Achieving Accurate Pictures of Risk and Identifying Gender Responsive Needs:

Two New Assessments for Women Offenders[1]

Patricia Van Voorhis, Ph.D.
University of Cincinnati

Emily Salisbury, Ph.D.
Portland State University

Emily Wright, M.S.
University of Cincinnati

Ashley Bauman, M.S.
University of Cincinnati

January 28, 2008

With women offenders representing only seven percent of the U.S. prison population, prevailing correctional policies continue to focus on the risk and needs of male offenders. However, in recent years, the female prison populations have increased more rapidly than male populations (Bureau of Justice Statistics, 2005). Such rapid growth draws strong attention to existing practices of assessing and classifying women offenders (Van Voorhis, 2004). Current classification procedures involve the use of statistically-derived assessments that predict an offender's likelihood of recidivism or an inmate's likelihood of serious misconducts. They provide a risk score that determines the custody level of one's prison assignment if incarcerated or level of community supervision if on probation or parole. Some assessments also identify needs that must be addressed in order to meet basic needs, change offender behavior, or assure humane prison adjustment (Clements, McKee, & Jones, 1984).

[1] This research was funded by the National Institute of Corrections under annual cooperative agreements awarded to the Criminal Justice Research Center at the University of Cincinnati. Conclusions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Corrections or the United States Department of Justice.

Since these assessments are so important to the lives of offenders, it is unfortunate that most were originally developed for men and then applied to women with little regard for their validity or appropriateness (Chesney-Lind, 1997; Morash, Bynum, & Koons, 1998; Van Voorhis & Presser, 2001). In fact, a recent national survey of state prison correctional classification directors found that 36 states had not validated their classification systems on their female inmates (Van Voorhis & Presser, 2001). The adverse consequences represent more than an omission of research. First, over-classification of women offenders has been observed both by correctional personnel and in research (e.g. Brennan, 1998; Fowler, 1993; Hardyman & Van Voorhis, 2004). Over-classification occurs when risk assessments, designed for men, prescribe a more austere custody or supervision level for women than their behavior warrants. Second, needs assessments, both those which are imbedded in current risk/needs assessment and those which are "stand-alone" needs assessments, fail to address needs unique to women offenders. An emerging literature on "gender responsive" programming (see Bloom, Owen, & Covington, 2003) challenges commonly used assessments for their failure to tap needs pertaining to mental health, children and parenting, poverty, relationships, self-esteem, self-efficacy, abuse and trauma, personal safety, and the confluence of trauma, mental health, and substance abuse (Belknap & Holsinger, 2006; Blanchette, 2004; Blanchette & Brown, 2006; Brennan, 1998; Brennan & Austin, 1997; Farr, 2000; Reisig, Holtfreter, & Morash, 2006).

To improve upon this situation, a joint project between the National Institute of Corrections and the University of Cincinnati recently completed research with four jurisdictions (Colorado, Maui, Missouri, and Minnesota) to develop and validate new risk/needs assessments specifically for women offenders. The research built from two perspectives on offender rehabilitation: a) research by Canadian scholars Donald Andrews, Paul Gendreau, James Bonta,

and others which stressed the importance of assessing and treating dynamic risk factors (see Andrews & Bonta, 2003; Gendreau, Little & Goggin, 1996); and b) research by feminist criminologists (e.g., Joanne Belknap, Kathleen Daly, Meda Chesney-Lind, Barbara Bloom, Barbara Owen, and Stephanie Covington) stressing the importance of women's unique "pathways" to crime.

Both perspectives are relevant to the importance of assessing and programming for dynamic risk factors. A dynamic risk factor is a need that is also known to be predictive of offender recidivism or other adverse correctional outcomes. The term dynamic further suggests that the need can be ameliorated (e.g., unsafe housing) or stabilized (e.g., depression) through correctional interventions. Clearly, risk/needs assessments are crucial to the task of identifying dynamic risk factors in order to link offenders to relevant programs. However, the gender-responsive scholars assert that women's unique needs (listed above) are not adequately tapped by the current generation of risk/needs assessments (Bloom et al., 2003). Even so, with only limited knowledge, as to whether the gender-responsive needs are risk factors (predictive of adverse correctional outcomes), it is not clear whether they were appropriate for correctional risk/needs assessments. Against this background, one of the main research questions of the UC-NIC research was to empirically examine the relevance of gender-responsive needs to correctional risk/needs assessment and programming.

An understanding of the importance of these issues requires an appreciation for the relevance of dynamic risk factors to broader correctional policies regarding risk assessment, correctional programming, and correctional practice. Prevailing correctional policies emanating from the "needs principle' (Andrews & Bonta, 2003; Andrews, Bonta & Hoge, 1990) currently bestow priority to the treatment of dynamic risk factors, because doing so, will reduce future

offending (Cullen, Fisher & Applegate, 2000). In such political and funding climates, making the case for directing scarce resources to the treatment of gender-responsive needs becomes especially arduous, since these needs are not established risk factors or noted on the current generation of dynamic risk assessment instruments. It is also difficult to treat needs that are not prescribed by these assessments, because, in essence, they are unidentified. In this environment, policy makers, practitioners, and other stakeholders will likely be more receptive to prioritizing programming for identified risk factors than programming for gender responsive needs that may be highly prevalent and extremely unfortunate but not relevant to future offending (Blanchette & Brown, 2006).

In sum, the key research questions of the NIC Women's Classification Study were: 1) Are gender-responsive needs pertaining to trauma/abuse, mental health, self-efficacy, self esteem, parenting, and relationships relevant to future offending and other adverse correctional outcomes?; and 2) Does the addition of gender-responsive items to the gender-neutral items contained on current dynamic risk assessment instruments improve predictive validity?

The Case for Women's Needs

The emerging literature on gender-responsive strategies for women offenders offers much support for the belief that had we started with women the current generation of risk/needs assessments might look quite different from the status quo. For example, writings on women's unique pathways and needs acknowledge the following issues:

- Trauma, victimization and abuse: Research shows that women under correctional supervision are more likely to experience physical and sexual abuse than male offenders or women in the general population (Bureau of Justice Statistics [BJS], 1999; McClellan, Farabee, & Crouch, 1997). However, studies of the relationship between abuse and criminal behavior in adult women are mixed, likely as a result of studies: 1) utilizing various techniques to measure victimization (Browne, Miller & Maguin, 1999), and 2) predicting different types of recidivism (Law, Sullivan & Goggin, in review). Moreover, the issue is understudied.

- Mental health: The mental health needs of female offenders differ substantially from those of male offenders. Depression, anxiety, and self-injurious behavior are more prevalent among female offenders than male offenders (Belknap & Holsinger, 2006; Bloom, Owen, & Covington, 2003; McClellan, Farabee, & Crouch, 1997; Peters, Strozier, Murrin, & Kearns, 1997), as are phobic diagnoses (Blume, 1997), and co-occuring diagnoses such as depression and substance abuse (Bloom et al., 2003; Blume, 1997; Holtfreter & Morash, 2003; Owen & Bloom, 1995). One study noted that rates of such diagnoses are nearly four times the rates for men (Blume, 1997). Stress, depression, fearfulness, and suicidal thoughts/attempts have shown to be strong predictors of women's recidivism (Benda, 2005; Blanchette & Motiuk, 1995; Brown & Motiuk, 2005), but not for men's recidivism (Benda, 2005). However, current risk/needs instruments either ignore mental health, focus scales heavily toward psychotic disorders, or combine all symptoms into a global scale. All approaches run the risk of masking the impact of women's mental health issues.

- Intimate relationships: Prevailing models of psychotherapy for women recognize that women's identity, self-worth, and sense of empowerment are defined by the quality of relationships they have with others (Gilligan, 1982; Kaplan, 1984; Miller, 1976; Miller & Stiver, 1998). Correctional scholars have also noted that many women offenders engage in co-dependent relationships that facilitate their criminal behavior (Koons, Burrow, Morash, & Bynum, 1997; Ritchie, 1996). Because of high rates of abuse, trauma, and neglect experienced by female offenders, their ability to recognize and achieve healthy, mutually empowering, relationships is severely limited (Covington, 1998). Family support and conflict also factor into women's relational concerns.

- Self-esteem: Studies, mostly of male offenders, overwhelmingly indicate that low self-esteem, which was often aggregated into a category denoted "personal distress," is not a risk factor for recidivism (see Andrews & Bonta, 2003 for a summary). However, the gender-responsive literature closely relates self-esteem to the notion of "empowerment," which has been targeted by a number of correctional programs for women. Empowerment denotes the process of increasing women's self-esteem and internal locus of control (i.e., the belief that their lives are under their own power and control) (Task Force on Federally Sentenced Women, 1990). These needs are often cited by correctional treatment staff, researchers, and women offenders themselves as critical to their desistance (Carp & Schade, 1992; Case & Fasenfest, 2004; Chandler & Kassebaum, 1994; Koons, Burrow, Morash, & Bynum, 1997; Morash, Bynam, & Koons, 1998; Prendergast, Wellisch, & Falkin, 1995; Schram & Morash, 2002; Task Force on Federally Sentenced Women, 1990). Even so, whether women's self-esteem, in turn, is related to their recidivism is understudied; although one meta-analysis (12 effect sizes) showed an association between female offenders' low self-esteem and antisocial behavior (Larivière, 1999).

- Self-efficacy, distinct from self-esteem, is one's' confidence in achieving specific goals. Obviously self-efficacy is also relevant to the notion of empowerment. Again, the evidence-based, risk prediction research categorizes self-efficacy as a "personal distress" factor, which has had minimal impact in predicting recidivism in studies of male offenders. For women, little is known about the importance of self-efficacy to recidivism, but it has been suggested as playing a key role (Rumgay, 2004).

- Parental stress: Nearly 71 percent of women under correctional supervision have at least one child under the age of 18, with an average of 2.11 children (BJS, 1999). This, coupled with women's economic marginalization and substance abuse, often leads to stress and overwhelmed feelings about being able to take care of and provide for their children (Greene, Haney, & Hurtado, 2000). Maternal demands may contribute to recidivism especially when they are accompanied by: 1) poverty, 2) substance abuse problems, and 3) minimal support. Some studies with mothering offenders have

detected a relationship between parental stress and crime (Ferraro & Moe, 2003; Ross, Khashu, & Wamsley, 2004). Similarly, Bonta, Pang, & Wallace-Capretta (1995) found that women offenders who were parenting children alone were significantly more likely to be reconvicted than women raising children with partners. Additionally, studies investigating the relationship between child contact and women's prison adjustment, find that stress associated with limited contact was related to higher levels of mental illness (Houck & Loper, 2002; Tuerk & Loper, 2006). Parental stress is perhaps at its greatest among women who are threatened with the loss of child custody, a fairly common occurrence since the passage of the Adoption and Safe Families Act of 1997.

In addition to studying the needs mentioned above, it is important to explore collateral needs, such as housing safety, and poverty. As well, careful examination of the importance of needs noted on current risk/needs instruments, such as education, substance abuse, and employment is warranted. It is commonly asserted that antisocial associates, antisocial peers, and antisocial personality factors comprise the strongest predictors of future offending, and should therefore be the most important correctional treatment targets (Andrews & Bonta, 2003). However, that impression was also formulated on studies of predominately male samples. Detection of different patterns of risk factors---traditional or gender responsive--would warrant policy shifts in correctional priorities for women offenders.

Development of New Assessments

Development of two types of gender-responsive assessments began in 1999 with a pilot study in the Colorado Department of Corrections and later continued with three larger projects in Maui, Minnesota, and Missouri. Two types of assessments were constructed. The first, presently called "the trailer" is designed to supplement existing dynamic risk/needs assessments such as the Level of Service Inventory-Revised (Andrews & Bonta, 1995) and the Northpointe Compas (Brennan, Dieterich, & Oliver, 2006). The second is an assessment that can be used on its own, as a "stand-alone" risk/needs assessment. Extensive literature searches and focus groups with correctional administrators, treatment practitioners, line staff, and women offenders informed both of the assessments. Both instruments contain an interview and a self-report

survey. The full instrument, and many of the questions now contained on the trailer, was developed by members of the Women's Issues Committee of the Missouri Department of Corrections in collaboration with researchers at the University of Cincinnati.

The assessments were designed with several features in mind. First, development teams and focus groups recommended models that would facilitate seamless assessments affording similarity across different correctional settings, e.g., probation, institutions, and parole. Second, the instruments were designed to be used in agencies invested in gender-responsive programming. Third, the items were measured through behavioral criteria, thereby requiring few subjective judgments on the part of the practitioners or respondents. For example, items on an abuse scale did not ask whether offenders were abused, but rather whether they were subjected to slapping, humiliation, threats and other acts. Finally, even needs which were not unique to women (e.g., housing or accommodations, mental illness, financial circumstances, family support and others) were contextualized in gender responsive terms. Thus, housing was not limited to issues pertinent to homelessness and antisocial influences, but tapped as well issues of safety and violence within the home. Mental illness accounted for symptoms of depression and anxiety. A family domain was expanded over alternative assessments to differentiate between parental, intimate relationships and family of origin matters. Attitudes or cognitive issues included self efficacy and self-esteem as well as antisocial thinking. Finally, a number of items identified strengths, e.g., self efficacy, self-esteem, support from others, and educational assets.

Construction Validation Research

The scales and the final assessments were tested among three prison samples (Colorado, Minnesota, and Missouri), three probation samples (Maui, Minnesota, and Missouri) and two pre-release samples (Colorado and Missouri). Sample descriptions are shown in Table 1.

Table 1: Pre-conviction Demographic and Criminal Histories of NIC Women Offender Samples.

Background Characteristic	Prison Samples			Probation Samples			Pre-release Samples	
	Colorado (N=156)	Missouri (N=272)	Minnesota (N=198)	Missouri (N=313)	Minnesota (N=233)	Maui (N=158)	Colorado (N=134)	Missouri (N=162)
Average Age	34.6	33.8	33.7	31.9	34.0	34.3	34.6	35.3
% White	53.2	79.6	70.2	67.8	72.5	29.9	50.7	70.3
% Married	na	27.2	18.2	23.6	21.0	21.7	na	27.3
% Children <18	71.6	74.6	63.1	65.5	61.8	73.1	71.3	69.1
% H.S. or G.E.D.	59.4	65.8	59.1	64.5	78.5	71.5	51.5	55.6
% Employed FT	45.5	65.8	24.4	39.7	30.0	39.9	47.7	56.8
% Violent Offense	9.7	10.3	20.3	7.3	9.6	6.5	5.9	8.7
% Prior Fel.	48.7	55.6	59.1	19.3	19.9	29.1	49.3	54.1

na=not available

There were sample variations. For example, Minnesota and Missouri populations showed substantially higher proportions of white offenders than either Maui or Colorado. Moreover, Minnesota inmates and probationers evidenced somewhat more extensive criminal histories than women sentenced to probation or prison in the other states.

The studies involved three core research tasks. First, interview and survey questions were subjected to standard scale construction analysis. The structure of the scales and resulting psychometric properties were remarkably similar across sites, and results are available from the lead author or at www.uc.edu/corrections. Second, the resulting scales were correlated with appropriate outcome measures (misconducts for inmates and new offenses for community-based participants) to suggest their importance as risk factors. Third, scales found to be meaningful in a predictive sense were summed to form cumulative risk scores and subjected to tests of the validity and predictive strength of the final assessment tool.

The relationship between each of the scales and relevant outcomes are shown in Table 2. It should be noted that the measures for some of the scales were not identical across sites. In Colorado, Minnesota, and Maui, for example, measures of gender-neutral items (e.g., criminal history antisocial attitudes, antisocial companions, substance abuse, employment, education, accommodations) were obtained through the LSI-R (Andrews & Bonta, 1995). They were then supplemented by the gender-responsive scales. In Missouri, the gender-neutral items were designed by the Women's Issues Committee to be part of a new stand alone assessment which also contained the gender-responsive items. The Missouri stand alone instrument also designed additional interview-based scales which were not administered in Maui and Minnesota, e.g., housing safety, anger, depression/anxiety, psychosis, educational assets, family support/conflict,

Table 2: Relationship Between Assessment Scales (Gender-Neutral and Gender-Responsive) Risk Factors and Offense Related Outcomes by Sample and Correctional Setting.

Risk Factor	Prison Samples			Probation Samples			Pre-release Samples	
	Colorado[a] (N=156)	Missouri[b] (N=272)	Minnesota[b] (N=198)	Missouri[c] (N=313)	Minnesota[d] (N=233)	Maui[e] (N=158)	Colorado[f] (N=134)	Missouri[g] (N=149)
Gender Neutral Risk Factors								
Criminal History	--	.21***	.23***	--	.23***	.32***	.15**	.14*
Antisocial Attitudes	--	.15***	.22***	--	.22***	.18**	--	--
Family Conflict	--	.17***	.19***	.11**	.21***	.15**	--	--
Financial/Employment	--	.09*		.21***				.11*
Education/Employment	.12*		.27***		.18***	.26***	.24***	
Financial	--		.13**		.19***	.25***	.19**	
Education	--	--		.19***				.11*
Accommodations	--		.19***		.25***	.14**	.21***	
Leasure/Recreation	--		.13**		.09*	.13**	--	
Antisocial Associates	.14**	.16***	.12**	.16***	.23***	.19***	.14*	.13**
Mental Health History	(.20***)[h]	.19***	.22***	--	.20***	--	.14*	--

Table 2: Relationship Between Assessment Scales (Gender-Neutral and Gender-Responsive) Risk Factors and Offense Related Outcomes by Sample and Correctional Setting, Continued.

Risk Factor	Prison Samples			Probation Samples			Pre-release Samples	
	Colorado[a] (N=156)	Missouri[b] (N=272)	Minnesota[b] (N=198)	Missouri[c] (N=313)	Minnesota[d] (N=233)	Maui[e] (N=158)	Colorado[f] (N=134)	Missouri[g] (N=149)
Gender Neutral Risk Factors (Continued)								
Substance Abuse History	.16**	--	.22***	.18**	.16***	.33***	.24***	.18***
Substance Abuse Current		--		.21***				--
Gender-Responsive Risk Factors								
Housing Safety				.23***		.21***		--
Victimized (as an Adult)(Int.)		.10**	.16**	.09*	.18***	.11*		.19***
Abused (as a Child)(Int.)		.24***		--	.11*			--
Parental Stress	-- --	.13**	.12*	.18***	.24***	.20**	.18**	--
Anger		.13**		.15***				.16**
Anxiety/Depression		.23***		.18***				--
Psychosis		.31***		.16***		13**		.17**
Abused (as a Child) (Sur.)	.23***	.24***	.18**	--	.12**	--	--	--
Abused (as an Adult)(Sur.)	--	--	.19**	.09*	.24***	--	.17**	.11*

Table 2: Relationship Between Assessment Scales (Gender-Neutral and Gender-Responsive) Risk Factors and Offense Related Outcomes by Sample and Correctional Setting, Continued.

Risk Factor	Prison Samples			Probation Samples			Pre-release Samples	
	Colorado[a] (N=156)	Missouri[b] (N=272)	Minnesota[b] (N=198)	Missouri[c] (N=313)	Minnesota[d] (N=233)	Maui[e] (N=158)	Colorado[f] (N=134)	Missouri[g] (N=149)
Gender-Responsive Risk Factors (Continued)								
Relationship Dysfunction	.28***	.09*	.13**	--	.26***	--	--	--
Strengths								
Family Support		-.20***		-.08*		-.18**		-.20***
Relationship Support		-.16**		--				--
Educational Assets		--		-.19***				-.19***
Self-Efficacy	.14**	--	-.13**	-.12**	-.22***	-.16**	-.13*	--
Self-Esteem	--	--	-.09**	-.08*	-.15**	-.22***	--	--

***p≤.01
**p≤.05
*p≤.10

[a]Outcome measure is serious misconducts within 6. months, not including minor forms of insubordination.
[b]Outcome measure is serious misconducts within 12 months, not including minor forms of insubordination.
[c]Outcome measure is incarcerated within 24 months.
[d]Outcome measure is new arrests within 12 months.
[e]Outcome measure is new arrests within 24 months.
[f]Outcome measure is technical violation, new arrest, or any failure (mean time at risk = 17 months).
[g]Outcome measure is returns to prison withing 24 mo.
[h]Correlation is with aggressive misconducts within 6 months.
Gray-shaded blocks indicate that the measure was not tested.

and relation support/conflict. In this way, the research took advantage of the opportunity to test different types of measures and assessment approaches.

Table 2 shows that both gender-neutral and gender-responsive risk factors contribute to offense-related outcomes for women. For the purposes of this brief report, the following should be highlighted.

- Many of the gender-responsive factors were predictive of offense-related outcomes for women. In institutional settings these included, child abuse, loss of personal power in relationships, family support, relationship support, parental stress, family conflict, and current symptoms of depression and psychosis. The effects of adult victimization and self-efficacy, are less consistent and sample dependent. In community settings, many of the same factors are related to future offending (e.g., parental stress, family support, anger, depression and other symptoms of mental illness). Additional risk factors emerged in community settings, such as unsafe housing, educational assets, self-esteem and self-efficacy. Effects of child abuse and adult victimization were equivocal in the probation samples, but more obvious among samples which evidenced more extensive criminal histories, e.g., Minnesota, and the two parole samples.

- Traditional predictors of criminal behavior (similar to those typically seen with men) were also found to be predictive of both prison misconducts and recidivism. Criminal attitudes, however, were not as consistently associated with outcome measures, as one would expect on the basis of research with men. However, substance abuse, anger, antisocial associates, and criminal history were predictive in most settings, and educational, employment, and financial indices were especially potent risk factors in the probation settings. The most important risk factors among those typically seen on the current generation of dynamic risk/needs assessments included substance abuse, mental health, housing, and education, employment, and financial issues. On the basis of these findings, we would be reluctant to advocate that correctional agencies give more priority to the treatment of the "big four" (attitudes, personality, and associates) (Andrews & Bonta, 2003) than to the risk factors noted above.

- Strengths, such as self-esteem, self-efficacy, family and relationship support, and financial and educational assets were important. The findings offer some support to strength-based approaches (Sorbello, Eccleston, Ward, & Jones, 2002; Van Wormer, 2001), especially if they do not totally overshadow the importance of risk factors.

- Environments substantially affect these results. For example, child abuse and mental health issues were more strongly associated with outcomes in institutional settings than community settings. Adult victimization played a greater role in community settings, where the influences were more apparent. Similarly, education, poverty, employment, and unsafe homes were more potent risk factors in the community than in institutions where their impacts were less immediate.

- Tests of the two instruments in post-release settings were not as successful as the tests for the probation and institutional sites. In all likelihood, the dynamic items which were assessed while participants were incarcerated changed upon their release. Results may have been better if the assessments were administered during the first months on parole. To a lesser extent, his also occurred in the Colorado prison sample long lags between assessment of dynamic needs and follow-up time frames can attenuate findings (Brown & Motiuk, 2005; Law, 2005).

- Finally, the validity of both the NIC measures and the LSI-R varied across samples, in ways that implicated or benefited from the skill of interviewers or the integrity of test conditions. In the future, we would hope to correct some of these inconsistencies with more rigorous staff training and monitoring.

Full Instruments

With the pattern of risk factors differing somewhat across correctional settings, it was not possible to construct a single stand alone instrument or trailer that would be identical across correctional settings. However, the *structures* of all of the instruments were similar across settings and are shown in Figure 1. Basically, the final risk scale is a sum of all the risk factors found to be predictive for that setting (e.g., probation, prison, or parole) minus the strengths that were found to be associated with outcomes. A third section, details needs that with few exceptions were not found to be statistically related to offender outcomes and therefore do not appear relevant to the notion of risk. Section 2 of the assessment, therefore, identifies needs that may be of importance to case managers, perhaps for purposes of *responsivity* (Andrews & Bonta, 2003) or assisting offenders with barriers to treatment or supervision. In prison settings, Section 2 also serves the function of assisting offender re-entry planning, because many of the needs identified in that section, while not risk factors for poor prison adjustment, are nevertheless parole risk factors highly relevant to transition and re-entry planning.

Figure 1: Structure of Gender-Responsive Instruments[a]

Probation	Institutional	Parole
Section I: Items for Risk Scale		
Criminal history ***Antisocial attitudes*** **Antisocial friends** **Educational challenges** **Employment/financial** **Family conflict** **Substance abuse history** **Dynamic substance abuse** Anger Housing safety Depression/anxiety symptoms Psychotic symptoms Parental stress <u>Strengths</u> Educational assets Family support Self efficacy Self-esteem	**Criminal history** **Antisocial attitudes** **Family conflict** **History of mental illness** Depression/anxiety symptoms Psychotic symptoms Child abuse Anger Relationship dysfunction <u>Strengths</u> Family support	**Criminal history** **Antisocial attitudes** **Antisocial friends** **Educational challenges** **Employment/financial** **History of mental illness** Depression/anxiety symptoms Psychotic symptoms **Substance abuse history** Dynamic substance abuse Adult victimization Anger <u>Strengths</u> Educational strengths Family support
Section II: Other Items		
<u>Other</u> *Relationship support* *Relationship conflict* **Mental health history** Child abuse Adult victimization Relationship dysfunction	<u>Other (Re-entry)</u> **Mental health history** **Antisocial friends** **Educational challenges** **Employment financial** **Substance abuse** **Dynamic substance abuse** *Relationship support* *Relationship conflict* Adult victimization Parental stress Self efficacy Self-esteem Housing safety	<u>Other</u> Self efficacy Self-esteem Relationship support Family conflict Child abuse Parental stress Relationship support *Housing safety* *Parental stress*

[a]Items in bold are gender-neutral items; others are gender-responsive.

Cumulative scales similar to those suggested in Figure 1 were constructed to formulate final assessment scores. The predictive validity of these scores is shown in Table 3 across correctional settings. Four types of models are shown. First, a static risk assessment incorporates only criminal history items. Such models do not include dynamic needs, and provide no information pertinent to treatment. Even so, such models are commonly used as custody classification tools or in parole risk assessments (Bonta, 1996; Hoffman 1994); b) the second row reports results for a gender-neutral dynamic risk/needs score. For the Colorado, Minnesota and Maui samples this is the final score for the Level of Service Inventory-Revised (Andrews & Bonta, 1996). In Missouri, the gender-neutral scale consists of needs shown in bold face in Figure 1. These are such needs as substance abuse, education, employment, and others that would be relevant to both men and women. Scales shown in the third row supplement the gender neutral scales (row 2) with gender-responsive predictors. Finally, for purposes of illustration, a final row examines the predictive validity of the cumulated gender-responsive scales. It is important to stress that the models for rows 1 and 2 are similar across sites, but the selection of gender-responsive variables did vary somewhat. Because the sites tested different models, this was unavoidable.

Two statistical values were determined; one (Pearson's r) served as a measure of the strength of the relationship between the risk scales and outcome measures (effect sizes); the other, Area Under the Curve (AUC), expressed a ratio of the "prediction hits" or true positives to false positives that was unaffected by base rates and selection ratios (see Swets, Dawes & Monahan, 2000; Quinsey, Harris, Rice & Cormier, 1998). Generally, r values of .30 or higher and AUCs above .70 are considered ideal for prediction research, AUC values of .50 are considered to be no better than chance.

Table 3: Comparative Predictive Validity of Assessment Models

Risk Factor	Prison Samples						Probation Samples						Pre-release Samples			
	Colorado[a] (N=156)		Missouri[b] (N=272)		Minnesota[b] (N=198)		Missouri[c] (N=313)		Minnesota[d] (N=233)		Maui[e] (N=158)		Colorado[f] (N=134)		Missouri[g] (N=149)	
	r	AUC	r	AUC	r	AUC	r	AUC	r	AUC	r	AUC	r	AUC	r	AUC
1. Static Models	--		.17***	.57	.23***	.63	--		.23***	.66	.32***	.71	.15**	.58	.15*	.59
2. Gender-Neutral Risk/Needs	.16**	.59	.20***	.61	.30***	.68	.24***	.67	.31***	.71	.36***	.72	.21***	.62	.21**	.63
3. Gender Responsive	.27***	.62	.38***	.65	.33***	.70	.31***	.73	.35***	.74	.37***	.73	.22***	.62	.29**	.67
4. Gender Responsive, Alone	.27***		.32***		.27***		.30***		.34***		.31***		--		.28**	

***p≤.01
**p ≤.05
[a]Outcome measure is serious misconducts within 6. months, not including minor forms of insubordination.
[b]Outcome measure is serious misconducts within 12 months, not including minor forms of insubordination.
[c]Outcome measure is incarcerated within 24 months.
[d]Outcome measure is new arrests within 12 months.
[e]Outcome measure is new arrests within 24 months.
[f]Outcome measure is technical violation, new arrest, or any failure (mean time at risk = 17 months).
[g]Outcome measure is returns to prison within 24 mo.

In all settings, the accounting for dynamic risk/need factors greatly enhances the predictive validity of risk assessment for women over the static risk assessment tools (row 2 vs. row 1). However, in 6 of the 8 samples, addition of the gender risk factors (row 3 vs. row 2) results in an even stronger model. With the exception of the Maui probation sample and the Colorado pre-release sample, binary logistic regression found that the gender responsive scales (as total scales) made significant contributions to the gender-neutral scales with probability values ranging from .001 to .07. Methodological issues reflecting concern for test conditions and the lag between assessment and outcome time frames help to explain the two exceptions and are discussed in detail in the final reports (see Salisbury, Van Voorhis & Spiropoulis, forthcoming; Van Voorhis, Salisbury, Bauman & Wright, 2007). It is also noteworthy that the gender responsive total scales (row 4) were strongly related to outcome, even without the inclusion of such consistently predictive gender-neutral factors as criminal history, substance abuse, and antisocial associates.

Implementation Considerations

Large-scale implementation of the gender-responsive assessments are welcomed and are underway in two states at the time of this writing. The considerably larger samples will afford important opportunities to refine these assessment tools and to develop more rigorous implementation strategies, case planning protocols, and staff training curricula. Ongoing research and development will also likely improve the need scales (e.g., the relationship scales and the criminal history scale of the stand-alone instrument) that are still somewhat questionable.

The evidence provided in this research underscores the importance of considering women's unique needs in correctional policy, assessment, and programming. As noted by correctional practitioners and women offenders with whom we met at the beginning of these

studies, it is troubled women who make adverse adjustments to prison and incur new offenses in the community. In most of our samples, women's problems were better predictors of adverse correctional outcomes than traditional offense-related predictors. Even so, use of the new risk/needs assessments must proceed with extreme caution. It was not the intent of the researchers or the National Institute of Corrections to create an assessment tool that would result in the placement of high need women in the most punitive and austere correctional environments available. At the outset, policy makers must recognize that in most correctional agencies, women commit serious misconducts and new offenses at a rate that is lower than that for men (Hardyman & Van Voorhis, 2004). In our work, this realization is continually and readily verified by simple queries of state correctional information systems. Simply put, women with multiple needs are at higher risk for adverse correctional outcomes than low risk women, but high risk and maximum custody means something qualitatively different for men and women as we compare their offense-related outcomes. Correctional policies should reflect these differences.

The new instruments are intended for use in gender-responsive (Bloom et al., 2003), evidence-based, treatment centers where treatment practitioners are skilled in ways to empower women, address and accommodate trauma, stabilize symptoms of mental health, accommodate family reunification, teach healthy relationships, facilitate communication with children, provide parenting classes, strengthen vocational, educational, and life skills, and provide gender-responsive substance abuse treatment. Additional concerns and advantages that are specific to each type of correctional setting include the following.

- Probation: The advent of gender-responsive approaches to corrections has seen a number of options developed for women, including gender-responsive caseloads and program curricula, as well-as multimodal, wrap around services that take advantage of partnerships with other relevant public services such as mental health, education, labor, family services, and substance abuse. The difference in such models over more generic models of the same, is their focus on needs that are most relevant to

women's success. They also employ modalities that are relational, child-centered, trauma informed, and give strong attention to building self-efficacy and other strengths. The assessments would also map well onto treatment-intensive, residential or day-reporting centers. Inappropriate uses would involve use of the tools in agencies which; 1) do not have the resources to program for gender-responsive needs; 2) treat high risk women and high risk men the same; or 3) do not appreciate that gender responsive risk factors are relevant to future offending.

- Prisons: Research in three states shows rather convincingly that behavioral disruptions in prisons are most likely to involve disturbed inmates with histories of trauma, mental illness, and substance abuse. This picture prompts careful consideration of conditions of confinement, particularly inhumane or excessively restrictive settings which further exacerbate the risk these inmates pose to themselves and others. The gender-responsive assessment models also depart dramatically from current views of prison security which stress the importance of prior record and current offense attributes. At the same time, we do not advocate that needs assessments, such as the ones developed in this research, be the new determinants of maximum or close custody for women. Indeed, careful attention to disciplinary data in these and other research sites (see Hardyman & Van Voorhis, 2004) finds very few women engaged in violent or aggressive altercations in prison. In Missouri, for example, at 12 months following incarceration, among 272 inmates, the five most serious incidents involved: 1) 1 for a minor assault; 2) 1 for possession of an intoxicating substance; 3) 1 for threatening behavior, and 4) 2 for sexual misconduct. Together these 5 women represented only 1.6 percent of the inmate population. In all of the states, the overwhelming majority of prison misconducts involved minor incidents such as interfering with a count or disobeying an order.

  Gender-responsive, risk/needs assessments would appear to be most valuable for purposes of identifying inmates appropriate for treatment-intensive services and placements. Doing so, given the nature of women's risk, could actually be more beneficial to institutional security than blind adherence to current forms of custody classification. In the many states where the overwhelming majority of women are released from prison within 6 months, policy makers may also wish to shift the prison paradigm to a community correctional model (albeit a residential one) that places a greater focus on prisoner re-entry programming, than custody per se. The re-entry paradigm would afford better opportunities for family reunification and fostering of family support, which were found to be so highly important to prison management and recidivism.

- Parole: The assessment tools resulting from this research are of obvious relevance to case-planning for re-entry and transition. The tools afford the opportunity to identify community risk factors while women are still incarcerated. Our results suggest careful attention to family reunification, abusive intimate relationships, education, poverty, substance abuse, and mental health. As a precaution, our research conducted the assessments in prisons and collected follow-up data upon the participants' release. In this context, many dynamic needs (e.g., depression, parental stress, current substance abuse, housing safety and others) may have changed. Appropriate use of the tools would involve reassessment within three months of return to the community. Doing so is also likely to improve the predictive validity over the results shown in Table 3 and perhaps show the importance of additional risk factors.

Obtaining the Gender-Responsive Assessments

All six assessment tools, three trailers and three stand alone instruments, are available from the University of Cincinnati's Corrections Institute. Developed through federal monies, the

assessments are public-domain and available with no charge. The copyrights for the assessments are held by the University of Cincinnati, and intended users must provide assurances that the tools will not be changed without permission nor provided to third parties or commercial interests. Intended users must also provide assurances that appropriate training will protect against unintended uses, poor administration, parochial or inaccurate interpretations of specific needs, and other unintended consequences. Departments wishing to use the tools in prison settings must provide assurances that they not being implemented solely for custody assignments. The University of Cincinnati Corrections Institute provides training for a fee but does not require users to secure training from UCCI. The UCCI training covers the following topics: a) evidence-based approaches to correctional intervention; 2) gender-responsive programming, 3) interviewing and listening skills, 4) case planning, and 5) extensive practice. As might be expected, listening and interview skills are essential to the task of securing the sensitive information tapped by these assessments. Further information may be obtained at www.uc.edu/corrections or by calling (513) 556-1913.

Conclusion

In sum, the research conducted to date offers much support to the notion of gender-responsive assessment and programming. Results shown in Table 3 also show that the tools, when administered by well-trained interviewers and under adequate test conditions, achieve commendable levels of predictive validity. Ongoing research and development, however, is standard to test construction and likely will result in future improvement of these tools. Just the same, with careful attention to training and implementation, the assessments can be used with confidence and are likely to greatly facilitate high-quality programming for women offenders.

References

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

Andrews, D. A., & Bonta, J. (2003). *The psychology of criminal conduct* (3rd ed.). Cincinnati, OH: Anderson.

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

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: A survival analysis. *International Journal of Offender Therapy and Comparative Criminology, 49,* 325-342.

Blanchette, K. (2004). Revisiting effective classification strategies for women offenders in Canada. *Feminism & Psychology, 14,* 231-236.

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

Blanchette, K., & Motiuk, L. L. (1995). *Female offender risk assessment: The case management strategies approach.* Poster session presented at the Annual Convention of the Canadian Psychological Association, Charlottetown, Prince Edward Island.

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.

Blume, S. (1997). Women: Clinical aspects. In J. Lowinson, P. Ruiz, A. Milkman, & J. Langrod (Eds.), *Substance abuse: A comprehensive textbook* (pp. 645-654). Baltimore, MD: Williams and Wilkins.

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

Bonta, J. (1996). Risk-needs, assessment and treatment." In A.T. Harland (ed.), *Choosing correctional options that work: Defining the demand and evaluating the supply*. Thousand Oaks, CA: Sage Publications.

Bonta, J., & Motiuk, L. L. (1987). The diversion of incarcerated offenders to correctional halfway houses. *Journal of Research in Crime and Delinquency, 24,* 302-323.

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

Brennan, T. (1998). Institutional classification of female offenders. In R. Zaplan (Ed.), *Female offenders: Critical perspectives and effective interventions.* Gaithersberg, Md: Aspen Publishers.

Brennan, T., Dieterich, W., & Oliver, W. (2006). COMPAS: Technical manual and psychometrics report version 5.0. Northpointe Institute, Traverse City, Michigan.

Brennan, T., & Austin, J. (1997). *Women in jail: Classification issues.* Washington, DC: USDOJ, National Institute of Corrections.

Brown, S. L., & Motiuk, L. L. (2005). *The Dynamic Factor Identification and Analysis (DFIA) component of the Offender Intake Assessment (OIA) process: A meta-analytic, psychometric, and consultative review* (Research Report R-164). Ottawa, Ontario: Correctional Service Canada.

Browne, A., Miller, B., & Maguin, E. (1999). Prevalence and severity of lifetime physical and sexual victimization among incarcerated women. *International Journal of Law and Psychiatry, 22,* 301-322.

Bureau of Justice Statistics. (1999). *Special report: Women offenders.* Washington, DC: USDOJ.

Bureau of Justice Statistics. (2005). *Prisoners in 2004.* Washington, DC: USDOJ.

Bureau of Justice Statistics. (2006). *Mental health problems of prison and jail inmates.* Washington, DC: USDOJ.

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

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

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

Clements, C., McKee, J., & Jones, S. (1984). *Offender needs assessments: Models and approaches.* Washington, D.C.: National Institute of Corrections.

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 Publishing.

Covington, S. (2002). Helping women recover: Creating gender-responsive treatment. In S.

Straussner & S. Brown (Eds.), *The handbook of addiction treatment for women*: *Theory and practice.* San Francisco: Jossey-Bass.

Cullen, F. T., Fisher, B. S., & Applegate, B. K. (2000). Public opinion about punishment and corrections. In M. Tonry (Ed.), *Crime and justice: A review of research, Vol. 27* (pp. 1-79). Chicago: University of Chicago Press.

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.

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

Farr, K. A., (2000). Classification for female inmates: Moving forward. *Crime & Delinquency, 46,* 3-17.

Feeley, M. M., & Simon, J. (1992). The new penology: Notes on the emerging strategy of corrections and its implications. *Criminology, 30,* 449-474.

Fowler, L. (1993). What classification for women? In *Classification: A tool for managing todays offenders.* Laurel, MD: American Correctional Association.

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

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.* Cambridge, MA: Harvard University Press.

Greene, S., Haney, C., & Hurtado, A. (2000). Cycles of pain: Risk factors in the lives of incarcerated mothers and their children. *The Prison Journal, 80,* 3-23.

Hardyman, P. L., & Van Voorhis, P. (2004). *Developing gender-specific classification systems for women offenders.* Washington, DC: USDOJ, National Institute of Corrections.

Holtfreter, K., & Morash, M. (2003). The needs of women offenders: Implications for correctional programming. *Women & Criminal Justice, 14,* 137-160.

Hoffman, P. (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,* 477-494.

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

Kaplan, A. G. (1984). *The "self in relation": Implications for depression in women.* Publication No. 14. Wellesley, MA: Stone Center.

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 and 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.

Larivière, M. (1999). *The relationship between self-esteem, criminality, aggression, and violence: A meta-analysis.* Unpublished comprehensive examination, Carleton University, Ottawa, Ontario, Canada.

Law, M. (2004). *A longitudinal follow-up of federally-sentenced women in the community: Assessing the predictive validity of the dynamic characteristics of the Community Intervention Scale.* Unpublished doctoral dissertation, Ottowa, Ontario: Carleton University.

Law, M., Sullivan, S., & Goggin, C. (in press). *Security classification measures for female offenders and predictors of female criminal conduct: A literature review.* Ottawa, Ontario: Correctional Services of Canada.

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

Miller, J. B. (1976). *Toward a new psychology of women.* Boston: Beacon Press.

Miller, J. B., & Stiver, I. P. (1998). *The healing connection: How women form relationships in therapy and life.* Wellesley, MA: Wellesley Centers for Women.

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

Motiuk, M. S., Motiuk, L. L., & Bonta, J. (1992). A comparison between self-report and interview-based inventories in offender classification. *Criminal Justice and Behavior, 19,* 143-159.

Owen, B., & Bloom, B. (1995). *Profiling the needs of California's female prisoners: A needs assessment.* Washington, DC: USDOJ, National Institute of Corrections.

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. (2003). *When prisoners come home: Parole and prisoner reentry.* New York: Oxford University Press.

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

Quinsey, v., Harris, G., Rice, M., & Cormier, C. (1998). *Violent offenders: Appraising and managing risk.* Washington, DC: American Psychological Association.

Reisig, M. D., Holtfreter, K., & Morash, M. (2006). Assessing recidivism risk across female pathways to crime. *Justice Quarterly, 23*, 384-405.

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

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

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

Salisbury, E., Van Voorhis, P., & Spiropoulis, G. (forthcoming). The predictive validity of a gender-responsive needs assessment. *Crime and Delinquency.*

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

Shields, I. W., & Simourd, D. J. (1991). Predicting predatory behavior in a population of incarcerated young offenders. *Criminal Justice and Behavior, 18,* 180-194.

Sorbello, L., Eccleston, L., Ward, T., & Jones, R. (2002). Treatment needs of female offenders: A review. *Australian Psychologist, 37,* 198-205.

Swets, J., Dawes, R., & Monahan, J. (2000).Psychological science can improve diagnostic decisions. *Psychological Science in the Public Interest, 1,* 1-26.

Task Force on Federally Sentenced Women. (1990). *Creating choices: The report of the Task Force on Federally Sentenced Women.* Ottawa, ON: Ministry of the Solicitor General Canada.

Travis, J. (2005). *But they all come back: Facing the challenges of prisoner reentry.* Washington, DC: Urban Institute Press.

Tuerk, E. H., & Loper, A. B. (2006). Contact between incarcerated mothers and their children: Assessing parenting stress. *Journal of Offender Rehabilitation, 43,* 23-43.

Van Voorhis, P. (2004). An overview of offender classification systems. In P. Van Voorhis, M. Braswell, & D. Lester (Eds.), *Correctional counseling and rehabilitation (5th ed.),* (pp. 133-16).

Van Voorhis, P., & Presser, L. (2001). *Classification of women offenders: A national assessment of current practices.* Washington, DC: USDOJ, National Institute of Corrections.

Van Voorhis, P., Salisbury, E., Bauman, A., & Wright, E. (2007). Gender-Responsive Risk/Need Assessment: Final Report Prepared for the Maui CARE Project. Cincinnati, OH: University of Cincinnati Center for Criminal Justice Research.

Van Wormer, K. (2001). *Counseling female offenders and victims: A strengths-restorative approach*. New York: Springer.