

**Institutional Assessment and Classification of Women Offenders:
From Robust Beauty to Person-Centered Assessment**

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1. Introduction

Correctional institutions must understand persons who enter their care. Assessment and classification are the main techniques such institutions rely on to describe, understand, treat and “name” their clients. Thus, errors of assessment or classification can produce systematic misunderstanding and inappropriate treatment of offenders. Assessment occurs at several stages of criminal justice processing. The dominant roles are to support various risk decisions (custody classifications, supervision levels, early release, pre-trial release, revocation of probation or parole, and so on); and to guide the provision of services and programs. Classification errors - aside from producing systematic misunderstanding of the clients – may also result in damaging and stigmatizing mismatches between the individual female offender and how she is processed, managed and treated. This chapter reviews several problems and offers some suggestions for advances in assessing and classifying female offenders.

When women enter correctional institutions, they are sequentially assessed and classified to identify needs and risks, for security classification, program eligibility and planning; for reclassification and re-entry preparation; for probation supervision levels, parole revocation decisions, and so on. Most institutions use the same assessment tools for both men and women - despite rising evidence of gender differences in criminal behaviors and in underlying dynamics of anti-social behavior. There is a robust debate over the use of “gender-neutral” assessments and much concern over whether they validly identify the risks and needs of women offenders or undermine the goals of classification. The following two broad areas are critical to this debate:

Content and theoretical validity: A first concern is the content validity or “information content” of classification systems for female offenders. The selection of risk and need assessment factors is driven by prevailing theories of criminality, by treatment goals and by organizational purposes. Ideally, this selection should include all relevant factors at each assessment stage. A key controversy is whether traditional risk factors should be adjusted to be more gender-sensitive or augmented by gender-specific factors of particular relevance for women offenders (Salisbury, Van Voorhis and Wright 2006, Blanchette and Brown 2006).

Integrative procedures – Linear models versus person-centered assessment: A second area of potential controversy concerns procedures to “integrate” the many assessment factors into a classification decision. The classic paper by Robin Dawes (1979) on the “robust beauty of improper linear models” inspired this section. Most current gender-neutral offender classifications (e.g., LSI-CMI, VRAG, Hare’s PCL, etc.) use simple linear models (i.e., additive summation of risk factors, often with equal weighting) to produce a classification score. Dawes noted the surprisingly effective performance of these methods in often outperforming human experts (e.g., judges, psychiatrists, weather forecasters, etc.) in classification and prediction tasks (Grove and Meehl 1996; Quinsey et al. 1998).

However, when the purpose of a classification shifts from risk to explanatory profiling, explanation, case conceptualization or treatment choice, linear models are less informative. They have been criticized for largely obliterating the “person” by losing the holistic individual profile by compressing all factors into a single score (Ragin 2000). An alternative “person-centered” or configural assessment may augment risk based linear models and provide far more individualized information. This alternative appears consistent with feminist “pathways” approaches (Daly 1992, 1994). The configural assessment may address individuality by retaining each woman’s own pattern of risk-need factors (Cairns, Bergman and Kagan 1998; Piquero and Moffit 2005, Brennan – this volume, Chapter 7). In this debate the configural approach may provide an alternative or an augmentation of more generally used linear models.

2. Two main controversies regarding assessment of women offenders

Before reviewing how correctional organizations assess and classify women offenders it is appropriate to mention the poor performance of current gender-neutral risk-based procedures when assessing women offenders. They provide very modest predictive validity, are over-simplified and offer almost no clinical guidance for the treatment of women offenders (Belnap and Holzinger 2006; Blanchette and Brown 2006). Two broad themes as well as many design flaws, underlie this poor performance:

Controversy 1: Content validity and theoretical justifications

An on-going feminist critique of assessment has focused on theoretical gaps and weak content validity of current instruments i.e., inadequate coverage of risk and need factors. Feminists reject the assumption that the same factors can explain both male and female criminality (Belnap 2001; Chesney-Lind 1989) and hold that male-centered or standard theories are blind to several factors that appear unique to female criminality.

These additional factors are needed to differentiate several categories, pathways or “fault lines” among women offenders. While much empirical research supports the relevance of mainstream factors for both men and women offenders, the omission of gender-specific or “gendered context” of female criminality renders mainstream assessments blind to several important distinctions (see also Chapter 1). Gender-specific factors often mentioned include: women’s economic marginalization, the drug-related nature of many women’s offenses, physical and sexual victimization and their sequelae, selected personality factors, and so on.

The opposing view emphasizes research support for these “general” criminological theories and the apparent finding that gender-neutral risk-need factors apply equally to men and women (Higgins 2004). If male and female criminality is equally predicted by general theories and if gender-specific factors add little incremental explanatory power there may be no need for additional factors. This conclusion appears supported by several studies of traditional theories that include gender in their analyses (Cernkovich and Giordano, 1979)-

Another point is that the missing factors e.g., female poverty, victimization, and so on, are either already included in mainstream instruments or partially captured by the broader profiles and coverage of the major and validated criminogenic factors in recent assessment systems, e.g., anti-social attitudes, peer associations, family disorganization, poverty, homelessness and joblessness (Andrews & Bonta 2003, p. 90; Dowden and Andrews 1999, Blanchette and Brown 2006). Additionally, in institutions efficiency is critical and if there is little practical gain from additional gender-specific factors they should be avoided.

My position is that both sides in this debate have merit and current research gaps suggest we are far from final conclusions. I am sympathetic to an expansion of current assessment instruments since they have been pitifully lacking in content validity and mostly fail to meet the standard of including “all relevant” factors for either male or female offenders.

Controversy 2: Linear models versus Person-Centered or Configural assessment

The second issue - integrating multiple factors into a classification decision - has not been as clearly on the “radar screen” of feminists, but seems equally critical for women offenders. This is the use of linear models versus person-centered classification (such as pattern or configural analysis).

Several feminists have argued for “individualized assessment” (Belnap and Holzinger 2006) and this is also underscored by the recent emphasis on “specific responsivity” as a key principle of correctional programming (Andrews, Bonta and Wormith 2006). The term “responsivity” – which seems to be an unnecessary and confusing neologism - was formerly known as “differential treatment, treatment-relevant typologies, or more plainly and simply as the need to “match” offenders to treatment (Palmer 1992, Van Voorhis 1994, Harris and Jones 1999; Brennan 1987).

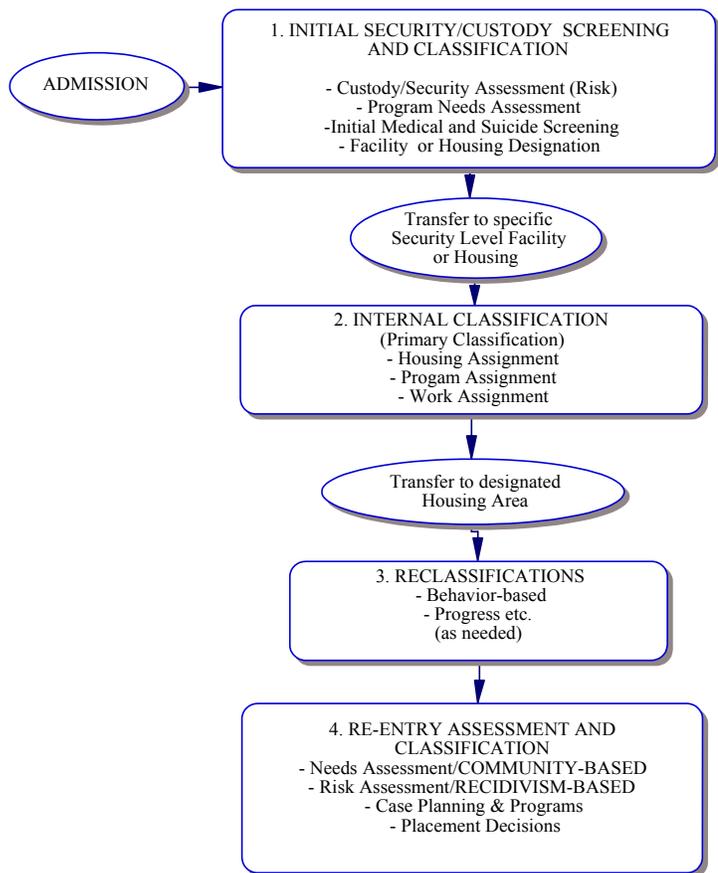
Person-centered approaches address the differential matching of offenders to treatment plans by developing and categorizing individual holistic profiles. A fairly long history in correctional research - mostly on males - sought to develop “person-centered” classifications to capture the causal heterogeneity among offenders (Warren 1971, Palmer 1992, Harris and Jones 1999). From a feminist perspective the person-centered approach is illustrated in Daly’s (1992, 1994) “pathways” framework; and in recent taxonomic studies of women offenders (Stefurak and Calhoun 2006; Brennan – this volume). In the last decade more reliable quantitative methods have become available for configural classification. These range from clinical judgment - as used by Daly (1994) - to the quantitative pattern recognition methods used by Widom 1978, Stefurak and Calhoun 2006; Bergman 2000; Brennan 2006, Brennan – this volume; and others). I suggest that these methods should enter into the organizational assessment and classification of women offenders—not necessarily to replace linear models—but to augment them. This becomes valuable when the role of classification focuses on explanation, case conceptualization and

treatment matching - all of which fit the feminist agenda of a more individualized and holistic approach.

3. Sequencing of assessments and classifications in correctional institutions

Before evaluating the current status of correctional classification, I briefly review the sequencing of classification that typically occurs across correctional institutions. While there are many local variations, the chart below indicates the typical sequence (NIC 2005; Brennan 2003). Several of these decision points emphasize classification for “risk”; while others address a complex mix of goals including risk assessment, explanation, needs assessment and treatment/services planning. Each assessment stage has different purposes and different legal, time and informational constraints.

Figure 1. Typical sequence of Classifications in Correctional and Detention Institutions



1. Intake or initial screening classifications

Intake and booking, particularly in jails, includes a rapid screening to support immediate processing decisions e.g., identification, accept/not accept, refer to a more

appropriate agency, guidance for temporary housing, protective custody, suicide watch and immediate medical, psychological or other needed treatments; initial screening for “dangerousness”, victimization by other inmates, and so on. These decisions are usually provisional and are re-visited as more complete and verified data becomes available.

Intake assessment typically occurs in busy, crowded situations with pressure to quickly gather and enter data and make quick decisions. Opportunities for extended probing and in-depth interviewing are often limited. Thus, the danger at this stage largely stem from errors of omission. Both genders are vulnerable to such omissions given staff overload, limited data and pressure to quickly process new intakes. Errors may result from incomplete criminal histories, faulty stigmatization and stereotyping by either arresting officers or screening staff or failure to identify critical needs. Only the most basic needs (medical, suicide risk, injuries, protective custody, etc.) are systematically gathered with current instruments [National Institute of Corrections (NIC) 2004]. Standard screening or booking forms - particularly in jails - are stripped down for efficiency and may miss underlying needs of clear importance to female detainees (e.g., family and child-parent relationships, certain mental health problems, etc.). Problems of intake units are well described by classic studies of street-level bureaucracy by Prottas (1979) and Lipsky (1980).

Validated actuarial risk classifications or detailed needs assessments are rarely used at intake. Decisions are provisional and temporary since a more complete risk and needs assessment will occur at the next phase of classification. However, since they represent the first contact between agency and offender, they may substantially influence further processing through errors, omissions or negative stereotyping (Bowker and Star 1999).

2. Initial or primary security classification

Following intake, most institutions conduct a more formal risk-needs assessment for two broad purposes: 1) Risk assessment for security designations, housing placements and eligibility designations, and 2) Needs assessment for treatment planning and services. These classifications strongly impact detainees through differential processing and privileges, security placements, surveillance levels, program eligibility, visitation options, telephone access, and so on. Equity issues are thus deeply implicated in these classifications.

Risk assessment for security decisions: Most detention institutions conduct a risk-based security classification although the timing may differ e.g., between jails and prisons. Probation and parole also conduct risk classifications to designate low, medium and high risk classes for supervision levels and caseload analysis. Objective and validated security classifications are legally mandated for correctional institutions as a basis for housing/cell assignment, supervision levels and eligibility for services. These classifications are institutionalized in the policy and procedures of correctional institutions and guide most routine offender processing (Lipsky 1980, Bowker and Star 1999). Their importance also stems from their link to several other correctional goals e.g., prisoner safety, staff safety, fairness and equity, and so on.

Standard 2G security and risk classifications: Over the last two decades, typical security classification has adopted short additive point systems with a limited set of criminal history and legal elements. These second-generation models (2G) are described by Bonta (1996). Typical risk elements include: current offense seriousness, number of prior offenses, number of prior commitments, age at a first offense, disciplinary history, etc. (NIC 2003; Austin 1986, Brennan 1987). Many of these institutional models were not based on statistical predictive weights but largely emerged from a professional consensus with subjective or logical policy weighting of risk factors. This has been labeled as the BOGSAT method (Bunch of Guys, Sitting Around a Table). It is not ideal for achieving predictive accuracy, but these methods can be surprisingly effective (Dawes 1979).

In jails and prisons these 2G security classifications aimed at a common sense separation of violent from non-violent offenders and repeat from minor offenders with little attention to gender issues (Austin 1983, Brennan 1998). They were easy to use, quick, fairly reliable and objective. Their avoidance of social, clinical or psychological factors was seen (at the time) as more efficient, less vulnerable to legal challenge and consistent with the just desserts model that swept the country during the 1980's (Palmer 1992, Clear 1988). Validation tests for women offenders, although advocated, were rarely conducted or published (Austin 1998; Hardyman and Van Voorhis 2004; but see Harer and Langan 2001). Their weaknesses included a degree of over-classification, stigmatization and unfair loss of privileges. Since the base rate for serious violent infractions among women offenders is much lower than among males, over-classification errors are more likely for women offenders (Clear 1988, Brennan 1998).

3. Internal custody classification: For services, treatment and behavioral management

Internal classification shifts the focus from security to the complexities of offender management, treatment needs, services while incarcerated and (more recently) for re-entry planning. These classifications offer decision-support for housing, co-mingling of selected offenders, privileges, counseling needs, treatment planning and re-entry case management. These require an understanding of individual differences, personality, social factors and criminogenic needs. Their emphasis on treatment and behavioral management escalated the need for theory-guided and gender-sensitive assessment.

Some states are beginning to seriously examine gender-sensitive assessment for internal classification because of increasing awareness that women's criminogenic and service needs may differ from those of males (Bloom, Owen, and Covington, 2003; Hardyman and Van Voorhis 2004). Other state systems are turning to more comprehensive 3G and 4G classification tools (e.g., LSI-CMI, COMPAS) to address internal management, treatment and re-entry issues. Although these 4G instruments broaden the range of social and psychological factors they do not, as yet, address all potentially important risk and need factors for women. Gender-sensitive risk and need assessment is at a very early stage of development (Wright et al. 2006; Blanchette and Brown 2006) and empirical data is only currently emerging to indicate the most promising factors. Several research teams are

currently seeking relevant gender-specific factors for women offenders (Blanchette and Brown 2006; Bloom, Owen, and Covington 2003, Brennan et al. 2006).

4. Re-entry classifications: Risk and needs profiles

A recent institutional trend is to incorporate a “re-entry” assessment to both identify recidivism risk and to prepare prisoners for the transition back to society. Rehabilitation and planning for re-entry must begin early in a prison term to support the needed education, training and treatment for successful re-entry. Thus these assessments are conducted while the detainee is still incarcerated and they partially overlap with internal treatment classification since both incorporate criminogenic factors. Re-entry assessments emphasize emerging research on factors relevant for the transition to community (stable and safe housing, social supports, coping abilities, and so on).

This emphasis on assessment for re-entry is driven by the fact that many female offenders leave prisons and jails each year after being simply “warehoused” and thus remain ill-prepared for the transition. A recent American Bar Association (ABA) report publicized this issue, noting that many correctional institutions fail to do any “correcting” and offer few relevant programs to prepare prisoners for release. Many prisoners - of both genders - remain severely socially marginalized and may have little motivation to follow a law-abiding lifestyle (Rose and Clear 2002).

The usual approach of simply warehousing prisoners - of both genders - in often bleak and demeaning conditions does little to prepare them to survive productively when released. Political recognition of this is forcing jails, prisons, probation and parole to develop assessment approaches to strengthen rehabilitation and re-integration. Thus, institutional classification - for both internal management and re-entry planning - is currently being enriched by the needs of re-entry planning and by the gender-sensitive perspective (Salisbury et al. 2006; Blanchette and Brown 2006).

5. Predictive risk classifications for parole and probation supervision

These systems predominantly reflect short 2G linear point systems that are geared to prediction of recidivism for probation and parole populations. Perhaps the best known example is the Salient Factor Index used for parole prediction purposes (Hoffman 1995). These methods did not involve any attempt to be gender-specific and relied mostly on a non-theoretical attempt to optimize predictive accuracy using a variety of statistical methods (Gottfredson 1987). More recently some state systems are using 3G and 4G methods such as LSI and COMPAS for this narrowly predictive purpose.

4. Evolution of Assessment Methods in Correctional Institutions

The last three decades have seen several advances in offender classification (Palmer 1993, Bonta 1996 and Clements 1996). This has been viewed as progressing from “first generation” (1G) to the currently emerging “fourth generation” (4G) assessment paradigm (Andrews, Bonta and Wormith 2006). Design weaknesses in each phase have

been detrimental to female offenders – and have prompted the evolution of the next phase. The first three phases emphasized gender-neutral approaches mostly based on an assumption that gender should be avoided as a “legally suspect classification” (Starr 1992). However, this assumption has been challenged (Bloom 2000; Brennan 1998, Farr 2000) and gender-sensitive assessments are now emerging in current 4G approaches. These phases are as follows:

1G methods – Clinical or professional judgment: These rely on clinical, discretion or expert judgment without explicit scoring rules or actuarial analyses. This traditionally dominated corrections and is still widely preferred by correctional decision-makers - from judges to classification officers (Wormith 2001, Boothby and Clements 2000). Its weaknesses include subjectivity, inconsistency, bias, stereotyping and legal vulnerability. Several meta-analytic studies confirm it has weaker predictive validity than structured methods (Grove and Meehl 1996). Legal pressures have undermined this approach and many correctional institutions have attempted to implement objective methods to replace or augment the 1G approach (with mixed success and much resistance). The 1G approach appears to impact male and female offenders alike – unless correctional staff have stronger implicit tendencies to over-classify or impose negative stereotypes on women offenders.

2G methods – Structured additive points systems: These gender-neutral simple additive points systems remain widely used for both men and women offenders. The most dominant 2G methods conform to Dawes (1979) description of “improper linear models” since their risk/need factors and weights were primarily established by common sense or professional consensus i.e., the BOGSAT method. Criminological theory was rarely involved in selecting their risk factors and the items include mainly criminal or disciplinary history e.g., prior arrests and convictions, escape history, prior disciplinary infractions, prior violent offences, drug problems; with a few social factors such as unemployment and educational factors (Austin 1983).

These methods are modestly effective for predictive purposes and often outperform “trained experts” (Dawes 1979; Mossman 1994). Their simplicity, objectivity and efficiency led to their adoption by many correctional institutions (NIC 1998). Subsequently, more rigorous statistical methods emerged to validate, select and weight the assessment factors and form composite scales, although again with little guidance from theory (Gottfredson 1987). For example, the VRAG (Quinsey et al. 1998) and the Salient Factor Index (Hoffman and Beck 1985) exemplify more statistically elaborated predictive instruments. From a female offender perspective, however, the development and use of most 2G risk-based methods was misaligned with the needs of female offenders. The focus on risk diverted attention from treatment relevant classification; and their calibration on male samples and omission of gender-specific factors may have limited their predictive validity for women (Brennan 1998; Hardyman and Van Voorhis 2004; but see Harer and Langan 2001)

3G methods: These use a more comprehensive and theory-guided selection of risk and needs factors and use criminogenic factors that are empirically validated and dynamically sensitive to change (Andrews et al. 2006). The Level of Service Inventory-

Revised or LSI-R (Andrews & Bonta 1995) exemplified these changes and is perhaps the most widely used 3G assessment in correctional organizations.

However, 3G methods have been criticized for their limitation to mainstream theories and gender-neutral risk factors with little attempt to address gender-sensitivity. Also, by emphasizing “risk” as the focus of classification they have been attacked as inappropriate for women offenders (Bloom 2000, Reisig et al. 2006). Most 3G methods also fail to explicitly assess “strengths” or the “enhancement” or “good lives” approach (Ward and Stewart 2004).

4G methods: In a recent review Andrews, Bonta and Wormith (2006) identify several 4G approaches, including: the Correctional Assessment and Intervention System (www.nccd-crc.org/need_main.html); the Adult and Youth COMPAS (www.northpointe.com); the Offender Intake Assessment (OIA) of Correctional Services of Canada (Motiuk, 1997) and the LSI/Case Management Inventory (Andrews, Bonta, and Wormith 2004). Innovations in 4G methods are addressing several deficiencies of 3G methods and introducing several technical advances (Brennan, Wells and Alexander 2004).

First, 4G tools more strongly incorporate theory-guided assessment with a broader range of theories e.g., low self-control, strain theory, social control, social marginalization, routine opportunity theory and a “strengths/good lives” perspective. Second, they broaden the range of dynamic factors. Third, they are software-based and incorporate integrated databases to link person factors to environmental factors, criminal justice processing decisions, treatments and outcomes. This integration of data domains will facilitate evidence-based practice studies (EBP), case monitoring, impact and evaluation goals, survival analyses and other outcome studies (Andrews, Bonta and Wormith 2006; Brennan, Wells and Alexander 2004).

4G methods are beginning to incorporate gender-specific factors from emerging research (Wright, Salisbury and Van Voorhis 2006; Salisbury, Van Voorhis and Wright 2006, Blanchette and Brown 2006; Brennan – this volume). For example, COMPAS already uses gender-specific calibrations of all its risk and need factors and a female-based pattern identification procedure reminiscent of the feminist “pathways” model (Daly and Chesney-Lind 1988; Daly 1992). 4G systems also comply with evidence-based practice (EBP) data requirements by the seamlessly integrating risk/need person assessment to treatment, case-management and outcomes. Finally, the broader risk/needs profiles included in these assessments should facilitate the analysis of specific responsivity and strengthen treatment-relevant classifications.

5. Eleven Problems of Institutional Assessments of Risk-needs of Female Offenders

Current institutional assessments reflect various design flaws that are particularly damaging to the effective and fair assessment of women. These, together with inadequate resources and ineffective implementation, have undermined many basic correctional goals (Burke and Adams 1991, Brennan 1999, Van Voorhis and Presser 2001, 2004).

However, the last decade has seen strong pressures for gender-sensitive assessments including litigation, academic research on gender-specific factors and rising concern in federal agencies. The NIC has supported an initiative on the classification of women offenders, including a national survey of institutional assessment and classification of women offenders (Hardyman and Van Voorhis 2004). In California, the Office of Criminal Justice Planning (OCJP) supported a study of gender-specific responses (Owen, Bloom, Deschenes and Rosenbaum 1998). Blanchette (2002) describes national recognition in Canada of the emergence and support for gender specificity in assessing women offenders.

Thus, before recommending steps to improve assessment and classification for women offenders it seems prudent to identify the design flaws of current correctional assessment of women offenders:

1. Designed and calibrated for males – then applied to women: A first flaw is that many correctional institutions use the same classification instruments for both male and female offenders (Hardyman and Van Voorhis 2004). These were designed and calibrated largely on male offenders, but the same risk factors and weights are applied to women offenders. There were only few attempts to assess their validity for women (Harer and Langan 2001). This persists despite evidence that women differ from male offenders in several key risk and need factors e.g., disciplinary behaviors and institutional adjustment, risk of violence, medical needs, mental health, family issues, and so on (Hardyman and Van Voorhis 2004).

2. Lack of an instrument specifically for women offenders: Blanchette and Brown (2006) note that we still do not have a well-designed, validated, gender-sensitive risks-needs instrument for women offenders. New efforts are underway towards this goal (Wright and Van Voorhis 2006), but the basic research remains to be completed. The main current assessment instruments (e.g., LSI-R, PCL-R, COMPAS) were designed largely on male samples, using gender-neutral risk factors; although COMPAS now incorporates calibrations based strictly on female only samples.

3. Confusion over purposes of classification: Recent surveys reveal organizational confusion over the purposes of assessment and classification for both male and female offenders (Hardyman and Van Voorhis 2004). This arises partly from the many competing purposes of classification (Brennan 1987). Classification designs can be contentious with different stakeholders (inmates, staff, citizen victim groups, politicians, etc.) emphasizing highly diverging policy priorities. Hardyman and Van Voorhis (2004) noted this confusion in their recent national review, noting that many criminal justice organizations had no clear policy priorities or “central principles” to guide their assessment and classifications for women offenders. They also note that the current literature remains unclear about the proper purposes of classification - particularly for women offenders.

Any confusion over purposes, or a policy vacuum, can result in a poor fit or “misalignment” between the adopted classification and organizational policies that it

should achieve. The classic example of misalignment is when a correctional organization uses a predictive risk classification for treatment planning purposes. Good alignment implies that the design of the classification method “fits” the organizational purposes and its culture (Walton 1980, Brennan 1999). Several studies document a serious “disconnect” between classification and practice (Wormith 2000). Such “disconnects” are illustrated in several ways: 1) when an organization conducts risk assessments on women but then ignores these when making custody and housing decisions; 2) when the staff systematically overrides the assessments and replaces them with discretionary decisions; and 3) when there is no obvious relation between the formal needs assessment and the actual treatments provided (Wormith 2000, Hardyman and Van Voorhis 2004; Brennan 1998).

4. Prioritizing an inappropriate policy for women offenders: A variation of the above policy confusion occurs when an organization prioritizes an inappropriate goal or adopts an unbalanced classification policy. The design of an assessment must begin with central purpose or “organizing principle”. However, most correctional organizations still prioritize “risk” as their dominant classification goal for women offenders, while neglecting other key purposes (e.g., explanation, clinical description, treatment guidance and responsivity issues, etc.). I agree that risk assessment must be an important goal - since male and female offenders both present some security or disciplinary risk. Yet, when other key classification goals are overly neglected the resulting classification procedures may be seriously misaligned with broader organizational purposes.

This prioritizing of “risk” in assessing women offenders has been challenged on several grounds (Bloom 2000, Brennan 1998). The lower base-rates of women offenders for risks of serious infractions and recidivism make risk prediction for security more difficult (Clear 1988). This is compounded by the omission of gender-specific risk factors and by using cut points based on male offender distributions (Harer and Langan 2001, Clear 1988). More generally, any misalignment between classification design and policy goals suggests the organization is misconstruing or confused over its classification policy goals (Walton 1989).

5. Inadequate knowledge of predictive validity for assessments for women: A decade ago Gendreau and colleagues (1996, p. 587) in a meta-analytic study concluded that the available research was “virtually silent” on recidivism prediction of women offenders. A decade later this is largely unchanged. For example, Blanchette and Brown (2006) recently concluded that current knowledge of predictive factors for women offenders is “replete” with inconsistent findings and offers little guidance on what specific need and risk factors are clearly criminogenic for women offenders. They note that while the predictive validity of several main assessment tools for recidivism of male offenders is well supported (e.g., the PCL-R, Hare 1991; LSI-R, Andrews and Bonta, 1995) the evidence is far from conclusive regarding the use of these instruments for women (p.80).

6. Lack of understanding of “specific responsivity” for women: We also have little knowledge of specific responsivity for women offenders – even in 4G applications. Thus,

most current instruments provide very little guidance on specific responsivity. Yet, this concept addresses the “individual matching” of women offenders to interventions based on personal risk/need profiles and is thus of extreme practical importance. Andrews et al (2006) acknowledged that specific responsivity is the “least explored” of their Risk-Needs-Responsivity Principles (RNR).

Historical approaches to specific responsivity and “matching” emphasized treatment-relevant typologies: e.g., the I-Level (Warren 1971), the Client Management Classification (Harris 1994), the “stages of change” theory (DiClemente & Velasquez 2002) and other typologies. These were mostly developed on males and there is almost no knowledge of whether their categories even exist for female offenders. Emerging treatment-relevant typologies of female offenders include the “Women’s Pathways” model of Daly and Chesney-Lind (1988); and the more recent quantitative taxonomies of Stefurak and Calhoun (2006), Brennan (2006; and Chapter 7, this volume).

7. Inadequate theory guidance for women’s assessment: Generally, few current risk-needs assessments have sufficient guidance from well validated female-centered theory of anti-social behavior. While, the literature on female-centered and hybrid theories is burgeoning and various theoretical proposals have proliferated, many of these lack validation evidence (Blanchette and Brown 2006). Thus, risk/needs assessments in correctional institutions either ignore theory or have only a tenuous link to mainstream criminological theories (Ward and Stewart 2003, Jones, 1996). Assessment without theoretical guidance runs the danger of incoherence, with a confusing mixture of disconnected factors, weak explanatory power and little utility for providing treatment guidance.

8. Inadequate needs assessment for women offenders: Needs assessment in many correctional institutions often focuses too narrowly on those “needs” for which the institution is legally responsible i.e., suicide and self-harm risks, medical needs, detoxification needs, and so on, while ignoring other key criminogenic needs (NIC 2003, Austin 1998, Clements 2000). These incomplete and partial needs assessment instruments also - as noted above - have little basis in criminological theory, do not address gender-specificity and offer weak guidance for effective rehabilitation (NIC 2003, Ward and Stewart 2003). Fowler’s (1993) conclusion that institutions do “nothing positive” to prepare women to return to their community or to develop critical survival skills, appears almost as true today as when it was made.

Since we still lack knowledge on what needs are truly criminogenic for women, the design of needs assessment instruments only receives marginal guidance from research on what factors are critically appropriate for women. Recent suggestions offer a large and confusing set of factors e.g., low self-esteem, low self-efficacy, dependency, suicide risk, drug abuse, poor education and vocational achievement, parental death or loss at an early age, foster care placement, unstable foster care, residential placement, homelessness, prostitution, and parental responsibilities, and so on.

An encouraging trend is the current emphasis on assessment and programming for re-entry and post-release support. This is strengthening needs assessment, case conceptualization and focusing attention on specific responsivity and rehabilitation goals. However, vigilance will be required to ensure that a gender-specific perspective informs this development-

9. Oversimplified risk classification models: Another consequence of the drive for speed and risk-based 2G risk assessment models during the last two decades was an extreme simplification of assessment (Austin 1983, NIC 2003). These models used only a few "objective" criminal histories, behavioral and legal factors in an additive point format so that security and risk assessments could be conducted typically within a few minutes. This simplification resulted from very strong pressures for organizational efficiency, over-emphasis on risk, neglect of treatment, omission of theory, and the assumption that the same instrument fits both male and female offenders.

However, the advantages were that these simple 2G methods gave institutions an objective and reliable separation of violent from non-violent offenders and repeat from first-time offenders. By efficiently supporting routine security and housing decisions they remain popular in busy correctional agencies for routine processing and housing decisions. As noted elsewhere, they tend to over-classify women offenders, lack gender-sensitivity, and have only modest predictive validity (Harer and Langan 2001).

10. Inadequate clinical utility for women offenders - Weak treatment implications: The loss of clinical and explanatory utility was an obvious consequence of prioritizing simplicity, efficiency and risk in the widely used 2G jail and prison assessments. By omitting most social, psychological and criminogenic factors these 2G methods were mostly blind to underlying causal and explanatory processes or to factors of relevance for women. This resulted in minimal explanatory depth.

However, explanatory criminogenic factors are needed to guide case formulation, to indicate specific needs and develop intervention plans (Sechrest 1987, Brennan 1998). 3G methods were a partial answer to these deficiencies and have gradually been adopted into detention institutions as well as for probation, parole and community corrections. However, these are often resisted or sabotaged and it has been difficult to achieve successful implementation among correctional staff (Boothby and Clements 2000). In an insightful analysis Wormith (2000) identifies several factors that underlie the poor implementation of 3G methods in criminal justice organizations.

11. Inadequate innovation in correctional organizations: In spite of strong pressure to upgrade female classifications - from legal challenges, academic findings, feminist opposition and internal staff dissatisfaction - recent surveys suggest that change and innovation has been very limited (Hardyman and Van Voorhis 2004). This national survey found that very few state correctional systems have upgraded their assessment and classification tools for women offenders and most continue to use the same gender-neutral instruments for both men and women offenders. Some have even experimented for a time with newer instruments and then reverted back to the same traditional practices. However,

solid empirical advances are now being reported and on correlates of female recidivism and a few state institutions are experimenting with gender-specific approaches (Wright, Van Voorhis and Livingstone 2006).

6. Theory as a foundation for female offender assessment

Assessment requires guidance from theory. As noted earlier, most current assessments do not sufficiently incorporate theoretical perspectives. In the case of assessment for women this partly results from unresolved theoretical debates and substantial gaps in research data. A first problem is whether we should rely on mainstream theories (e.g., strain theory, control theory, ecological theories, etc.) or seek female-specific theory as a basis for assessment. A second is that the identification and measurement of validated gender-specific assessment factors is at an early stage of development. Empirical data to support various theories and factors for female offending remains inconsistent (Bloom, Owen and Covington 2003, Wright and Van Voorhis 2006, Blanchette and Brown 2006). This section reviews selected theoretical options that appear relevant in designing institutional assessment for women offenders – although given the absence of research data extreme caution is warranted.

Position 1. Mainstream theories are sufficient: This position argues that mainstream theories of criminality and their predictive factors are applicable to both male and females and that gender difference in crime result from differences in levels of these risk factors (e.g., anti-social peers, poverty, joblessness, impulsivity, criminal opportunity, etc.). Several global theories dominate mainstream criminology e.g., control theory (both self and social control versions), social learning, criminal career or life course theories, socio-biological theories, and so on (Rutter et al 1998; Walsh 2002). These suggest specific gender-neutral risk and need factors to guide offender assessments.

Mainstream theories and their explanatory power for both male and female offending have been fairly well-supported by research. For example, Higgins (2004) demonstrated that the well-known “General theory of Crime” (Gottfredson and Hirschi, 1990) applies across gender. Using measures of self-control, parenting and deviance in multiple group structural equation modeling, he concluded that the central explanation fitted both male and female offending. This adds to an accumulating body of research supporting mainstream factors to explain female offending (Rutter et al. 1998, Dowden and Andrews 1999, Cernkovich and Giordano, 1979; and others). However, substantial disputes remain and some argue against relying only on mainstream factors (Morash 1999; Reisig, Holtfreter and Morash 2006 and others).

Position 2. Gender-specific theories are required: A second position asserts that if anti-social behavior among women has different explanations and meanings then gender-specific factors may be required to explain female offending. If this position is true it would be inadmissible to use the same assessment factors for male and female offenders. This position thus rejects mainstream theories and argues for gender-specific needs, risks and predictors (Daly and Chesney-Lind, 1988; Bloom, Owen, and Covington, 2003; Chesney-Lind, 1997). A substantial theoretical literature has now emerged with strong

implications for assessment instruments for women offenders. Some major themes in this literature are now discussed.

Gender inequality and female economic marginalization: This would give a central role in assessment systems to female poverty and economic marginalization (Steffensmeier and Allan 1996). Empirical support linking female poverty to offending is compelling e.g. single parenting, divorce, children born out of wedlock, economic and vocational challenges, and so on (Farrington and Painter 2004, and others).

Differential socialization: This suggests that different socialization and child rearing practices may produce gender differences in offending (Covington 1998; Belnap and Holzinger 2006). Socialization factors cover a spectrum of features e.g., higher aggression and ambition among boys, higher supervision and lower tolerance of non-conforming behavior of girls, lower opportunity for anti-social behaviors, the internalization of social cognitions regarding male-female power and aspects of femininity, and so on. However, others dispute that socialization alone can fully explain the sex ratio differences in crime rates (Campbell 2002). Additionally, in mainstream theories, inept, abusive and uncaring parenting is consistently criminogenic for both males and females (Lykken 1995; Gottfredson and Hirschi 1990).

Relational Theory: The central variables in this theory are relationship needs and attachment bonds, since these appear more important for women (Covington – this volume, Chapter 6; Bloom et al. 2003; and others). It overlaps with social control theory, since a greater need for social connectedness may produce stronger social bonding (e.g., to family, social groups) which theoretically should inhibit criminal behavior. However, if attachments are to anti-social others then certain “crimes” may result from a woman’s need to maintain these relations and also may reflect the strong influences of partners or associates.

Pathways Theory: This posits several diverse “pathways” or ideal types in which a women’s offending is seen as a response to oppression or social conditions (Daly and Chesney-Lind 1988). This theory suggests a range of personality and environmental factors that define several idealized types with a specific profile of risk and need factors (Reisig et al. (2006). These pathways include:

1. **Street women:** These women have fled severe domestic violence and are perhaps addicted and may rely on prostitution, drug dealing or theft to survive.

2. **Drug-connected women offenders:** The gist of this pattern is the use, sales or trafficking of drugs often in collaboration with an intimate partner or family member – although their own drug history may be less extensive than street women.

3. **Harmed and harming women:** This reflects long-term abuse and neglect, unstable living conditions and continuing abuse. School, family and delinquency problems may precede their own hostile aggressive demeanor. This profile is reminiscent of Moffitt’s (1993) life-course persistent (LCP) offenders.

4. Battered women – Situational offenders: The abuse of these women appears limited to their current intimate partner. They differ from other categories in that their criminal involvement appears situational or unlikely except for their relationship to the current violent partner.

5. Economic offending: The core of this pattern involves instrumental or economic crimes leading to fraud, theft or embezzlement but with little evidence of other problems. While many of these women are poor and economically marginalized, others are motivated by greed or social aspirations.

Possibility 3. Hybrid theories – Combining mainstream and gender-related factors: This possibility accepts traditional theories and their factors but would add relevant gender-specific factors to enhance the sensitivity of assessments to gender-specific factors. These theories include:

Gendered Theory of female offending: This argues that while mainstream factors causally influence both male and female offending - they may be moderated by gender (Steffensmeier and Allan 1996; Schwartz and Steffensmeier, this volume - Chapter 1). This theory emphasizes five central factors:

1. Cognitive internalization of women's roles and role performance e.g., nurturance, femininity, etc.
2. Women's moral and social development such as higher family and social affiliations, empathy and sympathy
3. Greater social control and supervision of women; lower opportunity for anti-social behavior, more disapproval of non-conforming behavior, etc.
4. Differences in physical strength
5. Sexuality

Each of these would be assessed in specific ways to reflect the moderating influence of gender on the manner in which each of these factors may influence particular forms and expressions of anti-social behaviors.

General Strain Theory: This approach has reformulated classic strain theory in a way that it may account for gender differences in crime (Agnew 1992). The central assessment features include: 1) strain and social failure, blocked opportunity and economic oppression, 2) aspirations, life goals, and expectations 3) coping and emotional responses to failure and strain; social supports. Broidy and Agnew (1997) suggest ways in which women and men respond differently to each of these broad mainstream factors.

Gender-specific taxonomic patterns of women offenders: This approach is more empirical and exploratory than the pathways approach, but is similar in assuming that certain female “patterns” or types exist (Widom 1978, Stefurak and Calhoun 2006, Moffitt et al. 2001, Brennan 2006). These may reflect female-specific explanations of offending. Recent empirical research has confirmed analogues of Moffitt’s LCP chronic delinquency category as well as her adolescent limited (AL) category among female samples (Stefurak and Calhoun 2006; Brennan – this volume). As these exemplars become more fully described they may clarify gender-specific causal structures or explanations that may produce specific responsivity implications for each type in terms of type-by-treatment interactions (i.e., the essence of specific responsivity).

This section has reviewed only selected theories of female offending. These may provide guidelines for institutional assessments for women. Depending on their further validation and refinement, they may indicate whether women offenders require additional risk or need factors beyond those used in current 3G and 4G assessments.

7. Content Validity – Key risk factors differentiating male from female crime

What explains the large differences in crime between males and females? Male gender appears to be a major risk factor for most forms of criminal behavior (Moffitt 1993; Rutter et al. 1998) with females generally committing fewer and less serious crimes. However, the crime sex ratio appears variable across both time and culture, suggesting that socialization and cultural issues may play some role. For example, the sex ratio for crime rates declined from about 11:1 to about 4:1 in the forty year period ending in 1995; and also appears to vary by ethnicity (Rutter et al. 1998).

Gender is only an entry point in identifying mechanisms to explain male-female differences in crime. Potential factors underlying higher male crime rates may include: hormones, temperament, personality differences, socio-cultural differences, role performance demands, differing identities and aspirations, and so on (Rutter et al. 1998, Walsh 2002). The potential factors fall roughly in three broad categories: 1) individual biological and psychological features, 2) psycho-social risk and protective factors, and 3) social, cultural and environmental contexts.

1. Individual psychological, biological and personal features

Temperamental and physiological factors are not typically assessed in correctional institutions and caution is warranted in the following discussion due to a lack of data. However, several factors in this domain have been proposed as influencing gender differences in crime (Fishbein 2000; Walsh 2002). If and when valid and efficient tests appear there will be strong pressure to incorporate these for the identification of extremely dangerous offenders. The following are noted:

Aggression, Hostility, Social Dominance, Testosterone: Biological differences in aggression and social dominance have long been mentioned as potentially influencing the sex ratio in crime (Maccoby and Jacklin 1980; Rutter et al. 1998). High testosterone is

associated with higher male criminality, violence and social dominance; as well as higher rates of violent crime, domestic violence, number of sex partners, drug use and prison rule violations (Walsh 2002, Mazur and Booth 1998).

In a recent study of prison assessments the need for improved identification of violent offenders was a dominant theme (Brennan, Wells and Alexander 2004). Recent innovations have focused on the identification of psychopathy. Such prisoners are mostly male and appear responsible for a very high percentage of violent crime and rule violations in prison (Hare 1996; Quinsey et al. 1998). Recent physiological assessments linked to psychopathy are emerging that may augment psychometric tests (Fishbein, 2000; Raine, 1993). These utilize physiological responses that appear to characterize psychopathic offenders in test situations e.g., skin conductance, heart rate changes, stress levels, anxiety levels (Raine, 1993). Psychopathic types also appear to reflect less fear, anxiety, stress or emotionality than non-psychopathic offenders in responding to test conditions. Fishbein (2000) suggests these approaches may have diagnostic usefulness and may find wide use if they can become more efficient.

Correctional institutions do not, currently rely on biological or hormonal tests to identify violent offenders and typically use history of violent crimes, weapon use and personality-based aggression scales (e.g. MMPI, COMPAS, Buss-Durkhee Hostility scales). These are used to support referrals for anger management or cognitive programs regarding anger; and for cell assignment to minimize violent disruptions. A recent finding among women offenders is that higher anger is significantly linked to return to prison and to prison misconducts (Salisbury, Van Voorhis and Wright 2006).

Another recent finding on female aggression from person-centered taxonomies is the recurrent identification of a sub-type of aggressive woman offender that appears to match the “harmed and harming” pathway. This pattern reflects a profile of hostility, resentment and anger among internalizing young women who had been seriously neglected and sexually abused (Widom 1978, Brennan 2006, and Chapter 7 this volume).

Hyperactivity, Impulsivity and novelty seeking: Impulsivity, novelty seeking, boredom proneness are all linked to personality theories of crime in mainstream theories. Male susceptibility to crime appears associated with hyperactivity, impulsivity, boredom proneness and risk-taking (Rutter et al. 1998, Walsh 2002). These all occur at higher levels among Moffitt’s (1993) serious habitual LCP offenders. It is also known that this pattern is gender-based with fewer women falling in this category (Moffitt et al. 2001).

Self-esteem: While often proposed as a risk or need factor for women offenders, the link from low self-esteem to women’s anti-social behavior appears inconsistent. Some doubt that it is criminogenic for women because it’s correlation with criminality appears weak and inconsistent (Andrews & Bonta, 1998; Gendreau, Little and Goggin, 1996; Dowden and Andrews 1999).

Self-efficacy, power and dependency: These factors are often proposed as important for assessing female offenders. However, they are typically not routinely used in current

3G and 4G assessment and there is a lack of data to confirm their validity. Socio-cultural oppression and economic marginalization have also been theoretically linked to dependency, low self-efficacy and powerlessness among women. Low self-efficacy may also be a component of a post-traumatic stress stemming from sexual and physical abuse. These relationships also may be context-dependent and differ across various categories of female offenders e.g. drug abusers, domestic violence, or Daly's (1994) criminal pathways. The exact role of low self-efficacy and power while clearly of interest, require additional data to confirm their explanatory and predictive importance.

Mental health factors: Most correctional institutions assess psychological and mental health problems of offenders. Stark differences have emerged between male and female offenders. Thus mental health histories and psychological factors appear critical for a gender-sensitive assessment (Bloom, Owen and Covington 2004). Certain diagnostic categories, however, appear particularly relevant given their differing prevalence rates by gender. The following three categories may be of interest in augmenting the gender-specificity of criminal justice assessment:

Attention Deficit (ADHD): This child and adolescent pattern of inattention, impulsivity, boredom proneness and extreme restlessness is strongly gender-linked with a sex ratio varying between 6:1 to 2:1 (Rutter et al. 1998). It correlates with the low "self-control" concept of Gottfredson and Hirschi's (1990) general theory of crime, and with Hare's (1996) psychopathy. While emerging in childhood it appears to persist and has been associated with adult criminal behavior in both genders.

Conduct disorder (CD): This diagnostic category includes delinquent behaviors such as vandalism, fire setting, burglary, stealing, cruelty and so on; and is often routinely used in delinquency institutions. It is gender-related and occurs among boys at about twice to three times than among girls (Rutter et al. 1998). Importantly, the sex ratio for CD also varies by specific crime suggesting different patterns of criminal activities among male and female offenders. For example, non-aggressive behaviors (e.g., truancy, alcohol and drug use) appear relatively frequently among girls, while aggressive predatory offences occur almost exclusively among males (Rutter et al. 1998).

Antisocial personality disorder (APD): This diagnostic category is often used in mental health assessments in correctional institutions. APD has a strong sex-ratio of around 6:1 to 5:1 between males and females (Rutter et al 1998). It is defined by a pervasive disregard and violation of the rights of others, criminal behavior, aggressiveness, lying and an irresponsible lifestyle, etc. (Rutter et al. 1998). Mental health professionals criticize this category because it virtually overlaps with criminality. It also clearly relates to Hare's (1996) psychopathy concept.

Psychopathy also shows a strong sex ratio. In a detailed review of psychopathy and its sub-types, Linda Mealey (1995) reported a sex ratio of at least 4:1. Among women, "psychopaths" are very rare (1% or less in community populations, Mealey 1995). This has prompted a discussion over whether this category even exists among women. However, taxonomic studies of female offenders have recurrently identified a similar type e.g.,

Widom 1978, Moffitt et al. 2001, Stefurak and Calhoun 2006; Brennan – this volume). However, caution is warranted here since prevalence and identification studies are hampered by the absence of a validated and uncontroversial assessment tool for psychopathy. Hare's psychopathy checklist (PCL) is the current gold standard – but its length and training requirements appear prohibitive and there is controversy over its construct validity (Walters 2004). A valid and efficient assessment of psychopathy would be profoundly important for correctional institutions.

Additionally, this category has no stable “naming” system. Various partially overlapping “psychopathy” categories have been named as follows: life course persistent (Moffitt 1993), primary sociopaths (Mealey 1995), primary and secondary psychopaths (Widom 1978), continuous anti-socials (DiLalla and Gottesman 1989), and so on. Thus, naming conventions are not yet established. Yet, it is clear that communication in institutions requires a stable naming system and this absence is a serious problem for correctional organizations. Another difficult ethical concern is the danger that some women offenders would be over-classified into either APD or psychopathy. For some women this could result from inter-personal relationship issues, unstable work and residence and the concept of “pervasive social malfunction” in which economically marginalized women appear to have more problems than men (Rutter et al. 1998). Several current projects are examining controversies of the definition, measurement, theoretical coherence and boundaries of both APD and psychopathy (Millon 1998).

Depression, low self-esteem and suicidal ideation: Institutional assessments of offenders usually include suicide risk and depression in routine intake screening. Initial assessments are cursory and are usually followed by more detailed assessments using a variety of mental health instruments. This area also reflects gender differences in prevalence with higher risks of depression, suicide and self-injury among women offenders (Belnap and Holzinger 2006). This area appears important for explanatory purposes and in providing treatment goals for certain categories of women offenders (Daly 1992).

Anxiety and emotional issues: Anxiety is not routinely included in institutional assessments. However, given the abuse, trauma and violence experienced by many women offenders as well as economic vulnerability, worry over children, and need for a safe and secure environment; the routine assessment of anxiety seems warranted. Anxiety has emerged as a significant correlate of return to prison and prison misconducts (Livingstone, Van Voorhis and Wright 2006). More generally, Blanchette and Brown (2006) report that over 60% of women offenders have high scores in a broad “emotional problems” category (e.g., anxiety, mental health, poor problem solving, neuroticism, low self-control, and so on).

Trauma and PTSD: Trauma is increasingly recognized as a set of complex patterns of co-occurring mental health, victimization, addictions, and other factors. The precise structure of these patterns may differ between males and females and even among females. This heterogeneity is shown by the finding that sexual abuse does not always imply that a particular female becomes traumatized. The form of trauma will depend on the specific event, the context, background factors and the person's responses. Yet among women,

childhood physical and sexual abuse appears central to certain particular co-occurring patterns involving abuse, anti-social behavior, addiction problems; depression, anxiety, social withdrawal, PTSD and borderline personality disorder. Another issue is women's responses to abuse and trauma can often result in conflicts with the law.

Although assessment of trauma is not routine in most correctional organizations, it may be identified by referrals to mental health staff who will then conduct an appropriate in-depth assessment. Given the likelihood that such informal referrals may fail to detect most trauma cases, a recommendation is that criminal justice organizations should incorporate trauma-informed assessments routinely into their assessments of women offenders. Until this occurs it is likely that many cases of trauma will remain undetected among women detainees.

2. Psychosocial risk and protective factors

Several psychosocial factors are routinely included in 3G and 4G assessments in correctional institutions. Gender differences appear particularly important for the following: 1) differential exposure to risk, 2) differential vulnerability or susceptibility to being harmed by these risks, and 3) differential ability to cope with adversity (Rutter et al. 1998). The following key risk and need factors have entered various institutional assessment systems:

Anti-social Attitudes and Cognitions: Antisocial attitudes appear criminogenic for both genders (Blanchette and Brown 2006)). This factor has been found to differentiate between security levels of women offenders and has demonstrated predictive validity for both institutional adjustment and recidivism (Dowden and Andrews 1999; Walters & Elliott 1999).

Physical and Sexual Abuse: Abuse and victimization are widely prevalent among women offenders - with about half to three-quarters of women offenders reporting victimization either currently or in the past (Owen and Bloom 1997). As noted above in discussing trauma, it appears that physical and sexual victimization are key components in different trauma patterns. These forms of abuse thus should be routinely included in assessment of women offenders. Abuse also often precedes runaway behavior which then leads to juvenile justice involvement and potential incarceration of the girl (Brennan et al. 1978; Chesney-Lind and Shelden 1998).

Abuse may function as a predictor, as a treatment goal or as an identifier of key "fault lines" between different pathways or categories of female offenders (Daly 1994; Stefurak and Calhoun 2006; Brennan 2006). However, additional research is needed since findings regarding its predictive power have been inconsistent (Bonta et al. 1995; Blanchette and Brown 2006).

The causal role of victimization in women's antisocial behavior also is ambiguous. Sexual and physical abuse have been implicated in distinct pathways of female offending (Daly and Chesney-Lind, 1988; Brennan – this volume). The development pathways of

abused young women seem to bifurcate into either externalizing or internalizing patterns. The externalizing pattern reflects aggressive acting out, promiscuity and excessive drug use; while the internalizing pattern reflects trauma, anxiety, depression, emotional problems, low self-esteem, social withdrawal, etc.. A recent empirical finding among young female offenders is that the internalizing pattern in Brennan et al. (2006) matched Belnap's (2006) description of one of her female offender sub-groups characterized by physical and sexual abuse, low self-esteem, relationship problems and mental health issues.

Differential Criminal Opportunity/High-risk lifestyles: Several state institutions are assessing "criminal opportunity" for routine re-entry planning. The concept of a "high risk" lifestyle relates to both higher criminal opportunity and exposure to high-risk situations. This factor occurs in both the General Theory of Crime (Gottfredson and Hirschi 1990) and in Routine Activities Theory (Cohen and Felson 1979). Evidence is accumulating regarding its predictive power for post-release recidivism (Osgood et al. 1996).

However, there is no consensus on an exact measure of "criminal opportunity" and it is unclear whether males and females differ in exposure to high-risk situations and criminal opportunities. The general theoretical expectation is that females have less exposure or opportunity (Steffensmeier and Allan 1998). However, caution is required due to a dearth of data. Brennan et al. (2006) using the Youth-COMPAS system identified several young female delinquent types exhibiting very high-risk lifestyles (high crime peers, drug problems, unsupervised, rebellious, high promiscuity). One type reflected Moffitt's (1993) "mimic adolescent limited" (AL) offender; while another reflected the habitual uncontrolled (LCP) pathway. While both types had high risk lifestyles they reflected different underlying etiologies – as exactly predicted by Moffitt (1993).

Substance abuse: Substance abuse is routinely assessed in correctional institutions. At least 50% of women offenders typically report daily use of drugs and many report being addicted (BJS, 1999). This is also a defining feature of both the "drug connected" and "street women" pathways in Daly's (1992, 1994) model. Yet, empirical findings for predictive validity of substance abuse have been inconsistent regarding women's recidivism (Blanchette and Brown 2006). A meta-analysis by Dowden and Andrews (1999) questioned its value as a treatment goal. Livingstone, Van Voorhis and Wright (2006), in contrast, report that a substance abuse history was significantly associated with both return to prison in a large sample of female offenders.

As noted elsewhere in this review, there are dangers in reaching strong conclusions from simple bivariate correlations. For example, substance abuse may be criminogenic for only certain female sub-types and may have little or no involvement in other types (Brennan – this volume). Recent research has also suggested that substance abuse may have different motivations and meanings by gender i.e., men's substance abuse appears more motivated by hedonism while among women it appears driven more by a desire to alleviate physical or emotional pain or by social motivations (Harer and Langen, 2001; Blume, 1990).

Protective factors, Strengths and Coping abilities: Since correctional assessment is mainly risk-based the domain of strengths has been largely ignored in many criminal justice agencies (NIC 2003, Harer and Langen 2001). However, it is now rapidly developing as a result of the attention to re-entry planning – as well as new theoretical concerns (Ward and Stewart 2003). This development is sufficiently recent; few strength instruments have been carefully evaluated for their validity among women. Thus, data from outcome studies is lacking and we have little guidance in selecting specific measures of strengths and protective factors.

However, recent findings suggest that certain protective factors are important for women offenders i.e., a safe supportive environment, supportive relationships, financial and educational strengths, intelligence and problem solving abilities and an ability to cope with anxiety (Livingstone, Van Voorhis and Wright 2006; Bloom, Owen and Covington 2003). There is controversy over whether “strengths” add incremental value over and above current mainstream factors (Bonta and Andrews 2003). However, empirical evidence is now emerging to support such factors. For example, among women offenders, family supports, supportive friends and supportive relationships were significantly associated with lower institutional misconducts, while financial and educational strengths were significantly associated with lower rates of return to prison over a 12 month outcome period (Livingstone, Van Voorhis and Wright 2006).

3. Social and Environmental Contexts

Assessments are increasingly focusing on situational, community and environmental contexts. This is an obvious feature of 3G and 4G assessments and is used in preparing prisoners for re-entry and re-integration. The extreme economic marginalization of many women offenders suggests that this domain should be important for gender-sensitive assessments. A widely publicized scandal of prison release was that most offenders are given about \$50 and a one-way bus ticket to return (mostly) to the same community where they were arrested. Crime, drugs, gangs, unemployment, inadequate or unsafe accommodation and extreme social marginalization often characterize these environments. The labels “war zones” or “oppositional sub-cultures” are often used to describe these environments (Rose and Clear 2002; Garbarino 1999; Lykken 1995). Some of the following factors have emerged in this domain:

Social and economic marginalization: This domain covers several traditional social risk and need factors i.e., joblessness, unstable housing, poverty and economic marginalization, low socio-economic class, unsafe residential area, and so on. Several studies support the predictive validity of elements of this domain for recidivism and return to prison amongst women (Farrington and Painter 2004, Blanchette and Brown 2006). For example, housing problems were significant in predicting return to prison among women probationers (Livingstone and Van Voorhis 2006).

Generally, women offenders appear more seriously marginalized than males - with lower full-time employment and higher public assistance [Bureau of Justice Statistics

(BJS) 1999]. These problems - as well as homelessness and residence in higher crime areas – are then compounded by childcare responsibilities (BJS 2000). A key challenge is whether current gender-neutral measures are sufficiently sensitive to do full justice to the negative impact of these factors on women (Bloom 2000, Livingstone and Van Voorhis 2006). It must be acknowledged that this assessment domain also has a measurement and conceptual problem since it appears to combine personal human capital (education, skill, etc.) with environmental factors – and ideally these should be distinguished.

Anti-social peers: This is a consensus criminogenic factor for both males and females and is central to social learning theory and sub-cultural theories. Meta-analytic research shows that reducing this risk factor among female offenders is associated with lowered recidivism (Dowden and Andrews 1999). However, this bivariate association, again, hides a more complex story. Specifically, anti-social affiliations appear criminogenic only for some women offenders but may be irrelevant for others (Stefurak and Calhoun 2006; Brennan – this volume). For example, one sub-type of abused and “internalizing” delinquent girls are characterized by very low peer associations, social withdrawal, mental health issues and severe sexual abuse. Care must be taken to avoid over-generalizations based on simple global associations (Cairns, Bergman and Kagan 1998).

Family Issues and relationships: Family factors appear critical for understanding, managing and treating offenders. Family factors have been theoretically and empirically linked to crime (Steffensmeier and Allen 1998; Gottfredson and Hirschi 1990). For example, Lykken (1995) argues that an epidemic of inept and abusive parenting is creating a “mass production” of sociopathic types in both genders.

Unfortunately, research among female offenders on many specific family dimensions has not produced sufficient data to confirm their status as criminogenic factors. Family factors are rarely systematically assessed in routine 2G institutional assessments often receiving only cursory coverage. However, newer 4G assessments - include a broader set of family factors (Brennan and Dieterich 2004). Important family factors for females include exposure to violence and parental pathologies, socialization failures, family disorganization, breakup and single parenting, large family size, sexual and physical victimization, neglect and emotional rejection, poor supervision and discipline, and so on (Rutter et al. 1998, Bloom 2000).

When women are imprisoned the family appears critical (Austin et al., 1992; Bloom, 1998). Significant stressors at this time include worry, pain and anxiety over separation from children, concern over children’s well-being; their placement in foster homes, social services or adoption; and concern over legal rights. Evidence is accumulating that this anxiety significantly impacts both women’s institutional adjustment and their post-release behavior (Hardyman and Van Voorhis 2004; Livingstone and Van Voorhis 2006). Another surprising finding is that women prisoners appear more isolated from families than males - as indicated by substantially fewer family visits (Kratcoski and Babb 1990). This may be crucial because of the presumed importance of family and child relations for women - and the role of family support for re-entry success.

Thus, institutional assessments should bolster family assessments e.g., by including the number of children, degrees of family support and cohesion and other relevant family factors (Dowden and Andrews 1999; Farrington and Painter 2004). Bloom et al. (2003) underscored the importance of family by calling for programs to support women offenders relationships with family, children, significant others, and friends. Building strong pro-social relationships for women offenders is consistent with both social control theory and the demonstrated importance of pro-social bonds for successful desistance (Horney et al. 1995). These issues are prompting a more elaborated assessment of family factors in 4G assessments (Salisbury, Van Voorhis and Wright 2006; Brennan and Dieterich 2004;).

Social and cultural context and related gender differences: Institutional risk assessments pay little attention to socio-cultural factors – except for gang membership, poverty, membership in drug cultures, and so on. However, from a gender perspective, socio-cultural factors have been implicated in the rise of female crime rates - including violent offences - over the last few decades (Campbell 1993). It also appears that certain socio-cultural factors (e.g., oppositional sub-cultures, “honor” cultures, urban ghettos, gang cultures, eco-terrorist groups, as well as the more toxic aspects of contemporary mainstream cultures) have both explanatory and preventive implications (Rose and Clear 1992; Walsh 2002). The cultural promotion of values, aspirations, role models and life expectations for boys and girls have been seen as critical in the differential anti-social behavior of boys and girls (Steffensmeier and Allen 1998; Garbarino 1990). However, few of the factors in this section have been systematically evaluated for their usefulness in institutional assessment of women offenders:

Contemporary cultural images and cognitive representations: Socio-cultural factors have been implicated in the mental health and crime problems of women. Belnap (2006) argues that depression, powerlessness, low self-efficacy and mental health issues are all linked to women’s experiences and expectations for sex discrimination, social marginalization, status expectations, disrespect, sexual double standards, sexual harassment and physical and sexual abuse. Regarding the cultural images of women, she documented a lack of positive attributes in images of being “female” and damaging consequences of such cognitive representations among young female offenders. Garbarino (1999) similarly emphasized “socially toxic” contemporary cultural factors in harming the social development of youth (e.g., shallow materialism, distorted values, meaningless aspirations, stunted role models, cults of “celebrity”).

Differences in peer environments of males and females: Contemporary peer groups of young males and females appear to differ in certain key ways. First, the higher male crime rate implies that young males have more exposure to anti-social peers than females. Second, Maccoby (1998) documents that young male interchanges tend to be more competitive and domineering; with more exhibitions of toughness, limit testing, risk taking and illicit activities. She describes girl’s exchanges as having more intimate friendships, more “turn-taking”, congenial emotional interchanges and attachments, and less “rule-breaking”. Third, weapon ownership in this culture is significantly higher among young males, with very few young females owning guns (Cairns and Earp 1989). These factors

should generally produce less violent, delinquent or aggressive behaviors among young women (Steffensmeier and Allan 1998).

Interaction between socio-cultural factors and hormones: Walsh (2002) has noted that hormonal factors interact with socio-cultural factors. For example, young males embedded in ‘fighting or honor’ cultures were found to have higher testosterone compared to other social groups. He suggests that to survive in such “macho” cultures, dominance and status-maintenance is critical and aggression becomes a standard strategy to maintain or achieve dominance (Walsh 2002).

Conclusions: Recommendations to improve Institutional classification of female offenders

The status of assessment of women in correctional institutions remains problematic. It reflects many design flaws, weak validation, calibrations based on male samples and use of gender-neutral factors while other potentially important factors are ignored. These problems continue unabated in many correctional institutions (Hardyman and Van Voorhis 2004). This underscores the urgency of upgrading both instrument design as well as organizational practices.

Improving assessment and classification for women offenders might proceed on several fronts. The first is technical design and the elimination of design flaws. The second is improved organizational implementation. This latter problem draws attention to an implementation gap that should be minimized. Even if these design flaws are corrected, the “business-as-usual” organizational problems of inadequate staffing, inadequate resources, weak supervision, inadequate training, work overload and so on, remain formidable and are likely to undermine any technical advances in assessments (Brennan 1999). The following suggestions are offered to advance methods and policy for assessing women in correctional organizations:

1. Technical recommendations

Stronger theory-guidance for women’s assessment: We urgently need validated theories of women’s criminality to guide selection of gender-specific assessment factors. Meehl (1992) argued that theoretical guidance is critical in designing assessments - from initial scale conceptualization to final validation and that even in areas of weak theory we must “make do” with these rather than rely on a shotgun approach. Yet, in the present circumstances there is a danger of shotgun empiricism as well as an unsystematic proliferation of untested “theories” of female offending and inadequate validation.

Available theories for women’s offending straddle mainstream explanations such as strain theory, control theories, social learning; female-centered theories such as evolutionary theories, relational theory; taxonomic theories, feminist pathways, and others. In spite of this proliferation we lack systematic theoretical understanding of re-entry

processes and desistance; specific responsivity and treatment matching; and disciplinary problems among women. Organizations must face and then manage all of these issues and theory development in these areas is critical to advance assessment.

Inclusion of gender-sensitive risk and need factors: While mainstream risk and need factors may offer several valid predictors of female offending, an optimum assessment for women appears to require additional gender-specific risk and need factors. While a final list of such factors is still evolving it may include sexual and physical abuse, women's socio-economic marginalization; relations with family, children and significant others; social supports; parenting and family responsibilities, coping abilities, current anxiety, trauma and stress; and other protective factors, etc.

Validation and "cut points" should be based on samples of women offenders: The development and validation of gender-sensitive actuarial assessments should utilize populations of women offenders – for both initial development and cross-validation. This would optimize the selection and weighting of required risk factors and the position of cut points for predictive scales for women offenders.

Higher clinical utility of assessment for women offenders: The clinical utility or practical usefulness of assessment tools for women offenders must be strengthened. Current assessments provide poor practical guidance. Gender-responsive classifications should explicitly provide clearer explanations, individualized case formulations; higher predictive validity; improved ability to identify needs and treatment goals; and a more systematic guidance for "matching" women to relevant programs. Such practice goals should be more readily achieved when assessments incorporate stronger theoretical guidance, more relevant and comprehensive risk and need factors and incorporate more powerful statistical analysis linked to women's outcomes.

Clinical utility or practical usefulness requires a deeper understanding of "specific responsivity". Andrews et al. 2006 acknowledged that specific responsivity is the "least researched" of their correctional principles. Current 3G and 4G institutional assessments have barely begun to tackle this issue. Although this topic has had little attention among female offenders some progress is occurring (Harris and Jones 1999; Stefurak and Calhoun 2006; Brennan – this volume). Responsivity will be clarified when the main fault lines or pathways among women offenders are identified and by the careful examination of treatment-by-type interactions.

Building individualized person-centered assessments: The current wide reliance on linear models should be augmented by more holistic pattern analyses for a more individualized person-centered assessment. By retaining the holistic profile, caseworkers will have a more individualized assessment of each woman (Cairns, Bergman and Kagan 1998). Configural or pattern-analysis methods retain such individuality since they do not compress all risk and need scores into a single "global" score and are thus better aligned with feminist individual "pathways" of women offenders. This may also unravel the mysteries of specific responsivity and provide a basis for "matching" women offenders to individualized treatment plans.

Stronger links from Assessment to Treatment: Improved assessment of women's needs and risks should offer a stronger foundation for designing gender-responsive and age-appropriate programs. However, since a valid and comprehensive gender-sensitive assessment has not yet existed, this link to program design has been fragmented. It appears that truly gender-responsive program designs for girls and women may only be constructed when appropriate assessment and classification tools for women are available.

If gender-sensitive assessments can validly and reliably identify a women offender's individualized needs then the hard work of designing and evaluating effective programs for women can realistically begin. This argues that a valid comprehensive assessment is an axiomatic foundation for program design. I note that this position is supported in that comprehensive assessment is identified as the first step in the NIC Transition from Prison to the Community Initiative (TPCI) program for prisoner re-entry (NIC 2005).

Stronger outcome measures for women offenders – Facilitating evidence-based practice: The current disconnect between assessment, programming and outcomes reflects a failure of “organizational learning” as well as disorganized criminal justice databases (Brennan, Wells and Alexander 2004). Evidence-based practice (EBP) and organizational learning cannot occur without outcomes data. EBP requires that women's risk and needs can be linked to programming and outcomes. It is scandalous that the databases of so many correctional organizations cannot link these data domains. Unfortunately, this disconnect is widespread in correctional organizations (Brennan Wells and Alexander, 2004).

However, recent 4G assessment software is now providing integrated data modules to link risk/needs assessment to program provisions and outcomes (Brennan and Dieterich, 2004). This may facilitate EBP studies and help in the continuous improvement of program design, delivery methods and the matching women offenders to effective treatments.

Explore non-global predictive and explanatory models for different “sub-types” of women offenders: The dominant predictive paradigm across criminal justice is to rely on a single “global” predictive model for ALL offenders. However, this present recommendation to explore “non-global” approaches to prediction follows from person-centered individualized assessment. This approach is consistent with the call for different gendered explanatory processes and different categories of women - as in the pathways model or in recent taxonomic research. If these truly reflect different explanatory processes - with different risks and need factors - then non-global predictive models may be warranted. Each pathway or category may be “marching to a different drummer” with quite different structural predictors (Lykken 1995) and may require its own non-global predictive model to “fit” that specific pathway.

This recommendation relates to a more general unresolved debate over dimensional versus categorical classification in criminology (Osgood 2005; Brennan – this volume). A recent study by Reising, Holtfreter and Morash (2006), supports the categorical argument for female offenders showing that the LSI-R global risk model was a poor fit to a large

category of economically marginalized women offenders. The more general point is that certain categories of women will not be well predicted by any single global linear model. However, this issue is far from resolved and only a few studies have attempted to discover the basic contours or non-global pathways among women offenders.

2. Policy recommendations

Several policy changes in correctional institutions appear necessary to improve assessment for women offenders. These should precede changes in technical design and may be essential in successfully implementing any upgraded assessment procedures. They include:

A broader vision of the roles assessment and classification: The current prioritization of “risk” as the central principle of classification must be replaced by a broader vision of the roles of assessment for women offenders. Several alternative policy goals should augment "risk" as the major organizing principles for classification e.g. treatment matching and responsivity, explanatory power and case conceptualization, least restrictive custody, consistency and fairness, rehabilitation, re-integration and re-entry planning. This broader vision of core goals and principles for classification will require a cultural shift and an educational, political and administrative transformation and be promulgated and understood by senior public administrators.

Yet, cultural change in corrections has been difficult to achieve. Complacency and resistance are widespread. More than a decade ago, Burke and Adams (1991) and Fowler (1993) challenged correctional policy makers by suggesting that improved classification for women will not result from advances in "risk" assessment, but only by a broadening of central principles to include needs assessment and habilitation. The recent finding of Hardyman and Van Voorhis (2004), a decade later - that many state agencies still use gender-neutral assessments for women and still prioritize risk - testifies to the difficulty of achieving this change.

Prioritize treatment-relevant classification: A more specific recommendation is to prioritize treatment-relevant assessment for women offenders at entry, for programming and for re-entry planning. The dominance of simple 2G risk models in correctional organizations is understandable since security and safety cannot be ignored. However, the limitations of these methods, their over-simplification and lack of treatment implications are such that a well-designed and theory-guided treatment classification is critical and may equally well fulfill both the risk function and its main role in supporting offender management, treatment and services.

Prioritize assessment for re-entry planning: Most jails and many prisons still do not prioritize assessment for re-entry planning for female offenders. An emphasis on risk-needs assessment for women offenders should be an intrinsic component of re-entry planning. The NIC TPCI acknowledges that comprehensive needs and risk assessment is the first step of TPCI planning.

More effective implementation: While implementation is not addressed in this chapter, political and organizational leadership issues will remain critical. Organizational and leadership dysfunctions could easily undermine technical design improvements. Too often, in corrections, the concerns of women detainees have remained an “afterthought” for administrators and implementation has been casual and ineffective. Vigilance will be required to ensure that the advances in assessment are effectively implemented. Thus, the focus cannot only be on technical design, but also on organizational leadership, policy visions, and organizational culture as they implement new assessment tools for women offenders.

References:

- Agnew, R. (1992). Foundation for a general theory of crime and delinquency *Criminology*, 30, 47-87.
- American Bar Association (2004) Report to the House of Delegates on the Justice Kennedy Commission. American Bar Association.
- Andrews, D. A., & Bonta, J. (1994, 2003). *The psychology of criminal conduct*. Cincinnati, OH: Anderson.
- Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency*, 52, 7-27.
- Austin, J. (1983) Assessing the new generation of prison classification models. *Crime and Delinquency*, 29, 561-576.
- Austin, J., ed. 1986. *Crime & Delinquency*. Special Issue: Prison Classification Systems. 32 (3).
- Austin, J.. (1998). *Objective Jail Classification Systems: A Guide for Jail Administrators*. Washington, DC: National Institute of Corrections
- Bergman, L.R. (2000) The application of a person-orientated approach: Types and Clusters. In: Bergman L.R. Cairns R. B. Nilsson L. G and Lars Nystedt (Eds) *Developmental Science and the holistic approach*. London: Lawrence Erlbaum Publishers.
- Belknap, J., and Winter, E.J. (2001). *Assessing the needs of delinquent and pre-adjudicated girls in Colorado*. Report to Colorado Division of Youth Corrections.
- Belknap Joanne and Kristi Holsinger (2006) *The Gendered Nature of Risk Factors for Delinquency*. *Feminist Criminology* 1, (1) 1-24.
- Blanchette, K. (2002). Classifying female offenders for effective intervention: Application of the case-based principles of risk and need. *Forum on Corrections Research*, 14, 31-35.
- Blanchette, K. and Brown S.L. (2006) *The assessment and treatment of women offenders: An integrative perspective*. Wiley Series in Forensic Clinical Psychology.
- Bloom, B. (2000). Beyond recidivism: Perspectives on evaluation of programs for female offenders in community corrections. In M. McMahon (Ed.), *Assessment to assistance: Programs for women in community corrections* (pp. 107-138). Latham, MD: American Correctional Association.
- Bloom, B., Owen, B., & Covington, S. (2003). *Gender-Responsive Strategies: Research Practice and Guiding Principles for Women Offenders*. Washington, DC: National Institute of Corrections.
- Blume, S. B. (1990). Chemical dependency in women: Important issues. *American Journal of Drug and Alcohol Abuse*, 16, 297-307.

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* (pp. 18-32). Thousand Oaks, CA: Sage.

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

Boothby, J. L., & Clements, C. B. (2000). A national survey of correctional psychologists. *Criminal Justice and Behavior*, 27, 715-731.

Bowker G.C and S.L. and Star (1999) *Sorting things out: Classification and its consequences*. MIT Press, Cambridge, Mass.

Brennan – This volume, Chapter 7

Brennan, T. (1987). Classification: An overview of selected methodological issues. In D. M. Gottfredson & M. Tonry (Eds.), *Prediction and classification: Criminal justice decision making* (pp. 201-248). Chicago: University of Chicago Press.

Brennan, T. (1998). Institutional classification of females: Problems and some proposals for reform. In R. T. Zaplin (Ed.), *Female offenders: Critical perspectives and effective interventions* (pp. 179-204). Gaithersburg, MD: Aspen.

Brennan T. (1999) "Implementing organizational change in criminal justice: Some lessons from Jail Classification systems" *Corrections Management Quarterly*, Vol.3 (2), 11-27,

Brennan T. (2003) The Roles of Objective Classification in Jail Programming and Internal Management. *Journal of Community Corrections*, 13, (3), 7-23.

Brennan, T., Elliott, D., & Huizinga, D. (1978) *The social psychology of runaways*. Lexington, MA: Lexington Books.

Brennan, T. Dieterich, W. and Oliver, W. (2004) *The COMPAS Scales: Normative data for Males and Females In Community and Incarcerated Samples*. Northpointe Institute, Traverse City, Michigan.

Brennan, T., Wells, D. and J. Alexander (2004) *Enhancing prison classification systems: The emerging role of management information systems*. U.S Dept of Justice, National Institute of Corrections

Brennan, T., Deiterich, W and Markus Breitenbach (2006) *Etiological Patterns among Female Delinquents: Towards an explanatory taxonomy*. Annual Conference - British Society of Criminology –Glasgow, Scotland.

Broidy, L. M., & Agnew, R. (1997). Gender and crime: A general strain theory perspective. *Journal of Research in Crime and Delinquency*, 34, 275-306.

Bureau of Justice Statistics (1999). *Prior abuse reported by inmates*. Washington, DC: US Department of Justice, Office of Justice Programs.

- Burke,P.,&Adams,L.(1991).Classification for women offenders in state correctional facilities: A handbook for practitioners. Washington, DC: National Institute of Corrections.
- Cairns, R. B., Bergman, L. R., & Kagan, J. (Eds.). (1998). *Methods and models for studying the individual*. Thousand Oaks, CA: Sage.
- Campbell A. (2002) *A mind of her own: The evolutionary psychology of women*. Oxford, Oxford University Press.
- Cernkovich , S. & Giordano, P. (1979). A comparative analysis of male and female delinquency *Sociological Quarterly*, 20, 131-145.
- Chesney-Lind, M. (1989). Girls' crime and woman's place: Toward a feminist model of female delinquency. *Crime & Delinquency*, 35, 5-29.
- Chesney-Lind, M. (1997). *The female offender*. Thousand Oaks, CA: Sage Publications.
- Chesney-Lind, M. and Shelden, R.G. (1998). *Girls, Delinquency and Juvenile Justice*. Wadsworth Publishing Company, Belmont, California.
- Clear, Todd. Statistical Prediction in Corrections. Research in Corrections 1.1 (1988): 1-51.
- Clements, C. B. (1996). Offender classification: Two decades of progress. *Criminal Justice and Behavior*, 23, 121-143.
- Covington, S.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. 113-131). Gaithersburg, MD: Aspen.
- Daly, K. (1992). Women's pathway to felony court: Feminist theories of lawbreaking and problems of representation. *Review of Law and Women's Studies*, 2, 11-52.
- Daly, K., & Chesney-Lind,M. (1988). Feminism and criminology. *Justice Quarterly*, 5, 497-535.
- Dawes, R. M. (1979). The robust beauty of improper linear models in decision models. *American Psychologist*, 34, 571-582.
- DiClemente C.C., and Prochaska, J.O. (1998) Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors. In: Miller, W.R., and Heather, N., eds.*Treating Addictive Behaviors*. 2d ed. New York: Plenum Press, 1998. pp. 3–24.
- DiLalla, L.F. and I. Gottesman (1989) Heterogeneity of causes for delinquency and criminality: Lifespan Perspectives. *Development and Psychopathology* 1, 339-349.
- Dowden, C. and Andrews D.A. (1999) What works for female offenders: A meta-analytic review. *Crime and Delinquency*, 45 (4), 438-452
- Farr, K.A. (2000). Classification for Female Inmates: Moving Forward. *Crime & Delinquency* 46 (1): 3–17.

Farrington D.P., and Painter, K.A. (2004) Gender differences in offending: Implications for risk-focused prevention. Government Report, British Home Office. www.homeoffice.gov.uk

Cohen L.E. and Felson M. (1979) Social change and crime rate trends: A Routine Activity Approach. *American Sociological Review*, 44, 588-608.

Fishbein D. (2000) Violent inmates: Matching treatment to offender. *American Jails* (December) 41-47.

Fowler, L. T. (1993). What classification for women? In: *Classification: A tool for managing today's offenders*. Laurel, MD: American Correctional Association.

Garbarino, J. (1999). *Lost Boys: Why our sons turn violent and how we can save them*. New York: The Free Press.

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

Gottfredson, S. D. (1987). Prediction: An overview of selected methodological issues. In D. M. Gottfredson & M. Tonry (Eds.), *Prediction and classification: Criminal justice decision making* (pp. 21-52). Chicago: University of Chicago Press.

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford, CA: Stanford University Press.

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

Hardyman, P. & Van Voorhis, P. (2004). *Developing Gender-Specific classification Systems for Women Offenders*. Washington, DC: U.S. Department of Justice, National Institute of Corrections.

Hare, R. D. (1991). *The Hare Psychopathy Checklist —Revised*. Toronto: Multi-Health Systems.

Hare, R. D. (1996). Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior*, 23, 25-54.

Harer M. D and Langan, N.P. (2001) Gender differences in predictors of prison violence: Assessing the predictive validity of a risk classification system. *Crime & Delinquency*, Vol. 47 No. 4, October 2001 513-536 © 2001 Sage Publications

Harris, P.M. 1994. Client management classification and prediction of probation outcome. *Crime and Delinquency* 40 (2), 154-174

Harris P.W and Peter R. Jones. Differentiating delinquent youths for program planning and evaluation. *Criminal Justice and Behavior*, Vol. 26 No. 4, December 1999 403-434

Higgins G.E. (2004) Gender and Self-Control Theory: Are There Differences in the Measures and the Theory's Causal Model. *Criminal Justice Studies*, 17 (1), 33–55

- 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, 477-494.
- Jones, P. R. (1996). Risk prediction in criminal justice. In A. T. Harland (Ed.), *Choosing correctional options that work: Defining the demand and evaluating the supply* (pp. 33-68). Thousand Oaks, CA: Sage.
- Kratcoski, P., and Babb, S. (1990) Adjustment of older inmates: An analysis of institutional structure and gender. *Journal of Contemporary Criminal Justice*. 6, 264-281.
- Lipsky, Michael. Street-Level Bureaucracy: Dilemmas of the Individual in Public Services. New York: Russell Sage Foundation, 1980.
- Lykken, D. T. (1995). *The antisocial personalities*. Hillside, NJ: Erlbaum.
- Maccoby, E.E. and Jacklin, C.N. (1980) Sex differences in aggression: A rejoinder and reprise. *Child Development* 51, 964-80.
- Mazur, A. and Booth, A. (1998) Testosterone and Dominance in Men. *Behavioral and Brain Sciences*. 21: 353-397
- Mealey, L. (1995). The sociobiology of sociopathy: An integrated evolutionary model. *Behavioral and Brain Sciences*, 18, 523-599.
- Meehl, P. E. (1992). Factors and taxa, traits and types, differences of degree and differences in kind. *Journal of Personality*, 60, 117-174.
- Millon, T. Simonsen, E., Birket-Smith M. and R.D. Davis (1998) *Psychopathy: Antisocial Behavior, Criminal and Violent Behavior*, Guilford Press.
- Moffitt TE (1993a) Adolescence-limited and life-course-persistent antisocial behaviour: a developmental taxonomy. *Psychological Review* 100(4): 674-701.
- Moffitt, T. E., A. Caspi, M. Rutter, and P. A. Silva. 2001. *Sex Differences in Antisocial Behaviour*. Cambridge, MA: Cambridge University Press.
- Morash, M., Bynum, T., & Koons, B. (1998) *Women Offenders: Programming Needs and Promising Approaches*. Washington, DC: National Institute of Justice.
- Mossman, D. (1994). Assessing predictions of violence: Being accurate about accuracy. *Journal of Consulting and Clinical Psychology*, 62, 783-792.
- Motiuk, L.L. (1997). Classification for correctional programming: The Offender Intake Assessment (OIA) process. *Forum on Corrections Research*, 9, 18-22.
- NIC. 1998-2003. Objective Jail Classification Workshop - Manual. National Institute of Corrections, Longmont, CO.
- NIC (2005) *Transition from Prison to the Community Initiative (TPCI)*. National Institute of Corrections Information Center, Longmont, CO

- Osgood Wayne D. (2005) Making sense of crime and the life course. *Annals of the American Academy of Political and Social Sciences*. v 602, 196-211
- Osgood, D. Wayne, Janet K. Wilson, Jerald G. Bachman, Patrick M. O'Malley, and Lloyd D. Johnston. 1996. "Routine Activities and Individual Deviant Behavior." *American Sociological Review* 61: 635-655.
- Owen, B., & Bloom, B. (1995). Profiling women prisoners: Findings from national surveys and a California sample. *The Prison Journal*, 75, 165–185.
- Owen, B. and Bloom, B. (2000) Profiling the Needs of Young Female Offenders: Instrument Development and Pilot Study – Final Report, National Institute of Justice.
- Owen, B., Bloom, B., Deschenes, E. P., & Rosenbaum, J. (1998). Modeling gender-specific services in juvenile justice: Policy and program recommendations. Final report submitted to California Office of Criminal Justice Planning.
- Palmer, T. (1992). *The re-emergence of correctional intervention*. Newbury Park, CA: Sage.
- Piquero Alex and Terrie E. Moffitt (2005) Explaining the facts of crime: How the developmental taxonomy replies to Farrington's Invitation. Chapter in: David Farrington (Editor) *Integrated developmental and life course theories of offending*. Transaction Publishers, London.
- Prottas, Jeffrey Manditch. People-Processing. Lexington: Lexington Books, 1979.
- Quinsey, V. L., Harris, G. T., Rice, M. E. and Cormier, C. A. (1998). *Violent Offenders: Appraising and Managing Risk*. Washington, DC: American Psychological Association.
- Ragin Charles (2000) *Fuzzy-set social science*. University of Chicago Press.
- Raine, A. 1993 *The psychopathology of crime*. San Diego, Academic Press.
- Reisig M. D, Kristy Holtfreter and Merry Morash (2006) Assessing recidivism risk across female pathways to crime. *Justice Quarterly*, 23 (3), 384-405
- Rose Dina. R. and Todd Clear (2002) Incarceration, social capital and crime: Implications for social disorganization theory. *Criminology* 36: 441-479.
- Rutter Michael, Henri Giller and Ann Hagell (1998). *Antisocial behavior by young people*. Cambridge University Press.
- Salisbury, E.J., Van Voorhis, P. and Emily Wright (2006) Construction and Validation of a Gender Responsive Risk/Needs Instrument for Women Offenders in Missouri and Maui. Annual Conference, American Society of Criminology, Los Angeles
- Sechrest, L. (1987). Classification for treatment. In D. M. Gottfredson & M. Tonry (Eds.), *Prediction and classification: Criminal justice decision making* (pp. 293-322). Chicago: University of Chicago Press.
- Steffensmeier, D.J., & Allen, E. (1996) Gender and crime: Toward a gendered theory of female offending. *Annual Review of Sociology*, 22, 459-487.

- Steffensmeier, D., & Allen, E. (1998). The nature of female offending : Patterns and explanation. In R.T.Zaplin (Ed.), *Female offenders: Critical perspectives and effective interventions* (pp. 5-29). Gaithersburg, MD: Aspen.
- Stefurak, James R. & Calhoun, Georgia B. (in press) Subtypes of Female Juvenile Offenders: A Cluster Analysis of the Millon Adolescent Clinical Inventory, *International Journal of Law and Adolescence*
- Van Voorhis, P. (1994). *Psychological classification of the adult male prison inmate*. Albany: State University of New York Press.
- Van Voorhis, P. & Presser, L. (2001). *Classification of Women Offenders: A National Assessment of Current Practices*. Washington, DC: U.S. Department of Justice, National Institute of Corrections.
- Glenn D. Walters (2004) The Trouble with Psychopathy as a General Theory of Crime. *International Journal of Offender Therapy and Comparative Criminology*, 48(2), 133-148
- Walters G.D. and W.N Elliott (1999) Predicting release and disciplinary outcome with the psychological inventory of criminal thinking styles: Female Data. *Legal and Criminological Psychology*, 4, 15-21
- Walton, Richard. Up and Running. Boston, Ma.: Harvard Business School Press, 1989.
- Walsh, A. (2002) *Biosocial Criminology*. Anderson Publishers, Cincinnati.
- Ward, T. and Brown, M. (2004) The Good Lives model and conceptual issues in offender rehabilitation. *Psychology, Crime and Law*, 10, 243-257.
- Ward, T. and Stewart, C. (2003) Criminogenic needs and human needs: A theoretical model. *Psychology, Crime and Law*, 10 (3), 125-143.
- Warren, M. (1971). Classification of offenders as an aid to efficient management and effective treatment. *Journal of Criminal Law, Criminology, and Police Science*, 62(1), 239-268.
- Widom, C.S. (1978) An empirical classification of female offenders. *Criminal Justice and Behavior* 5; 35-52.
- Wormith, J. S. (2001, July). Assessing offender assessment: Contributing to effective correctional treatment. *ICCA Journal on community corrections* pp. 12-23.
- Wright E., Salisbury, J. and Van Voorhis P. (2006) Gender-Responsive Needs: Preliminary Analyses of Six-Month Outcome Data from a Sample of Women Offenders in Minnesota. Annual Conference, American Society of Criminology, Los Angeles