-efficacy and recidivism it is definitely a promising area for further exploration. Taxman (2004: 12) stated it well when she wrote that "… [a need exists] to focus on the self-efficacy of the offender in order to build the capacity to desist from criminal conduct and build a prosocial lifestyle."

Parental Stress/Involvement

According to the Substance Abuse and Mental Health Services Administration (SAMHSA) (2010), over one fourth of adults on probation or parole in this country are living with children seventeen years of age or younger. Of these, 19.5% were women parenting alone, 23.3% were women parenting with a partner or spouse, 7.3% were men parenting alone, and 49.9% were men parenting with a partner or spouse. Based on these numbers, in over 57% of these situations, a father on parole was living with a child. Such numbers support research into the impacts of these children on the likelihood of success for parolees and probationers. In spite of these numbers there is not a great deal of research into the importance of children in the lives

of offenders in community corrections. Additionally, what research is available, generally addresses the pains of imprisonment for mothers.

Parental Stress/Involvement and Women

Qualitative research examining incarcerated mothers has indicated children are of primary concern to women in prison. Mothers report considerable levels of stress regarding the physical, mental, and emotional well-being of their children (Dodge & Pogrebin, 2001). For these women, such stress has been found to express itself in adjusting to prison both behaviorally and psychologically. Houck & Loper (2002) examined 362 mothers in a maximum security prison. Results of their research indicated that different types of parental stress were related to different outcomes. For example, stress associated with limited contact with children was related to higher levels of anxiety, depression, and physical ailments whereas stress associated with mothering competence was related to anxiety, depression and higher levels of misconduct in the institution.

Women have also reported that the separation from their children was the most painful aspect of imprisonment for them (Belknap, 1996; Kiser, 1991). Such results speak to the potential importance of parental stress for these women and argue that parental stress resulting from separation may be an important factor regarding adjustment of mothers in the prison environment. However, such data can only be considered to be tangentially related to the subject of interest: recidivism in the community. It is thus important to examine how parental stress may impact offender mothers in the community.

Using samples similar to those used by Daly (1994) in her study of pathways to felony court, Brown and Bloom (2009) found that a number of challenges existed for women with children reentering the community following prison. In addition to legal barriers that these

women face, the opinions of family members caring for the children and problems with erosion of parental authority made reunification a difficult process. These authors argued that parental stress resulting from difficulties faced by mothers reentering the community has a negative impact on the likelihood of successful reentry. It is unfortunate that in their study Brown and Bloom used descriptive statistics only and provided no statistical analyses of the relationship between parental stress and success in the community with which to further support their argument.

In their ethnography of 30 women in a southwestern county jail, Ferraro and Moe (2003) provide an in-depth picture of two ways in which parental stress can lead to criminal behavior by women. The economic challenges of single parenting led some women to sell drugs in order to provide for their children. Other women described being plunged into drug and alcohol use as a palliative for the pain they felt following the loss of children taken from them by child protective services.

The impact of parental involvement can also be seen in the potential for harm when women offenders in the community are separated from their children. Ross, Khashu, and Wamsley (2004) examined the intersection of two differing agencies: New York City's Administration for Children's Services and New York State's Division of Criminal Justice. Part of this research involved examining the chronology of child placement, arrest, and incarceration. The data indicated that, in 85% of cases, arrest and incarceration followed child placement rather than the reverse. It appears then, that at least in New York City, there is the suggestion that removal of children from their mothers has the effect of increasing criminal activity. Although such research does not directly address the prediction of recidivism, it offers indirect support for the potential protective factor of parental involvement for these women.

Other research argues that the effects of parental stress may only impact the likelihood of recidivism under certain circumstances. Such contextual effects have been seen in the work of Bonta et al. (1995). In their research investigating the validity of a gender-neutral risk assessment with women offenders these researchers found that single parent mothers experienced a significantly higher recidivism rate than mothers reporting a partner who shared parenting responsibilities. Such results support further investigation of the environment in which a woman is parenting and how that may increase parenting difficulties and, as a consequence, parental stress.

It would not be an exaggeration to say that the research by Van Voorhis and her colleagues (Van Voorhis et al., 2008; Wright et al., 2007) may be the only quantitative research available that has directly examined the relationship between recidivism and parental stress for women. The WRNA research conducted thus far indicates that parental stress is most important for mothering offenders in the community. These results therefore, make this research investigation of recidivism and parental stress particularly salient.

Parental Stress/Involvement and Men

Studies of parental stress and parental involvement for offending women are rare and such studies for men are rarer still. Additionally, studies investigating the importance of children on offending men generally do not ask men about their children. Rather, researchers examine such variables as phone calls, letters and visits in an attempt to assess the importance of "family" on the post release success of incarcerated men. Finally, research that does evaluate the importance of parenting for men generally examines outcomes other than success in the community.

Similar to the research on offending mothers, qualitative research has found that fathers in prison experience difficulties in adapting to the prison environment when they lack involvement and contact with their children (Lanier, 1993). In a sample of 188 fathers in a maximum security prison, the author found that 74% of these men had lived with children prior to incarceration and 75% reported that they spent a lot of time with their children prior to their incarceration. The author notes that little is known about the post-release consequences of fathers' separation from their children.

Other researchers have speculated that increased involvement with children may reduce the likelihood that a father will reoffend once in the community due to the fear of once again being separated from those children (Brenner, 2003; Carlson & Cervera, 1991). However, empirical research has not examined the impact of fatherhood on the likelihood of recidivism and thus is currently limited to speculation.

In their longitudinal research Sampson and Laub (1993) note that one time offenders who have jobs and take responsibility for their wives and children are more likely to desist from crime than offenders who did not take on such responsibilities. Here again, the problem with this research for the purposes of this dissertation lies in determining the true relationship between the variables. The decrease in offending may be due to the job, the wife, the children, or some combination of the three or the importance simply may lie in the pro-social act of taking responsibility period. Research on the relationship between recidivism and parental stress and involvement for fathers in the criminal justice system is practically nonexistent. Given the large numbers of fathers on probation and parole it is time to remedy this situation.

Parental Stress/Involvement and Women and Men

Similar to the research examining separate samples of offending women and men and parental stress and involvement, few studies have investigated combined gender samples and parental stress and involvement. This review found two studies of parenting and offending that used samples including women and men. Of the two studies identified, one examined the impact of programs designed to strengthen families (Penn State Erie, 2003). This primarily qualitative study sought to identify effects of a parenting education program for 69 mothers and 81 fathers incarcerated in prison. The outcome variables of interest involved parenting and did not address institutional adjustment. The program was found to benefit incarcerated parents in their ability to parent their children. Although such programs may impact interaction with the offenders' children, they do not speak to how this may or may not relate to community adjustment.

The second study interviewed a small sample (8 women and 43 men) of parolees for 6 months while they were on parole (Bahr, Armstrong, Gibbs, Harris, & Fisher, 2005). The researchers found that parenting had a significant impact on likelihood of return to prison. Specifically, living with children prior to incarceration, more contact with children while incarcerated and rating the relationship with a child as excellent all increased the likelihood that a parolee would not return to prison. As with the other research examined in this review, this data does not speak directly to the variables of interest: parental stress and involvement. Researchers in general have only looked at the existence of a relationship with children and living with those children, not at the actual quality of the relationship or parenting and how that impacted the life of the offender. Thus this research can only provide indirect support for further investigation of the impacts of parental stress and involvement on offending men and women. Additionally, the researchers did not report any information regarding gender.

Summary

Research on recidivism and parenting is limited. What research does exist regarding mothers and fathers who are offenders does not focus on the stress or level of involvement on the part of the offender in the life of his/her children but simply if they have contact or live with the children. Additionally, such research has rarely examined the effects of the children of offenders on their success in the community. Researchers have primarily focused on other topics such as the adjustment of incarcerated mothers separated from their children, challenges to mothers leaving prison, and evaluations of parenting education programs.

Although such research is of value in itself, it does not speak to the importance of the stress and involvement that offending parents experience as a consequence of parenting and the resulting effect that stress and involvement may or may not have on their likelihood of success. Furthermore, the research that does examine the relationship between recidivism and parenting does not identify parental stress as a variable of consideration and does not separate out the effects of parenting by gender (Brown & Bloom, 2009). Some research has indicated that separation from children can increase the offending of mothers (Ross et al., 2004) and in some cases provide sources of hope to stay out of prison (Ferraro & Moe, 2003).

Other than the research examining the predictive validity of the WRNA, the only study currently available that speaks to the issues of parenting is that of Bonta and his colleagues (1995) who found that single mothers had a higher recidivism rate than mothers parenting with a partner. Consequently, the only research directly evaluating the relationship between recidivism and parental stress available at this time is that examining the predictive validity of the WRNA with samples of women in prison and on probation or parole (Van Voorhis et al., 2010). The promising results of the preliminary investigation of parental stress and involvement with women

in the community begun by Van Voorhis and her colleagues demand a follow up of the importance of parental stress and involvement for fathers in the community as well as continued investigation of its impact on mothers.

Relationship Dysfunction/Support

The qualitative data examining the impact of relationship dysfunction and support on the lives of women offenders is instrumental to understanding the importance of the difference in operationalization of these variables in the WRNA as compared to the gender-neutral risk assessment measure of marriage. Qualitative research examining the lives of women offenders has indicated that relationship dysfunction involving emotional, physical, and/or sexual abuse may be related to offending behavior.

Interviews with 38 women by Harm and Phillips (2001) found that some women in their sample struggled with issues of domestic violence. Specifically, women described abusive relationships with men that brought them back to drug use and offending. Langan and Pelissier (2001) also found that the 318 women in their study of federal offenders in substance abuse treatment reported their drug use as a way to alleviate pain often derived from involvement in dysfunctional relationships. Owen (1998) and Chesney-Lind (1997) both found that women in their studies were frequently introduced to drugs by their romantic partners and often these partners continued to be a source of drugs. Covington (2003) argues that one of the challenges for women offenders in their efforts at successful reintegration involves avoiding dysfunctional relationships that will not repeat the abuse they have experienced in the past.

Alternatively, researchers interested in the criminal careers of offending males have long speculated that marriage has positive benefits for men. Support has been found for lower levels of offending for married men (Capaldi, Kim, & Owen, 2008; Horney et al., 1995; King,

Massoglia, & MacMillan, 2007; Laub & Sampson, 1993; Laub et al., 1998; MacKenzie & Li, 2002; Sampson & Laub, 1990; Sampson, Laub, & Wimer, 2006). Support for the positive effects of marriage is not limited to the United States. Positive effects of marriage have been seen in Finland (Savolainen, 2009), the Netherlands (Bersani, Laub, & Nieuwbeerta, 2009; Blokland & Nieuwbeerta, 2005), and New Zealand (Wright, Caspi, Moffitt, & Silva, 2001). As with some of the other gender-responsive variables, there is a problem with most of the research examining romantic relationships of male offenders. These studies generally use a dichotomous measure to examine only the presence of a relationship. What these studies do not examine is the quality of the romantic relationship and its impact on the quality of life for the male offender.

Although none of the studies examining romantic relationships in the lives of offending men have directly assessed relationship dysfunction/support, some have come close. Simons, Steward, Gordon, Conger, and Elder (2002) examined a sample of 236 men and women from Iowa. Using a measure of relationship quality obtained through observational measures of couple interaction, the researchers concluded that the quality of the romantic relationships and the anti- or prosocial attitudes of the partner were significantly related to offending for women in the sample but not for men.

In a review of the literature on the effects of marriage on male offenders, Wright and Wright (1992) concluded that the importance of marriage in the desistance process lies not in the actual marriage itself. Rather the importance is in the attachment of the offender to the partner as well as his/her anti- or prosocial proclivities. Clearly, such research supports further investigation of the presence of relationship dysfunction and support in the lives of offenders and its impact on their probability of success in the community.

The gender-responsive researchers who created the WRNA are interested in the negative impacts of relationship dysfunction in the lives of offenders as well as the positive impacts of a prosocial, healthy relationship. These variables specifically address dysfunctional romantic relationships that introduce negative variables into the lives of offending men and women such as drugs, crime, and violence as well the positive support available from a supportive, prosocial relationship. Research examining the romantic relationships in the lives of male offenders has simply not operationalized relationships in this manner. Quantitative research into this variable for women is limited to the research examining the predictive validity of the WRNA.

The results of the predictive validity research thus far have been ambiguous. A significant positive relationship was seen for relationship dysfunction in the Minnesota probation sample for prediction of recidivism and the prison sample in Colorado for misconduct but was non-significant for the probation samples in Maui and Missouri and for all of the pre-release samples. Further examination of the importance of such relationships in the lives of offending men and women is indicated.

Summary

The majority of the research regarding the romantic relationships of offending women and men has examined relationships as a dichotomy. Thus, the offender is asked only if he/she is married or has a significant other, or not. Some research has noted that the quality of the marriage/relationship is important to its impact on the offender (Capaldi et al., 2008; Laub & Sampson, 1993; Laub et al., 1998; Sampson & Laub, 1990; Sampson et al., 2006). However, rarely has any quantitative research examined the importance of relationship dysfunction and support on reoffending of men and women in corrections. This research moves the field forward by using the WRNA to specifically investigate the predictive validity of relationships, both

supportive and dysfunctional, on recidivism in the lives of women and men in community corrections.

Childhood and Adult Abuse

The harmed and harming pathway (Daly, 1994) proposes that women and men who have experienced (are experiencing) harm in their lives recreate that harm in their criminal behavior. Research for women has not provided any definitive results and little research exists to support or refute this possibility for men. Research does, however identify a relationship between abuse or victimization and negative outcomes. Although most of this research takes place in clinical settings results have indicated that abuse and victimization have serious potential for negative outcomes over the life course.

It is without question that childhood and adult abuse are more prevalent for women than for men (Boudewyn & Liem, 1995; Briere & Runtz, 1987; Bryer, Nelson, Miller, & Krol, 1987; Dube et al., 2005; Finkelhor, Hotaling, Lewis, & Smith, 1990; Forsythe & Adams, 2009; Harlow, 1999; Jacobson & Herald, 1990; Kendall-Tackett & Simon, 1992; Kohan, Pothier & Norbeck, 1987; McCormack, Janus, & Burgess, 1986; Messina, Grella, Burdon, & Prendergast, 2007; Peters, Strozier, Murrin, & Kearns, 1997; Rennison, 2003; Sansonnet, Haley, Marriage, & Fine, 1987; Struckman-Johnson, C., Struckman-Johnson, D., Rucker, Bumby, & Donaldson 1996). Although research points out that abuse is more common for women than for men, it also underscores the fact that such experiences do occur for men. Given that the WRNA research (Van Voorhis, et al., 2010) has indicated that experiences of abuse affect the risk/needs of women in corrections, it is important that further research affirm or disavow the importance of such experiences for men as well.

On a related note, some studies have identified a problem in documenting the existence of sexual abuse. Specifically, several researchers have found boys less likely to report sexual abuse than girls (Finkelhor et al., 1990; Holmes & Slap, 1998; Nasjleti, 1980; Pierce & Pierce, 1985) and men less likely to report sexual abuse than women (Agger, 1989; Carlson, 2006; Dumond, 1992; Loncar, Henigsberg, & Hrabac, 2010; Oosterhoff et al., 2004; Teichner, 2008). Finally, Brown and Anderson (1991) found that subjects in their study of adults admitted to an inpatient psychiatric hospital, did not always admit to child sexual abuse (CSA) the first time they were interviewed.

Although it is expected that the percentage of men in correctional facilities reporting sexual abuse is lower than those of women it is also likely that the numbers of men who have been abused or victimized are greater than reported. Additionally, although the percentages of abused men in the criminal justice system are smaller than the percentages of women, the absolute numbers are greater as noted earlier (Beck & Harrison, 2009).

Childhood and Adult Abuse and Women

Criminologists aver that childhood abuse places girls on the pathway to delinquent behavior (Chesney-Lind & Sheldon, 2004). Other researchers argue that childhood abuse is a key factor in continuing criminal behavior for adult women (McClellan et al., 1997; Salisbury & Van Voorhis, 2009; Widom, 1989). Adult abuse is also argued to be important to the offending behavior of adult women (Bloom et al., 2003; Covington, 1998; Pollock, 1999, 2002; Richie, 1996). Researchers examining the relationship between childhood and adult abuse and the likelihood of offending behavior for women have reported mixed results.

Research examining predictors of recidivism in female offenders has sometimes found abuse to be non-significant. For example, in a study of 411 adult female offenders Rettinger

(2010) found that abuse (childhood and adult) did not improve the predictive ability of a gender-neutral risk assessment for the sample of women. Other researchers have found abuse history to be unrelated to prediction of reoffending (Loucks, 1995; Messina et al., 2006). Still others have found abuse to be related to a lower likelihood of reoffending (Bonta et al., 1995). Not all research has failed to find significance in the importance of abuse as it relates to prediction of recidivism.

Research examining the importance of abuse has sometimes found that such abuse increases the likelihood of future offending for women. Gunnison and McCartan (2007) examined a sample of 131 female inmates and found that women with a prior history of sexual abuse were significantly more likely to persist in criminal behavior. In a study examining a sample of 470 drug abusing incarcerated women in Australia, research also found support for the importance of childhood and adult abuse (Johnson, 2004). Specifically, the data indicated that rates of childhood and adult abuse were significantly higher for certain offenders. Childhood and adult abuse were significantly correlated with involvement in the sex trade whereas physical abuse in childhood predicted violent offending. Such research supports the argument that it is important to determine type of offense when examining possible risk factors.

Research using the WRNA with samples of women offenders provides further insight into possible explanations for the varying outcomes seen with childhood and adult abuse as it relates to delinquent and criminal behavior and the likelihood of reoffending. Validation research investigating the WRNA with samples of women offenders has found mixed results based on the environment of the offender (Salisbury et al., 2009). Specifically, the researchers found that child abuse was correlated with serious misconducts in prison but failed to predict outcomes in the community. Alternatively, adult emotional abuse and victimization were non-

significant in the prison environment but were predictive for women released into the community. Such disparate results argue for research addressing the environment in which the female offender is residing at the time of the analysis.

Childhood and Adult Abuse and Men

A great deal of research has studied the outcomes of child abuse among men. These studies have found that such abuse is generally related to a variety of negative outcomes for men victimized as boys (Bagley, Wood, & Young, 1994; Bartholow et al., 1994; Bauserman & Rind, 1997; Bremner, Southwick, Johnson, Yehuda, & Charney, 1993; Dembo et al., 1987; Dimock, 1988; Dube et al., 2005; Elliott & Briere, 1992; Holmes & Slap, 1998; Krug, 1989; Putnam, 2003; Valente, 2005; Widom, 1996). Unfortunately, this research has used samples of clinical populations, college students, and medical facility patients while neglecting the existence of childhood abuse in the lives of offenders. The outcome variables in these studies therefore looked primarily at the adult mental health outcomes related to childhood abuse. Common outcomes included depression, psychosis and personality disorders, self-harm, symptoms of PTSD, substance abuse problems, and difficulty forming lasting relationships.

Although recent research into the prevalence of sexual assault in correctional facilities makes it clear that many offenders are experiencing abuse, research examining the effects of this type of abuse is still lacking. A small number of studies have found connections between abuse and later offending. Longo (1982) found that adolescent sex offenders (N = 17) were likely to have had their first sexual experiences at the elementary school age and that these experiences were often traumatic. Forty-seven percent of the sample (8) reported having been molested during their childhood. A study by Brannon, Larson, and Doggett (1989) involving a sample of incarcerated juvenile offenders found a CSA prevalence rate of 70% (44). Some of the juveniles

told researchers that no one had ever asked them about sexual abuse. In addition to a high prevalence among this sample of boys, the researchers also noted that the CSA they had experienced was not primarily of a minor variety. The boys had mostly experienced intercourse (50%) or fellatio (33%).

Abuse of men is not limited to childhood. A small but significant literature exists regarding abuse during war. Articles regarding the sexual torture of prisoners highlight an important issue with regard to sexual victimization of men in general: the fact that perpetrators of sexual victimization against men use their gender against them. In other words, the victimizers recognize and use the fact that men are less likely to report their abuse due to social mores regarding the victimization of men. In his research on abuses in war time, Agger (1989) noted that sexual torturers relied on reticence on the part of the victim to tell of his experience. Societal mores prevent men from telling of such abuse for fear of being considered weak, homosexual or not being believed.

In a study of male victims of sexual torture (n =60), Loncar et al. (2010) noted that homosexual rape during war has been poorly researched. Men in the sample experienced physical and mental abuse in addition to sexual abuse and suffered from a high prevalence of post-traumatic stress disorder (PTSD). It is clear that war time abuses can result in a number of outcomes detrimental to men experiencing them. Given the numbers of men returning from serving in the War on Terror, it is appropriate to address these issues as some of these men may find themselves later interacting with the criminal justice system.

One final research study provides strong support for further investigation of the importance of abuse in the prediction of recidivism. Benda et al. (2003) followed a sample of 601 men graduating from boot camp five years after graduation. Abuse is included in the study

as a measure of lack of attachment. The authors hypothesized that those participants who had experienced physical or sexual abuse as a child would have higher rates of criminal recidivism as adults following the boot camp experience. The results of the research supported this hypothesis. Abuse prior to the age of 18 was among the strongest predictors of recidivism.

Childhood and Adult Abuse and Women and Men

Although relatively few studies have examined the relationship between varying forms of abuse and recidivism, a great deal of research has examined samples of women and men to determine the negative impacts of abuse. Research has clearly supported a connection between abuse and numerous negative mental health outcomes such as major depression (Levitan et al., 1998; Silverman, Reinherz, & Giaconia, 1996), substance abuse (Brown & Anderson, 1991), borderline personality disorder (Herman, Perry, & van der Kolk, 1989), and post-traumatic stress disorder (Bagley et al., 1994; Bremner et al., 1993; Elliott & Briere, 1992; 1995; Widom, 1999) for both women and men.

Although some research has found similar outcomes for men and women survivors of abuse, it is important to note that some researchers have noted differences. For example, two separate studies found that both male and female survivors of childhood abuse experienced aggression as adults (Briere & Runtz, 2003; Denov, 2004). However, in both studies, researchers found that the manner in which women and men expressed their aggression was different. Women in the studies were more likely to turn their aggression inward in self-destructive behaviors whereas men were more likely to turn their aggression outwards in aggressive behavior towards others.

Although the vast majority of research addressing the outcomes of childhood and adult abuse examines the mental health outcomes of such experiences, some researchers have turned

their attention to the possibility that abuse may have an impact on criminal offending as well as risk to reoffend. For example, one study of 1600 adolescents from the National Youth Survey found that both female and male adolescents experiencing physical abuse were more likely to be involved in crime and that involvement in crime continued into adulthood and included a number of different types of offenses (Fagan, 2005). The results also indicated that, in general, gender did not moderate the relationship between physical abuse and offending. However, when it did appear as a moderator, the effect was generally stronger for the males.

Research examining samples of adults has also provided some support regarding the importance of abuse to both offending and recidivism. In a sample of 1,724 adults (53% female) Makarios (2007) found that those adults who had experienced abuse were at higher risk for arrest than those without a history of abuse. Of note is that although the history of abuse placed women in the study at higher risk for arrest than men, being abused still put men at increased risk for being arrested. In this sample, then, the history of abuse was an important factor for arrest for both genders.

Further support for the importance of abuse is found in a study evaluating the factors related to developmental and general theories of crime. Benda et al. (2005) investigated the effects of sexual abuse in a sample of 120 female and 572 male graduates from a boot camp. The data indicated that both childhood and current sexual abuse were positively associated with recidivism, regardless of gender.

Summary

A significant amount of research has examined the effects of childhood and adult abuse on samples of offending and non-offending women and men. It is clear that such abuse has negative impacts on the lives of survivors. The research examining the effects of such abuse on

mental health indicates that negative mental health consequences are common for both women and men. However, it is significant, particularly to the assessment of risk, that some research has found men more likely to externalize aggression whereas women are more likely to internalize aggression. Although the mental health outcomes for survivors of abuse are clearly negative, the implications of abuse for the prediction of risk are less clear.

This review clearly demonstrates that the literature examining the importance of abuse to the potential for reoffending is limited. Although researchers have begun to include abuse variables in prediction models, the number of studies is small and the results are equivocal. Data exist both supporting and refuting the importance of abuse in the prediction of recidivism. Additionally, it is of some value to note that the methodology in the WRNA has been designed to maximize the likelihood of offender reporting. As noted earlier, one problem with examining abuse histories in the lives of both women and men involves the issue of underreporting (Kilpatrick et al., 2003; Kimerling et al., 2002; Oosterhoff et al., 2004). The abuse interview scales are prefaced by a description of exactly what behavior is considered to be abusive and a survey scale is provided as well for those offenders who may not be comfortable reporting such abuse in an interview situation. Further examination of abuse histories and their impact on the likelihood of recidivism for male and female offenders is clearly warranted.

Family Support/Conflict

It is interesting that although the United States has historically emphasized the importance of family in public policy, one arena that has failed to concern itself with family is corrections (Hairston, 2003). Recent research in the area of reentry has attempted to remedy this omission and has provided some tentative support for the importance of family with regards to the success of offenders in the community. The primary reason researchers cite for the

importance of family involves their ability to provide offenders with social capital when they are reentering the community (Courturier, 1995; Hairston, Rollin, & Jo, 2004; La Vigne, Naser, Brooks, & Castro, 2005; Mills & Codd, 2008; Sullivan & Wilkinson, 2003; Visher, Kachnowski, La Vigne, & Travis, 2004; Visher & Travis, 2003). Families often provide offenders returning to the community with housing, job referrals, and financial assistance as they begin the reentry process.

A renewed interest in family support in the lives of offenders has led many to argue that family support is an untapped natural resource that has been overlooked by the correctional system for far too long. Research prior to the advent of the "nothing works" era (Martinson, 1974) found support for the importance of family in the success of offenders (Ohlin, 1951). This research found that male offenders on parole with more connections to family were more likely to succeed in the community.

Prior to reviewing the more recent literature on the importance of family in the success of offenders in the community, it is necessary to note the different definitions researchers have used to define the term "family." Family can mean birth parents and siblings related by blood, spouses and children, grandparents, aunts, uncles, and anyone else an offender considers to be family. For the purposes of this research and the WRNA, family refers to those persons with which and by whom one was raised. It is easiest to refer to these people as parents and siblings. However, for the purposes of this research, family is not strictly limited to biological parents and siblings. As others have noted (Bloom et al., 2003; Hairston, 2003; Owen 1998), the families of offenders often do not reflect the traditional concept of family. These women and men grow up in single parent households, with foster parents, and grandparents. The persons they consider to be their family are oftentimes not what many people may think of when hearing this term.

The WRNA addresses this issue by letting participants know that for the purposes of the risk/needs assessment interview family consists of the people they grew up with and whom they consider to be family. When asking questions regarding family of origin it is stressed in the interview that this means the people participants were raised with and by, not necessarily their blood relations.

One final reason exists for the importance of defining family in the review of the literature. Offenders (women and men) and most adults have two very distinct families. The first is the family of origin and the second is the family they create as adults through romantic relationships and procreation. The family portion of the WRNA focuses on the family of origin. The adult family of creation is addressed in the relationship and parenting sections of the WRNA. This portion of the literature review examines the literature dealing with family of origin.

Family Support/Conflict and Women

Studies of female recidivists have identified reunification with family as a difficult part of the process of returning to the community. Research by Harm and Phillips (2001) found that these women often paroled to their mothers' home. The challenges they experienced related to living with their mother, who was often the caretaker for their children while incarcerated. The combination of living with mothers while reestablishing a relationship with their children was described as not only the best part of returning to the community but also the most difficult part.

Owen (1998) reported that the nature of the relationship between women offenders and their families is complex. Although these women report their families as being a source of support for them, they also report difficult and complicated relationships. This is not surprising given that women also reported inflicting a great deal of harm upon their families. Some women

reported abandonment by families. It appears then that families for women offenders are not a discreet and simple area of study that can be assumed to have a positive effect. Questions regarding the quality and quantity of contact with family in addition to the existence of family are important.

Regardless of the nature of the relationship with family, for women, there is one particular aspect of family support that simply cannot be ignored: childcare. Many women reentering society following a period of incarceration, or those on probation in the community, have children (SAMHSA, 2010). The families of these women often provide childcare during incarceration and while under correctional supervision in the community, enabling women to meet the conditions of probation and parole (Leverentz, 2006).

Female offenders in other qualitative research have mentioned family support as an important means of gaining access to resources while at the same time often representing a risk. More than half of women in a study by Bui and Morash (2010) received tangible support in the form of housing and direct financial assistance. Importantly, these women often noted that both positive and negative forms of support existed within the family network. It was often necessary for these women to seek out the prosocial members of the family and distance themselves from the antisocial members.

The validation research examining the predictive validity of the WRNA with both incarcerated and community samples offers the strongest argument for further research examining family support and recidivism outcomes. These researchers have found significant statistical relationships between measures of recidivism and family support. Specifically, negative correlations have been found between family support and rearrests at two years for the probation samples in Maui; incarceration and family support at two years for the probation

sample in Missouri; prison misconducts at one year for the prison sample in Missouri; and technical violations and incarceration in Missouri (Van Voorhis, et al., 2010).

Family Support/Conflict and Men

In her study of the pathways of women and men in felony court, Daly (1994) found that more men than women lived with a family member such as a parent or sibling. Further examination of research into the importance of family for male offenders is problematic due to the fact that much of this research involves not the family of origin but the family created by the offender as an adult. This research supports the importance of family in the success of offenders and is examined in the literature review sections on parenting and romantic relationships. However, although less information is available on the importance of family of origin support for male offenders, the research that does exist is supportive of a relationship between family support and reductions in offender recidivism.

Studies of incarcerated male offenders generally support the importance of community contacts on both institutional adjustment (Wooldredge, 1999) and success in the community (Adams & Fisher, 1976; Glaser, 1964; Hairston, 1990; Holt & Miller, 1972; Ohlin, 1951). These studies generally use visits, letters, and phone calls as indicators of contact with the outside community. Although in some cases this has been interpreted as providing support for the effects of family on offender behavior, the researchers have often not specified who the visitors were or delved into the type of interactions that occurred between the offender and the person/s from the outside community. Given the lack of specificity regarding these visitors and their relationship with the offenders, this type of research can, at best, provide for speculation and support further inquiry.

Research has indicated that family support and the relationship an offender has with his family is important to the success of drug-using offenders. Slaght (1999) examined the drug use of male offenders after they had returned to the community for three months. The offenders in the sample who reported having difficulties in their relationship with family members in their home were more likely to be using drugs at three months post-release. Most other research involving family support and its relationship to recidivism in the community has involved mixed samples of both women and men.

Family Support/Conflict and Women and Men

Research involving mixed samples has provided support for the existence of a relationship between recidivism and family support. Nelson, Dees, and Allen (1999) interviewed 49 inmates released from prisons and jails in New York. The sample included 16 women and 33 men. Although the researchers indicated a strong correlation between family support and individual success in the community only descriptive statistics were reported and no information was provided regarding gender differences in the data. However, the interviews did indicate that family support was instrumental in a number of areas that are important for offender success in the community.

Two areas in particular appeared to be important for the success of these offenders. First, families provided a place to live on release. Forty of the offenders indicated living with family upon release from the community. In some cases, the family the participants lived with were their significant others and children and thus these results are not applicable to family of origin support. However, the interviews indicated that some of the participants lived with parents, siblings or other extended family of origin members. Some of the interviews described how these family members would discourage drug use in a number of different ways and aided the offender

in gaining licit employment in the community. Offenders who did not have family to provide housing on release often found themselves living in shelters with people who were using and dealing drugs and participating in other illegal activities. It is clear from these reports that family support can be instrumental in the success of an offender in the community.

Family support has also been found to be instrumental in decreasing behaviors related to crime. An evaluation of the La Bodega de la Familia program indicated that family support decreased both drug use and arrests (Sullivan, Mino, & Nelson, 2002). Research evaluated the impact of the program on a small sample of 50 heroin users (80% men) in the community. Participants in the La Bodega program were significantly less likely to use heroin and to be arrested than a comparison group while they were participating in the study and for a period of 6 months following participation. The researchers predicted these outcomes would be related to increased drug treatment from the La Bodega program. However, the data analysis indicated that the decrease in heroin use and arrests was related to support from counselors and family.

Family, as measured by visits, has also been found to be negatively related to recidivism on release. Bales and Mears (2008) examined a sample of 7,000 inmates (92% men) in Florida. Unlike previous studies, the authors sought to determine not just the number of visitors an inmate received but also the identity of the visitors. Of the visitors whose identity was known, most were family of origin members, followed by friends and significant others. Those inmates who received visits were significantly less likely to recidivate following release. This effect was strongest for visits by significant others. However, when the authors examined this effect by gender it was limited to men in the study. The researchers found no effect of visits on recidivism for women in the study.

These results may be an indication of an environmental effect in that family support may be more important for women once they are released in the community given their parenting and economic difficulties. Additionally, given the stronger effect of romantic relationships in the study, it may be that offending men experience romantic relationships as a strength factor whereas women experience romantic relationships as a risk factor (Bernard, 1972). Further examination of the romantic relationships of women and men is found in the literature review of that variable.

Research underscoring the importance of family support for offenders has not been limited to the United States. For example, Niven and Stewart (2005) examined 1,945 incarcerated offenders in England and Wales including 170 women. The authors sought to determine the effects of education, training, and employment (ETE) on success in the community for incarcerated offenders. The results indicated that accommodation on release and ETE were both related to successful resettlement in the community. Family visits while incarcerated were positively related to accommodation and ETE on release. Put simply, family support indicated by family visits appears to have aided these offenders in finding a place to live as well as participation in ETE which was directly related to success in the community. Unfortunately, the researchers did not provide information regarding gender and the results or as to how success was measured.

On a related note, furlough programs have also been found to be correlated with decreases in reincarceration following release from prison. Although studies of interventions cannot provide direct support for the importance of family in predicting recidivism, such studies do offer support for further investigation of the variable. For example, Baumer, O'Donnell, and Hughes (2009) followed all of the offenders released from Irish prisons during the time period of

January 1, 2001 through November 30, 2004 (19,955). The researchers sought to determine the effects of furlough programs on recidivism. Furlough is allowed for some prisoners for purposes of visiting family or for vocational purposes, although the majority of the furloughs were related to family. The study followed the offenders for a period of four years. The results indicated that those offenders who were allowed to leave on furlough were less likely to be reincarcerated during the four year period following their release from prison. Again, it is unfortunate that the researchers provided no information regarding gender.

Summary

Qualitative research in the area of family support and conflict has clearly established the importance of family in the success of female offenders. However, further research determining whether or not this extends to a relationship with recidivism is necessary. For men, family of origin has primarily been ignored over the last several decades in spite of promising research in the middle of the last century supporting its value as a resource for offenders seeking to desist from crime. Recent research on the importance of family for reentry supports its value as a source of social capital for offenders returning to their communities. However, such research has not examined the differences that exist in family support for women and men and how such support may play out differently for them in the community.

Additionally, past research has generally not examined the possible existence of a quantitative relationship between family of origin support/conflict and recidivism in the community. This dissertation moves the literature forward through empirical examination of measures of family support and conflict and the ability of the variables to predict recidivism for offenders in the community.

Unsafe Housing

The importance of housing is well-recognized by risk assessment in corrections. Gender-neutral risk assessments identify the importance of housing accommodations to the success of offenders in the community (Andrews & Bonta, 2010; Brennan et al., 2004). Research in a variety of correctional populations has supported the importance of housing in the prediction of recidivism (Baldry, McDonnell, Maplestone, & Peeters, 2004; Brown, Amand, & Zamble, 2009; Clear, Rose, & Ryder, 2001; Makarios, Steiner, & Travis, 2010; Nilsson, 2003; O'Brien, 2001; Pearl, 1998; Petersilia, 2001; Rettinger & Andrews, 2010). These results support the importance of housing as a factor related to risk of recidivism for offending women and men in the community. The WRNA does not dispute the importance of housing or the predictive validity of the gender-neutral risk assessment housing domain. However, the WRNA assesses housing by examining some of the issues that might contribute to the risks that housing can impose on women offenders. Specifically, the WRNA measures the level of safety in the household.

This research review noted earlier that some female offenders have described relationship dysfunction as an area that poses difficulties for them when in the community (Harm & Phillips, 2001; Langan & Pelissier, 2001). These studies profile women who live with domestic violence as well as women who use drugs as a means of dealing with the pain caused by relationship dysfunction. Such problems may further implicate unsafe housing. The WRNA addresses unsafe housing by asking not only about the neighborhood in which the offender resides but also about the presence of drugs or violence in the home.

Results of research examining the predictive validity of the unsafe housing scale in the WRNA have thus far been inconclusive. Unsafe housing has not been predictive for the prison or pre-release samples. However, research in Maui and Missouri supported the predictive validity

of the unsafe housing scale with samples of probationers. Further examination of this type of variable measurement is clearly needed for women. The omission of this type of examination of housing in samples of male offenders supports further investigation of not just the existence of housing but the quality of housing for male offenders in the community.

Mental Health

A considerable body of research exists establishing the presence of a relationship between mental illness and involvement with the criminal justice system. Prevalence of serious mental illness has been found to be higher in jails (Abram & Teplin, 1991), community correctional centers (Gunter, Philibert, & Hollenbeck, 2009) and prisons (BJS, 1997; Fradella, 2003; James & Glaze, 2006; Knoll, 2006; Lamb, Weinberger, & Gross, 1999; Morgan, Steffan, Shaw, & Wilson, 2007; Ogloff, Davis, Rivers, & Ross, 2007; Raines & Laws, 2009) than in the general population. Researchers cite deinstitutionalization in the 1980s as a major reason for the increase in mentally ill offenders in the criminal justice system (Knoll, 2006; Manderscheid, Gravesande, & Goldstrom, 2004; Marra, Shively, & Minaker, 1989; Soderstrom, 2007).

Investigation by researchers into the demographic differences in mental health issues for offenders involved in the criminal justice system reveals some interesting findings regarding gender. Bloom et al. (2003) note that women offenders experience higher rates of mental illness, are more likely to experience comorbidity between mental illness and substance abuse, and experience more affective disorders than men. Other research has supported the conclusion that mental illness is more prevalent among women offenders (BJS, 1997; Forsythe & Adams, 2009; Magletta, Diamond, Faust, Daggett, & Camp, 2009; Peters et al., 1997; O'Keefe & Schnell, 2007; Soderstrom, 2007).

When considering the prevalence of mental illness in offenders by gender it is important to point out that, as with abuse, percentages can be misleading (Belknap & Holsinger, 2006; Malik-Kane & Visher, 2008; McClellan et al., 1997). Although percentages are higher for women offenders, actual numbers of men with mental health issues may be higher. It thus is important to identify the impact of mental health issues for women and for men.

At first glimpse prior research examining the relationship of recidivism and mental health does not appear to support further investigation of mental health and risk assessment. In a meta-analysis of 58 studies Bonta et al. (1998) found the major predictors of recidivism were similar for mentally ill and non-mentally ill offenders. However, an examination of the sample and the measures used to identify mental illness is instructive for the purposes of this research.

First, the researchers examined 58 studies of recidivism and mental illness. The studies in the sample included 71.4% studies of men only, 27.0% studies of women and men, and 1.6% studies of women only samples. Thus, only 16 of the 58 studies in the meta-analysis included women, and 15 of those were samples of both women and men. Given that researchers examining samples of mentally ill women and men offenders have reported significant differences in the manifestations of mental illness between the genders (Lovell, Gagliardi, & Peterson, 2002; McClellan et al., 1997; Peters et al., 1997) further examination of mental illness in the criminal justice population of women and men is justified.

Second, an examination of the items used to identify mental illness in gender-neutral instruments is important. For example, one common instrument used to assess risk of recidivism is the Level of Service Inventory-Revised (LSI-R) (Andrews & Bonta, 1995). The LSI-R asks the interviewer to make a subjective judgment regarding the mental health status of the offender being interviewed. Additionally, the mental health measure in the LSI-R combines all possible

mental health issues in one scale. Concerns regarding the possible difficulties of such a gross measure to detect indications of the numerous mental health problems that may exist resulted in a different approach to measures of mental illness in the WRNA mental health scales.

First, the WRNA focuses on two different measures of mental illness: mental health history and current symptoms of dynamic mental health issues. Second, the scales include a number of questions allowing for a finer measure of not only the existence of but also the severity of any mental health issues. The mental health history scale asks the offender objective questions focusing on experiences from the offender's past that may indicate mental health issues. For example, the offender is asked if he/she has ever seen a mental health professional or if he/she has ever attempted suicide. Such objective questions aid in establishing a pattern of events from the past that allow the scale to assess not only if the offender has ever experienced a mental health related event but also the severity of the problem.

Questions on the dynamic mental health scale are behaviorally oriented regarding current status of mental health. For example, questions ask if the offender is currently having trouble sleeping, eating, or accomplishing tasks. The creators of the WRNA argue that such behavioral indicators may be better measures of mental health history and current mental health status (Van Voorhis et al., 2010). Such methodological questions make it clear that further investigation of a possible relationship between recidivism and mental illness is warranted.

Recent studies have indicated some connections to mental illness and success in the community. Way, Abreu, Ramirez-Romero, Aziz, & Sawyer (2007) compared the success rates of mentally ill (MI) and non-mentally ill (NMI) women and men on prison work release. The sample included 100 women (51 MI) and 91 men (42 MI). The MI women had lower success rates than the NMI women. It is important to note that the success rate for women was significant

only for parole violations, not new court commitments. Although the MI men had higher success rates than the NMI men these differences did not achieve significance.

In an examination of 1,100 men and women returning to prison Malik-Kane and Visher (2008) wrote that 35% (91) of women and 15% (126) of men reported a mental health condition. The researchers found that the MI women reported more arrests but not more incarcerations, and the MI men reported no higher arrests or reincarceration than the NMI men.

Other researchers have found evidence of a relationship between returns to prison and mental illness. Using a sample including 3,844 offenders (24% women) O'Keefe and Schnell (2007) found that MI offenders were more likely to return to prison than non-MI offenders. The researchers provided no information on gender however they did report that the returns to prison were primarily based on technical violations.

Researchers investigating 4,386 women and 4,164 men in 16 prison-based therapeutic communities found support for the importance of mental illness in the success of offenders in the community (Messina, Burdon, Hagopian, & Prendergast, 2004). The researchers found that women in the sample were significantly more disadvantaged than men with regard to employment, substance abuse, mental health, and abuse prior to incarceration. Regarding outcomes in the community, the data indicated that those participants identified as having mental health issues in need of case management services were more likely to return to custody than those without such mental health issues. Furthermore, return to custody for the MI women in the study was thirty-seven percent less likely than return to custody for the MI men in the study ($p \leq .001$).

Finally, in a longitudinal study examining personality variables with 369 male federal inmates over a period of ten to twelve years, Listwan et al. (2007) found support for personality

variables related to mental health. Using the Jesness Inventory, the research examined four categories of offenders: neurotic, aggressive, situational, and dependent. Neurotics in the sample were more likely to have been arrested for drug offenses and had the highest rates of recidivism than any of the other personality types measured in the study. Although not strictly a mental health study, the results support further research of those variables previously relegated to the responsivity category.

Summary

As this review illustrates, it is clear that both women and men in the criminal justice system are at greater risk of mental health issues than is the general population. What is not clear is how and if the presence of mental health issues affects the prediction of recidivism for offenders. A particularly difficult issue involves the measurement and identification of mental health issues using risk assessment instruments. As noted above, some researchers argue that risk assessments can do a better job at identification of mental health issues through the use of behaviorally oriented questions and through scales which use a finer grained approach to establishing the existence of mental health issues. Additionally, the data regarding recidivism and mental illness is limited and contradictory. Thus, this research seeks to move the field forward by directly examining and comparing the relationship between mental illness and recidivism for women and men in community correctional facilities.

Educational Assets/Needs

As with housing, gender-neutral risk assessments have established that a relationship exists between educational needs and the prediction of risk to reoffend (Andrews & Bonta, 2010; Brennan et al., 2004). The approach taken by gender-neutral risk assessment regarding the importance of education is, however, very different from the approach taken in the WRNA.

Gender-neutral instruments generally examine educational needs through a measure of the level of educational attainment the offender has achieved. The WRNA delves further into educational deficiencies by examining the possible reasons behind the lack of achievement. Such questions probe difficulties in reading, attendance in special education classes and diagnosis of any education-related disorders such as attention deficit or attention deficit hyperactivity disorder. Furthermore, the WRNA examines the possible presence of educational assets which may serve as a means of reducing the likelihood of the offender recidivating.

Although not direct measures of educational assets, research examining the effects of educational programs have shown that such treatment can reduce the likelihood of recidivism for both women and men (Brewster & Sharp, 2002; Burdon et al., 2004; Burke & Vivian, 2001; Cecil et al., 2000; Chappell, 2004; Fabelo, 2002; Gordon & Weldon, 2003; Haulard, 2001; Hull et al., 2000; Jensen & Reed, 2007; Kaiser, 2010; Makarios et al., 2010; Nillson, 2003; Nuttall et al., 2003; Sedgely et al., 2010; Torre & Fine, 2005; Wilson et al., 2000). These studies provide a measure of indirect support for further examination of educational assets and their relationship to recidivism.

As noted above, most research examining the relationship between recidivism and education has examined only the level of attainment regarding formal education. The WRNA has begun to examine the predictive validity of the educational scales. Thus far, the examination of education scales has been limited to educational assets in the Missouri study. The educational needs were examined using a gender-neutral risk assessment and therefore the educational needs scale has not yet been validated. The educational assets scale has been found to be inversely related to risk of recidivism for pre-release and probation samples only with the relationship being non-significant for prison samples.

Further examination of both the educational needs and assets scales is required with women offenders in the community to determine if a more detailed examination of the needs variable is warranted as well as further examination of the potential for educational assets to serve as a protective factor. The lack of research examining the importance of educational assets/needs for male offenders speaks to the necessity of examining this variable from a new perspective in samples of male offenders in the community.

Anger/Hostility

Studies of anger and its relationship to recidivism in samples of offenders have primarily examined the impacts of programs designed to address antisocial attitudes or anger. This body of research has generally found that reductions in levels of anger are correlated with reductions in recidivism (Curulla, 1991; Dowden et al., 1999; Eamon et al., 2001; Finn, 1998; Landenberger & Lipsey, 2005; MacKenzie et al., 2007). Although not directly testing the ability of anger to predict recidivism, these studies provide indirect support for the importance of anger as it relates to recidivism.

Research supporting the importance of anger has not been limited solely to program evaluation. In a study designed to compare the ability of latent trait and life course theory variables to predict recidivism, O'Connell (2003) finds support for the importance of a variable he calls aggression. The questions used to measure aggression in his study are somewhat similar to those used in the WRNA to measure anger and thus the results can be used as support for further investigation of this variable. In his study, O'Connell (2003) did not report gender effects. He does report that the measure of aggression (five items asking questions about anger-related urges and behaviors) were significantly related to arrest and drug use at eighteen months.

Research with the WRNA anger scale has thus far been limited to the Missouri sample. The anger scale has, however, been found to have predictive validity for recidivism in the probation sample, misconduct in the prison sample, and incarceration at 12 and 24 months for the prerelease sample. The anger scale was non-significant for technical violations at 12 months for the prerelease sample. Thus, although limited, research that has examined the importance of the predictive validity of anger regarding recidivism for offenders supports further investigation of this variable and its relation to the likelihood of recidivism for offenders in the community.

SUMMARY

Understanding the factors that increase an offender's risk of recidivism is a complex process. Research has provided clear support for the gender-neutral risk factors included in such instruments as the Level of Service Inventory-Revised (LSIR; Andrews & Bonta, 1995) and the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS; Brennan et al., 2004). What is less clear is the importance of the gender-responsive variables included in the WRNA.

This review clearly showed that further investigation into the complex relationship between the likelihood of recidivism and the gender-responsive variables of the WRNA is necessary. Researchers have illustrated the importance of self-efficacy, parental stress, parental involvement, relationship dysfunction, child abuse, adult physical abuse, family support, unsafe housing, dynamic mental health, mental health history, educational assets, relationship support, and anger/hostility in a number of areas for women and men in a variety of settings. The research investigating the WRNA also clearly demonstrated that the gender-neutral variables are able to predict recidivism for women as well.

What has not been investigated sufficiently to date is the ability of gender-responsive variables and gender-neutral variables to predict risk of recidivism with female and male offenders. Although the gender-neutral proponents argue that current risk assessments work equally well for women and men, no research to date has examined the combination of gender-neutral and gender-responsive variables in a sample of female and male offenders in a community corrections setting. Therefore, although a great deal of research exists to support the gender-neutral variables it is impossible to know if the predictive ability of gender-neutral risk assessments could be improved with the addition of the gender-responsive variables. It is with this goal in mind that this dissertation seeks to investigate the importance of the gender-neutral and gender-responsive variables included in the Women's Risk/Needs Assessment using a sample of male and female offenders residing in community correctional facilities.

CHAPTER THREE

METHODOLOGY

Although gender-neutral risk factors in risk assessments have been validated for women and men little research exists examining the importance of gender-responsive risk factors. Additionally, although prevalence studies indicate that many of these issues are at a higher prevalence for women in the criminal justice system than for men, absolute numbers of men experiencing gender-responsive risk factors such as child abuse are higher than the numbers of women. This dissertation contributes to the existing knowledge by examining the gender-neutral and gender-responsive risk factors for women and men residing in community-based correctional facilities.

SAMPLE

The sample consisted of 244 offenders residing in six community correctional facilities in and around Cincinnati, Ohio. Data for a group of 122 women offenders was drawn between October 2008 and January 2009. The data from women offenders was originally collected for purposes of psychometric validation of the Women's Risk/Needs Assessment (WRNA). In order to achieve a sample large enough to examine the psychometric validity of the WRNA, it was necessary to collect data from three sites. Site one included 33 women, site two included 45 women, and site three included 44 women.

Data for a comparable group of men was drawn from three community correctional facilities between November 2009 and January 2010. Thus, there were 122 men in the sample consisting of 33 from site four, 45 from site five, and 44 from site six. A list of all residents at each site was generated by staff on the day prior to the first day of interviews. A number between 1 and 10 was randomly picked from a random numbers table and recruitment began with that

name on the list and followed the rest alphabetically. Thus, the sample represents different stages of confinement, some at the beginning of their stay, some at intermediate stages and some near the end of confinement.

Although all six sites were secure facilities, residents at sites two (women) and five (men) were able to leave the facility to work in the community whereas those at sites one, three, four, and six were not allowed to leave the facility. Due to the nature of the coming and going of the residents, it was not possible to determine with certainty the number of potential participants who declined to participate at sites two and five. Although residents at the site were paged, in some cases there was no response to the pages and the interviewers were therefore unable to ask the residents to participate. For women in the sample there were seven known refusals at site two, ten at site one, and four at site three. Thus, based on the information available, the participation rates (ratio of those volunteering to those who were asked) for women were 77% at site one, 87% at site two, and 92% at site three, for an overall participation rate of 89%. It is possible that some women who did not respond to pages at site two chose not to participate. Three women did not respond at site two. If an assumption is made that failure to respond to a page indicates refusal the participation rate for site two is reduced to 81% and the overall participation rate is reduced to 84%. Importantly, even with the addition of this possibility the response rate is still high enough to be acceptable.

For men in the sample there were three known refusals at site four, one at site five, and five at site six. Therefore 92% of men at site four participated, 98% at site five, and 90% at site six. This resulted in an overall participation rate of 93% for men. Adding in the two men at site five who failed to answer pages reduces the response rate to 92%, which is still very high. Assuming that failure to respond to pages is a refusal results in an overall participation rate of

88%, an acceptable response rate for the research. Thus, 88% of women and men comprising the sample consented to the research under recruitment and consent procedures approved by the University of Cincinnati's Institutional Review Board[2]. Follow-up data describing the incidence and prevalence of new arrests and technical violations were obtained beginning February 1, 2010 and ending January 31, 2011.

PARTICIPANTS

Although the original number of participants in the study was 244 the sample size was reduced due to difficulties regarding release dates (participants not released from facility for substantially longer period of time than other residents) and behavior while inside the facilities. Thus, participants who had not yet reached the one year cutoff for outcome or who were unsuccessful in the community correctional facility were excluded from the sample resulting in a sample size of 215 (101 female, 114 male).

Table 3.1 describes demographic characteristics and criminal histories for the 215 women and men residing in community correctional facilities who participated in the current study. The mean age of the sample was 35 years old, with just under three-fourths White. Slightly more than half of the participants in the sample had children (55%), although only 20% were married. The primary current convictions for the participants in the sample were property offenses (54%) and drug offenses (33%) with only 14% being convicted of other offenses.

[2] November 19, 2009, IRB# 09-09-25-01

Table 3.1: Demographic and Criminal Histories of Participants in Sample

Characteristic	Total Sample (N = 233)	Male (N = 114)	Female (N = 119)
Average Age (Years)	34.5	34.0	35.0
% White	75.3	76.3	74.3
% Married	19.5	18.4	20.8
% Parent of Children < 18	53.5	50.9	56.4
% Single Parent of Children < 18***	22.3	6.1	40.6
% HSD or GED	76.7	79.8	73.3
% Employed F/T***	44.2	56.1	30.7
% Drug Offense***	32.6	20.2	46.5
% Property Offense***	54.0	68.4	37.6
% Other Offense	13.5	11.4	13.9
% Prior Felony**	41.4	51.8	29.7
% Prior Prison	25.1	28.9	20.8

Note. HSD = high school diploma; GED = general equivalency diploma.
*Significant difference ($p \leq .05$) between men and women.
**Significant difference ($p \leq .01$) between men and women.
***Significant difference ($p \leq .001$) between men and women.

Table 3.1 also disaggregates the demographic characteristics, criminal histories, offense characteristics, and charges for women, and men who participated in the current study. The mean age of women in the sample was 35, with three-fourths of women being White. Slightly more than half of women in the sample had children and just under half currently retained custody of their children (48%), although only approximately 21% were married. Further examination of these factors showed that 41% of women were single parents raising their children on their own. In accordance with previous research (see Austin, 2001; BJS, 1999, 2006), the primary current convictions for women in the sample were drug offenses (47%) and property offenses (38%) with only 14% being convicted of other offenses. Of the 101 women offenders, 30 (30%) had been convicted of a prior felony, and 21 (21%) had been previously incarcerated.

The mean age of men in the sample was close to that of women (34). Men were also similarly situated with regard to race, with slightly more than three-fourths being White (76%). The rate of marriage was slightly lower (18%) but the difference was not significant. It is in the area of single parenthood where a drastic difference is seen for the two genders. Only 6% of men in the sample reported being single parents. This rate is significantly lower than that of women. A larger percentage of men in the sample were currently convicted of a property offense (68.0%) than women. Alternatively, the number of men in the sample with a current conviction for a drug offense was significantly lower than women (20%). Finally, the percentage of men in the sample who had been convicted of an offense other than property or drugs (11%) was statistically equivalent to the percentage of women convicted of other offenses. More male offenders had a prior felony (52%) whereas a smaller percentage had previously been incarcerated (29%).

Chi-square analyses revealed that the current conviction was significantly different by gender ($\chi^2 = 27.70$, $p \leq .001$). Seventy-eight men had a current conviction for a property offense compared to 38 women, whereas 23 men had a current conviction for a drug offense compared to 47 women. Men were significantly more likely to have a prior felony ($\chi^2 = 10.73$, $p \leq .01$). There were no significant differences in the existence of prior prison terms.

It appears then, that while there are some significant differences in the demographic characteristics of the male and female groups, the participants are generally more similar than they are different. Similarities among the participants included race, marital status, level of education, employment in the year prior to incarceration, and previous incarceration.

OUTCOME MEASURES

Time at risk was calculated based on the discharge date for each participant. Data on discharge dates were provided by the staff at each of the facilities included in the study. Given

that the data were collected for women at a much earlier date than for men, follow up times for the participants in the sample will vary. The recidivism measure reflects the time period beginning when the participant was discharged from the facility and ending when a 12 month follow-up period was reached for each participant. Time at risk for the total sample ranged from 12 months to two years and four months with an average of one and one half years. As expected, women were at risk for a longer period than men with the lower range for women being 15 months and an average time at risk of two years and one month. For men, the lower range dropped to 12 months and the average time at risk was one year and one month. Because of these differences we set an equal time period of six- and twelve-months for analysis of outcome data.

Recidivism data were collected using county courthouse websites. Information regarding arrest is publicly available for all six counties of residence for the participants in the study via the internet (See Appendix A for website addresses). Outcome measures for women and men can be found in Table 3.2. The outcome measures included arrest occurrence, arrest prevalence, technical violation occurrence, any outcome-related failure, and any failure. Arrest occurrence was a dichotomous yes or no measure whereas arrest prevalence included a count of the number of separate arrest occurrences. An arrest was defined as a separate occurrence if the arrest events took place on different dates. Technical violations were identified on the websites as a "community control sanction violation" and were recorded as a dichotomous measure (yes or no). Finally, any offense-related failure was comprised of any arrest, conviction, or revocation (incarceration in a correctional facility).

Although the six- and twelve-month outcome periods are too short to use conviction and incarceration as individual measures of recidivism, combining all of these measures to form a single dichotomous (yes or no) variable identifying failure added strength to the measure and

Table 3.2 Recidivism Outcome Measures

6-Months	Arrest (Y/N)	# of Arrests	Technical Violations	Any offense related failure	Any failure
Women	19.80% (20)	32 [.63]	13.86% (14)*	23.76% (24)	28.71 (29)
Men	15.79% (18)	23 [.78]	24.56% (28)*	28.07% (32)	35.09 (40)
12-Months					
Women	24.75% (25)	51 [.50]	23.76% (24)*	31.68% (32)	39.60% (40)
Men	23.68% (27)	40 [.68]	37.72% (43)*	42.11% (48)	46.49% (53)

Total sample N = 215, N for women = 101, N for men = 114
( ) = raw number
[ ] = average arrests per offender arrested
* = χ^2 $p \leq .05$

thus it was retained for the analyses. The final measure examined was any failure. This measure is also a dichotomous variable that added technical violations to the any offense-related failure measure.

At the six-month time period less than 20% of women (N = 20) and men (N = 18) had experienced an arrest. The mode for the number of arrests for both genders was one with six women arrested twice and five men arrested twice. None of the offenders were arrested more than two times in their first six months following release from the correctional facility.

Regarding technical violations, just under one-fourth (28) of men experienced a technical violation within 6-months of release from the correctional facility compared to just under 15% of women (14). This was the only significant difference for the outcome measures at six-months ($\chi^2 = 3.90$, $p \leq .05$). Men were significantly more likely to have experienced a technical violation within six-months of release. The measure of any offense-related failure was positive for just under 25% of women in the sample (24) and just under 30% of men (32). Finally, just over 35% of men (40) experienced any failure compared to just under 29% of women (29).

The twelve-month outcomes exhibited a higher level of variation. At this time period just under 25% of women (25) had been arrested, this number was not significantly different from the percent of men who had been arrested (23.68%, N = 27). Similarly, no significant differences

existed in the number of arrests for women (51) compared to men (40). Once again, men had a significantly higher number of technical violations than women ($\chi^2 = 4.86$, $p \leq .05$). Finally, although men experienced more offense-related failures and failures of any kind than women these differences were non-significant.

ASSESSMENT INSTRUMENT

Scales included in the Women's Risk/Needs Assessment measuring both gender-neutral and gender-responsive risk factors obtained from the WRNA were included in the analyses as potential risk factors for arrests and technical violations.

Women's Risk/Needs Assessment

The Women's Risk/Needs Assessment is an interview and self-report survey that was created by University of Cincinnati research staff to measure gender-neutral and gender-responsive risks and needs of women offenders. The interview comprises multiple subscales; each asks questions tapping an underlying domain. These domains include gender-neutral scales that research with the WRNA has supported as predictive of recidivism as well as gender-responsive scales experiencing some preliminary support in validation research with women offenders (Van Voorhis et al., 2010).

The gender-neutral subscales in the WRNA interview include attitudes, criminal history, educational needs, employment/finances, antisocial friends, and substance abuse (current and history). The gender-responsive scales include educational strengths, anger/hostility, mental health (current and history), childhood and adult abuse/trauma, relationship support, parenting, and family of origin support and conflict.

The WRNA self-report survey includes subscales tapping domains which may be sensitive issues for offenders. The subscales in the WRNA survey include dysfunctional

relationships, self-efficacy, parenting, child abuse, and adult abuse. Addressing these issues in a self-report survey provides a private format for sensitive topics intended to encourage offenders to be honest[3].

MEASURES

The mean, standard deviation, and ranges for the scales tested in this study are provided in Table 3.3. To facilitate reading, the subscales have been designated and grouped as either gender-neutral scales or gender-responsive scales. Scales are coded so that, for the risk factors, higher scores reflect the presence of a risk factor and, for strength factors higher scores reflect the presence of strengths.

WRNA Gender-Neutral Independent Variables

Antisocial Attitudes

For a number of years, the principles of effective intervention have found anti-social attitudes to be one of the major risk factors for recidivism (Andrews & Bonta, 2010). The WRNA Antisocial Attitudes Scale (AA) assesses the degree to which an offender has internalized criminal values or denied responsibility for her/his actions. The interviewer is required to ask the offender to give an account of his or her offense. Interviewers listened for examples of antisocial attitudes including rationalization and justification of behavior, and denial of harm. Following the interview, interviewers coded seven dichotomous items as yes or no to indicate which attitudes were exhibited. The summed items resulted in a scale with an alpha reliability of .62 for the total sample (.34 for women, and .73 for men). The mean AA score for the total sample was 2.74 (SD = 1.83) and scores ranged from 0-7.

[3] When offenders were unable to read the survey, they could elect to have it read to them.

Table 3.3 Measures of Central Tendency and Dispersion for Assessment Scales (N = 215)

	WRNA Gender Neutral Scales			
Scale	Mean	Standard Deviation	Range	Alpha
Attitudes [I]	2.74	1.83	0-7	.62
Criminal History [I]	2.67	2.44	0-13	.61
Educational Needs [I]	.73	1.09	0-4	.68
Employment/Finances [I]	3.83	2.22	0-8	.63
Antisocial Friends [I]	3.16	1.99	0-6	.80
Current Substance Abuse [I]	1.68	1.42	0-5	.63
Substance Abuse History [I]	6.52	3.28	0-10	.89
	WRNA Gender Responsive Scales			
Educational Assets [I]	1.75	1.17	0-4	.59
Housing Safety [I]	.93	1.05	0-4	.66
Anger/Hostility [I]	1.36	1.37	0-4	.71
Depression [I]	1.60	1.64	0-6	.70
Psychosis [I]	.10	.34	0-2	.27[b]
Mental Health History [I]	2.06	1.91	0-6	.81
Parental Involvement [I]	3.22	1.09	0-4	.93
Parental Difficulties [I]	.52	.87	0-3	.77
Family of Origin Support [I]	3.84	1.23	0-5	.78[a]
Family of Origin Conflict [I]	.52	.69	0-2	.91[a]
Relationship Involvement [I]	2.76	2.17	0-7	.63
Relationship Dysfunction [S]	2.94	3.11	0-12	.80
Self-Efficacy [S]	25.39	6.62	4-34	.90
Parental Stress [S]	6.70	7.56	0-25	.84
Child Abuse [I]	.62	.75	0-2	.34[b]
Adult Abuse [I]	.52	.70	0-2	.41[b]
Child Abuse [S]	8.22	8.85	0-36	.94
Adult Abuse [S]	8.40	7.82	0-30	.94

I = interview scale, S = survey scale, a = Guttman scale, b = correlation

Criminal History

Measures identifying criminal history have long been counted among the best predictors of future criminal behavior (Andrews & Bonta, 1995). The Criminal History Scale (CH) included seven items pertaining to an offenders' previous interaction with the criminal justice system. These items included measures of violent offenses, prior probation, and prison incarceration. Analysis revealed a low alpha reliability score of .61 for the total sample, .49 for women, and .65 for men.[4]

Educational Needs

The Educational Needs Scale (EN) examines educational deficiencies using a four-item scale incorporating questions regarding current difficulty reading and writing, present or past learning disabilities, as well as graduation from high school or receipt of a General Equivalency Diploma (GED). The alpha reliability scores on this scale were .68 for the total sample, .78 for women, and .53 for men.

Employment and Financial Difficulties

The Employment and Financial Difficulties Scale (EF) is composed of seven questions relating to whether participants had ever faced difficulties finding or keeping a job, paying their bills, or supporting themselves. The alpha reliability score was low for the total sample (.63) for women (.57) and for men (.61).

Antisocial Friends

The Antisocial Friends Scale (AF) included six items that assessed the offender's association with friends who engaged in criminal behavior. Questions asked if the participant had friends that had been incarcerated or been in trouble with the law as well as what percentage of

[4] Research is currently underway to improve several scales. New scales were not available at the time of this study.

friends had been in trouble with the law and whether the offender had any friends who acted as prosocial role models. The AF scale reliability was adequate with a score of.80 for the total sample, .77 for women, and .83 for men.

Substance Abuse: History and Current

Substance abuse issues were measured using two scales. The Substance Abuse History Scale (SAH) measured any history of substance abuse with ten questions related to previous substance-related offenses, previous drug treatment, and the impact that the use of drugs had on daily life. The Current Substance Abuse Scale (CSA) measured the degree to which substance use presented a problem at the time of the interview. Six questions measure association with other substance users, missed treatment appointments and violations related to using substances.

The SAH showed good reliability for the total sample (.89), women (.89), and men (.88). Lower alpha reliability scores were seen for the CSA (.63 for the total sample, .62 for women, and .60 for men). The lower alpha reliability scores on the CSA in a closed custody sample may be an indication that the measures do not fit an incarcerated sample well where offenders find it difficult to use. Inmates may also fear consequences of honest responses.

WRNA Gender-Responsive Independent Variables

Educational Assets

Preliminary research in Missouri has provided support for the existence of an inverse relationship between educational assets and recidivism (Van Voorhis, et al., 2010). Of particular importance as regards this study is that the research in Missouri found significant results for the pre-release and probation samples. The Educational Assets Scale (EA) measured educational assets using a four-item scale that, as with the EN, measured graduation from high school or receipt of a General Equivalency Diploma (GED). However, the EA also measures any post high

school degrees and certifications which may indicate an area of strength on which to build future success. Alpha reliability for the EA scale was .59 for the total sample, .67 for women, and .49 for men.

Housing Safety

The Housing Safety Scale (HS) contains 4-items measuring the safety of the neighborhood as well as the home. Alpha reliability for this scale was .66 for the total sample, .65 for women, and .65 for men.

Anger/Hostility

The Anger/Hostility Scale (AS) includes 4-items addressing perceptual and behavioral anger/hostility issues. The AS therefore included four questions. Two questions ask about the offenders' perception of his/her anger/hostility. One further question is behavioral in nature and asks if the offender has physically harmed anyone in the last three years. A final question asks the offender if he/she has had any criminal or child/family services cases resulting from anger/hostility problems. Alpha reliability for this scale was .71 for the total sample, .73 for women, and .68 for men.

Mental Health History

The 6-items in the Mental Health History Scale (MHH) used in the current study were designed to evaluate mental illness based on measures of behavior. Thus, the questions in the MHH ask if an offender has ever experienced delusions, attempted suicide, been hospitalized for a mental health issue, received mental health-related medication, or been diagnosed with a mental illness. These questions demonstrated a high level of reliability with an alpha score of .81 for the total sample (.76 for women and .81 for men).

Current Depression

The WRNA further extends the examination of mental health by measuring current symptoms of depression. Again, the creators of the instrument used behavioral measures in an effort to create a more valid and reliable measure of the domain. The six-item Current Depression Scale (CD) assessed the extent to which participants were experiencing symptoms of depression and anxiety over the period of a few days. Thus, interviewers specifically asked the offenders to reference the last few days in answering these questions. Questions addressing issues such as loss of appetite and excessive worry were included in this scale. Alpha reliability scores for the CD were .70 for the total sample, .64 for women, and .74 for men.

Psychosis

The psychosis scale was comprised of two questions asking the offender about any current experiences regarding feelings that others were attempting to cause them harm and whether or not they were currently seeing or hearing things that were not really there. Alpha is not an appropriate measure for a two-item scale, thus the item correlation was measured. The correlation for the total sample was .27, .25 for women, and .30 for men.

Parenting

The Parenting Scales measured levels of parental involvement and parental stress. The Parental Involvement Scale (PI) includes four questions which reflect custody issues, current contact with children, involvement in important decisions regarding children, as well as the participants' beliefs regarding their ability to be a good parent. The PI produced an alpha reliability of .93 for the total sample, .93 for women, and .93 for men.

The Parental Difficulties Scale (PD) contained 6 items that identify parenting difficulties related to levels of support from others, single parenting, and behavior difficulties of children. The PD produced an alpha reliability of .77 for the total sample, .76 for women, and .73 for men.

The Parental Stress Scale (PS) included 12 items that measured the extent that offenders felt their parenting of children to be out of control, their children to be unmanageable, and that they received little or no support from family members or significant others. The PS produced an alpha reliability of .84 for the total sample, .76 for women, and .89 for men.

Family support

Research examining the predictive validity of the WRNA using samples of female offenders has indicated that prosocial family support is positively related to success in the community and in institutions (Van Voorhis, et al., 2010). The Family of Origin Support Scale (FOS) and Family of Origin Conflict Scale (FOC) included questions designed to measure not just the existence of family in the life of the offender but the quality of the relationship as well.

The FOS included five items that measured both emotional and tangible support. Questions addressed the status of the offenders' relationship with her/his family and whether family members had visited during incarceration or assisted in reentry after a prison term. The FOC included three items measuring conflict through the perceptions of the offenders and by asking if any family members currently refused to have contact with the offender. The FOS produced an unacceptably low alpha reliability of .36 for the total sample, .53 for women, and .14 for men. Further analysis of the FOS indicated that it may be forming a Guttman scale with a coefficient of reproducibility of .78. The alpha for the FOC was also unacceptably low (.32). In previous evaluation research with the WRNA the FOC has formed a Guttman scale explaining

the low alpha reliability. The FOC once again formed a Guttman scale with a coefficient of reproducibility of .91.

Relationships

Although qualitative research argues for the importance of relationship dysfunction in the lives of women offenders, the outcomes of research examining relationship dysfunction with the WRNA to date has been mixed (Van Voorhis et al., 2010). The six-item self-report Relationship Dysfunction Survey Scale (RD) measured the concepts of codependence and power loss while in relationships. The alpha for the RD was acceptable for the total sample but not for men (.80 for the total sample, .82 for women, and .70 for men). This difference may reflect gender differences in the salience of these items. The literature finds codependency more relevant to women than men (Koons et al., 1997; Richie, 1996).

In addition to measuring relationship dysfunction, the WRNA also included a scale measuring relationship involvement (RI). This scale included four items asking the offender about his/her current relationship status, how long he/she had been in a relationship and his/her satisfaction with the relationship. The RI demonstrated low alpha reliability for the total sample (.63), women (.60), and men (.68).

Self-Efficacy

The purpose of the Self-Efficacy Survey Scale (SE) was to measure the degree to which participants felt that they were capable of achieving their goals and dealing with problems in their lives. This 17-item scale included questions regarding ability to follow through with plans, staying on task, and dealing with difficult situations. This scale had an excellent alpha reliability score for the total sample (.90), women (.89), and men (.89).

Childhood Abuse

The 19-item Childhood Abuse Survey Scale (CA) assessed the degree to which a participant experienced physical and emotional abuse as a child. Questions included whether, as a child, the participant had been pushed, kicked, beaten, dragged, choked, and burned, forced to do something embarrassing, threatened, or insulted or ridiculed. The reliability of the CAS was excellent with an alpha score of.94 for the total sample, .94 for women, and .95 for men.

The Child Abuse Interview Scale (CAI) was not appropriate for alpha reliability testing as it contains only two questions. The first question asks if the offender has ever experienced physical abuse as a child and the second question asks if the offender has ever experienced sexual abuse as a child. A correlation was run to determine the similarity of the questions. The correlation was .34 for the total sample, .32 for women, and .38 for men.

Adult Abuse

The 15-item Adult Abuse Survey Scale (AAS) measured the degree to which participants had experienced physical and emotional abuse as an adult. Questions included whether, as an adult, the participant had been pushed, kicked, beaten, dragged, choked, and burned, forced to do something embarrassing, threatened, or insulted or ridiculed. The reliability of the AAS was similar to the CA with an alpha of .94 for the total sample, .95 for women, and .93 for men. Similar to the CAI, the Adult Abuse Interview Scale (AAI) was not appropriate for alpha reliability testing as it contains only two questions. The questions are the same as the CAI with the exception that they ask about experiences as an adult. Although still fairly low, the correlations were higher for the AAI (total sample = .41, women = .27, & men = .26).

An overview of these results reveals nine scales with alphas below .70. It is intended that many of these will be corrected in research that is currently underway to revalidate the WRNA

scales; the modified scales were not complete at the time of the present study. With the exception of the criminal history scale, however, most of the scales with low alphas involved those with fewer items, a condition which is noted to attenuate scale alphas (Brown, 1998).

DATA ANALYSIS

Data analysis sought to compare male and female offenders according to the extent to which they evidenced gender-neutral and gender-responsive needs and whether such needs were risk factors for each group. Remember that this dissertation sought to answer a number of questions regarding gender-neutral and gender-responsive needs. First, the analysis compared the extent to which men and women in the sample demonstrated the two types of needs. Difference of means tests and chi-square tests were employed to identify similarities and differences that existed between men and women in the sample. In addition to identifying significant differences between men and women for categorical scales, the chi-square tests were also used to identify differences for gender based on treatment needs.

The scales examined in their continuous form using difference of means testing were therefore collapsed into categorical scales based on their relationship to the outcome variable "any offense-related outcome". The procedure for collapsing the variables began with an examination of the relationship between each scale and the outcome variable "any offense-related outcome." Cut-points were established at points on the scales corresponding with changes in outcome. Categories were expected to retain the predictive merits of the uncollapsed variables. Categories for each scale can be found in Table 3.4. Variable categories were the same for men and women.

Rather than simply controlling for gender, analyses were performed on each gender as suggested by Holtfreter and Cupp (2007). Following analyses of the existence and prevalence of

the gender-neutral and gender-responsive needs, factor analyses were performed to identify any co-occurrence of gender-neutral and gender-responsive needs in the sample.

The last analyses sought to determine if the gender-neutral and gender-responsive needs were predictive for men and women in the sample as well as what were the optimal predictors. Bivariate correlations (Pearson's *r*) assessed the predictive validity of each need. Finally the total

Table 3.4 Categorical Breakdown of Assessment Scales

	WRNA Gender Neutral Scales			
Scale	Low	Moderate	High	Very High
Attitudes [I]	0-2	3-4	5-7	n/a
Criminal History [I]	0-1	2-7	8-13	n/a
Educational Needs [I]	0	1-3	4	n/a
Employment/Finances [I]	0-1	2-5	6-8	n/a
Antisocial Friends [I]	0-1	2-4	5-6	n/a
Current Substance Abuse [I]	0	1-3	4-5	n/a
Substance Abuse History [I]	0-2	3-5	6-9	10
WRNA Gender Responsive Scales				
Educational Assets [I]	0-2	3-5	n/a	n/a
Housing Safety [I]	0	1-2	3-4	n/a
Anger/Hostility [I]	0	1-3	4	n/a
Depression [I]	0-1	2-4	5-6	n/a
Mental Health History [I]	0	1-3	4-6	n/a
Parental Involvement [I]	0-1	2	3	n/a
Parental Difficulties [I]	0-1	2	3	n/a
Family of Origin Support [I]	0-2	3-4	5	n/a
Relationship Dysfunction [S]	0-5	6-8	9-12	n/a
Relationship Involvement [I]	0-2	3-4	5-7	n/a
Self-Efficacy [S]	0-18	19-26	27-34	n/a
Parental Stress [S]	0-10	11-15	16-25	n/a
Child Abuse [S]	0-6	7-16	17-36	n/a
Adult Abuse [S]	0-10	11-17	18-30	n/a

I = interview scale, S = survey scale, n/a = Not Applicable

WRNA scale was replicated and tested for predictive validity separately for the male and female groups. Final scales were tested for predictive validity using appropriate measures of association (Pearson's *r*) and area under the curve (AUC).

The AUC was included because it has been argued by some researchers to be a more accurate predictor of recidivism (Mossman, 1994; Rice & Harris, 2005). The AUC is preferred by certain researchers in that it is independent of base rates and researcher bias regarding reduction of different types of error. The AUC compares true prediction rates to false prediction rates and thus does not include error introduced by factors such as concern over the number of false positives versus false negatives. For the purposes of evaluating the WRNA with male and female offenders this meant that the AUC provided a measure of how well the instrument was able to improve over chance. Thus, the AUC measured how well the WRNA categorized those offenders more likely to recidivate with a higher score over those less likely to recidivate with a lower score. An AUC of .50 represents prediction of recidivism no better than chance. AUC scores of .70 or higher are generally considered to be acceptable (Tape, 2003).

SUMMARY

Quantitative research examining the predictive merits of gender-responsive variables for women in corrections is just beginning. Further examination of these variables and their importance for the likelihood of recidivism for women in corrections is necessary. Furthermore, such variables have generally been omitted from gender-neutral risk assessments. Despite this omission, social science literature indicates that further examination of the importance of these variables to the risk of reoffending for men in corrections is also warranted.

Thus, this research moves the literature forward by seeking to answer the following research questions. How do males and females compare in terms of the extent to which they

evidence gender-neutral and gender-responsive needs? Are the gender-neutral needs predictive for both males and females? Do the needs co-occur in similar ways for males and females? Are the gender-responsive needs predictive for both males and females? If not: What are the optimal predictors for men? What are the optimal predictors for women?

CHAPTER FOUR

GENDER COMPARISON

This chapter focuses on two of the research questions presented in Chapter Three. These two questions addressed the existence and prevalence of gender-neutral and gender-responsive risk/needs in a sample of women and men as well as the ways in which they co-occur for the two genders. The analyses therefore involved a comparison of the extent to which men and women in the sample evidenced gender-neutral and gender-responsive risk/needs and gender-responsive strengths. The chapter concludes with an examination, through factor analysis, of the nature in which these risk/need scales may be co-occurring and whether the co-occurrence differs for men and women.

DESCRIPTIVE ANALYSES

Difference of Means Tests

Gender-Neutral Risk/Needs Variables–Difference of Means Tests

Difference of means tests were employed to compare the occurrence of the gender-neutral scales: criminal history, antisocial attitudes, educational needs, employment/ finances, antisocial friends, and substance abuse (history and current). Results of these tests for the gender-neutral and gender-responsive risk/needs as well as the gender-responsive strengths can be found in Table 4.1.The data demonstrated no significant differences between men and women with regard to educational needs and antisocial friends. Educational needs, as indicated by scores on this scale for the two groups, were remarkably low. The frequency distribution for the scale (not shown) further demonstrated that over half of men (57%, N= 65) and women (61%, N =62) reported no educational needs.

Table 4.1 Comparison of Males and Females (t-Tests) on Gender Neutral and Gender Responsive Assessment Scales, Men (N = 114) and Women (N= 101).

	Men		Women		
Scale	Mean	SD	Mean	SD	Difference of Means Test
WRNA Gender-Neutral Scales					
Antisocial Attitude [I]	3.17	2.04	2.26	1.42	14.66[b]***
Criminal History [I]	3.11	2.71	2.19	2.01	8.06[b]**
Educational Needs [I]	.68	.96	.78	1.23	ns
Employment/Finances [I]	3.18	2.18	4.57	2.05	4.84[a]***
Antisocial Friends [I]	3.11	2.03	3.23	1.94	ns
Current Substance Abuse [I]	1.34	1.25	2.06	1.50	14.30[b]***
Substance Abuse History [I]	6.10	3.28	7.06	3.20	2.17[a]*
WRNA Gender-Responsive Risk Scales					
Anger/Hostility [I]	1.26	1.32	1.48	1.43	ns
Housing Safety [I]	.90	1.05	1.37	1.26	8.50[b]**
Depression [I]	1.32	1.60	1.91	1.63	2.69[a]**
Mental Health History [I]	1.34	1.72	2.87	1.80	6.36[a]***
Parental Difficulties [I c]	.44	.78	1.42	1.01	28.09[b]***
Parental Stress [S c]	9.57	6.45	13.27	5.29	3.05[a]**
Child Abuse [S]	8.75	9.11	7.61	8.55	ns
Adult Abuse [S]	6.36	6.38	10.70	8.64	17.21[b]***
Relationship Dysfunction [S]	2.11	2.34	3.81	3.55	16.68[b]***
WRNA Gender-Responsive Strength Scales					
Educational Assets [I]	1.75	1.08	1.75	1.27	ns
Relationship Involvement [I]	2.67	2.08	2.87	2.27	ns
Parental Involvement [I c]	3.65	.64	3.58	.68	ns
Family of Origin Support [I]	3.95	1.05	3.71	1.40	ns
Self-Efficacy [S]	27.27	6.30	23.46	6.92	4.23[a]***

I = interview scale, S = survey scale
*Significant difference ($p \leq .05$), **Significant difference ($p \leq .01$), ***Significant difference ($p \leq .001$)
a = *t*-test with equal variances
b = Welch's test with unequal variances
c = custodial parents only, N for men = 46, N for women = 48

Men and women in the sample evidenced significantly different means for the remainder of the gender-neutral variables, including antisocial attitudes, criminal history, employment/ finances, and substance abuse (history and current). Men demonstrated significantly higher mean scores in two of these gender-neutral domains. The mean score on the antisocial attitudes scale (AA) was significantly higher for men than women (Welch = 14.66, $p \leq .001$). Men also scored significantly higher on the criminal history scale (Welch = 8.06, $p \leq .001$). For the final three remaining gender-neutral domains, women had higher mean scores than men. Specifically, women in the sample reported significantly higher gender-neutral risk/needs with regard to

employment/finances ($t = 4.84$, $p \leq .001$), substance abuse history ($t = 2.17$, $p \leq .05$), and current substance abuse (Welch = 14.30, $p \leq .001$).

Gender-Responsive Risk/Needs Variables–Difference of Means Tests

The gender-responsive risk/needs scales included in the tests for difference of means comprised anger/hostility, housing safety, depression, mental health history, parental difficulties (interview), relationship dysfunction (survey), parental stress (survey), child abuse (survey), and adult abuse (survey). The analyses found no significant differences between the mean scores for men and women for the anger/hostility or child abuse (survey) scales. Significant differences were noted in the mean scores for the gender-responsive risk/need scales of housing safety, depression, mental health history, parental difficulties (interview), parental stress (survey), relationship dysfunction, and adult abuse (survey).

The mean score on the housing safety scale was significantly higher for women than men (Welch = 8.50, $p \leq .01$). Women in the sample were much more likely than men to report housing safety problems (women = 71%, N = 72; men 56 %, N = 60).

Both the interview and survey scales measuring parental difficulties and stress indicated significantly higher levels of parental difficulties/stress for women. The mean scores for mothers in the sample were significantly higher than the mean scores for fathers on both the parental difficulties scale (Welch = 37.86, $p = .001$) and the parental stress scale ($t = 2.93$, $p \leq .01$).

Such differences in the levels of parental difficulties and stress may be at least partially explained through an examination of one of the questions included in the parental difficulties scale. This question asks if the offender is a single parent. In responding to this question 10% (N = 6) of the fathers answered yes compared to 72% (N = 41) of the mothers. Thus, it may be that women in the sample reported higher levels of parental difficulties and stress because they were

more frequently parenting by themselves. These results were similar to those found when all parents of children, not just custodial parents were tested.

Women reported significantly higher mean scores for both mental health scales examined. Women had higher mean scores for mental health history (MHH) ($t = 6.36$, $p \leq .001$) and depression ($t = 2.69$, $p \leq .01$). Women also exhibited a significantly higher mean score on the relationship dysfunction scale (Welch = 16.68, $p \leq .001$). Finally, on the adult abuse survey (AAS) scale the mean score for women far outpaced men (Welch = 17.21, $p \leq .001$).

Gender-Responsive Strengths Variables –Difference of Means Tests

The WRNA includes five gender-responsive strengths scales. Higher scores on these scales indicate a strength, or protective factor. These scales include educational assets, relationship involvement, parental involvement, family of origin support, and self-efficacy. There were no significant differences regarding the mean scores for men and women on educational assets, relationship involvement, parental involvement, or family of origin support.

Although over half of men and women in the sample reported no educational needs, neither did they report a great deal of educational assets. The mean score on the educational assets scale for men and women was identical. Further examination of the answers regarding individual items revealed that 73% of women and 80% of men in the sample had received either their high school or general equivalency diploma. Following this milestone, just over half of men (55%, N = 63) and women (56%, N = 57) reported pursuit of further education (including vocational/technical school in addition to traditional college).

Both women and men reported low scores for relationship involvement and the differences were non-significant. An examination of the parental involvement (PI) scale revealed that, of those participants reporting shared or full custody of their children (N = 115), the mean

score was similar for women and men. Both mothers and fathers reported high levels of involvement with their children as reflected by the questions on the scale.

The mean scores for men and women on the family support scale indicated no significant differences. Men and women both reported high mean levels of family support. Finally, the self-efficacy scale (SES) is one of the few instances where men exhibited significantly higher scores than women ($t = 4.23$, $p \leq .001$).

Chi-Square Tests

Men and women were also compared across collapsed scores indicating high, medium, and low levels depicting intensity of need. Offenders scoring in the high need group were viewed as most likely to need programmatic intervention or other case management response,[5] especially if their composite assessment scored in the high risk level. In addition, several of the scales included in the WRNA [e.g., current psychosis, child abuse (interview), adult abuse (interview), and family of origin conflict scales] were not appropriate for difference of mean tests due to their categorical nature and their consequent failure to meet required assumptions of such tests. They are tested in this section.

Gender-Neutral Variables Chi-Square Tests

As seen previously in the difference of means tests, women in the sample generally demonstrated higher levels of risk/needs than the men. See Table 4.2 for the results of the chi-square tests. Non-significant differences were seen for educational needs and therefore supported the lack of a difference for these scales by gender. Significant differences were identified on scales pertaining to antisocial attitudes ($\chi^2 = 16.16$, $p \leq .001$), criminal history ($\chi^2 = 6.89$, $p \leq .05$), employment/finances ($\chi^2 = 22.34$, $p \leq .001$), and current substance abuse ($\chi^2 = 7.31$, $p \leq$

[5] See Chapter Three Data Analysis section for methods used to collapse scales.

.05). Specifically, chi-square tests revealed that men were more likely than women to indicate a need for treatment (high need) of antisocial attitudes. Women showed significantly greater treatment needs than men on scales pertaining to employment/finances and current substance.

Gender-Responsive Risk/Need Variables Chi-Square Tests

The results of the chi-square tests for the gender-responsive variables previously tested for difference of means indicated that women demonstrated significantly higher needs for case management/treatment than men on all but three scales: anger/hostility, current psychosis, and child abuse (survey) scales.

Although all of the scales were tested using chi-square analyses the results of the categorical scales that could not be examined using difference of means testing are of particular interest. The current psychosis scale failed to demonstrate any significant differences between women and men in the sample. It also should be noted, however, that the data for this scale were extremely skewed with 197 (89 women, 108 men) of the 215 participants scoring zero on the scale. This means that 92% of the sample (88% of women and 95% of men) reported no psychotic symptoms. Such low base rates make it difficult to draw any conclusions. However, one conclusion that can be reached regarding current psychotic symptoms is that they were rare among this sample.

The interview scales for child and adult abuse consist of two questions each. The first question on each scale asked if the offender experienced any physical abuse as a child/adult, the second asked if the offender had experienced any sexual abuse as a child/adult. The chi-square test indicated that there was a significant difference between the childhood abuse interview

Table 4.2 Pearson's Chi-Square, Based on Percent in Category for Assessment Scales
Men (N = 114) and Women (N = 101)

Scale	Low	Moderate	High	χ^2
WRNA Gender Neutral Scales				
Antisocial Attitude [I]				16.16***
Women	63.4%	28.7%	7.9%	
Men	40.4%	33.3%	26.3%	
Criminal History [I]				6.89*
Women	44.6%	52.5%	3.0%	
Men	29.8%	61.4%	8.8%	
Educational Needs [I]				ns
Women	61.4%	32.7%	5.9%	
Men	57.0%	41.2%	1.8%	
Employment/Finances [I]				22.34***
Women	8.9%	51.5%	39.6%	
Men	27.2%	57.9%	14.9%	
Antisocial Friends [I]				ns
Women	25.7%	44.6%	29.7%	
Men	30.7%	30.7%	38.6%	
Current Substance Abuse [I]				7.31*
Women	22.8%	58.4%	18.8%	
Men	30.7%	62.3%	7.0%	
Substance Abuse History [I]				ns
Women	24.8%	47.5%	27.7%	
Men	36.8%	46.5%	16.7%	
WRNA Gender Responsive Risk Scales				
Anger/Hostility [I]				ns
Women	34.7%	41.6%	23.8%	
Men	41.2%	39.5%	19.3%	
Housing Safety [I]				6.25*
Women	28.7%	53.5%	17.8%	
Men	42.1%	49.1%	8.8%	
Depression [I]				8.21*
Women	47.5%	44.6%	7.9%	
Men	66.7%	27.2%	6.1%	
Current Psychosis [I]				ns
Women	88.1%	9.9%	2.0%	
Men	94.7%	4.4%	0.9%	
Mental Health History [I]				28.76***
Women	17.8%	41.6%	40.6%	
Men	50.9%	32.5%	16.7%	
Parental Difficulties [I]				25.37***
Women	70.3%	21.8%	7.9%	
Men	95.6%	2.6%	1.8%	
Parental Stress [S]				6.09*
Women	33.3%	56.3%	10.4%	
Men	58.7%	34.8%	6.5%	
Child Abuse [I]				11.42**
Women	43.6%	32.7%	23.8%	
Men	64.0%	26.3%	9.6%	
Child Abuse [S]				ns
Women	56.4%	23.8%	19.8%	
Men	49.1%	35.1%	15.8%	

Table 4.2 Pearson's Chi-Square, Based on Percent in Category for Assessment Scales Men (N = 114) and Women (N = 101), Continued

Scale	Low	Moderate	High	χ^2
WRNA Gender Responsive Risk Scales (Continued)				
Adult Abuse [I]				84.59***
Women	27.7%	47.5%	24.8%	
Men	88.6%	10.5%	.9%	
Adult Abuse [S]				19.31***
Women	51.5%	25.7%	22.8%	
Men	79.8%	10.5%	9.6%	
Physical Abuse [I]				39.91***
Women	21.8%	47.5%	30.7%	
Men	63.2%	28.1%	8.8%	
Sexual Abuse [I]				45.63***
Women	46.5%	38.6%	14.9%	
Men	88.6%	10.5%	0.9%	
Relationship Dysfunction [S]				18.55*
Women	64.4%	21.8%	13.9%	
Men	86.0%	13.2%	0.9%	
WRNA Gender Responsive Strength Scales				
Educational Assets [I]				ns
Women	70.3%	29.7%	0.0	
Men	75.4%	24.6%	0.0	
Relationship Involvement [I]				ns
Women	39.6%	27.7%	32.7%	
Men	46.5%	28.9%	24.6%	
Parental Involvement [I a]				ns
Women	46.6%	6.9%	46.5%	
Men	52.6%	7.0%	40.4%	
Family of Origin Support [I]				ns
Women	17.8%	47.5%	34.7%	
Men	9.6%	56.1%	34.2%	
Self-Efficacy [S]				9.40**
Women	20.8%	37.6%	41.6%	
Men	7.9%	34.2%	57.9%	

I = interview scale, S = survey scale
*Significant difference ($p \leq .05$), **Significant difference ($p \leq .01$), ***Significant difference ($p \leq .001$)
a = N for men = 46, N for women = 48

(CAI) scores for men and women in the sample ($\chi^2 = 11.42$, $p \leq .01$). Women had significantly higher scores than men. Interestingly, when childhood abuse was measured via a more private survey, where respondents indicated whether they had experienced actual behaviors associated with child abuse (e.g., being burned), there were no significant differences between men and women.

The difference between women and men in the sample regarding the adult abuse interview (AAI) scale was more pronounced ($\chi^2 = 84.59$, $p \leq .001$). The majority of women (72%, N = 73) in the sample reported some form of adult abuse compared to a minority (11%, N = 13) of men. In addition to examining statistically significant differences in abuse as a child and adult, further chi-square tests sought to determine if significant differences existed for men and women regarding physical abuse and sexual abuse. Thus the questions were combined to form scales measuring physical abuse as an adult or child and sexual abuse as an adult or child. In both cases the chi-square tests indicated significantly different reports of abuse (physical abuse: $\chi^2= 39.91$, $p \leq .001$; sexual abuse: $\chi^2= 45.63$, $p \leq .001$). Examination of the frequencies indicated in both cases that women reported more abuse and clearly identified the source of these differences.

Regarding physical abuse, 37% of men (N = 42) reported physical abuse compared to 78% of women (N = 79). The difference was even more dramatic in the case of sexual abuse where a small number of men (11%, N = 13) reported that they had experienced sexual abuse compared to 54% of women (N = 54).

Gender-Responsive Strengths Variables Chi-Square Tests

Examination of the gender-responsive strengths using chi-square analyses revealed results similar to those seen for the difference of means testing. No-significant differences existed for the educational assets, relationship involvement, family support, and parental involvement scales. Significant differences were found for the self-efficacy scale ($\chi^2 = 9.40$, $p \leq .01$). Significantly more women were found in the low self-efficacy category than men.

Factor Analysis

As noted in Chapter Three this research sought to address an additional question regarding the co-occurrence of both the gender-neutral and gender-responsive risk/needs as well as the gender-responsive strengths for women and men in the sample. A number of authors have addressed the importance of co-occurrence from a treatment perspective (e.g., see Covington & Bloom, 2006), noting that risk factors occur in the context of other risk factors which must be reflected in treatment/programming decisions. Separate factor analyses were performed to examine the possibility that some risks/needs/strengths may co-occur as part of underlying factor structures. A three-step process was used in these analyses. Each of the three factor analyses performed on women and men in the sample used principal component analysis with varimax rotation and Kaiser normalization.

The first factor analysis (not shown) included the majority of the gender-neutral and gender-responsive scales, excluding only those that repeated the same constructs (i.e. scales duplicated through interview and survey). Examination of the rotated component matrix in this first step revealed that the scales were coming together as a result of what appeared to be measurement artifacts. For example, the educational risk and educational assets scales comprised all of the variation in one factor. Similar groups were seen with the abuse, substance abuse, and relationship scales. It was therefore necessary to remove the scales that were grouping together as a result of being similar constructs.

Step two in the factor analysis process thus included those scales that did not group together in step one as a result of construct similarity. This provided a valuable descriptive picture of men and women in the sample. Results for the second factor analyses can be seen in Table 4.3 for women and Table 4.4 for men. The third and final step in the factor analysis

Table 4.3 Factor Analysis of Co-Occurring Scales – Women

Risk Scales	Relationships & Substance Abuse	Mental Health	Abuse & Mental Health	Canadian Model	SES & Housing Safety	Parenting & Anger
Attitude				.855		
Criminal History				.845		
Educational Assets		-.712				
Employment/Finances		.429			.512	
Housing Safety					.870	
Antisocial Friends	.774					
Anger						.823
Mental Health History			.720			
Depression		.675				
Current Psychotic Symptoms		.605				
Physical Abuse (Adult or Child)			.722			
Sexual Abuse (Adult or Child)			.666			
Substance Abuse History	.684					
Relationship Dysfunction	.683					
Self-Efficacy	-.493	-.481				
Parental Stress	.420					.529

Extraction Method: Principle Components Analysis, Rotation: Varimax with Kaiser Normalization

Table 4.4Factor Analysis of Co-Occurring Scales – Men

Risk Scales	Canadian Model	Mental Health	Abuse	SES & Parental Stress	Canadian Model	Mental Health & Relationships
Attitude					.851	
Criminal History	.445				.412	
Employment/Finances				.628		
Educational Needs		.520				
Housing Safety	.616					
Antisocial Friends	.847					
Anger	.443	.470				
Mental Health History		.499				.425
Depression		.715				
Current Psychotic Symptoms		.678				
Physical Abuse (Adult or Child)			.678			
Sexual Abuse (Adult or Child)			.867			
Substance Abuse History	.619					
Relationship Dysfunction						.859
Self-Efficacy				-.507		
Parental Stress				.743		

Extraction Method: Principle Components Analysis, Rotation: Varimax with Kaiser Normalization.

process examined the factors created using only those scales significantly related to the outcome variable "any offense-related failure." Because this analysis depended on the results of predictive analyses shown in Chapter 5, the findings are presented there.

The second factor analysis of women in the sample produced a six-factor solution. The factor explaining the most variance for women in the sample (22.3%; eigenvalue= 3.6) was the relationships and substance abuse factor. Scales included in this factor were antisocial friends, substance abuse history, relationship dysfunction, low self-efficacy, and parental stress. The relationships and substance abuse factor described a group of women in dysfunctional relationships who were spending time using drugs with peers, perhaps those they were in relationship with, lacking in self-efficacy, and who were having difficulty parenting their children.

The mental health factor included women who were lacking in educational assets, struggling with employment and finances, experiencing current symptoms of depression and psychosis, and lacking in self-efficacy. This factor appeared to comprise mentally ill women who incurred poverty as a result of their mental illness. The abuse and mental health factor involved mental health history and physical and sexual abuse. The last three factors constituted a confluence of attributes highlighted by the Canadian model which included criminal history and antisocial attitudes, a factor comprised of socio-economic issues and housing safety and a final factor comprised of anger and parental stress. These factors combined, however, only accounted for 21.2% of the variance and therefore were getting less stable.

The second factor analysis for men also resulted in a six-factor solution. The factor accounting for the largest proportion of variance for men (22.3%; eigenvalue= 3.6) included

criminal history, housing safety, antisocial friends, anger and substance abuse history, many of the needs noted in the Canadian model.

The factor explaining the second largest amount of variance for men was the mental health factor. Included in this factor were educational needs, anger, mental health history, depression, and current symptoms of psychosis. The third factor was an abuse factor including the physical and sexual abuse scales. The last three factors in the six-factor solution for men were the socio-economic and parental stress factor which included employment/finances, lack of self-efficacy, and parental stress, another Canadian model factor comprised of antisocial attitudes and criminal history, and finally the mental health history and relationship dysfunction factor. Similar to the last three factors for women, these factors accounted for a small percent of variance (21.2%) and were becoming unstable.

SUMMARY

This comparison of women and men in a sample of offenders has clearly demonstrated that some significant differences exist between genders. It was clearly demonstrated that women in this sample reported higher levels of risk/needs in most of the gender-neutral areas and in all of the gender-responsive risk/needs than men. Women reported significantly higher mean scores for the gender-neutral scales employment/finances, current substance abuse, and substance abuse history. Women were also higher on all significantly different mean scores for the gender-responsive scales including housing safety, depression, mental health history, parental difficulties, parental stress, adult abuse, sexual abuse, physical abuse, and relationship dysfunction.

Additionally, the chi-square results indicated that, when considering treatment/case management issues, women in this sample were significantly more likely to be identified as in

need of treatment. These results provide support for the argument that women offenders generally experience higher levels of need in those areas of risk/needs that can be considered as targets for treatment.

Women and men in the sample also varied in the ways in which the risk/needs co-occurred. For example, regarding both genders, the factor explaining most of the variance in the descriptive factor analyses included antisocial friends and substance abuse. However, for women in the sample the factor also included dysfunctional relationships, low self-efficacy, and parental stress. Alternatively, this factor for men included criminal history, housing safety, and anger. Thus, although some of the same risk/needs and strengths are operating for women and men, the ways in which they are functioning in their lives appeared to be different. The analyses found next in Chapter Five examined the relationships between the gender-neutral and gender-responsive scales included in the WRNA and the outcome measures described in Chapter Three.

CHAPTER 5

PREDICTIVE ANALYSES

In addition to the gender comparisons in Chapter Four, Chapter Five analyses examined the predictive validity of the WRNA scales. Included are bivariate correlations for gender-neutral risk/needs, gender-responsive risk/needs, and gender-responsive strength scales and measures of recidivism. To assess the ability of individual scales to predict recidivism this research analyzed bivariate correlations at 6- and 12-months for each of the scales included in the WRNA. Individual scales identified as predictive for men and women were then subjected to factor analysis to identify the manner in which the risk/needs co-occurred for each gender. The factor analyses were conducted separately for men and women.

Finally, total risk scales were created separately for men and women using combinations of those scales identified as predictive. The predictive validity of these total risk scores was examined through bivariate correlations and the area under the curve measure (AUC). In addition to risk scores, risk categories (e.g. low, moderate, high) were identified in these data separately for men and women. Predictive validity for risk categories was examined using Kendall's Tau_B due to the categorical nature of this variable.

Bivariate Correlations

Gender-Neutral Variables

Significant correlations for men can be found in Table 5.1 and in Table 5.2 for women (non-significant correlations are not shown). The gender-neutral scales in the bivariate analyses included criminal history, antisocial attitudes, educational needs, employment/financial, antisocial friends, and substance abuse (history and current). The focus of the discussion is on

Table 5.1 Bivariate Correlations: Gender-Neutral Risk/Needs Scales – Men (N = 114)

Scale	Arrest (Y/N)	# of Arrests	Technical Violations	Any Offense Related Failure	Any Failure
Six-Months					
Criminal History [I]	.17*		.18*	.21*	.28**
Attitude [I]					
Educational Needs [I]					
Employment/Financial [I]			.18*		.24**
Antisocial Friends [I]					
Substance Abuse History [I]					
Current Substance Abuse [I]					
Twelve-Months					
Criminal History [I]	.19*			.33**	.30**
Attitude [I]				.23**	.23**
Educational Needs [I]		.16*			.16*
Employment/Financial [I]					
Antisocial Friends [I]	.19*	.16*		.19*	.22**
Substance Abuse History [I]				.16*	
Current Substance Abuse [I]			.18*	.18*	

I = interview scale, S = survey scale
* = $p \leq .05$, ** = $p \leq .01$

Table 5.2 Bivariate Correlations: Gender-Neutral Risk/Needs Scales – Women (N = 101)

Scale	Arrest (Y/N)	# of arrests	Technical Violations	Any offense related failure	*Any failure*
Six-Months					
Criminal History [I]	.23*	.25**	.18*	.33**	.33**
Antisocial Attitude [I]		.18*		.21*	.18*
Educational Needs [I]					
Employment/Financial [I]	.17*			.17*	.19*
Antisocial Friends [I]					
Substance Abuse History [I]					
Current Substance Abuse [I]					
Twelve-Months					
Criminal History [I]	.19*			.29**	.26**
Antisocial Attitude [I]				.19*	
Educational Needs [I]					
Employment/Financial [I]	.18*	.19*		.20*	
Antisocial Friends [I]					
Substance Abuse History [I]					
Current Substance Abuse [I]		.18*			

I = interview scale, S = survey scale
* = $p \leq .05$, ** = $p \leq .01$

the 12-month findings, because more significant relationships were found at that point as variation on the various dependent variables improved.

0It was not surprising that the gender-neutral scales included in the WRNA generally fared well for men in this sample. Overall, five of the seven gender-neutral scales were significantly related to any offense-related outcome (AOF) at the twelve-month time period. Criminal history demonstrated the strongest relationship with AOF ($r = .33$, $p \leq .01$). The only two gender-neutral scales that did not demonstrate significant relationships with AOF were the educational needs and employment/financial scales. It is not surprising that measures of education and employment were not predictive for men in this sample as men did not demonstrate a great deal of need in these areas.

Examination of the gender-neutral variables at twelve-months for women in the sample revealed a different pattern than men. For example, where five of the seven gender-neutral scales were predictive for men, only three of the scales (criminal history, antisocial attitudes, & employment/financial) were identified as predictive for women. Additionally, women reported higher needs on the employment/financial scale, which was significantly related to AOF ($r = .20$, $p \leq .05$). It appears then that while gender-neutral scales have significance for both genders, they functioned differently for men and women. Specifically, while antisocial attitudes and criminal history both exhibited a significant relationship with AOF for both genders the employment/financial scale was only significant for women. Additionally, the antisocial friends scale and the substance abuse scales only demonstrated a significant relationship for men.

Gender-Responsive Risk/Needs Variables

The next area of analysis included an examination of relationships for the gender-responsive risk/needs scales. The gender-responsive risk/needs scales included in the WRNA are

housing safety, anger, mental health history, depression, psychosis, child abuse (interview), adult abuse (interview), sexual abuse (interview), physical abuse (interview), child abuse (survey), adult abuse (survey), parental difficulties (interview), parental stress (survey), relationship dysfunction, and family of origin conflict. Results of these analyses can be found in Table 5.3 for men and Table 5.4 for women.

The gender-responsive scales did not perform well for men. Although some significant relationships did emerge, most were in the opposite direction expected for risk factors. That is, most of the gender-responsive variables demonstrated a modest negative relationship with any offense-related failure and any failure for men. For example, the physical abuse scale demonstrated a significant relationship with AOF (r = -.17, $p \leq .05$). However, interpretation of this relationship indicated that the existence of physical abuse in the life of men in the sample decreased the likelihood of recidivism.

This was not true for women in the sample. Indeed, several of the gender-responsive scales performed quite well for women. Measures of mental health, abuse, and parenting issues were all significantly related to any offense-related failure. For example, scales measuring parental difficulties and stress were the most strongly related to AOF (r = .33, $p \leq .01$; r = .34, $p \leq .01$, respectively). The strength of the relationships for these scales exceeded the strongest relationship seen for the gender-neutral scales (criminal history) for women.

Gender-Responsive Strengths Variables

The final scales examined included the gender-responsive strengths: educational strengths (ES), relationship involvement (RI), parental involvement (PI), family of origin support (FOS), and self-efficacy (SE). Results can be found in Table 5.5 for men and Table 5.6 for women.

Table 5.3 Bivariate Correlations: Gender-Responsive Risk/Needs Scales – Men (N = 114)

Scale	Arrest (Y/N)	# of Arrests	Technical Violations	Any Offense-Related Failure	Any Failure
Six-Months					
Housing Safety [I]					
Anger [I]					
Mental Health History [I]		-.12*	.15*		
Depression [I]			.16*		
Current Psychosis [I]					
Child Abuse [I]	-.15*	-.12*		-.17**	-.17**
Adult Abuse [I]					
Sexual Abuse [I]					
Physical Abuse [I]	-.16**	-.12*		-.20**	-.21**
Child Abuse [S]					
Adult Abuse [S]					
Parental Difficulties [I]				-.14*	
Parental Stress [S]					
Relationship Dysfunction [S]			-.17**		
Family Conflict [I]				.15*	.13*
Twelve-Months					
Housing Safety [I]					
Anger [I]	.12*		.13*		
Mental Health History [I]					
Depression [I]	.12*				.13*
Current Psychosis [I]	-.13*				
Child Abuse [I]	-.13*		-.16**	-.14*	
Adult Abuse [I]					
Sexual Abuse [I]	-.14*	-.13*			
Physical Abuse [I]			-.19**	-.17**	
Child Abuse [S]					
Adult Abuse [S]		.14*			
Parental Difficulties [I]			-.19**	-.13*	
Parental Stress [S]					
Relationship Dysfunction [S]					-.19**
Family Conflict [I]					

I = interview scale, S = survey scale
* = $p \leq .10$, ** = $p \leq .05$, ** = $p \leq .01$

Table 5.4 Bivariate Correlations: Gender-Responsive Risk/Needs Scales – Women (N = 101)

Scale	Arrest (Y/N)	# of arrests	Technical Violations	Any offense related failure	Any failure
Six-Months					
Housing Safety [I]					
Anger [I]					.13*
Mental Health History [I]	.15*			.14*	.19**
Depression [I]					
Current Psychosis [I]			.15*	.16*	.22**
Child Abuse [I]					
Adult Abuse [I]	.16*			.22**	.18**
Sexual Abuse [I]	.19**	.18**		.21**	.16*
Physical Abuse [I]					
Child Abuse [S]	.15*			.20**	.17**
Adult Abuse [S]				.16*	.14*
Parental Difficulties [I]	.26**	.18**		.26**	.22**
Parental Stress [S]	.28**	.21**		.28**	.27**
Relationship Dysfunction [S]					
Family Conflict [I]					
Twelve-Months					
Housing Safety [I]					
Anger [I]					
Mental Health History [I]	.14*	.20**		.18**	.18**
Depression [I]					
Current Psychosis [I]		.22**		.14*	
Child Abuse [I]					
Adult Abuse [I]		.17**		.18**	.17**
Sexual Abuse [I]		.16*		.15*	.19**
Physical Abuse [I]					
Child Abuse [S]		.21*			.17*
Adult Abuse [S]		.14*	.16*		.14*
Parental Difficulties [I]	.30**	.26**	.14*	.33**	.30**
Parental Stress [S]	.26**	.27**	.14*	.34**	.31**
Relationship Dysfunction [S]					
Family Conflict [I]					

I = interview scale, S = survey scale
* = $p \leq .10$, ** = $p \leq .05$, ** = $p \leq .01$

Table 5.5 Bivariate Correlations: Gender-Responsive Strength Scales – Men (N = 114)

Scale	Arrest (Y/N)	# of Arrests	Technical Violations	Any Offense Related Failure	Any Failure
Six-Months					
Educational Assets [I]					
Relationship Involvement [I]					
Parental Involvement [I a]		.17*	.21*	.20*	.19*
Family of Origin Support [I]			.15*		
Self-Efficacy [I]					
Twelve-Months					
Educational Assets [I]					
Relationship Involvement [I]					.14*
Parental Involvement [I a]	.25**	.28**	.34**	.33**	.30**
Family of Origin Support [I]					.18**
Self-Efficacy [I]					.17*

I = interview scale, S = survey scale
* = p ≤ .10, ** = p ≤ .05, ** = p ≤ .01
a, N = 62

Table 5.6 Bivariate Correlations: Gender-Responsive Strength Scales – Women (N = 101)

Scale	Arrest (Y/N)	# of Arrests	Technical Violations	Any Offense Related Failure	Any Failure
Six-Months					
Educational Assets I					
Relationship Involvement I					
Parental Involvement [I a]					
Family of Origin Support [I]					
Self-Efficacy [I]					
Twelve-Months					
Educational Assets [I]					
Relationship Involvement [I]					
Parental Involvement [I a]				-.25**	-.19*
Family of Origin Support [I]			.15*		.15*
Self-Efficacy [I]		-.13*			

I = interview scale, S = survey scale
* = p ≤ .10, ** = p ≤ .05, ** = p ≤ .01
a, N = 57

As with the gender-responsive risk/needs scales, significant relationships for gender-responsive strengths scales for men were opposite to the expected direction. For example, parental involvement demonstrated a significant relationship for AOF for men ($r = .34$, $p \leq .01$). It may be that for some of these men involvement in the life of their child increases their risk of recidivism. However, it is also possible that parenting questions designed specifically for mothers are not appropriate for fathers. Unlike the relationships for men in the sample, the parental involvement scale demonstrated a significant negative relationship with AOF ($r = -.25$, $p \leq .01$) for women. Thus, parental involvement appeared to function as a protective factor for mothers.

Factor Analysis

Scales Related to Outcomes

As noted in Chapter Four, the third and final step in the factor analysis process examined the factors created using scales significantly related to the outcome measure any offense-related failure. This outcome measure was used because it demonstrated the strongest predictive validity with the individual scales. The results of the factor analyses for these scales can be found in Table 5.7 for men and Table 5.8 for women.

The factor analysis for men identified a two-factor solution. Both of the factors in this model can be classified as fitting into the Canadian Model. For our purposes the Canadian Model refers to the gender-neutral variables criminal history, antisocial attitudes, employment/financial, educational needs, antisocial friends, and substance abuse (current and history). The first factor in this analysis was responsible for 32.4% of the variance (eigenvalue = 2.2). This factor included employment/financial, antisocial friends, and history and current substance abuse. The second factor (17.1%; eigenvalue = 1.2) included antisocial attitudes, criminal history, and anger.

Table 5.7 Factor Analysis of Co-Occurring Risk Scales – Men

Risk Scales	Canadian Model – 1	Canadian Model – 2
Attitude	(-.482)	.719
Criminal History		.618
Employment/Financial	.478	
Antisocial Friends	.649	
Anger		.593
Substance Abuse History	.752	
Current Substance Abuse	.618	

Extraction Method: Principle Components Analysis, Rotation: Varimax with Kaiser Normalization
() Variable was not included in the factor because it achieved a stronger loading on another factor.

Table 5.8 Factor Analysis of Co-Occurring Risk Scales – Women

Risk Scales	Abuse, Substance Abuse, and Parenting	Employment/Financial and Mental Health	Canadian Model
Attitude			.865
Criminal History			.879
Employment/Financial		.624	
Mental Health History		.657	
Current Psychotic Symptoms		.700	
Physical Abuse (Adult or Child)	.628		
Sexual Abuse (Adult or Child)	.539		
Parental Stress	.641		
Current Substance Abuse	.665		

Extraction Method: Principle Components Analysis, Rotation: Varimax with Kaiser Normalization

Again, although this factor includes the anger scale as a predictor, it clearly fits into the Canadian Model of risk prediction. Although anger has not generally been included in traditional risk prediction instruments, it has long been identified as an important area for treatment of male offenders (Curulla, 1991; Dowden et al., 1999; Ely, 2004; MacKenzie et al., 2007; Richards et al., 2000; Van Voorhis, Braswell, & Lester, 2009).

The factor analysis for women resulted in a three-factor solution. The factor accounting for the largest amount of variance (26.2%; eigenvalue = 2.4) included physical and sexual abuse, parental stress, and current substance abuse. This factor describes a group of women who have experienced or are currently experiencing physical and/or sexual abuse, using drugs, and having difficulties parenting their children.

The second factor in the model accounted for 16.8% of the variance (eigenvalue = 1.5) and included the employment/financial, mental health history, and current symptoms of psychosis scales. This factor describes women with mental health issues experiencing difficulty in maintaining a financially self-supporting lifestyle, perhaps exemplifying women identified by Morash (2010) in her examination of programs for women on probation and parole.

Finally, the third factor accounted for 12.4% of the variance (eigenvalue = 1.1) and can be described as a group of women with the traditional risk/needs included in gender-neutral risk assessments which follow the Canadian Model of risk prediction (Andrews & Bonta, 2010). Included in this factor are the two traditional domains of antisocial attitudes and criminal history.

Total Scale Bivariate Correlations and Areas Under the Curve

Having examined the individual scales and their relationships to the recidivism measures, analyses next turned to the predictive validity of the WRNA when scales were combined to produce a total risk assessment for each gender. The total risk scores were created using a combination of the scales most strongly related to any offense-related failure for men and women. Once the scales with the strongest predictive validity were identified for each gender, the scales were then collapsed into categories prior to creating a cumulative total risk scale. This procedure was performed to prevent those scales with larger cumulative scores from having a greater impact on the total scale. Gender-responsive strengths were subtracted from the cumulative scale to produce a final risk score.

After the risk prediction instrument was created for each gender, the scores were then collapsed into categories (i.e. low, moderate, or high risk). For purposes of clarity the results for the WRNA cumulative instrument prior to categorization is referred to as the risk score, whereas

the score following categorization is referred to as the risk category. Relationships between risk scales for men can be found in Table 5.9 and in Table 5.10 for women.

Men

The most predictive model for men included the gender-neutral scales criminal history, antisocial attitudes, educational risk, employment/financial, antisocial friends, substance history, and current substance abuse. Thus, the most predictive model for men recreated a traditional dynamic risk/needs assessment instrument, similar to the LSI-r or the Northpointe COMPAS. Twelve-month risk scores were significant for all outcomes. Not surprisingly, the strongest relationships were with any offense-related failure ($r = .41$, $p \leq .001$, AUC = .73) and any failure ($r = .41$, $p \leq .001$, AUC = .73).

The scores for men categorized into four levels including low (lowest score through 3), low-moderate (4 through 6), moderate (7 through 9), and high (10 through highest score) risk. The relationships for the risk categories were significant for all outcomes as well. The two composite outcomes measures remained strong (AOF: $r = .37$, $p \leq .001$, AUC = .72; AF: $r = .38$, $p \leq .001$, AUC = .72).

Women

The cumulative risk scale with the strongest predictive validity for women included criminal history, antisocial attitudes, employment/financial, mental health history, current symptoms of psychosis, child abuse (survey), adult abuse (survey), parental stress (survey), and self-efficacy. Women's risk scores also categorized into four levels including low (lowest score through 5), low-moderate (6 through 14), moderate (15 through 25), and high (26 through highest score) risk.

Table 5.9 Bivariate Correlations and Areas Under the Curve (AUCs) Between Risk Scores (Pearson's r) and Risk Categories (Kendall's Tau_B) and Recidivism – Men (N = 114)

	Arrest (Y/N)		N Arrest		Technical Violation (Y/N)		Any Offense-Related Failure (Y/N)		Any Failure (Y/N)	
	r/τ	AUC	*r*/τ	AUC	*r*/τ	AUC	*r*/τ	AUC	*r*/τ	AUC
Six-Months										
Risk Score					.23**	.64	.25**	.66	.32***	.68
Risk Category							.25**	.66	.32***	.69
Twelve-Months										
Risk Score	.19*	.64	.19*	.64	.31***	.67	.41***	.73	.41***	.73
Risk Category	.22*	.65	.21*	.64	.27**	.70	.37***	.72	.38***	.72

* = p ≤ .05, ** = p ≤ .01, *** = p ≤ .001

Table 5.10 Bivariate Correlations and Areas Under the Curve (AUCs) Between Risk Scores (Pearson's r) and Risk Categories (Kendall's Tau_B) and Recidivism – Women (N = 101)

	Arrest (Y/N)		N Arrest		Technical Violation (Y/N)		Any Offense-Related Failure (Y/N)		Any Failure (Y/N)	
	r/τ	AUC	*r*/τ	AUC	*r*/τ	AUC	*r*/τ	AUC	*r*/τ	AUC
Six-Months										
Risk Score	.32***	.72	.25**	.74			.34***	.70	.34***	.71
Risk Category	.27**	.70	.25**	.72			.28**	.70	.30**	.70
Twelve-Months										
Risk Score	.29**	.69	.34***	.63	.17*	.64	.38***	.73	.36***	.72
Risk Category	.27**	.69	.26**	.64	.21*	.64	.35***	.73	.36***	.72

* = p ≤ .05, ** = p ≤ .01, *** = p ≤ .001

At twelve-months, the total risk score for women was significantly related to all five outcome measures. As with men, the strongest relationships were demonstrated for the composite outcome measures: any offense-related failure (r = .38, p ≤ .01; AUC = .73), and any failure (r = .36, p ≤ .01; AUC = .72). The risk category scores for women demonstrated results similar to those of the risk scores: any offense-related failure (r = .35, p ≤ .01; AUC = .73), and any failure (r = .36, p ≤ .01; AUC = .72).

Analyses with Scales Created for Opposite Gender

Past research with the WRNA has indicated that although traditional risk assessments have predictive validity for women offenders, adding gender-responsive risk/needs may increase their predictive validity (Van Voorhis, 2010). In order to examine this argument, the total risk assessment created for women was analyzed for men and the total risk assessment created for men was analyzed for women. The correlation and AUC results for these analyses can be found in Table 5.11 for men and Table 5.12 for women.

Results for men were non-significant for all outcomes and both time periods. Results for women were significant at twelve-months for any offense-related failure (r = .21, p ≤ .05, AUC = .64). Although a significant relationship was identified two important points should be noted. First, the AUC value did not reach the .70 level. Second, the relationship was much weaker than those identified using the risk assessment scores created for women using the gender-responsive risk factors.

Table 5.11 Bivariate Correlations and Areas Under the Curve (AUCs) Between Risk Scores (Pearson's r) and Risk Categories (Kendall's Tau_B) and Recidivism – Men Using Total Risk Scale Created for Women (N = 114)

	Arrest (Y/N)		N Arrest		Technical Violation (Y/N)		Any Offense-Related Failure (Y/N)		Any Failure (Y/N)	
	r	AUC	*r*	AUC	*r*	AUC	*r*	AUC	*r*	AUC
Six-Months										
Risk Score										
Twelve-Months										
Risk Score										

* = p ≤ .05, ** = p ≤ .01, *** = p ≤ .001

Table 5.12 Bivariate Correlations and Areas Under the Curve (AUCs) Between Risk Scores (Pearson's r) and Recidivism – Women Using Total Risk Scale Created for Men (N = 101)

	Arrest (Y/N)		N Arrest		Technical Violation (Y/N)		Any Offense-Related Failure (Y/N)		Any Failure (Y/N)	
	r	AUC	*r*	AUC	*r*	AUC	*r*	AUC	*r*	AUC
Six-Months										
Risk Score										
Twelve-Months										
Risk Score			.18*	.52			.21*	.64		

* = p ≤ .05, ** = p ≤ .01, *** = p ≤ .001

SUMMARY

The bivariate analyses of the individual and total scales clearly identified differences between men and women. While gender-neutral scales demonstrated predictive validity for both genders, the gender-responsive scales were predictive only for women. Additionally, although the gender-neutral variables were predictive for women, the addition of gender-responsive variables to the risk assessment model improved the predictive validity of the assessment.

The factor analyses identified both similarities and differences between men and women in this sample. While factor analyses for men and women both included a factor that supported the Canadian Model of risk prediction, the women also included models that were more gendered in nature. Additionally, the factors with the most explained variance for women were the two gender-responsive factors.

Although the analyses in this chapter did not support the gender-responsive domains as risk predictors for men, it is important to identify those needs which occurred in the sample and to remember that risk prediction is only one reason for identifying such issues in offenders. Humane reasons argue that such identification is important as well. Further discussion of these topics can be found in Chapter Six.

CHAPTER SIX

DISCUSSION AND IMPLICATIONS

Introduction

The majority of correctional risk assessments in use today follow what is known as the Canadian Model (Andrews & Bonta, 2010). These assessments have been designed using samples comprised primarily of male offenders. Researchers concerned with the unique issues faced by female offenders have questioned the use of instruments designed for men with women (Van Voorhis et al., 2010). Efforts to address this seeming omission resulted in the creation of a risk assessment (WRNA) for female offenders.

The WRNA differed from other correctional risk assessments in its inclusion of gender-responsive scales. These scales have received preliminary validation with samples of women (Van Voorhis et al., 2010). However, research to date, had not sought to validate this instrument with a sample of men. This research sought to rectify that omission. Specifically, this research examined the validity of the WRNA using a sample of men and women. The data sought to identify the prevalence, co-occurrence, and predictive validity of gender-neutral and gender-responsive scales, as well as similarities and differences between men and women. Prior to discussing these results some caveats should be noted.

Limitations

These data, in general support the inclusion of gender-responsive variables in risk assessment instruments for women. However, the sample was small (N for men = 114, N for women = 101), but acceptable for the analysis. Although small samples are a limitation in general, another interpretation argues for the strength of the gender-responsive variables. The

ability of these data to identify significant relationships in this small sample may indicate that these issues are important indeed for women.

The second limitation involves the short length of time allowed for measurement of the outcome variables. Due to time constraints the length of time available for analyses of the outcome variables was limited to one year. Further analysis of the sample at longer time points (2 years, 3 years, etc.) should provide more definitive results.

Given the paucity of research regarding the gender-responsive variables with samples of males in a correctional setting this research was preliminary in nature. This study was one of the first of its kind. Further attempts to identify gender-responsive issues for male offenders should be pursued. In particular, more research is needed using materials designed for male offenders. The WRNA was developed for women not men. Areas such as mental health might be evaluated differently for men. Perhaps measures of post-traumatic stress disorder, particularly for those returning from active military duty, might be a more appropriate measure of mental health for men. It is possible that a number of the gender-responsive variables may be expressed differently for men.

Additionally, the outcomes are limited due to the nature of the source from which they were drawn. The outcome data were acquired from county courthouse and Ohio Department of Corrections records on the internet. Such websites have advantages in that information is provided regarding the specific charges, outcomes, and ongoing progress of the offender regarding past and current offenses. Importantly, failures were recorded based on the date of the failure rather than the time that the record was posted. However, drawing information from official records such as these may attenuate results as there may be a lapse in time between occurrence of a failure and recording of that failure on the website. For a variety of reasons it

may not be possible for courthouse personnel to record failures daily on the website. To address this concern, website records were checked for an additional three months beyond the twelve-month time-at-risk date for each offender.

Finally, this sample was drawn from community correctional facilities in one jurisdiction from one state. It is therefore important to note that these results are not generalizable to other jurisdictions. While the offenders in this sample may be similar to those in other locations, it is also possible that the offenders in this sample are unique to their area and should not be inferred to other locations.

Prevalence

Gender-Neutral Risk/Needs Scales

This research continued to provide support for the presence of gender-neutral risk/needs for men and women. This was not surprising as a vast amount of research has already identified these issues as important for both genders. However, recall that this research sought specifically to determine how males and females compared regarding the prevalence of risk/needs. The results clearly indicated that gender-neutral risk/needs are prevalent for both genders. However, comparison of the two genders revealed some differences in the prevalence of gender-neutral risk/needs.

Specifically, men demonstrated a significantly higher prevalence of antisocial attitudes and criminal history than women. Alternatively, women reported significantly higher scores on employment/financial, substance abuse history, and current substance abuse scales. Feminist researchers have argued that not only do issues such as poverty and substance abuse have a greater impact on women offenders but that they are also more prevalent in the lives of these women (Bloom et al., 2003; Holtfreter, Reisig, & Morash, 2004).These results support the

argument that although gender-neutral scales exist for both genders they may function differently in the lives of women and, as such, should be viewed differently when working with women offenders.

Gender-Responsive Risk/Needs Scales

In addition to gender-neutral risk/needs, this research also sought to compare men and women regarding the prevalence of gender-responsive risk/needs. The gender-responsive risk/needs were more prevalent for women in all but two of the gender-responsive scales. Men and women reported similar prevalence on the anger and child abuse (survey) scales.

Although anger here is included in the gender-responsive category for the purposes of risk assessment, it has long been considered an appropriate area for treatment of male offenders (Van Voorhis et al., 2009). Thus it was not surprising to see men and women reporting similar levels of anger. Additionally, differences in the nature of the questions included in the child abuse (survey) helped to explain the lack of difference in the prevalence of this variable. The child abuse (survey) scale included only questions related to physical abuse. Alternatively, the child abuse interview scale asked the offenders about both physical and sexual abuse they had experienced as children. Men, therefore, reported experiencing similar levels of physical abuse in childhood when compared with women. Women reported significantly more sexual abuse.

Given that the WRNA was created for women offenders based on feminist theory, social-learning theory, and surveys of both correctional officials working with women offenders and women offenders themselves these results were not surprising. The WRNA includes gender-responsive scales created to measure issues of women offenders. That men reported lower levels of these issues was perhaps confirmation that the creators of the instrument achieved the goal of measuring constructs pertinent to women offenders. It should be noted that men did not fail to

report any gender-responsive risk/needs. Rather, these results indicated that such issues were more prevalent for women.

Gender-Responsive Strengths Scales

The WRNA is unique not only in its inclusion of gender-responsive risk/needs measures but in its focus on strengths as well. The WRNA includes five scales focusing on areas that, for women, are argued to act as protection against recidivism. These scales include educational assets, relationship involvement, parental involvement, family of origin support, and self-efficacy. A similar prevalence of these strengths was reported by men and women for all of the gender-responsive strengths except self-efficacy. The results indicated that men were significantly higher in self-efficacy than women. This result appears consistent with earlier results noting that women scored higher than men on all of the gender-responsive risk/needs scales for which a significant difference was identified. Such results provide further support for the argument that women experience greater deprivations perhaps leading to lower levels of self-efficacy.

Co-Occurrence

Further analyses sought to compare the manner in which the risk/needs scales co-occurred for men and women. The three-step procedure used in the analyses facilitated a comparison of men and women in two ways: description and prediction. The first factor analysis established the necessity of removing scales that measured similar constructs. The second factor analysis examined the tendencies of variables to group together in order to provide a general description of each gender. The third factor analysis used only scales identified as significantly related to the outcome measure of any offense-related failure thus providing some indication of the manner in which the measures related to recidivism might tend to co-occur.

Factor analysis of the scales was helpful in that it provided a quantitative method to explore the existence of co-occurring variables that may represent underlying constructs unique to women and men. The six-factor solution for men included (in order of explained variance): a) the Canadian Model (criminal history, housing safety, antisocial friends, anger, & substance abuse history): b) mental health (educational needs, anger, mental health history, depression, & current psychotic symptoms): c) abuse (physical abuse & sexual abuse): d) socio-economic status and parental stress (employment/finances, low self-efficacy, & parental stress): e) the Canadian Model (Antisocial attitude & criminal history): f) and mental health and relationship dysfunction (mental health history & relationship dysfunction). In comparison, the six-factor solution for women included (in order of explained variance): a) relationships and substance abuse (antisocial friends, substance abuse history, relationship dysfunction, low self-efficacy, & parental stress): b) mental health (lack of educational assets, employment/finances, depression, current psychotic symptoms, & low self-efficacy): c) abuse and mental health (mental health history, physical abuse, & sexual abuse): d) the Canadian Model (antisocial attitudes & criminal history): e) socio-economic status and housing safety (employment/finances & housing safety): f) and parenting and anger (anger & parental stress).

Feminist criminologists have argued that romantic relationships are particularly relevant to the offending of women (Koons, et al., 1997; Langan & Pelissier, 2001; Richie, 1996, Robertson & Murachver, 2007; Salisbury & Van Voorhis, 2009). An examination of the first factor for each gender is supportive of this argument. In the first factor both men and women demonstrate substance abuse issues, however, the co-occurring scales are different. For men, the substance abuse is accompanied by antisocial friends unlike women whose substance abuse co-occurs with antisocial friends, relationship dysfunction, parental stress, and low self-efficacy.

While such results underline the importance of antisocial friends, they also clearly support the priority of relationship dysfunction in the lives of offending women. That is, their substance use appeared to occur in the context of intimate relationships as well as antisocial friends.

This research did not, however, find the constellation of risk/needs that might have been expected based on past research. In her work, Covington (2003) found that abuse, mental health, and substance abuse tended to co-occur for women offenders. By contrast, this research found that substance abuse for women tended to co-occur in the company of other risk/needs (antisocial friends, low self-efficacy, and parental stress) one might expect based on the lifestyle and costs associated with being a substance abuser.

Additionally, the second factor for men included anger, educational needs, and mental health whereas the second factor for women included educational needs, employment/financial, and mental health. Where both men and women reported experiencing mental health issues in conjunction with educational needs, the third variable in the factor was different. Men reported anger issues whereas women reported employment/financial issues. For women this factor represents the co-occurrence of issues feminist criminologists argue represented greater deprivations for women offenders (Bloom et al., 2003). The co-occurrence of these risk/needs may indicate support for these arguments. Alternatively, the results may simply be demonstrating the impact of mental health issues on employment.

The presence of mental health in the second factor for men further underscores the argument that mental health may be an important issue for male offenders. Indeed, researchers favoring gender-neutral risk/needs assessments do not advocate ignoring such issues for offenders. Rather mental health issues are placed in the category of responsivity, an area to be addressed as an appropriate course of action due to their potential interference with treatment of

risk/needs that are related to recidivism (Andrews & Bonta, 2010). Thus, although perhaps not directly related to risk prediction, mental health issues have an indirect impact on the likelihood of future recidivism.

Although the latter factors explained less and less of the variance in the model, it was instructive to examine differences in some of the other four factors. One factor included only physical and sexual abuse for men whereas for women these scales were accompanied by mental health. This factor may be demonstrating the different sequelae of abuse that have been seen in past research of male and female survivors of abuse. In a review of the research regarding sexual abuse, Briere and Runtz (2003) note that what research exists suggests that men may be more likely to externalize their pain from sexual abuse whereas women are more likely to internalize their negative feelings perhaps resulting in mental health issues.

Another factor included the employment/financial scale for both men and women. However, the co-occurring variables were different for the two genders. For men this factor also included parental stress whereas for women the factor included housing safety. These results may indicate that, for men, parental stress may be more related to economic rather than nurturing issues. Furthermore, the combination of employment/financial with housing safety for women supports a connection with issues women may have in being the primary caretaker for their children.

This research clearly identified both gender-neutral and gender-responsive factors for men and women. Both men and women in this sample of community-correctional based offenders demonstrated gender-neutral and gender-responsive risk/needs which tended to co-occur differently based, at least in part, on gender. The importance of these issues as regards

recidivism demonstrated differences as well. These will be reviewed and discussed later in the chapter.

Predictive Validity

Identification of risk/needs related to recidivism is paramount to the reduction of recidivism. This study, therefore, sought to address a basic question: Does evidence exist to suggest that gender-responsive risk/needs factors are able to predict community-based recidivism outcomes in a sample of male and female offenders? Additionally, this research sought to identify those risk/needs (gender-neutral and gender-responsive) which were optimal as risk predictors for men and women. Finally, identification of the individual scales related to recidivism functioned as a precursor to the creation of a total risk assessment for each gender.

Gender-Neutral Risk/Needs Scales

The gender-neutral risk/needs scales were supported as predictive for both men and women. Significant gender-neutral relationships with outcome variables for women included criminal history, antisocial attitudes, and employment/financial scales. In comparison, significant gender-neutral scales for men included criminal history, antisocial attitudes, antisocial friends, and both substance abuse scales. While in general this study replicated the results of numerous previous studies these results also argue for a different interpretation of the Canadian Model as regards women offenders.

Supporters of the Canadian Model place priority on what is known in gender-neutral risk assessment as the "Big 4" (Andrews & Bonta, 2010). These four gender-neutral risk/needs are argued to be the best predictors of recidivism and include criminal history, antisocial attitudes, antisocial personality traits, and antisocial peers. This research clearly provided further support

for the importance of these four risk/needs for men. This result was not surprising as the Canadian Model was created and designed primarily using samples of men.

The "Big 4" did not demonstrate the same support in this research for women. Rather, for women, the antisocial friends scale did not demonstrate a significant relationship with the outcome measures. Antisocial friends, therefore, were more important to the prediction of recidivism for men than women. Perhaps then a reinterpretation of the "Big 4" for women should be considered.

An examination of these results limited to only the gender-neutral risk/needs would clearly place employment/financial issues as a higher priority for the women. However, an important part of this study was to include gender-responsive risk/needs and determine if they might add something to the model for men and women. Prior to any detailed discussion of the potential for re-examining the "Big 4" as it applies to women, it was first necessary to discuss the gender-responsive risk/needs and their connection to recidivism.

Gender-Responsive Risk/Needs Scales

The gender-responsive risk/needs scales are comprised of housing safety, anger, mental health history, depression, current psychosis, child abuse (interview/survey), adult abuse (interview/survey), parental difficulties (interview), parental stress (survey), family of origin conflict, and relationship dysfunction. These scales demonstrated some predictive validity for women but did not perform well for men.

Those gender-responsive risk/needs related to outcomes for women included mental health, abuse, and parental difficulties/stress. These measures were not only significantly related to the outcome measures but, in the case of parental difficulties/stress, surpassed the strength of any of the other measures, gender-neutral or gender-responsive. It is clear from these results that

attention must be paid to the gender-responsive issues of female offenders with a particular emphasis on the parenting issues of female offenders.

Gender-Responsive Strengths Scales

The gender-responsive strengths scales also did not perform well for men. Those relationships that were significantly related to outcomes for men were in the direction opposite than expected. Thus, some of the strengths appeared to be operating as risk/needs for men. In particular, the parental involvement scale showed a strong, positive relationship with the outcome variables at twelve months.

These results may be interpreted as an indication that for offending fathers, involvement with their children represents a risk/need. Alternatively, it may be that parenting is different for offending men than it is for offending women. Given the exploratory nature of this research it would be premature to attempt to reach any definitive conclusion regarding the relationship between the parental involvement scale and outcomes for men. The strength of the relationship across all outcome measures does, however, argue for further investigation of this variable with samples of male offenders.

In contrast to the results seen for men, the parental involvement and self-efficacy scales were seen to operate in a protective fashion for women at the twelve-month time period. Research seeking to identify the best practices for working with women offenders has identified parenting as an important issue for women offenders (Bloom et al, 2003). Identification of this relationship as a potential protective factor for offending mothers supports the argument that a focus on parenting support for these women may provide a new avenue for reduction of recidivism. Moreover, proponents of strengths-based models argue that increases in self-efficacy

are paramount to the success of offenders in the community (Blanchette & Brown, 2006). This research supports a strength-based approach for women offenders.

Co-Occurring Risks/Needs/Strengths

The factor analysis of outcome-related scales revealed a two-factor solution for men and a three-factor solution for women. The results supported the Canadian Model of risk prediction for men. The first of the two factors for men included employment/financial, antisocial friends, and both current and historical measures of substance abuse. The second factor included criminal history, antisocial attitudes, and anger. The addition of the anger variable in this factor underscores the value of further investigation regarding its importance for offending men. As noted earlier, practitioners have long recognized the importance of treating anger (Van Voorhis et al., 2009). Overall, however, these results support continued use of the Canadian Model in risk prediction instruments for male offenders.

The three-factor solution for women told a different story. Although the third factor in the model was comprised entirely of antisocial attitudes and criminal history, the first two factors were more gender-responsive in nature. The first factor included physical and sexual abuse, current substance abuse, and parental stress. The second factor included education/employment, mental health history, and current psychotic symptoms. Although such results do not replicate exactly the gendered pathways identified by Daly (1994) in her research, they do argue for the existence of different pathways for women to recidivism. These results support the inclusion of gender-responsive variables in risk assessments for women as part of a case management plan as well as their inclusion in correctional curricula.

Total Scales

The final question this research sought to address involved the predictive validity of gender-neutral and gender-responsive scales when combined separately to form a risk prediction model for each gender. The most predictive total scale for men contained only gender-neutral scales: criminal history, educational risk, employment/financial, antisocial friends, substance abuse history, and current substance abuse. These results reaffirm the use of gender-neutral variables in creating risk prediction instruments for male offenders. Clearly, as researchers have found in the past, the Canadian Model is appropriate for men.

The model with the highest degree of predictive validity for women included both gender-neutral and gender-responsive risk/needs scales as well as one gender-responsive strength. Specifically, the model for women included criminal history, antisocial attitudes, employment/financial, mental health history, current symptoms of psychosis, child abuse (survey), adult abuse (survey), parental stress (survey), and self-efficacy. Although the outcome measures of arrest & technical violations did not demonstrate the strengths desired, the combined measures of any failure and any offense-related failure had correlations and AUC's at strong, significant levels. This research provided clear support for the importance of gender-responsive risk/needs in the lives of women offenders.

One final analysis was included in examining the predictive validity of the scales and is worthy of note. Large quantities of empirical research have validated the use of gender-neutral risk assessments with women offenders. This research further supports those results albeit improvements in predictive validity can be made with the addition of gender-responsive variables. However, additional analyses examined the predictive validity of the total risk

assessment created for men with women as well as the total risk assessment created for women with men.

Results of these analyses indicated that while the model created for women was not predictive for men, the model created for men predicted for women. However, the model created for men when used to predict for women did not have the same level of predictive validity as the model created for women using scales created and designed with samples of women. Simply stated, inclusion of gender-responsive variables in the risk prediction instrument for women resulted in higher levels of predictive validity. Results such as these argue that gender-responsive risk assessment is imperative for women offenders. Furthermore, such results have implications for the treatment and case management of women offenders in community correctional facilities.

Implications

This research has replicated past studies supporting the predictive validity of traditional gender-neutral risk/needs measures for men and women. However, these data have also indicated that the "Big 4" do not function in the same manner for women as they do for men. These data demonstrated support for the inclusion of gender-responsive scales to improve the ability of risk assessments to predict for women. Such research has implications for practitioners in the field of corrections.

Men

This research has clearly provided support for the continued use of the Canadian Model of risk prediction with male offenders. Findings for the male offenders provided no surprises; support was found for past research in gender-neutral risk assessment. However, a failure to mention the prevalence of some of the gender-responsive variables for men would constitute an unacceptable omission, despite their failure to predict recidivism.

For purposes of case management/treatment, the Canadian Model argues that the most intensive treatment should be reserved for those with the highest levels of risk/needs (Andrews & Bonta, 2010). In compliance with this model researchers collapse risk scores into categories for identification of those with the highest level of need and to target those at highest risk for treatment. A discussion of the risk categories of gender-responsive variables found in the chi-square analyses in Chapter Five for men was therefore warranted.

Interview questions found that almost half of men reported moderate to high levels on the mental health history scale and one-third of men reported moderate to high levels of abuse on the childhood abuse interview scale. When the results of survey questions for child abuse (as opposed to interview questions) were examined the frequency for men in the moderate to high categories increased to half. While this research is exploratory in nature and the sample is too small to support external validity for these results they do argue that further identification of male offenders with mental health and abuse issues is important.

The Canadian Model includes a place for responding to mental health issues: the responsivity section of the model supports addressing these issues as important given their potential for acting as barriers to the treatment of risk/needs (Andrews & Bonta, 2010). In order to treat such issues, however, it is first necessary to determine that they exist. Previous research has noted that men are likely to underreport their experiences with abuse (Loncar et al., 2010). The WRNA scales were specifically designed to encourage reporting of sensitive topics. Results of the survey on child abuse support the importance of allowing offenders to disclose such personal issues in a safe and secure environment. Although this research did not find support for the relevance of mental health and abuse issues to risk prediction, identification and treatment of

such issues are important to the health and safety of male offenders and should therefore be identified and treated.

Women

This research supports the arguments of feminist criminologists that the risk/needs of women offenders are quantitatively different than those of men. Although not providing exact replications of prior research there are clear examples of gender-responsive factors pertinent to women offenders. Gender-responsive factors unique to women included abuse, substance abuse, and parental stress and employment/financial issues and mental health. It is noteworthy that this research did not find the combination of abuse, mental health, and substance abuse found in prior research (Covington, 2003). Still, it is clear that women experience higher levels of gender-responsive risk/needs that are relevant to their future offending.

One of the reasons for the gender-responsive movement involved the concern with over-classification of women offenders (Van Voorhis & Presser, 2001). Additionally, researchers seeking to identify the most effective means of treating female offenders have noted that equality is not the same as parity (Bloom et al., 2003). These researchers argued that to achieve parity it is necessary to provide women offenders with "…opportunities, programs, and services that are equivalent, but not identical, to those available to male offenders" (p. 84). Such an argument, combined with the identification of gender-responsive issues as related to recidivism perhaps supports a change to a new definition of risk for women and the modification of the risk paradigm.

Modification of the Risk Assessment Paradigm

Researchers have argued that failure to include gender-responsive variables in correctional risk assessments may result in egregious situations for women offenders (Van

Voorhis & Presser, 2001). Identification of certain gender-responsive risk/needs issues resulting from efforts to address such situations have resulted in a difficult dilemma for both researchers and practitioners. Specifically, researchers and practitioners have found themselves in the awkward position of questioning the ethics and appropriateness of elevating the risk level of women offenders based on issues such as mental health, abuse, and parental stress.

Although such a question is important it may be that the answer comes in the form of another question. Perhaps the more fitting question is whether it is more appropriate to recognize that risk represents a different construct for women offenders than it does for men. This research supports addressing such issues as part of a move to focus on a new model of assessment incorporating the idea of public health into the risk assessment approach.

An alternative paradigm that has already demonstrated preliminary success in some areas of corrections is the public health model. The public health model differs in its approach in a number of ways (Gabor, Welsh, & Antonowicz, 1996). In brief, the public health model considers crime to be a community health problem rather than a public order problem, seeks primary prevention through addressing risk factors, views crimes as a combination of causes rather than resulting strictly from offender motivation, and addresses crime systemically.

The public health model approach has seen promising results not just with reductions in areas such as improved mental health and decreases in disease but in lower rates of recidivism as well (Conklin, 2004). Gender-responsive programs fit well with the public health model and have demonstrated some success at reducing recidivism for female offenders. At the same time such programs address gender-responsive needs that are garnering more and more empirical support as important to recidivism reduction for women (Van Voorhis et al., 2010).

A recent evaluation of the *Moving On* program (Van Dieten & MacKenna, 2001), a gender-responsive, cognitive-behavioral treatment program for women offenders, indicated that program participants showed reduced rates of recidivism (Gehring et al., 2010). An examination of a gender-responsive substance abuse program for women also revealed support for the ability of such programs to reduce the recidivism of women offenders (Messina, Grella, Cartier, & Torres, 2010). In an era of diminishing funds and demands for evidence-based treatment, the results of such research support the inclusion of gender-responsive treatment for women offenders. This research further supports these arguments that addressing gender-responsive risk/needs in the lives of female offenders may reduce their likelihood of reoffending. Such an argument may provide the means by which to offer much-needed services to offenders in a climate where having at least the appearance of being tough on crime may be a mandate for treatment.

REFERENCES

Abram, K. M., & Teplin, L. A. (1991). Co-occurring disorders among mentally ill jail detainees: Implications for public policy. *American Psychologist, 46*(10), 1036-1045.

Adams, D., & Fisher, J. (1976). The effects of prison residents' community contacts on recidivism rates. *Corrective and Social Psychiatry and Journal of Behavior Technology Methods and Therapy, 22*, 21-27.

Ægisdóttir, S., White, M. J., Spengler, P. M., Maugherman, A. S., Anderson, L. A., Cook, R. S., et al. (2010). The meta-analysis of clinical judgement project: Fifty-six years of accumulated research on clinical versus statistical prediction. *The Counseling Psychologist 34(3)*, 341-382.

Agger, I. (1989). Sexual torture of political prisoners: An overview. *Journal of Traumatic Stress, 2*(3), 305-318.

Andrews, D. A. (1989). Recidivism is predictable and can be influenced: Using risk assessments to reduce recidivism. *Forum on Corrections Research, 1*(2), 11-18.

Andrews, D. A., & Bonta, J. (1995). *The Level of Service Inventory - Revised.* Toronto: Multi-Health Systems.

Andrews, D. A., & Bonta, J. (2006). *The psychology of criminal conduct* (3rd ed.). Cincinnati, OH: Anderson.

Andrews, D. A., & Bonta, J. (2010). Rehabilitating criminal justice policy and practice. *Psychology, Public Policy, & Law, 16*, 39-55.

Andrews, D. A., & Dowden, C. (2007, October). The risk-need-responsivity model of assessment and human service in prevention and corrections: Crime-prevention jurisprudence. *Canadian Journal of Criminology and Criminal Justice*, 439-464.

Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior, 17*, 19-52.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2004). *The Level of Service/Case Management Inventory (LS/CMI).* Toronto: Multi-Health Systems.

Andrews, D. A., Bonta, J., & Wormith, S. J. (2006). The recent past and near future of risk and/or need assessment. *Crime and Delinquency, 52*(1), 7-27.

Andrews, D., & Dowden, C. (2006). Risk principle of case classification in correctional treatment: A meta-analytic investigation. *International Journal of Offender Therapy and Comparative Criminology, 50*(1), 88-100.

Andrews, D., & Dowden, C. (2007, October). The risk-need-responsivity model of assessment and human servicein prevention and corrections: Crime-prevention jurisprudence. *Canadian Journal of Criminology and Criminal Justice*, 439-464.

Andrews, D., Zinger, I., Hoge, R., Bonta, J., Gendreau, P., & Cullen, F. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology, 28*(3), 369-404.

Austin, J. (2001). Prisoner reentry: Current trends, practices, and issues. *Crime & Delinquency, 47*, 314.

Austin, J., & McGinnis, K. (2004). *Classification of high-risk and special management prisoners a national assessment of current practices.* Washington, DC: USDOJ: National Institute of Corrections.

Baer, J. S., Holt, C. S., & Lichtenstein, E. (1986). Self-efficacy and smoking reexamined: Construct validity and clinical utility. *Journal of Consulting and Clinical Psychology, 54*, 846-852.

Bagley, C., Wood, M., & Young, L. (1994). Victim to abuser: Mental health and behavioral sequels of child sexual abuse in a community survey of young adult males. *Child Abuse & Neglect, 18*(8), 683-697.

Bahr, S. J., Armstrong, A. H., Gibbs, B. G., Harris, P. E., & Fisher, J. K. (2005). The reentry process: How parolees adjust to release from prison. *Fathering, 3*(3), 243-265.

Bahr, S. J., Harris, L., Fisher, J. K., & Armstrong, A. H. (2010, October). Successful reentry: What differentiates successful and unsuccessful parolees? *International Journal of Offender Therapy and Comparative Criminology, 54*(5), 667-692.

Baldry, E., McDonnell, D., Maplestone, P., & Peeters, M. (2003-2004). Australian prisoners' post-release housing. *Current Issues in Criminal Justice, 15*(2), 155-169.

Bales, W. D., & Mears, D. P. (2008). Inmate social ties and the transition to society. *Journal of Research in Crime and Delinquency, 45*(3), 287-321.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Baron, S. W. (2004). General strain, street youth , and crime: A test of Agnew's revised theory. *Criminology, 42*(2), 457-483.

Bartholow, B. N., Doll, L. S., Joy, D., Douglas, J. M., Bolan, G., Harrison, J. S., et al. (1994). Emotional, behavioral and HIV risks associated with sexual abuse among adult homosexual and bisexual men. *Child Abuse & Neglect, 18*(9), 747-761.

Baumer, E. P., O'Donnell, I., & Hughes, N. (2009). Thee porous prison. *The Prison Journal, 89*(1), 119-126.

Bauserman, R., & Rind, B. (1997). Psychological correlates of male child and adolescent sexual experiences with adults: A review of the nonclinical literature. *Archives of Sexual Behavior, 26*(2), 105-141.

Beck, A. J., & Harrison, P. M. (2009). *Sexual victimization in prisons and jails reported by inmates, 2008-2009.* Washington, DC: Bureau of Justice Statistics.

Belfrage, H., Fransson, G., & Strand, S. (2000). Prediction of violence using the HCR-20: A prospective study in two maximum security correctional institutions. *Journal of Forensic Psychiatry, 11*, 167-175.

Belknap, J. (1996). Access to programs and health care for incarcerated women. *Federal Probation, 60*, 34-39.

Belknap, J. (2007). *The Invisible Woman: Gender, Crime, and Justice* (3rd ed.). Belmont, CA: Thomson Wadsworth Publishing Company.

Belknap, J., & Holsinger, K. (2006). The gendered nature of risk factors for delinquency. *Feminist Criminology, 1*, 48-71.

Benda, B. B. (2005). Gender differences in life-course theory of recidivism. *International Journal of Offender Therapy and Comparative Criminology, 49*(3), 325-342.

Benda, B. B., Harm, N. J., & Toombs, N. J. (2005). Survival analysis of recidivism of male and female boot camp graduates using life-course theory. *Journal of Offender Rehabilitation, 40*(3/4), 87-113.

Benda, B., Toombs, N., & Peacock, M. (2003). Discriminators of types of recidivism among boot camp graduates in a five-year follow-up study. *Journal of Criminal Justice, 31*, 539-551.

Benda, B., Toombs, N., & Peacock, M. (2006). Distinguishing graduates from dropouts and dismissals: Who fails boot camp? *Journal of Criminal Justice, 34*, 27-38.

Bernard, J. (1972). *The Future of Marriage.* New York: Bantum Books.

Bersani, B. E., Laub, J. H., & Nieuwbeerta, P. (2009). Marriage and desistance from crime in the Netherlands: Do gender and socio-historical context matter? *Journal of Quantitative Criminology, 25*(3), 3-24.

Blanchette, K., & Brown, S. L. (2006). *The assessment and treatment of women offenders: An integrative perspective.* New York: Wiley.

Blokland, A. J., & Nieuwbeerta, P. (2005). The effects of life circumstances on longitudinal trajectories. *Criminology, 43*, 1203-1240.

Bloom, B., Owen, B., & Covington, S. (2003). *Gender responsive strategies: Research, practice, and guiding principles for women offenders.* Washington, DC: USDOJ, National Institute of Corrections.

Bloom, B., Owen, B., & Covington, S. (2003). *Gender responsive strategies: Research, practice, and guiding principles for women offenders.* Washington, DC: National Institute of Corrections.

Bonta, J. (1989). Native inmates: Institutional responses, risks, and needs. *Criminology, 31*, 49-62.

Bonta, J. (1996). Risk-needs assessment and treatment. In A. T. Harland, *Choosing correctional options that work* (pp. 18-32). Thousand Oaks, CA: Sage Publications, Inc.

Bonta, J. (2002). Offender risk assessment: Guidelines for selection and use. *Criminal Justice and Behavior 29*, 355-379.

Bonta, J., & Motiuk, L. L. (1990). Classification to correctional halfway houses: A quasi-experimental evaluation. *Criminology, 28*, 497-506.

Bonta, J., & Motiuk, L. L. (1992). Inmate Classification. *Journal of Criminal Justice, 20*, 343-353.

Bonta, J., Hanson, K., & Law, M. (1998). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychology Bulletin, 123*, 123-142.

Bonta, J., Harman, W. G., Hann, R. G., & Cormier, R. B. (1996). The prediction of recidivism among federally sentenced offenders: A re-validation of the SIR scale. *Canadian Journal of Criminology*(38), 61-79.

Bonta, J., Pang, B., & Wallace-Capretta, S. (1995). Predictors of recidivism among incarcerated female offenders. *The Prison Journal, 75*(3), 277-294.

Boudewyn, A. C., & Liem, J. H. (1995). Childhood sexual abuse as a precursor to depression and self-destructive behavior in adulthood. *Journal of Traumatic Stress, 8*, 445-459.

Brannon, J. M., Larson, B., & Doggett, M. (1989). The extent and origins of sexual molestation and abuse among incarcerated adolescent males. *International Journal of Offender Therapy and Comparative Criminology*, 161-172.

Bremner, J. D., Southwick, S. M., Johnson, D. R., Yehuda, R., & Charney, D. S. (1993). Childhood physical abuse and combatrelated posttraumatic stress disorder in Vietnam veterans. *American Journal of Psychiatry, 150*(2), 235–239.

Brennan, T., Dieterich, W., & Oliver, W. (2004). *The COMPAS scales: Normative data for males and females. Community and incarcerated samples.* Traverse City: Northpointe Institute for Public Management.

Brennan, T., Dietrich, W., & Ehret, B. (2009). Evaluating the predictive validity of the COMPAS risk and needs assessment system. *Criminal Justice and Behavior, 36*(1), 26-40.

Brenner, E. (2003). *Fathers in prison: A review of the data.* Philadelphia: National Center on Fathers and Families.

Brewster, D. R., & Sharp, S. F. (2002). Educational programs and recidivism in Oklahoma. *The Prison Journal, 82*(3), 314-334.

Briere, J., & Runtz, M. (1987). Post sexual abuse trauma. *Journal of Interpersonal Violence, 2*(4), 367–379.

Briere, J., & Runtz, M. (1990). Differential adult symptomology associated with three types of child abuse histories . *Child Abuse & Neglect, 14*, 357-364.

Briere, J., & Runtz, M. (2003). Childhood sexual abuse: Long-term sequelae and implications for psychological assessment. *Journal of Interpersonal Violence, 8*, 312-330.

Brown, G. R., & Anderson, B. (1991, January). Psychiatric morbidity in adult inpatients with childhood histories of sexual and physical abuse. *The American Journal of Psychiatry, 148*(1), 55-61.

Brown, J. D. (1998). Statistics Corner: Questions and answers about language testing statistics: Reliability and cloze test length. *JALT Testing & Evaluation SIG Newsletter, 2*(2), 19-22.

Brown, M., & Bloom, B. (2009). Reentry and renegotiating motherhood: Maternal identity and success on parole. *Crime & Delinquency, 55*(2), 313-336.

Brown, S. L., St. Amand, M. E., & Zamble, E. (2009). The dynamic prediction of criminal recidivism . *Law and Human Behavior, 33*, 25-45.

Bryer, J. B., Nelson, B. A., Miller, J. B., & Krol, P. A. (1987). Childhood sexual and physical abuse as factors in adult psychiatric illness. *American Journal of Psychiatry, 144*, 1426-1430.

Bui, H. N., & Morash, M. (2010). The impact of network relationships, prison Experiences, and internal transformation on women's success after prison release. *Journal of Offender Rehabilitation, 49*, 1-22.

Burdon, W. M., Messina, N., & Prendergast, M. L. (2004). The California treatment initiative. *The Prison Journal, 84*(1), 61-80.

Bureau of Justice Statistics. (1997). *Mental health and treatment of inmates and probationers.* Washington, DC: United States Department of Justice.

Bureau of Justice Statistics. (1999). *Women offenders.* Washington, DC: United States Department of Justice.

Bureau of Justice Statistics. (2006). *Women offenders.* Washington, DC: United States Department of Justice.

Bureau of Justice Statistics. (2009). *Probation and Parole in the United States, 2008.* Washington, DC: Department of Justice.

Burke, L. O., & Vivian, J. E. (2001). The effect of college programming on recidivism rates at the Hampden County house of correction. *Journal of Correctional Education, 52*(4), 160-162.

Capaldi, D. M., Kim, H. K., & Owen, L. D. (2008). Romantic partners' influence on men's likelihood of arrest in early adulthood. *Criminology, 46*, 267-299.

Carlson, B., & Cervera, N. (1991). Inmates and their families. *Criminal Justice and Behavior, 18*, 318-331.

Carlson, E. S. (2006). The hidden prevalence of male sexual assault during war: Observations on blunt trauma to the male genitals. *The British Journal of Criminology, 46*(1), 16-25.

Carp, S. V., & Schade, L. (1992, August). Tailoring facility programming to suit female offender's needs. *Corrections Today*, 154-158.

Case, P., & Fasenfest, D. (2004). Expectations for opportunities following prison education: A discussion of race and gender. *Journal of Correctional Education, 55*, 24-39.

Cecil, D. K., Drapkin, D. A., MacKenzie, D. L., & Hickman, L. J. (2000). The effectiveness of adult basic education and life-skills programs in reducing recidivism. *Journal of Correctional Education, 51*(2), 207-226.

Chandler, S. M., & Kassebaum, G. (1994). Drug-alcohol dependence of women prisoners in Hawaii. *Affilia, 9*, 157-170.

Chappell, C. A. (2004). Post-secondary correctional education and recidivism. *Journal of Correctional Education, 55*(2), 148-169.

Chesney-Lind, M. (1997). *The female offender: Girls, women, and crime.* Thousand Oaks: Sage.

Chesney-Lind, M. (2000). What to do about girls? Thinking about programs for young women. In McMahon, *Assessment to Assistance.* Lanham: American Correctional Association.

Chesney-Lind, M., & Rodriguez, N. (1983). Women under lock and key. *The Prison Journal*(63), 47-65.

Chesney-Lind, M., & Shelden, R. (1992). *Girls, delinquency, and juvenile justice.* Pacific Grove: Brooks/Grove.

Chesney-Lind, M., & Shelden, R. (2004). *Girls, delinquency, and justice.* Pacific Grove: Brooks/Cole.

Clear, T., Rose, D. R., & Ryder, J. A. (2001). Incarceration and the community. *Crime & Delinquency, 47*(3), 335-351.

Condiotte, M. M., & Lichtenstein, E. (1981). Self-efficacy and relapse in smoking cessation. *Journal of Consulting and Clinical Psychology, 49*, 648-658.

Conklin, T. J. (2004, October). A public health model of care for corrections. *Corrections Today*, 120-122 & 141.

Coulson, G., Ilacqua, G., Nutbrown, V., Giulekas, D., & Cudjoe, F. (1996). Predictive utility of the LSI for incarcerated female offenders. *Criminal Justice and Behavior, 23*, 427-439.

Couturier, L. (1995, December). Inmates benefit from family services program. *Corrections Today*, 100-107.

Covington, S. (1998). The relational theory of women's psychological development: Implications for the criminal justice system. In R. T. Zaplin (Ed.), *Female offenders: Critical perspectives and effective interventions* (pp. 113-128). Gaithersburg, MD: Aspen.

Covington, S. (2000). Helping women recover: Gender-specific treatment for substance abuse in community corrections. In McMahon, *Assessment to assistance: Programs for women in community corrections* (pp. 171-233). Lanham, MD: American Correctional Association.

Covington, S. (2003). A woman's journey home: Challenges for female ex-offenders. In J. Travis, & M. Waul, *Prisoners Once Removed: The Impact of Incarceration and Reentry on Children, Families, and Communities* (pp. 67-104). Washington, DC: Urban Institue.

Covington, S., & Bloom, B. (2006). Gender-responsive treatment and services in correctional settings. In E. L. (Ed.), *Inside and out: Women, prison, and therapy* (pp. 9-33). Binghamton, NY: Haworth Press.

Curulla, V. L. (1991). Aggression replacement training in the community for adult learning-disabled offenders. *Unpublished Doctoral Dissertation*.

Daly, K. (1992). Women's pathways to felony court: Feminist theories of lawbreaking and problems of representation. *Southern California Review of Law and Women's Studies, 2*, 11-52.

Daly, K. (1994). *Gender, Crime, and Punishment.* New Haven: Yale University Press.

Dembo, R., Dertke, M., LaVoie, L., Borders, S., Washburn, M., & Schmeidler, J. (1987). Physical abuse, sexual victimization and illicit drug use: A structural analysis among high risk adolescents. *Journal of Adolescence, 10*, 13-33.

Denov, M. S. (2004, October). The long-term effects of child sexual abuse by female perpetrators: A qualitative study of male and female victims. *Journal of Interpersonal Violence, 19*(10), 1137-1156.

DiClemente, C. C. (1981). Self-efficacy and smoking cessation maintenance. *Cognitive Therapy and Research, 5*, 175-187.

Dimock, P. T. (1988). Adult males sexually abused as children: Characteristics and implications for treatment. *Journal of Interpersonal Violence, 3*(2), 203-221.

Dodge, M., & Pogrebin, M. R. (2001). Collateral costs of imprisonment for women: Complications of reintegration. *The Prison Journal, 81*(1), 42-54.

Donnellan, M. K., Trzesniewski, R., Robins, R., Moffit, T., & Caspi, A. (2005). Low self-esteem is related to aggression, antisocial behavior, and delinquency. *Psychological Science, 16*(4), 328-335.

Dowden, C., & Andrews, D. (1999). What works for female offenders: A meta-analytic review. *Forum on Corrections Research, 11*, 18-21.

Dowden, C., Blanchette, K., & Serin, R. (1999). *Anger management programming for federal male inmates.* Ottawa, Canada: Research branch, Correctional Service of Canada.

Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Dong, M., et al. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine, 28*(5), 430-438.

Dumond, R. W. (1992). The sexual assault of male inmates in incarcerated settings. *International Journal of the Sociology of Law, 20*(2), 135-157.

Eamon, K. C., Munchua, M. M., & Reddon, J. R. (2001). Effectiveness of an anger management program for women inmates. *Journal of Offender Rehabilitation, 34*(1), 45-60.

Elliott, D. M., & Briere, J. (1992). The sexually abused boy: Problems in manhood . *Medical Aspects of Human Sexuality, 26*, 68-71.

Elliott, D. M., & Briere, J. (1995). Posttraumatic stress associated with delayed recall of sexual abuse: A general population study. *Journal of Traumatic Stress, 8*, 629-647.

Ely, F. (2004). An analysis of anger, anxiety, and self-esteem factors in relation to severity of crimes in male criminal offenders. *Unpublished Doctoral Dissertation*.

Fabelo, T. (2002). The impact of prison education on community reintegration of inmates. *Journal of Correctional Education, 53*(3), 106-110.

Fagan, A. A. (2005). The relationship between adolescent physical abuse and criminal offending: Support for an enduring and generalized cycle of violence. *Journal of Family Violence, 20*(5), 279-290.

Ferraro, K., & Moe, A. (2003). Mothering, crime, and incarceration. *Journal of Contemporary Ethnography, 32*, 9-40.

Finkelhor, D., Hotaling, G., Lewis, I. A., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: Prevalence, characteristics, and risk factors. *Child Abuse & Neglect, 14*, 19-28.

Finn, P. (1998). *The Delaware Department of Correction life skills program.* Washington, DC: United States Department of Justice.

Flores, A., Lowenkamp, C., Smith, P., & Latessa, E. (2006). Validating the Level of Service Inventory–Revised on a sample of federal probationers. *Federal Probation, 70*(2), 44-49.

Folsom, J., & Atkinson, J. L. (2007). The generalizability of the LSI-R and the CAT to the prediction of recidivism in female offenders. *Criminal Justice and Behavior, 34*(8), 1044-1056.

Forsythe, L., & Adams, K. (2009). Mental health, abuse, drug use and crime: Does gender matter? *Australian Institute of Criminology, 384*, 1-6.

Fradella, H. F. (2003). Faith, delusions, and death: A case study of the death of a psychotic inmateas a call for reform. *Journal of Contemporary Criminal Justice, 19*(1), 98-113.

Friestad, C., & Hanse, I. L. (2005). Mental health problems among prison inmates: The effect of welfare deficiencies, drug use and self-efficacy. *Journal of Scandinavian Studies in Criminology and Crime Prevention, 6*, 183-196.

Gabor, T., Welsh, B., & Antonowicz, D. H. (1996). The role of the health community in the prevention of criminal behavior. *Canadian Journal of Criminology and Criminal Justice*, 317-33.

Gehring, K., Van Voorhis, P., & Bell, V. (2010). "What works" for female probationers? An evaluation of the Moving On program. *Women, Girls, and Criminal Justice, 11*(1), 6-10.

Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works? *Criminology, 34*, 575-607.

Glaser, D. (1964). *The Effectiveness of a Prison and Parole System.* Indianapolis, IN: Bobbs, Merrill.

Godding, P. R., & Glasgow, R. E. (1985). Self-efficacy and outcome expectancy as predictors of controlled smoking status. *Cognitive Therapy and Research, 9*, 583-590.

Goldberg, L. R. (1970). Man versus model of man: A rationale, plus some evidence, for a method of improving on clinical inferences. *Psychological Bulletin (73)6*, 422-432.

Goldstein, A. P., Glick, B., & Gibbs, J. C. (1998). *Aggression Replacement Training.* Champaign, IL: Research Press.

Gordon, H. R., & Weldon, B. (2003). The impact of career and technical education programs on adult offenders. *The Journal of Correctional Education, 54*(4), 200-209.

Grove, W. M., & Meehl, P. E. (1996). Compararative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law 2(9)*, 293-323.

Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment 12(1)*, 19-30.

Gunnison, E., & McCartan, L. M. (2007). The Role of Different Developmental Experiences. *Women & Criminal Justice, 16*(3), 43-65.

Gunter, T. D., Philibert, R., & Hollenbeck, N. (2009). Medical and psychiatric problems among men and women in a community corrections residential setting. *Behavioral Sciences and the Law, 27*, 695-711.

Gwaltney, C. J., Shiffman, S., Balabanis, M. H., & Paty, J. A. (2000). Dynamic self-efficacy and outcome expectancies. *Journal of Abnormal Psychology, 114*(4), 661-675.

Hairston, C. F. (1990). Family ties during imprisonment: Do they influence future criminal activity? *Federal Probation, 52*(1), 48-52.

Hairston, C. F. (2003). Prisoners and their families: Parenting issues during incarceration. In J. Travis, & M. Waul (Eds.), *Prisoners once removed: The impact of incarceration and reentry on children, families, and communities* (pp. 259-282). Washington, DC: The Urban Institute Press.

Hairston, C. F., Rollin, J., & Jo, H. (2004). Family connections during imprisonment and prisoners' community reentry. *Children, Families, and the Criminal Justice System*.

Hanley, D. (2006). Appropriate Services. *Journal of Offender Rehabilitation, 42*(4), 1-22.

Harlow, W. (1999). *Prior Abuse Reported by Inmates and Probationers.* Washington, DC: Bureau of Justice Statistics.

Harm, N. J., & Phillips, S. D. (2001). You can't go home again: Women and criminal recidivism. *Journal of Offender Rehabilitation, 32*(3), 3-21.

Haulard, E. R. (2001). Adult education. *Journal of Correctional Education, 52*(4), 157-159.

Heilbrun, K., Dematteo, D., Fretz, R., Erickson, J., Yasuhara, K., & Anumba, N. (2008, November). How "specific" are gender-specific rehabilitation needs? An empirical analysis. *Criminal Justice and Behavior, 35*(11), 1382-1397.

Herd, N., Borland, R., & Hyland, A. (2009). Predictors of smoking relapse by duration of abstinence: findings from the International Tobacco Control (ITC) Four Country Survey. *Addiction, 104*, 2088-2099.

Herman, J. L., Perry, C., & van der Kolk, B. (1989). Childhood trauma in borderline personality disorder . *American Journal of Psychiatry, 146*(4), 490-495.

Hoffman, P. B. (1982). Females, recidivism, and salient factor score: A research note. *Journal of Criminal Justice*, 121-125.

Hoffman, P. B. (1983). Screening for risk: A revised salient factor score (SFS 81). *Journal of Criminal Justice, 11*, 539-47.

Hoffman, P. B. (1994). Twenty years of operational use of a risk prediction instrument: The United States parole commission's salient factor score. *Journal of Criminal Justice, 22*(6), 477-494.

Hoffman, P. B., & Adelberg, S. (1980). The salient factor score: A nontechnical overview. *Federal Probation, 44*, 44-53.

Hoffman, P. B., & Beck, J. L. (1974). Parole Decision-making: A salient factor score. *Journal of Criminal Justice, 2*, 195-206.

Hoffman, P. B., & Beck, J. L. (1976). Salient factor score validation--A 1972 release cohort. *Journal of Criminal Justice, 4*, 69-76.

Hoffman, P. B., & Beck, J. L. (1980). Revalidating the salient factor score: A research note. *Journal of Criminal Justice, 8*, 185-188.

Hoffman, P. B., & Beck, J. L. (1985). Recidivism among released federal prisoners: Salient factor score and five year follo-up. *Criminal Justice and Behavior, 12*, 501-507.

Hoffman, P. B., & Stone-Meierhoefer, B. S. (1979). Post release arrest experiences of federal prisoners. *Journal of Criminal Justice, 13*, 117-129.

Hoffman, P. B., Stone-Meierhoefer, B. S., & Beck, J. L. (1978). Salient factor score and releasee behavior: Three validation samples. *Law and Human Behavior, 2*, 47-63.

Hollin, C. R., & Palmer, E. J. (2003). Level of Service Inventory-Revised profiles of violent and nonviolent prisoners. *Journal of Interpersonal Violence, 18*(9), 1075-1086.

Holmes, W. C., & Slap, G. B. (1998). Sexual abuse of boys: Definition, prevalence, correlates, sequelae, and management. *Journal of the American Medical Association, 280*, 1855-1862.

Holsinger, A. M., Lowenkamp, C., & Latessa, E. J. (2006). Exploring the validity of the Level of Service Inventory-Revised with Native American offenders. *Journal of Criminal Justice, 34*, 331-337.

Holt, N., & Miller, D. (1972). *Explorations in inmate-family relationships.* Sacramento: California Department of Corrections.

Holtfreter, K., & Cupp, R. (2007). Gender and risk assessment: The empirical status of the LSI-R for women. *Journal of Contemporary Criminal Justice, 23*, 363-382.

Holtfreter, K., Reisig, M. D., & Morash, M. (2004). Poverty, state capital, and recidivism among women offenders. *Criminology & Public Policy, 3*, 185-208.

Homer, E. L. (1979, March). Inmate family ties: Desirable but difficult. *Federal Probation, 43*(1), 47-52.

Horney, J., Osgood, D. W., & Marshal, I. H. (1995). Criminal careers in the short-term: intra-individual variability in crime and its relation to local life circumstances. *American Sociological Review, 60*(5), 655-673.

Houck, K. D., & Loper, A. B. (2002). The relationship of parenting stress to adjustment among mothers in prison. *American Journal of Orthopsychiatry, 72*, 548-558.

Howser, J., Grossman, J., & MacDonald, D. (1983). Impact of family reunion program on institutional discipline. *Journal of Offender Counseling, Services, and Rehabilitation, 8*, 27-36.

Hubbard, D. J., & Pealer, J. (2009). The importance of responsivity factors in predicting reductions in antisocial attitudes and cognitive distortions among adult male offenders. *The Prison Journal, 89*(1), 79-98.

Huebner, B. M., DeJong, C., & Cobbina, J. (2010). Women coming home. *Justice Quarterly, 27*(2), 225-254.

Hull, K. A., Forrester, S., Brown, J., Jobe, D., & McCullen, C. (2000). Analysis of recidivism rates for participants of the academic/vocational/transition education programs offered by the Virginia Department of Correctional Education. *Journal of Correctional Education, 51*(2), 256-261.

Jacobson, A., & Herald, C. (1990). The relevance of childhood sexual abuse to adult psychiatric inpatient care. *Hospital and Community Psychiatry, 41*, 154-158.

James, D. J., & Glaze, L. E. (2006). *Mental health problems of prison and jail inmates.* Washington, DC: Bureau of Justice Statistics.

Janus, M. J. (1985). Selective incapacitation: Have we tried it? Does it work. *Journal of Criminal Justice, 13*, 117-129.

Jensen, E. L., & Reed, G. E. (2007). Adult Correctional Education Programs. *Journal of Offender Rehabilitation, 44*(1), 81-98.

Johnson, H. (2004). *Key findings from the drug use careers of female offenders study.* Canberra: Australian Institute of Criminology.

Kaiser, M. (2010, August). Correctional education, because it works. *Corrections Today*, 18-20.

Kendall-Tackett, K. A., & Simon, A. F. (1992). A comparison of the abuse experiences of male and female adults molested as children. *Journal of Family Violence, 7*, 57-62.

Kilpatrick, D. G., Saunders, B. E., & Smith, D. W. (2003). *Youth victimization prevalence and implications.* Washington, DC: U.S. Deparment of Justice, Office of Justice Programs.

Kim, D. Y., Joo, H. J., & McCarty, W. P. (2008). Risk assessment and classification of day reporting center clients. *Criminal Justice and Behavior, 35*(6), 792-812.

Kimerling, R., Rellini, A., Kelly, V., Judson, P. L., & Learman, L. A. (2002). Gender differences in victim and crime characteristics of sexual assaults. *Journal of Interpersonal Violence, 17*(5), 526-532.

King, R. D., Massoglia, M., & MacMillan, R. (2007). The context of marriage and crime: Gender, the propensity to marry, and offending in early adulthood. *Criminology*, 33-65.

Kiser, G. C. (1991, September). Female inmates and their families. *Federal Probation*, 56-63.

Knoll, J. (2006). A tale of two crises: Mental health treatment in corrections. *Journal of Dual Diagnoses, 3*(1), 7-21.

Kohan, M. J., Pothier, P., & Norbeck, J. S. (1987). Hospitalized children with history of sexual abuse: Incidence and care issues. *American Journal of Orthopsychiatry, 57*, 258-264.

Koons, B. A., Burrow, J. D., Morash, M., & Bynum, T. (1997). Expert and offender perceptions of program elements linked to successful outcomes for incarcerated women. *Crime & Delinquency, 43*, 515-532.

Kroner, D. G., & Mills, J. F. (2001). The accuracy of five risk appraisal instruments in predicting institutional misconduct and new convictions. *Criminal Justice and Behavior, 28*, 471-489.

Krug, R. S. (1989). Adult male report of childhood sexual abuse by mothers: Case descriptions, motivations, and long-term consequences. *Child Abuse & Neglect, 13*, 111-119.

La Vigne, N. G., Naser, R. L., Brooks, L. E., & Castro, J. L. (2005, November). Examining the effect of incarceration and in-prison family contact on prisoners' family relationships. *Journal of Contemporary Criminal Justice , 21*(4), 314-335.

Lamb, H. R., Weinberger, L. E., & Gross, B. H. (1999). Community treatment of severely mentally ill offenders under the jurisdiction of the criminal justice system: A Review. *Psychiatric Services, 50*(7), 907-913.

Landenberger, N. A., & Lipsey, M. W. (2005). The positive effects of cognitive-behavioral programs for offenders. *Journal of Experimental Criminology, 1*, 451-476.

Langan, N. P., & Pelissier, B. (2001). Gender differences among prisoners in drug treatment. *Journal of Substance Abuse, 13*, 291-301.

Lanier, C. S. (1993). Affective states of fathers in prison. *Justice Quarterly, 10*, 49-56.

Lanier, C. S., & Fisher, G. (1990). A prisoners' parenting center (PPC): A promising resource strategy for incarcerated fathers. *Journal of Correctional Education, 44*(4), 158-165.

Laub, J. H., & Sampson, R. J. (1993). Turning points in the life course: Why change matters to the study of crime. *Criminology*, 301-325.

Laub, J. H., & Sampson, R. J. (2003). *Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70.* Cambridge: Harvard University Press.

Laub, J. H., Nagin, D. S., & Sampson, R. J. (1998). Trajectories of change in criminal offending: Good marriages and the desistance process. *American Sociological Review, 63*(2), 225-238.

Leverentz, A. M. (2006). *People, places, and things: The social process of reentry for for female ex-offenders.* Washington, DC: Department of Justice.

Levitan, R. D., Parikh, S. V., Hegadoren, K. M., Adams, M., Kennedy, S. H., & Goering, P. N. (1998). Major depression in individuals with a history of childhood physical or sexual abuse: Relationship to neurovegetative features, mania, and gender. *American Journal of Psychiatry, 155*, 1746-1752.

Listwan, S. J., Van Voorhis, P., & Ritchey, P. N. (2007). Personality, criminal behavior, and risk assessment. *Criminal Justice and Behavior, 34*(1), 60-75.

Listwan, S., Sperber, K., Spruance, L., & Van Voorhis, P. (2004). Anxiety in correctional settings: It's time for another look. *Federal Probation, 68*(1), 27-31.

Loeb, S. J., & Steffensmeier, D. (2006). Older male prisoners: Health status, self-efficacy beliefs, and health-promoting behaviors. *Journal of Correctional Health Care, 12*(4), 269-278.

Loncar, M., Henigsberg, N., & Hrabac, P. (2010). Mental health consequences in men exposed to sexual abuse during the war in Croatia and Bosnia. *Journal of Interpersonal Violence, 25*(2), 191-203.

Longo, R. E. (1982). Sexual learning and experience among adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology, 26*, 235-241.

Loucks, A. D. (1995). Criminal behavior, violent behavior, and prison maladjustment in federal female offenders. *Unpublished doctoral thesis*. Ontario, Canada: Queen's University.

Loucks, A. D., & Zamble, E. (n.d.). Predictors of criminal behavior and prison misconduct in serious female offenders.

Loucks, A., & Zamble, E. (1999). Predictors of recidivism in serious female offenders: Canada searches for predictors common to both men and women. *Corrections Today, 61*, 26-31.

Lovell, D., Gagliardi, G. J., & Peterson, P. D. (2002). Recidivism and use of services among persons with mental illness after release from prison. *Psychiatric Services, 53*(10), 1290-1296.

Lowenkamp, C. T., & Latessa, E. J. (2002). *Evaluation of Ohio's community based correctional facilities and halfway house programs.* Cincinnati: University of Cincinnati.

Lowenkamp, C., Holsinger, A. M., Brusman-Lovins, L., & Latessa, E. J. (2004). Assessing the Inter-Rater Agreement of the Level of Service Inventory – Revised. *Federal Probation, 63*(3), 34-38.

Lowenkamp, C., Holsinger, A., & Latessa, E. J. (2001). Risk/Need assessment, offender classification, and the role of childhood abuse. *Criminal Justice and Behavior, 28*(5), 545-563.

Loza, W., & Loza-Fanous, A. (1999, October). Anger and prediction of violent and nonviolent offenders' recidivism. *Journal of Interpersonal Violence, 14*(10), 1014-1029.

Loza, W., MacTavish, A., & Loza-Fanous, A. (2007, September). A nine-year follow-up study on the predictive validity of the self-appraisal questionnaire for predicting violent and nonviolent recidivism. *Journal of Interpersonal Violence, 22*(9), 1144-1155.

MacKenzie, D. L., & Li, S. D. (2002, August). The impact of formal and informal social controls on the criminal activities of probationers. *Journal of Research in Crime and Delinquency, 39*(3), 243-276.

MacKenzie, D. L., Bierie, D., & Mitchell, O. (2007). An experimental study of a therapeutic boot camp. *Journal of Experimental Criminology, 3*, 221-246.

Magletta, P. R., Diamond, P. M., Faust, E., Daggett, D. M., & Camp, S. D. (2009). Estimating the mental illness component of service need in corrections: Results from the mental health prevalence project. *Criminal Justice and Behavior, 36*(3), 229-344.

Makarios, M. D. (2007). Race, abuse, and female criminal violence. *Feminist Criminology, 2*(2), 100-116.

Makarios, M., Steiner, B., & Travis III, L. F. (2010). Examining the predictors of recidivism among men and women released from prison in Ohio. *Criminal Justice and Behavior, 37*(12), 1377-1391.

Malik-Kane, K., & Visher, C. A. (2008). *Health and prisoner reentry: How physical, mental, and substance abuse conditions shape the process of reintegration.* Washington, DC: The Urban Institute.

Manchak, S. M., Skeem, J. L., Douglas, K. S., & Siranosian, M. (2009). Does gender moderate the predictive validity of the Level of Service Inventory–Revised (LSI-R) for serious violent offenders? *Criminal Justice and Behavior, 36*, 425-442.

Manderscheid, R. W., Gravesande, A., & Goldstrom, I. D. (2004). Growth of mental health services in state adult correctional facilities. 1988 to 2000. *Psychiatric Services, 55*(8), 869 – 872.

Marra, H. A., Shively, D. A., & Minaker, J. (1989). Community mental health and prisons: A model for constitutionally adequate care in correctional mental health. *Journal of Criminal Justice, 17*, 501-506.

Martinson, R. (1974). What works? Questions and answers about prison reform. *Public Interest, 10*, 22-54.

Mateyoke-Scrivner, A., Webster, J. M., Hiller, M. L., Staton, M., & Leukefeld, C. (2003). Criminal history, physical and mental health, substance abuse, and services use among incarcerated substance abusers. *Journal of Contemporary Criminal Justice, 19*(1), 82-97.

McClellan, D. S., Farabee, D., & Crouch, B. M. (1997, December). Early victimization, drug use, and criminality: A comparison of male and female prisoners. *Criminal Justice and Behavior, 24*(4), 455-476.

McCormack, A., Janus, M., & Burgess, A. W. (1986). Runaway youths and sexual victimization: Gender differences in an adolescent runaway population. *Child Abuse & Neglect, 10*, 387-395.

Meehl, P. E. (1957). When shall we use our heads instead of the formula? *Journal of Counseling Psychology 4*, 268-273.

Meehl, P. E. (1959). A comparison of clinicians with five statistical methods of identifying psychotic MMPI profiles. *Journal of Counseling Psychology 6(2)*, 102-109.

Meehl, P. E. (1986). Causes and effects of my disturbing little book. *Journal of Personality Assessment 50(3)*, 370-375.

Messina, N., Burdon, W., Hagopian, G., & Prendergast, M. (2006). Predictors of prison-based treatment outcomes: A comparison of men and women participants. *The American Journal of Drug and Acohol Abuse, 32*(1), 7-28.

Messina, N., Grella, C., Burdon, W., & Prendergast, M. (2007). Childhood adverse events and current traumatic distress. *Criminal Justice and Behavior, 34*(11), 1385-1401.

Messina, N., Grella, C., Cartier, J., & Torres, S. (2010). A randomized experimental study of gender-responsive substance abuse treatment for women in prison. *Journal of Substance Abuse Treatment, 38*, 97-107.

Mills, A., & Codd, H. (2008). Prisoners' families and offender management: Mobilizing social capital. *Probation Journal, 55*(1), 9-24.

Morash, M. (2010). *Women on probation and parole: A feminist critique of community programs and services.* Boston, MA: Northeastern University Press.

Morash, M., & Schram, P. J. (2002). *The prison experience: Special issues of women in prison. .* Prospect Heights: Waveland Press, Inc.

Morash, M., Bynum, T., & Koons, B. A. (1998). *Women offenders: Programming needs and promising approaches.* Washington, DC: USDOJ, National Institute of Justice.

Morgan, R. D., Steffan, J., Shaw, L. B., & Wilson, S. (2007). Needs for and barriers to correctional mental health services: Inmate perceptions. *Psychiatric Services, 58*(9), 1181-1186.

Mossman, D. (1994). Assessing predictions of violence: Being accurate about accuracy. *Journal of Consulting and Clinical Psychology, 62*(4), 783-792.

Myers, M. F. (1989). Men sexually assaulted as adults and sexually abused as boys. *Archives of Sexual Behavior, 18*, 203-215.

Nasjleti, M. (1980). Suffering in silence: The male incest victim. *Child Welfare, 59*, 269-275.

National Council on Crime and Delinquency. (2004). *Correctional Assessment and Intervention System.* Madison: National Council on Crime and Delinquency.

Nelson, M., Dees, P., & Allen, C. (1999). *The first month out: Post-incarceration experiences in New York city.* New York, NY: Vera Institute of Justice.

Nilsson, A. (2003). Living conditions, social exclusion and recidivism among prison inmates. *Journal of Scandinavian Studies in Criminology and Crime Prevention, 4*, 57-83.

Niven, S., & Stewart, D. (2005). *Resettlement Outcomes on Release from Prison in 2003, Home Office Research Findings.* London: Home Office.

Nuttall, J., Hollmen, L., & Staley, E. M. (2003). The effect of earning a GED on recidivism rates. *Journal of Correctional Education, 54*(3), 90-94.

O'Brien, P. (2001). "Just like baking a cake": Women describe the necessary ingredients for successful reentry after incarceration. *Families in Society: The Journal of Contemporary Human Services, 82*, 287-295.

O'Connell, D. (2003). Investigating latent trait and life course theories as predictors of recidivism among an offender sample. *Journal of Criminal Justice, 31*, 455-467.

O'Keefe, M. L., & Schnell, M. J. (2007). Offenders with mental illness in the correctional system. *Mental Health Issues in the Criminal Justice System*, 81-104.

Ogloff, J. R., Davis, M. R., Rivers, G., & Ross, S. (2007). *The identification of mental disorders in the criminal justice system.* Canberra: Australian Institute of Criminology.

Ohlin, L. E. (1951). *Selection for Parole.* New York, NY: Russell Sage.

Oosterhoff, P., Zwanikken, P., & Ketting, E. (2004). Sexual torture of men in Croatia and other conflict situations: An open secret. *Reproductive Health Matters, 12*(23), 68-77.

Owen, B. (1998). *In the Mix: Struggle and Survival in a Women's Prison.* New York, NY: State University of New York Press.

Pearl, N. (1998). Use of community-based social services to reduce recidivism in female parolees. *Women and Criminal Justice, 10*(1), 27-52.

Penn State Erie, The Behrend College's Center for Organizational Research & Evaluation (CORE). (2003). *Outcomes evaluation of the Long Distance Dads© Program.* Erie, Pennsylvania: Penn State Erie.

Peters, R. H., Strozier, A. L., Murrin, M. R., & Kearns, W. D. (1997). Treatment of substance abusing jail inmates: Examination of gender differences. *Journal of Substance Abuse Treatment, 14*, 339-349.

Petersilia, J. (2001). Prisoner reentry: Public safety and reintegration challenges. *The Prison Journa, 81*, 360-375.

Pierce, R., & Pierce, L. H. (1985). The sexually abuse child: A comparison of male and female victims. *Child Abuse & Neglect, 9*, 191-199.

Pollock, J. M. (1999). *Women, prison, and crime* (2nd ed.). Pacific Grove, CA: Brooks/Cole.

Pollock, J. M. (2002). Parenting programs in women's prisons. *Women & Criminal Justice, 14*(1), 131-154.

Porporino, E. J., & Motiuk, L. L. (1995). The prison careers of mentally disordered offenders. *International Journal of Law and Psychiatry, 18*, 29-44.

Prendergast, M., Wellisch, J., & Falkin, G. (1995). Assessment of services for substance-abusing women offenders and correctional settings. *Prison Journal, 75*, 240-256.

Pruesse, M., & Quinsey, V. L. (1977). The dangerousness of patients released from maximum security: A replication. *Journal of Psychiatry and Law, 47*, 293-299.

Putnam, F. W. (2003). Ten-year research update review: Child sexual abuse. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(3), 269-278.

Quinsey, V. L., Warenford, A., Pruesse, M., & Link, N. (1975). Released Oak Ridge patients: A follow-up study of review board discharges. *British Journal of Criminology, 15*, 264-270.

Raines, J. B., & Laws, G. T. (2009, Jul/Aug). Mental health court survey. *Criminal Law Bulletin, 45*(4), 627.

Reisig, M., Holtfreter, K., & Morash, M. (2006). Assessing recidivism risk across female pathways to crime. *Justice Quarterly, 23*(3), 384-407.

Rennison, C. M. (2003). *Intimate partner violence, 1993–2001.* Washington, D.C.: United States Department of Justice.

Rettinger, L. J., & Andrews, D. A. (2010). General risk and need, gender specificity, and the recidivism of female offenders. *Criminal Justice and Behavior, 37*(1), 29-46.

Rice, M. E., & Harris, G. T. (1995). Psychopathy, schizophrenia, alcohol abuse, and violent recidivism. *International Journal of Law and Psychiatry, 18*, 333-342.

Rice, M. E., & Harris, G. T. (2005). Comparing effect sizes in follow-up studies: ROC , Cohen's d and r. *Law and Human Behavior, 29*, 615-620.

Rice, M. E., Quinsey, V. L., & Houghton, R. (1990). Predicting treatment outcome and recidivism among patients in a maximum security token economy. *Behavioral Sciences and the Law, 8*, 313-326.

Richards, H., Kaplan, M., & Kafami, D. M. (2000). Program in treatment an experienced and expressed anger among incarcerated men. *Journal of Offender Rehabilitation, 30*(3/4), 35-58.

Richie, B. (1996). *The gendered entrapment of battered, black women.* London: Routledge.

Robertson, K., & Murachver, T. (2007). Correlates of partner violence for incarcerated women and men. *Journal of Interpersonal Violence, 22*, 639-655.

Ross, T., Khashu, A., & Wamsley, M. (2004). *Hard data on hard times: An empirical analysis of maternal incarceration, foster care, and visitation.* New York, NY: Vera Institute of Justice.

Rounds-Bryant, J. L., Flynn, P. M., & Craighead, L. W. (1997). Relationship between self-efficacy perceptions and in-treatment drug use among regular cocaine users. *American Journal of Drug and Alcohol Abuse, 23*, 383-395.

Rumgay, J. (2004). Scripts for safer survival: Pathways out of female crime. *The Howard Journal, 43*, 405-419.

Salisbury, E. J., Van Voorhis, P., & Spiropoulos, G. V. (2009). The predictive validity of a gender-responsive needs assessment: An exploratory study. *Crime & Delinquency*, 550-585.

Salisbury, E., & Van Voorhis, P. (2009). Gendered pathways: A quantitative investigation of women probationers' paths to incarceration. *Criminal Justice and Behavior, 36*(6), 541-566.

Sampson, R. J., & Laub, J. H. (1990, October). Crime and deviance over the life course: The salience of adult social bonds. *American Sociological Review, 55*(5), 609-627.

Sampson, R. J., & Laub, J. H. (1993). *Crime in the Making: Pathways and Turning Points through Life.* Cambridge: Harvard University Press.

Sampson, R. J., Laub, J. H., & Wimer, C. (2006). Does marriage reduce crime? A counterfactual approach to within-individual causal effects. *Criminology, 44*, 465-508.

Sansonnet-Hayden, H., Haley, G., Marriage, K., & Fine, S. (1987). Sexual abuse and psychopathology in hospitalized adolescents. *Journal of American Academy of Adolescent Psychiatry, 26*, 753-757.

Savolainen, J. (2009). Work, family and criminal desistance: Adult social bonds in a Nordic welfare state. *British Journal of Criminology, 49*, 285-304.

Schafer, N. (1994). Exploring the link between visits and parole success: A survey of prison visitors. *International Journal of Offender Therapy and Comparative Criminology, 38*, 17-32.

Schram, P. J., & Morash, M. (2002). Evaluation of a life skills program for women inmates in Michigan. *Journal of Offender Rehabilitation, 34*, 47-70.

Schram, P. J., Koons-Witt, B. A., Williams III, F. P., & McShane, M. D. (2006). Supervision strategies and approaches for female parolees. *Crime & Delinquency, 52*(3), 450-571.

Sedgely, N. H., Scott, C. E., Williams, N. A., & Derrick, F. W. (2010). Prison's dilemma: Do education and jobs programmes affects recdivism? *Economica, 77*, 497-517.

Shiffman, S., Balabanis, M. H., Paty, J. A., Engberg, J., Gwaltney, C. J., Liu, K. S., et al. (2000). Dynamic effects of self-efficacy on smoking lapse and relapse. *Health Psychology, 19*(4), 315-323.

Shover, N. (1996). *Great Pretenders: Pursuits and Careers of Persistent Thieves.* Boulder, Co.: Westview.

Silverman, A. B., Reinherz, H. Z., & Giaconia, R. (1996). The long-term sequelae of child and adolescent abuse: A longitudinal community study. *Child Abuse & Neglect, 20*, 709–723.

Simons, R. L., Steward, E., Gordon, L. C., Conger, R. D., & Elder, G. H. (2002). A test of life-course explanations for stability and change in antisocial behavior from adolescence to young adulthood. *Criminology, 40*, 401-434.

Simourd, D. J. (2004). Use of dynamic risk/need assessment instruments among long-term incarcerated offenders. *Criminal Justice and Behavior, 31*, 306-323.

Sitharthan, T., & Kavanagh, K. J. (1990). Role of self-efficacy in predicting outcomes from a programme for controlled drinking. *Drug and Alcohol Dependence, 27*, 87-94.

Slaght, E. (1999). Focusing on the family in the treatment of substance abusing criminal offenders. *Journal of Drug Education, 29*(1), 53-62.

Smith, P., Cullen, F. T., & Latessa, E. J. (2009). Can 14,737 women be wrong? A meta-analysis of the LSI-R and recidivism for female offenders. *Criminology & Public Policy, 8*(1), 183-208.

Soderstrom, I. R. (2007). Mental Illness in offender populations: prevalence, duty and implications. *Mental Health Issues in the Criminal Justice System*, 1-17.

Steadman, H. J., & Morrisey, J. P. (1982). Predicting violent behavior: A note on a cross-validation study. *Social Forces, 61*, 475-483.

Steffensmeier, D. J., & Allan, E. (1996). The Nature of Female Offending: Patterns and Explanations. In R. T. Zaplin, *Female Offenders: Critical Perspectives and Effective Interventions* (pp. 5-29). Gaithersburg, MD: Aspen.

Stephens, R. S., Wertz, J. S., & Roffman, R. A. (1993). Predictors of marijuana treatment outcomes: The role of self-efficacy. *Journal of Substance Abuse, 5*, 341-353.

Strand, S., Belfrage, H., Fransson, G., & Levander, S. (1999). Clinical and risk management factors in risk prediction of mentally disordered offenders - more imporant than historical data? *Legal and Criminological Psychology, 4*, 67-76.

Struckman-Johnson, C., Struckman-Johnson, D., Rucker, L., Bumby, K., & Donaldson, S. (1996). Sexual coercion reported by men and women in prison. *The Journal of Sex Research, 33*(1), 67-76.

Sturgeon, V. H., & Taylor, J. (1980). Report on the five year follow up study of mentally disorder sex offenders released from Atascadero State Mental Hospital in 1973. *Criminal Justice Journal, 4*, 31-63.

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2010). *The NSDUH Report: Parents on Probation or Parole.* Rockville, MD: SAMHSA.

Sullivan, C., & Wilkinson, R. A. (2003, June). Private family visits are a matter of logic. *Corrections Today, 65*(3), 18-19.

Sullivan, E., Mino, M., & Nelson, K. (2002). *Families as a resource in recovery from drug abuse: An evaluation of La Bodega de la Familia.* New York, NY: United States Department of Justice.

Tape, T. G. (2003). *Interpreting diagnostic tests: The area under the ROC curve.* Omaha, NE: University of Nebraska Medical Center.

Task Force on Federally Sentenced Woman. (1990). *Creating choices: The report of the Task Force on Federally Sentenced Women.* Ottawa, Ontario: Ministry of the Solicitor General Canada.

Taxman, F. (2004). *Brick walls facing reentering offenders.* Washington, DC: The Urban Institute.

Teichner, L. A. (2008). Unusual suspects: Recognizing and responding to female staff perpetrators of sexual misconduct in U.S. prisons. *Michigan Journal of Gender & Law, 14*(2), 259-298.

Teplin, L. A., Abram, K. M., & McClelland, G. M. (1994). Does psychiatric disorder predict violent crime among released jail detainees? A six-year longitudinal study. *American Psychologist, 49*, 335-342.

Thornton, D., Beech, A., & Marshall, W. L. (2004). Pretreatment self-esteem and posttreatment sexual recidivism. *International Journal of Offender Therapy and Comparative Criminology, 48*(5), 587-599.

Torre, M. E., & Fine, M. (2005). Bar none. *Journal of Social Issues, 61*(3), 569-594.

Valente, S. (2005). Sexual abuse of boys. *Journal of Child and Adolescent Psychiatric Nursing, 18*(1), 10-16.

Van Dieten, M., & MacKenna, P. (2001). Moving On facilitator's guide. Toronto, Ontario: Orbis Partners, Inc.

Van Voorhis, P. (2010). Women's Risk Women's Needs. *Women and Security Classification Conference.* New York: John Jay College of Criminal Justice.

Van Voorhis, P., & Presser, L. (2001). *Classification of women offenders: A national assessment of current practices.* Washington, DC: National Institute of Corrections.

Van Voorhis, P., Bauman, A., Wright, E., & Salisbury, E. (2009). Implementing the women's risk/needs assessment (WRNAs): Early lessons from the field. *Women, Girls, and Criminal Justice, 10*(6), 89-91.

Van Voorhis, P., Braswell, M. C., & Lester, D. (2009). *Correctional Counseling and Rehabilitation, 7th Edition.* Cincinnati, Ohio: Anderson.

Van Voorhis, P., Salisbury, E., Bauman, A., Holsinger, K., & Wright, E. (2008). Classifying Women Offenders: Achieving Accurate Pictures of Risk and Identifying Gender Responsive Needs. In B. Bloom, *ICCA 2008 Penary Addresses.* Lanham, MD: American Correctional Association.

Van Voorhis, P., Salisbury, E., Wright, E., & Bauman, A. (2008). *Achieving accurate pictures of risk and identifying gender responsive needs: Two new assessments for women offenders.* Washington, D.C.: National Institute of Corrections.

Van Voorhis, P., Wright, E. M., Salisbury, E., & Bauman, A. (2010). Women's risk factors and their contributions to existing risk/needs assessment: The current status of a gender-responsive supplement. *Criminal Justice and Behavior, 37*, 261-288.

VanBenschoten, S. (2008). Risk/needs assessment: Is this the best we can co? *Federal Probation 72(2)*.

Vielva, I., & Iraurgi, I. (2001). Cognitive and behavioural factors as predictors of abstinence following treatment for alcohol dependence. *Addiction, 96*, 297-303.

Villeneuve, D. B., & Quinsey, V. L. (1995). Predictors of general and violent recidivism among mentally disordered inmates. *Criminal Justice and Behavior, 22*, 397-410.

Visher, C., & Travis, J. (2003). Transitions from prison to community. *Annual Review of Sociology, 29*, 89-113.

Visher, C., Kachnowski, V., La Vigne, N., & Travis, J. (2004). *Baltimore prisoners' experiences returning home.* Washington, DC: The Urban Institute Press.

Vose, B., Cullen, F. T., & Smith, P. (2008). The Empirical Status of the Level of Service Inventory. *Federal Probation, 72*(3), 22-28.

Waller, I. (1974). *Men Released from Prison.* Toronto: University of Toronto Press.

Warr, M. (1998). Life-course transitions and desistance from crime. *Criminology, 36*(2), 183-216.

Way, B. B., Abreu, D., Ramirez-Romero, D., Aziz, D., & Sawyer, D. A. (2007). Mental health service recipients and prison work release: How do the mentally ill fare compared to other inmates in prison work release programs? *Journal of Forensic Sciences, 52*(4), 965-966.

Widom, C. S. (1989). Child abuse, neglect, and violent criminal behavior. *Criminology, 27*, 251-271.

Widom, C. S. (1996). Crime and childhood sexual abuse. *American Journal Psychiatry, 156*, 1223-1230.

Widom, C. S. (1999). Posttraumatic stress disorder in abused and neglected children grown up. *American Journal of Psychiatry, 156*, 1223-1229.

Wilson, D. B., Gallagher, C. A., & MacKenzie, D. L. (2000). A meta-analysis of corrections-based education, vocation, and work programs for adult offenders. *Journal of Research in Crime and Delinquency, 37*(4), 347-368.

Wooldredge, J. D. (1999). Inmate experiences and psychological well-being. *Criminal Justice and Behavior, 26*(2), 235-350.

Wormith, J. S., Olver, M. E., & Stevenson, H. E. (2007). The long-term prediction of offender recidivism using diagnostic, personality, and risk/need approaches to offender assessment. *Psychological Services, 4*(4), 287-305.

Wright, B. E., Caspi, A., Moffitt, T. E., & Silva, P. A. (2001). The effects of social ties on crime vary by criminal propensity: A life-course model of interdependence. *Criminology, 39*(2), 321-352.

Wright, E., Salisbury, E., & Van Voorhis, P. (2007). Predicting the prison misconducts of women offenders: The importance of gender-responsive needs. *Journal of Contemporary Criminal Justice, 23*, 310-340.

Wright, K. N., & Wright, K. E. (1992). Does getting married reduce the likelihood of criminality? *Federal Probation, 56*(3), 50-57.

APPENDICES

Appendix A: Recidivism Data Website Addresses

Brown County Clerk of Courts -

http://www.browncountyclerkofcourts.org/Search/srchmain.shtml

Butler County Clerk of Courts - http://www.butlercountyclerk.org/pa/pa.urd/pamw6500-display

Clermont County Clerk of Courts -

http://www.clermontclerk.org/pa/gdpa.urd/pamw6500.display

Greene County Clerk of Courts - http://www.co.greene.oh.us/pa/pa.urd/pamw6500*display

Hamilton County Clerk of Courts - http://www.courtclerk.org/queries.asp

Licking County Clerk of Courts - http://www.lcounty.com/pa/

Montgomery County Clerk of Courts - http://www.clerk.co.montgomery.oh.us/pro/

Morrow County Clerk of Courts - http://www.morrowcountymunict.org/

Ohio Department of Rehabilitation and Correction -

http://www.drc.ohio.gov/offendersearch/search.aspx

Warren County Clerk of Courts – http://www.co.warren.oh.us/clerkofcourt/search/default.aspx

Appendix B: Women's Risk/Needs Assessment (Pre-Release)

WOMEN'S RISK/NEEDS ASSESSMENT PRE-RELEASE INTERVIEW

Version 3: April, 2008

Name:			Inmate ID (DOC #):
DOB:	Race:	Age:	Assessment Date:
Interviewer:			Interviewer sex: o Male o Female

Directions: Staff completing this form should (a) interview the offender, and (b) consult appropriate official records prior to completing the interview. Criminal history, current offense, and other agency reports should be consulted in order to verify and corroborate the offender's answers to questions asked during the interview. Below, please check all of the official sources of information consulted prior to beginning this interview.

IN THE COURSE OF THIS INTERVIEW, THE FOLLOWING DOCUMENTS WERE READ (check all that apply):

o Police Reports	o Prosecutor's Documents	o Pre-sentence Reports
o Assessments, including substance abuse assessments	o Treatment Reports	o Criminal History
o Offender probation, parole and institutional files	o Classification Files	o Earlier Interviews
o Other (specify)		

Some of the following items (e.g., current conviction charge) can be completed without input from the offender. In these cases, the interviewer should simply transfer information from the offender's record to this document. However, most items will require questions of the offenders. In those cases, the questions are provided in this document. Interviewers are requested to ask all questions in their entirety, except for questions that are not applicable.

SECTION 1: OFFENDER'S VERSION OF THE PRESENT OFFENSE (ATTITUDE SCALE)

Directions: In this part of the assessment, the interviewer should engage the offender in a brief discussion of the offense which led to her conviction. The following questions should be helpful in doing so. After asking these questions, complete the items in the ATTITUDE SCALE below.

	INTRODUCTORY QUESTIONS TO ASK THE OFFENDER
1.	Can you tell me about the offense(s) that led to your current conviction?
2.	What actually happened? What events led up to your arrest?
3.	Did you commit this offense with another person? What was his or her role in the offense? How did you get hooked up with this person?
4.	Was there a victim? Do you know what happened to that person?
5.	Were you treated fairly by criminal justice officials?
6.	How do you feel about this now, looking back on it?

SCORING: ATTITUDE SCALE – *DO NOT ASK THE OFFENDER THESE QUESTIONS.* On the basis of answers to the questions above, the interviewer should check yes or no regarding the offender's attitudes toward the offense.

	ATTITUDES SCALE	**No**	**Yes**
7.	Offender displays no remorse for the present offense (other than remorse for being apprehended).	o (0)	o (1)
8.	There are differences between the official version and the offender's version. Offender portrays the offense in a more favorable light than official documents.	o (0)	o (1)
9.	Offender attributes offense to others. Co-defendants, victims, or others are blamed.	o (0)	o (1)
10.	Offender makes excuses for the offense – does not take responsibility.	o (0)	o (1)
11.	Offender denies having committed the offense.	o (0)	o (1)
12.	Offender blames justice system officials for her being apprehended, arrested, convicted, and/or incarcerated.	o (0)	o (1)
13.	Offender minimizes harm to the victim (answer no if no victim).	o (0)	o (1)

Total Attitude Score (sum items 7-13): _____

Notes:

SECTION 2: CRIMINAL HISTORY SCALE

SCORING: CRIMINAL HISTORY SCALE – Please complete the following items by examining official documents.

	CRIMINAL HISTORY SCALE	No	Yes
14.	Was the offender convicted for a violent offense (homicide, assault, robbery, or other offense that involved physical harm to others)?	o (0)	o (1)
15.	Number of prior felonies:	o None (0) o One to two (1) o Three to five (2) o Six or more (3)	
16.	Have any prior offenses (felonies and misdemeanors) been for violent offenses?	o (0)	o (1)

The following may be asked directly of the offender, but corroborate her responses with official records.

		No	Yes
17.	Have you ever been on supervised probation or parole prior to this offense?	o (0)	o (0)
	If yes, were you ever revoked on a prior term of probation or parole		
	For a technical violation?	o (0)	o (1)
	For a law violation?	o (0)	o (1)
18.	Have you served any prior prison terms?	o (0)	o (0)
	If yes, how many?	o None (0) o One (1) o Two or more (3)	
19.	Did you receive any conduct violations while serving a prior prison term?	o (0)	o (0)
	If yes, were any for		
	Assault, escape, fighting, dangerous contraband, or threatening others?	o (0)	o (2)
	Contraband, failure to report, creating a disturbance, substance abuse, or failure to attend programs?	o (0)	o (1)
20.	During your most recent term have you received any conduct violations for assault, escape, fighting, contraband, threatening others, creating a disturbance, substance abuse, or failure to attend programs?	o (0)	o (1)

Total Criminal History Score (sum items 14-20): _____

	CASE MANAGEMENT NOTES	
21.	How old were you when you first became involved in the juvenile or criminal justice system?	

Notes:

INTRODUCTION TO OFFENDERS:

This remainder of this interview is designed to help us get a sense of you and what some of your needs might be. We will use this information to help us link you to programs and services that we hope will benefit you. We will begin with a discussion about your education and employment history.

SECTION 3: EDUCATIONAL SCALES

SCORING: EDUCATIONAL SCALES – These questions must be asked directly of the offender.

	EDUCATIONAL SCALES	EDUCATIONAL STRENGTHS		EDUCATIONAL NEEDS	
		No	Yes	No	Yes
22.	Do you currently have trouble reading or writing? For example, do you have trouble reading a newspaper?			o (0)	o (1)
23.	Have you ever been diagnosed with any learning disabilities, attention deficit disorder (ADD), ADHD, or special educational needs?			o (0)	o (1)
24.	Have you ever attended special education classes or received any services for students with learning disabilities?			o (0)	o (1)
25.	Have you graduated from high school or received a G.E.D.?	o (0)	o (1)	o (1)	o (0)
26.	Have you received any job-related licenses or certificates? (Include those which may have been received in high school or prison.)	o (0)	o (1)		
27.	Have you attended college or post high school classes for at least one academic term?	o (0)	o (1)		
28.	Do you have a college degree? (Include 2 year degrees.)	o (0)	o (1)		

Total Educational Needs Score (sum items 22-25): _____

Total Educational Strengths Score (sum items 25-28): _____

	CASE MANAGEMENT NOTES		
29.	Do you have educational or vocational plans for the future?	o No	o Yes
30.	Interviewer: Check if verified by educational assessments:	o Offender's version is corroborated by educational tests. o No tests were available to corroborate offender's report of reading, writing, or aptitude.	

Notes:

SECTION 4A: EMPLOYMENT/FINANCIAL (OFFENDER IS IN PRISON)

SCORING: EMPLOYMENT/FINANCIAL SCALE – This scale is to be completed if the offender is currently in a residential setting. If the offender is currently on parole supervision and has been for at least one month, please fill out scale 4B instead of this one. These questions must be asked directly of the offender.

	EMPLOYMENT/FINANCIAL			
31.	During the year prior to this incarceration (or revocation if offender was recently returned to prison) were you employed?	o Fulltime (0)	o Part-time or unable to work because of child/family care, poor health, student, etc. (1)	o Unemployed but able to work (2)

		No	**Yes**
32.	During the 3 years before your offense, did you have any difficulties finding and keeping a job? [If unable to be employed (e.g., parenting, disabled), score No.]	o (0)	o (1)
33.	Did you own or lease an automobile?	o (1)	o (0)
34.	Did you have a checking account?	o (1)	o (0)
35.	Did you have a savings account?	o (1)	o (0)
36.	Were you (or you and your significant other) able to pay your bills without financial help from family or friends?	o (1)	o (0)
37.	During your adult life, have you ever been homeless or lived in a shelter?	o (0)	o (1)

Total Employment/Financial Score (sum items 31-37): _____

	CASE MANAGEMENT NOTES		
38.	Will you be the sole provider of your children upon your release?	o No	o Yes
39.	Will you (or you and your children) have medical insurance?	o No	o Yes
40.	Are you ineligible for any benefits you think you might need? If yes, what benefits? _____	o No	o Yes
41.	Prior to coming here did you have any recent problems like eviction, bankruptcy, calls from collection agencies, cut-off utilities, problems with getting child support payments, repossession of property… things like that?	o No	o Yes

42.	Do you worry about whether you will be able to make ends meet once you are released?	o No	o Some	o A lot

Notes:

SECTION 4B: EMPLOYMENT/FINANCIAL (OFFENDER IS ON PAROLE)

SCORING: EMPLOYMENT/FINANCIAL SCALE – This scale is to be completed if the offender is currently on parole supervision and has been for at least one month. If the offender is currently in a residential setting, please fill out scale 4A instead of this one. These questions must be asked directly of the offender.

	EMPLOYMENT/FINANCIAL			
43.	During the past month or two have you been employed?	o Fulltime (0)	o Part-time or unable to work because of child/family care, poor health, student, etc. (1)	o Unemployed but able to work (2)

		No	**Yes**
44.	In the past, have you experienced any difficulties finding and keeping a job while in the community? [If unable to be employed (e.g., parenting, disabled), score No.]	o (0)	o (1)
45.	Do you own or lease an automobile?	o (1)	o (0)
46.	Do you have a checking account?	o (1)	o (0)
47.	Do you have a savings account?	o (1)	o (0)
48.	Are you (or you and your significant other) able to pay your bills without financial help from family or friends?	o (1)	o (0)
49.	During your adult life, have you ever been homeless or lived in a shelter?	o (0)	o (1)

Total Employment/Financial Score (sum items 43-49): _____

	CASE MANAGEMENT NOTES		
50.	Are you the sole provider of your children since your release?	o No	o Yes
51.	Do you (or you and your children) have medical insurance?	o No	o Yes
52.	Are you ineligible for any benefits you think you might need? If yes, what benefits? _____	o No	o Yes
53.	Have you had any recent problems like eviction, bankruptcy, calls from collection agencies, cut-off utilities, problems with getting child support payments, repossession of property… things like that?	o No	o Yes

54.	Are you worried about whether you will be able to make ends meet?	o No	o Some	o A lot

Notes:

SECTION 5: HOUSING SAFETY

SCORING: HOUSING SAFETY SCALE – These questions must be asked directly of the offender. If the offender is currently in the community on parole supervision, please shift the verb tense accordingly. For example, *Do* you feel safe in your *current* home?

	HOUSING SAFETY	**No**	**Yes**
55.	Did you feel safe in your last home, prior to your incarceration?	o (1)	o (0)
56.	Did you feel safe in your last neighborhood, prior to your incarceration?	o (1)	o (0)
57.	Was your home environment free of violence?	o (1)	o (0)
58.	Was your home environment free of substance abuse?	o (1)	o (0)

Total Housing Safety Score (sum items 55-58): _____

	CASE MANAGEMENT NOTES		
59.	During the 18 months prior to your offense, how many times did you move your residence?		
60.	Will you be living on your own for the next several months following your release?	o No	o Yes
	If no, who will you be living with (relationship not name)?		
61.	Do you have any worries about where you will be living upon your release?	o No	o Yes
62.	Are you at all concerned about your safety?	o No	o Yes

Notes:

SECTION 6: ANTISOCIAL FRIENDS

SCORING: ANTISOCIAL FRIENDS SCALE – These questions must be asked directly of the offender.

	ANTISOCIAL FRIENDS	**No**	**Yes**
63.	Have any of your close friends on the outside been in trouble with the law?	o (0)	o (1)
64.	Have any of your close friends on the outside done prison time?	o (0)	o (1)
65.	Have you ever committed any offenses with a friend?	o (0)	o (1)
66.	Prior to your arrest, did you have some friends who seemed supportive of you?	o (1)	o (0)
67.	On the outside do you spend time with people who abuse alcohol/drugs?	o (0)	o (1)
68.	If you look at your group of friends on the outside, would you say that most have been involved with the law?	o (0)	o (1)

Total Antisocial Friends Score (sum items 63-68): _____

Notes:

SECTION 7: ANGER/HOSTILITY

SCORING: ANGER/HOSTILITY SCALE – These questions must be asked directly of the offender.

	ANGER/HOSTILITY	No	Yes
69.	Would you describe yourself as having a strong temper?	o (0)	o (1)
70.	Do you have trouble controlling your temper when you get upset?	o (0)	o (1)
71.	Within the past 3 years, have you ever hit/hurt anyone, including family members, when you were upset (exclude self-defense)?	o (0)	o (1)
72.	Have these events ever resulted in involvement with child and family services or law enforcement?	o (0)	o (1)

Total Anger/Hostility Score (sum items 69-72): _____

	CASE MANAGEMENT NOTES		
73.	Have any of these experiences occurred within the past 6 months (exclude self-defense)?	o No	o Yes
74.	Within the past 6 months have you had any times when you think you got too aggressive when something made you angry?	o No	o Yes
75.	Were you angry or upset when you committed the present offense?	o No	o Yes
76.	Have you taken any classes or programs to help you manage your anger?	o No	o Yes

Notes:

SECTION 8: MENTAL HEALTH

SCORING: HISTORY OF MENTAL ILLNESS SCALE – These questions must be asked directly of the offender.

	HISTORY OF MENTAL ILLNESS	**No**	**Yes**
77.	Have you ever attempted suicide?	o (0)	o (1)
78.	Have you ever seen a mental health counselor/therapist, psychologist, or psychiatrist?	o (0)	o (1)
79.	Have you ever taken any prescribed medication to help you feel better emotionally?	o (0)	o (1)
80.	Have you ever seen things or heard voices that were not really present?	o (0)	o (1)
81.	Have you ever been hospitalized or placed in a mental health unit for any of these or other types of mental health problems?	o (0)	o (1)
82.	Have you ever been diagnosed with mental illness?	o (0)	o (1)

Total History of Mental Illness Score (sum items 77-82): _____

Notes:

SCORING: MENTAL HEALTH: DYNAMIC SCALES OF CURRENT SYMPTOMS – These questions must be asked directly of the offender.

Okay, let's talk about how you've been feeling over the last several days. At present are you:

	MENTAL HEALTH: DYNAMIC SCALES OF CURRENT SYMPTOMS	DEPRESSION/ ANXIETY		PSYCHOSIS	
		No	Yes	No	Yes
83.	Experiencing problems concentrating or staying focused?	o (0)	o (1)		
84.	Experiencing mood swings --- too many ups and downs?	o (0)	o (1)		
85.	Experiencing a loss of appetite?	o (0)	o (1)		
86.	Having many thoughts that others are out to harm you?			o (0)	o (1)
87.	Experiencing fears about the future, which are difficult to cope with?	o (0)	o (1)		
88.	Having any trouble sleeping because you are too worried about things?	o (0)	o (1)		
89.	Worrying so much about things that you have trouble getting going and getting things done?	o (0)	o (1)		
90.	Seeing things or hearing voices that are not really present?			o (0)	o (1)

Total Depression/Anxiety Score (sum items 83-85 and 87-89): _____

Total Psychosis Score (sum items 86 and 90): _____

	CASE MANAGEMENT NOTES		
91.	Are you currently taking any prescribed medication to help with any of these problems?	o No, I have no need for such medication. o No, but I am in need of medication for these problems. o Yes, I take medication which seems to help. o I take medication, but it does not help. o I have not taken medication for any of these problems even though I have them.	
92.	Are you experiencing any suicidal thoughts?	o No	o Yes

Notes:

SECTION 9: ABUSE/TRAUMA

SCORING: ABUSE/TRAUMA SCALES – These questions must be asked directly of the offender.

I am going to ask you some questions about whether or not you have been physically or sexually abused as a child or an adult. There are only four questions in this section, and if the questions are too difficult to answer, we will just move on to the next section. Please understand that the types of experiences that we would consider to be abusive include hitting, slapping, pushing, kicking, and threatening to hurt you. Abuse also includes being forced to do something humiliating or embarrassing, being ridiculed, insulted, or harassed on a fairly regular basis.

	ABUSE/TRAUMA SCALES	CHILD ABUSE		ADULT ABUSE	
		No	Yes	No	Yes
93.	Have you ever experienced physical abuse:				
	As an adult?[a]			o (0)	o (1)
	As a child?[b]	o (0)	o (1)		
94.	Have you ever experienced sexual abuse:				
	As an adult?[a]			o (0)	o (1)
	As a child?[b]	o (0)	o (1)		

Total Child Abuse Score (sum items 93[b] and 94[b]): _____

Total Adult Abuse Score (sum items 93[a] and 94[a]): _____

	CASE MANAGEMENT NOTES		
95.	In your life have you ever had any experience that was so frightening, horrible, or upsetting that IN THE PAST MONTH you (check any that apply):	o Have had nightmares about it OR thought about it when you did not want to. o Tried hard not to think about it OR went out of your way to avoid situations that reminded you of it. o Were constantly on guard, watchful, or easily startled. o Felt numb or detached from others, activities or your surroundings.	
96.	Are you currently being stalked or emotionally abused (humiliated, threatened, harshly ridiculed) by someone close to you?	o No	o Yes

Notes:

SECTION 10: SUBSTANCE ABUSE

SCORING: SUBSTANCE ABUSE – Before completing this section, please review available official records. If appropriate, discuss current and past treatment referrals with the offender (community and institutional). These questions (except question 97) must be asked directly of the offender.

	SUBSTANCE ABUSE SCALES	HISTORY		CURRENT	
		No	Yes	No	Yes
97.	(Interviewer answers this question based on official records.) Has the offender received prior substance abuse treatment or services in a program other than AA/NA or substance abuse education?	o (0)	o (1)		
98.	Would you say that your use of drugs or alcohol was involved in the present offense?	o (0)	o (1)		
99.	Have you had any recent (past 6 months) conduct violations, law violations, or technical violations related to drugs or alcohol use?			o (0)	o (1)
100.	During the past 6 months have you received a drug screen that was rated positive or diluted?			o (0)	o (1)
101.	Have drugs or alcohol ever made it difficult for you to perform at work or in school?	o (0)	o (1)		
102.	Have family or friends ever expressed concern for your drinking or drug use?	o (0)	o (1)		
103.	When you start drinking or taking illegal drugs, do you have difficulty stopping?	o (0)	o (1)		
104.	Do you associate with individuals who drink heavily or use drugs?			o (0)	o (1)
105.	In the past 6 months, have you missed treatment appointments or stopped participating in support groups? (not applicable = 0)			o (0)	o (1)
106.	Have you ever experienced health or emotional problems resulting from alcohol or drug use?	o (0)	o (1)		
107.	Has your drug or alcohol use ever resulted in marital or family fights?	o (0)	o (1)		
108.	Has drug use ever resulted in financial problems for you?	o (0)	o (1)		
109.	Does anyone in your home use drugs or alcohol?			o (0)	o (1)
110.	Did your drug use ever involve the use of opiates, hallucinogens, or ecstasy?	o (0)	o (1)		
111.	During your most active periods of drug and/or alcohol use did you use on a daily basis?	o (0)	o (1)		
112.	Are you currently using? (If more appropriate, check yes if there is any evidence of current use.)			o (0)	o (1)

Total Substance Abuse History Score (sum items 97-98, 101-103, 106-108, & 110-111): _____

Total Substance Abuse Current Score (sum items 99-100, 104-105, 109, & 112): _____

	CASE MANAGEMENT NOTES		
113.	Does the offender have substance abuse-related offenses on record (felonies or misdemeanors)?	o No	o Yes

Notes:

SECTION 11: RELATIONSHIPS

SCORING: RELATIONSHIPS – These questions must be asked directly of the offender. For items below, no significant other = no. These items are case management notes only and are not included in the scoring process.

	CASE MANAGEMENT NOTES		
114.	Are you currently involved with a significant other?	o No	o Yes
115.	Are you married?	o No	o Yes
116.	How long have you been involved with this person?		
117.	Is this relationship satisfying to you (i.e., does it make you happy at the present time)?	o No	o Yes

Notes:

SECTION 12: PARENTING

SCORING: PARENTING SCALES – These questions must be asked directly of the offender.

118. Do you have any children who are 18 or younger? o No o Yes

If yes, please complete this section.

	PARENTAL INVOLVEMENT	No	Yes
119.	Do you expect to have shared or full custody of your children upon release?	o (0)	o (1)
120.	Do you maintain at least monthly contact with any children by letter, telephone, or visits?	o (0)	o (1)
121.	Are you involved in important decisions regarding your children (e.g., school-related, health, outside activities)?	o (0)	o (1)
122.	Do you feel prepared to be a good parent?	o (0)	o (1)

Total Parental Involvement Score (sum items 119-122): _____

	PARENTAL DIFFICULTIES	No	Yes
123.	Prior to your arrest, did you have support from the father(s) of your children?	o (1)	o (0)
124.	Prior to your arrest, did you feel like you had no help from others in raising your children?	o (0)	o (1)
125.	Are you a single parent?	o (0)	o (1)
126.	When you had custody of your children, did you ever feel that they were too difficult to manage?	o (0)	o (1)
127.	Do any of your children have significant behavioral problems?	o (0)	o (1)
128.	Has child rearing ever made you feel desperate or so stressed that you just wanted to give up?	o (0)	o (1)

Total Parental Difficulties Score (sum items 123-128): _____

	CASE MANAGEMENT NOTES		
129.	Have you ever been investigated for abuse/neglect of a child (e.g., by police, children services, school)?	o No	o Yes
130.	Are you having any difficulty obtaining or maintaining custody of your children?	o No	o Yes

Notes:

SECTION 13: FAMILY OF ORIGIN

SCORING: FAMILY OF ORIGIN SCALES – These questions must be asked directly of the offender. For items below, "no family" = No.

	FAMILY OF ORIGIN SCALES	FAMILY SUPPORT		FAMILY CONFLICT	
		No	**Yes**	**No**	**Yes**
131.	How is your relationship with your parents (parent figures) and/or siblings (check the option that best applies)?				
	Good, just minor conflicts[a]	o (0)	o (1)		
	Conflictual some of the time (mixed)[b]	o (0)	o (0)	o (0)	o (0)
	Conflictual most of the time[c]			o (0)	o (1)
	Family, no contact[d]			o (0)	o (1)
132.	Do you maintain at least monthly contact with any siblings and/or parents (or parent figures)?	o (0)	o (1)		
133.	Do your parents or any siblings currently refuse to communicate with you because they are angry with you?			o (0)	o (1)
134.	Do your parents or any siblings encourage you to participate in programs, classes, or treatment sessions that might help you to avoid trouble in the future (e.g., or come to terms with substance abuse, etc.)?	o (0)	o (1)		
135.	Did you receive visits from your parents or siblings during this prison term (or during your recent term if offender is already on parole)?	o (0)	o (1)		
136.	Have your parents or siblings offered to help you get established after you are released?	o (0)	o (1)		

Total Family Support Score (sum items 131[a-b], 132, and 134-136): _____

Total Family Conflict Score (sum items 131[b-d] and 133): _____

	CASE MANAGEMENT NOTES		
137.	Do any of your family members have a criminal history?	o No	o Yes

Notes:

WOMEN'S RISK/NEEDS ASSESSMENT
PRE-RELEASE SURVEY

Version 3: April, 2008

Name:	Date:

The following questionnaire asks about issues that have a special interest to women: relationships, self-confidence, and parenting. These questions are designed to help us find appropriate programming for you as you complete this period of supervision. Please answer them as honestly as you can.

1. RELATIONSHIP SCALE [1]: The next questions ask you about your relationships with your significant others. In answering these questions please think of your most recent intimate relationship(s).

	YES	NO
1. In general, would you describe these relationships as supportive and satisfying?	o (c)	o (a)
2. Do you get into relationships that are painful for you? Or is your present relationship a painful one?	o (a)	o (c)

	OFTEN	SOMETIMES	SELDOM
3. Have significant others loved and appreciated you for who you are?	o (c)	o (b)	o (a)
4. Do you find yourself more likely to get in trouble with the law when you are in a relationship than when you are not in a relationship?	o (a)	o (b)	o (c)
5. Do you tend to get so focused on your partner that you neglect other relationships and responsibilities?	o (a)	o (b)	o (c)
6. Have partner(s) been able to convince you to get involved in criminal behavior?	o (a)	o (b)	o (c)

Scoring Relationship Scale

Number of (a) _____ x 2 = _____

Number of (b) _____ x 1 = _____

Number of (c) _____ x 0 = _____

TOTAL _____

2. SHERER SELF-EFFICACY SCALE[2]: Please check the response that best describes you.

	OFTEN	SOMETIMES	SELDOM
1. When you make plans, are you fairly certain that you can make them work?	o (a)	o (b)	o (c)
2. Do you have problems getting down to work when you should?	o (c)	o (b)	o (a)
3. Are you pretty persistent --- like if you can't do a job the first time, do you keep trying until you can?	o (a)	o (b)	o (c)
4. When you set important goals for yourself, do you have trouble achieving them?	o (c)	o (b)	o (a)
5. Do you give up on things before completing them?	o (c)	o (b)	o (a)
6. Do you avoid facing difficulties?	o (c)	o (b)	o (a)
7. When something looks complicated, do you avoid trying to do it?	o (c)	o (b)	o (a)
8. When you have something unpleasant to do, do you stick to it until you finish it?	o (a)	o (b)	o (c)
9. When you decide to do something, do you go right to work on it?	o (a)	o (b)	o (c)
10. When you try to learn something new, do you tend to give up if you are not initially successful?	o (c)	o (b)	o (a)
11. When unexpected problems occur, do you handle them well?	o (a)	o (b)	o (c)
12. Do you avoid trying to learn new things when they look too difficult?	o (c)	o (b)	o (a)
13. Does failure just make you try harder?	o (a)	o (b)	o (c)
14. Do you feel insecure about your ability to do things?	o (c)	o (b)	o (a)
15. Can you depend on yourself?	o (a)	o (b)	o (c)
16. Do you give up easily?	o (c)	o (b)	o (a)
17. Do you feel capable of dealing with most problems that come up in life?	o (a)	o (b)	o (c)

Scoring Self-Efficacy Scale

Number of (a) _____ x 2 = _____

Number of (b) _____ x 1 = _____

Number of (c) _____ x 0 = _____

TOTAL _____

3. PARENTING SCALE[3]: Next we are going to ask you questions about your life with your children.

Please do not complete this section if you do not have children who are under 18 years of age.

_____I do not have children under 18.

Please tell us whether or not you agree with the following statements. Please check the response that best describes you.

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
1. I have many people I can lean on, who would help me out during tough times.	o (d)	o (c)	o (b)	o (a)
2. I believe that I am admired and praised by the people in my life. They think that I am worthy and important.	o (d)	o (c)	o (b)	o (a)
3. The people in my life have confidence in me and expect that I will do the right thing and make good decisions.	o (d)	o (c)	o (b)	o (a)
4. No one has ever really listened to me.	o (a)	o (b)	o (c)	o (d)
5. Raising children is a nerve-wracking job.	o (a)	o (b)	o (c)	o (d)
6. My life seems to have been one crisis after another.	o (a)	o (b)	o (c)	o (d)
7. I go through times when I feel helpless and unable to do the things I should.	o (a)	o (b)	o (c)	o (d)
8. Sometimes I just feel like running away.	o (a)	o (b)	o (c)	o (d)
9. Most of the time, I get no support from the children's father (or stepfather/co-parent).	o (a)	o (b)	o (c)	o (d)
10. Raising children is harder than I expected.	o (a)	o (b)	o (c)	o (d)
11. I have trouble keeping my kids from misbehaving.	o (a)	o (b)	o (c)	o (d)
12. My children are difficult to control.	o (a)	o (b)	o (c)	o (d)

Scoring Parenting Scale

Number of (a) _____ x 3 = _____

Number of (b) _____ x 2 = _____

Number of (c) _____ x 1 = _____

Number of (d) _____ x 0 = _____

TOTAL _____

4. CHILD ABUSE SCALE: We would like to know if you have experienced serious forms of mistreatment as either a child or an adult. Below is a list of some threatening, even abusive, behaviors. If you have experienced any of these acts, please check whether you experienced them infrequently (less than 5 times) or frequently (more than 5 times). Check "never" if you have never experienced the act.

First we will ask you about your experiences as a child. Were you ever…

	NEVER	LESS THAN 5 TIMES	5 OR MORE TIMES
1. Pushed/shoved you	o (c)	o (b)	o (a)
2. Threw something at you	o (c)	o (b)	o (a)
3. Kicked/hit you	o (c)	o (b)	o (a)
4. Beat you	o (c)	o (b)	o (a)
5. Dragged you	o (c)	o (b)	o (a)
6. Scratched you	o (c)	o (b)	o (a)
7. Bent your fingers/twisted your arm	o (c)	o (b)	o (a)
8. Held you against a wall	o (c)	o (b)	o (a)
9. Choked you	o (c)	o (b)	o (a)
10. Burned/scalded you	o (c)	o (b)	o (a)
11. Threatened to use weapons against you	o (c)	o (b)	o (a)
12. Threatened to kill you	o (c)	o (b)	o (a)
13. Threatened to harm you	o (c)	o (b)	o (a)
14. Actually used a weapon against you	o (c)	o (b)	o (a)
15. Forced you to do something embarrassing	o (c)	o (b)	o (a)
16. Insulted, ridiculed, or humiliated you	o (c)	o (b)	o (a)
17. Called you loser, failure, stupid, etc.	o (c)	o (b)	o (a)
18. Said that you were ugly or unattractive	o (c)	o (b)	o (a)
19. Locked you in some location	o (c)	o (b)	o (a)

Scoring Child Abuse Scale

Number of (a) _____ x 2 = _____

Number of (b) _____ x 1 = _____

Number of (c) _____ x 0 = _____

TOTAL _____

5. ADULT ABUSE SCALE:

Now we will ask you about your experiences as an adult. Again, please check whether you experienced them infrequently (less than 5 times) or frequently (more than 5 times). Check "never" if you have never experienced the act. This section asks you about physical abuse. As an adult, have you ever been…

	NEVER	LESS THAN 5 TIMES	5 OR MORE TIMES
1. Slapped you	o (c)	o (b)	o (a)
2. Pushed/shoved you	o (c)	o (b)	o (a)
3. Threw something at you	o (c)	o (b)	o (a)
4. Kicked/hit you	o (c)	o (b)	o (a)
5. Beat you	o (c)	o (b)	o (a)
6. Dragged you	o (c)	o (b)	o (a)
7. Scratched you	o (c)	o (b)	o (a)
8. Bent your fingers/twisted your arm	o (c)	o (b)	o (a)
9. Held you against a wall	o (c)	o (b)	o (a)
10. Choked you	o (c)	o (b)	o (a)
11. Threatened to use weapons against you	o (c)	o (b)	o (a)
12. Threatened to kill you	o (c)	o (b)	o (a)
13. Threatened to harm you	o (c)	o (b)	o (a)
14. Threatened to harm your children	o (c)	o (b)	o (a)
15. Actually used a weapon against you	o (c)	o (b)	o (a)

Scoring Adult Abuse Scale

Number of (a) _____ x 2 = _____

Number of (b) _____ x 1 = _____

Number of (c) _____ x 0 = _____

TOTAL _____

[1] Scales contains items from the following:
Fischer, J., Spann, L., and Crawford, D, (1991). Measuring Codependency, Alcoholism Treatment Quarterly, 8(1) 87-99.
Roehling, P. & Gaumond, E. (1996). Reliability and Validity of the Codependent Questionnaire. Alcoholism Treatment Quarterly, 14(1), 85-95.Crowley Jack, D. & Dill, D. (1992). The Silencing the Self Scale, Psychology of Women Quarterly, 16, 97-106.

[2] Sherer, M., Maddus, J., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. (1982). The Self Efficacy Scale: Construction and Validation. Psychological Reports, 51, 663-671.

[3] Most questions are from: Avison, W., Turner, R, & Noh, S. (1986) Screening for Problem Parenting: Preliminary Evidence on a Promising Instrument. Child Abuse & Neglect. 10, 157-170.