
Judgments of Dangerousness: Are Sex Offenders Assessed Differently than Civil Psychiatric Patients?

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Although there has been a great deal of research on sex offenders, researchers have yet to examine how clinicians assess sex offender dangerousness in practice. The purpose of this study was to take a first step toward understanding how professional and paraprofessional "clinicians" assess sex offenders by comparing how they assess violence in this population with how they assess violence of civil psychiatric patients. Thirty-five clinicians were asked to list factors they used to assess risk of dangerousness for eight recently discharged patients and to further rate the patients on risk cues derived from the Psychopathy Checklist-Short Version (PCL-SV), rendering a total of 280 judgments of dangerousness. Results indicated that clinicians most commonly considered clinical and behavioral types of factors for assessing violence of both clinical populations, however, notable differences emerged when analysing the specific violence risk factors utilised. In particular, clinicians working with sex offenders emphasised contextual factors such as employment opportunities and social support, while clinicians working with psychiatric patients emphasised medication compliance as well as underlying psychotic processes, such as delusional thinking and guardedness.

The prediction of an individual's risk to engage in future violent behavior constitutes a vital part of assessments made regularly by mental health professionals (Grisso & Tomkins, 1996). A clinician's judgment of dangerousness is central to decisions involving civil commitment of psychiatric patients

(Melton, Petrila, Poythress, & Slobogin, 1997). While statutes vary across jurisdictions, typical involuntary civil commitment statutes ask whether the individual is mentally ill and dangerous to either themselves or others, or is "gravely disabled" such that they cannot provide for their own basic

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needs regarding shelter, food, clothing, etc. (Cornwell, 1998). To assist with assessing dangerousness of individuals with mental disorders, the MacArthur Foundation Violence Risk Assessment Study summarised a number of risk factors that have been demonstrated to be associated with violence in psychiatric populations (Monahan & Steadman, 1994; Steadman et al., 1994). A number of actuarial instruments and decision-making aides are being tested and developed which show promise for improving risk assessment technology in mental health settings (Douglas, Webster, Eaves, Winthrop, & Hart, 1996; Gardner, Lidz, Mulvey, & Shaw, 1996a; Harris & Rice, 1997; McNeil & Binder, 1994; Steadman et al., 1998).

In the past decade, clinicians have increasingly been called upon to assess sexual offenders for legal purposes, including civil commitment. In *Kansas v. Hendricks* (1997), the United States Supreme Court upheld a sexual predator commitment statute allowing indeterminate commitments for sexual predators after completion of their sentence. For commitment purposes, the Kansas statute defined sexually violent predator as "any person who suffers from a mental abnormality or personality disorder which makes the person likely to engage in the act of predatory sexual violence" (Kansas Statute Annotated Sec. 59-29a02(a)). Currently, over 15 states have adopted similar forms of such statutes. Indeed, sex offenders in the United States now can serve their prison sentences and, as soon as they are about to be released to the community, can be committed to forensic institutions for further confinement. Recognising the high stakes involved in sex offender assessment, researchers have responded by attempting to establish empirically-validated violence risk factors for sex offending (Hanson, 1998) and to develop actuarial instruments to improve predictive accuracy of dangerousness assessments (Kropp et al., 2000; Quinsey et al., 1998).

Overall, relatively little commentary has addressed *how* clinicians make risk assessment decisions in practice (Grisso, 1996; Mulvey & Lidz, 1995), though there has been some research looking at how clinicians make dangerousness judgments in civil psychiatric settings (Hiday, 1992; 1988; Lindsey, & Paul, 1989; Nicholson, 1986; Monahan, Hoge, Lidz, Roth, Bennett, Gardner, & Mulvey, 1995). For instance, Segal and colleagues (Segal, Watson, Goldfinger, &

Averbuck, 1988a, 1988b, 1988c; Watson, Segal, & Newhill, 1993) examined dangerousness judgment decisions made in a psychiatric emergency room. Impulsivity, severity of symptoms, irritability, formal thought disorder, thought content disorder, expansiveness, impaired affect, and inappropriate affect were related to ratings of dangerousness (Segal et al., 1988b). Additionally, research examining various aspects of clinical judgments in the same setting found that perceived hostility, history of violence, and presence of serious disorder significantly related to risk assessments (Lidz, Mulvey, Appelbaum, & Cleveland, 1989; Apperson, Mulvey, & Lidz, 1994).

Other research has studied *how* forensic clinicians conduct risk assessments. Zabow and Cohen (1993) surveyed forensic psychiatrists in South Africa in order to ascertain what types of risk factors clinicians used in assessing violence. The authors found that the patient's criminal history, history of violent behavior, history of substance abuse, history of antisocial behaviors, persecutory delusions, and history of gang membership weighed heavily in clinicians' judgments of forensic patient's dangerousness. Quinsey and Maguire (1986) found that forensic clinicians' judgments of dangerousness correlated with a homicide offense, high frequency of institutional assault, an involuntary admission, and low IQ. The authors stated that, in general, clinicians tended to overemphasise certain types of crimes (e.g., murder) and underemphasise others, such as sexual offending, when predicting future dangerousness. Finally, Menzies and Webster (1995) found that forensic clinicians relied heavily upon previous violence, poor anger control, and alcohol abuse. All three studies indicated that demographic characteristics (race, age) exerted little influence over judgments.

Researchers have yet to examine how clinicians assess sex offender dangerousness specifically. While sexual predator commitment statutes are facially different from general civil commitment statutes, it is not yet known whether these differences lead clinicians to use different risk assessment strategies when examining sexual predators as compared to when they examine non-sexual predator or general civil psychiatric patients. In other words, while the two statutes lay out different criteria for commitment, it is not clear that clinicians are applying different assessment strategies in practice. Becker and Murphy

(1998) suggest that "the process of determining whether an individual meets criteria for commitment does not substantially differ from the process of civil commitment for individuals with other types of disorders." The purpose of this study is to test this hypothesis and take a first step toward exploring how clinicians assess dangerousness of sex offenders.

Method

The study was conducted in two settings: a civil psychiatric unit housing patients with chronic mental illness and a forensic unit housing convicted sex offenders. Both of the units are located at a 240 bed state operated inpatient psychiatric facility which serves the most severely mentally ill patients from across the state of Nebraska. Most of the beds are used for adults suffering from severe and persistent mental illness. Half of the facility's beds are housed in the Forensic Mental Health Service (FMHS), which provides evaluation and treatment services for civilly committed sex offenders. Civil psychiatric patients requiring longer-term care are treated at the Community Transition Program (CTP), which offers extensive psychosocial rehabilitation for chronic psychotic or other serious disorders.

In total, thirty-five mental health professionals and paraprofessionals, broadly defined as clinicians, volunteered to participate in this study (out of 45 requested; 78% response rate). Clinicians were excluded from the study only if they did not make or participate in assessments of patient violence as part of their typical job duties. Participants included clinical staff involved in treatment decisions including two clinical psychologists, five master's level social workers, four master's level psychologists, ten nurses, thirteen paraprofessional staff, and one psychiatrist. Thirty-five percent of the clinicians were male and 65% female. The clinicians were 90% Caucasian. The remaining 10% were African-American, Hispanic, and Native-American. The age of the clinicians was virtually half below 40 years of age and half above 40 years of age. In addition to level of training, years of experience and clinician gender were recorded to later control for any variance in dangerousness judgments accounted for by clinician characteristics.

Each participant entered data on a computer program after signing informed consent documents. First, clinicians were asked to list the first

names of the eight most recently discharged patients and describe eight risk factors they considered to assess risk of dangerousness to others in the community for these patients. Second, clinicians were prompted by a computer program to rate on a Likert scale (1 to 8) the eight patients on twelve risk factors drawn from the Psychopathy Checklist-Revised (PCL-SV; Hare, 1991). These included Grandiosity, Impulsivity, History of Violence, Childhood History of Violence, Poor Behavioral Controls, Adult Antisocial Behavior, Irresponsibility, Deceitfulness, Denial of Responsibility, Superficiality, Lack of Realistic Goals, and Lack of Empathy. Additionally, clinicians were prompted to make a judgment of dangerousness (1 = not dangerous to others to 8 = very dangerous to others). All 13 variables were randomised and rated in a unique order for each subject to counteract order effects. This entire data collection procedure took between 15–20 minutes. A total of 280 risk factors and judgments of dangerousness were obtained, 144 from the civil unit and 136 from the forensic unit.

After data collection, two research assistants coded the eight risk factors each clinician said they considered. A coding scheme was used and approximated the risk domains from the MacArthur Risk Assessment Study, with minor adjustments. Research assistants coded risk factors according to the following categories: 1) clinical — general clinical characteristics and terminology, not behaviors per se, but rather psychological conditions, 2) violence history — information from the patient's past specifically related to violent behavior, 3) social history — any other information from the patient's past background not related to violence, 4) contextual — aspects of a client's environment or situation that might increase or decrease risk of violence, 5) demographic — basic demographic and/or physical information about a client, 6) testing — information originally gathered from assessments, and 7) behavioral — specific actions of a client that can be observed and seen. An interrater reliability of $kappa = .87$ was achieved for the 280 risk factors obtained in total. Research assistants tabulated the frequency of each of the individual violence risk factors listed, as well.

Results

With respect to consideration of risk cue domains, clinicians relied mainly on variables that

were clinical in nature. Nearly half of all the risk cues used for assessing violence risk of sex offenders (48%) and civil psychiatric patients (52%) fell into this category. Although clinicians working with civil patients tended to list more behavioral (18%) and fewer contextual (11%) cues than clinicians working with sex offenders (10% behavioral, 19% contextual), these differences only approached, but did not achieve, statistical significance. Correspondingly, clinicians listed more historical cues for sex offenders (20%) than clinicians listed for civil psychiatric patients (12%), but again, this was not significant. Finally, testing and demographic cues were the least commonly listed, both domains constituting less than two percent of all cues considered during assessment of both sex offenders and civil psychiatric patients.

When analysing the specific types of risk cues considered, Medication Compliance was reported by 67% of clinicians to be a highly important risk factor to consider at discharge for civilly committed psychiatric patients, see Table 1. Aggressiveness and Coping Skills were similarly rated by over 60% of the clinicians as critical to risk assessment decisionmaking for civil patients. For sex offenders, 65% of clinicians listed Social Support as a highly significant factor to consider in judgments of dangerousness at discharge. Treatment Compliance, Aggressiveness, and History of Violence were also reported as among the most important risk factors to consider at discharge for sex offenders, with over 50% of clinicians listing each of these factors.

The twelve PCL-SV cues accounted for 75% of the variance in dangerousness judgments for civil psychiatric patients, $R^2 = .749, p < .05$. Judgments of future risk for civil psychiatric patients were significantly associated with Grandiosity ($\beta = .161, p = .004$), Lack of Remorse ($\beta = .199, p = .012$), Lack of Empathy ($\beta = .183, p = .017$), Poor Behavioral Controls ($\beta = .334, p = .000$), and Impulsivity ($\beta = .140, p = .048$), see Table 2. Irresponsibility approached the level of significance for this population ($\beta = -.15, p = .083$). Sixty-seven percent of the variance in dangerousness judgments for sex offenders was accounted for by the twelve psychopathy variables, $R^2 = .667, p < .05$. Judgments of future risk for sex offenders, $R^2 = .667, p < .05$, were significantly associated with Lack of Remorse ($\beta = .352, p = .001$), Lack of Realistic Goals ($\beta = .328, p = .000$), and Juvenile Antisocial Behavior ($\beta = .197, p = .003$), see Table 3. None of the other psychopathy factors approached the level of significance for sex offenders.

To compare beta weights between these two decision-making models, it is recommended that the interactions be entered into regression formulas in the following manner (Cohen & Cohen, 1975). First, interaction terms representing psychiatric patients vs. sex offenders X PCL-SV risk cues were created. Second, regression equations were conducted, which included as the criterion judgments of dangerousness and as predictors the variable connoting psychiatric patient/sex offender, the twelve PCL-SV cues, and the twelve interaction terms. Third, interaction terms were examined and

Table 1

Clinicians' Most Commonly Listed Risk Factors to Consider at Discharge in Regards to Dangerousness

Risk Factors Clinicians	CIVIL PSYCHIATRIC PATIENTS ^a Percentage of Clinicians	Risk Factors	SEX OFFENDERS ^b Percentage
	Listing Factors	Listing Factors	
Medication Compliance	66.7	Social Support	64.7
Aggressiveness on Unit	61.1	Treatment Compliance	58.8
Coping Skills	61.1	Aggressiveness on Unit	52.9
Substance Abuse	44.4	History of Aggression/Violence	52.9
History of Aggression/Violence	38.9	Insight	41.2
Guardedness	38.9	Victim was Relative	35.3
Social Support	27.8	Substance Abuse	35.3
Anger	27.8	Employment Opportunity	29.4
Delusional Thinking	22.2	Anger	29.4
Insight	22.2	Social Skills	29.4
Social Skills	22.2	Impulse Control	23.5

Note: (n^a = 144 risk cues; n^b = 136 risk cues)

Table 2

Summary of Linear Regression Analysis for Psychopathy Variables Predicting Clinicians' Judgments of Dangerousness for Civil Psychiatric Patients ($N = 144$)

PSYCHOPATHY VARIABLES	B	SE B	β
Superficiality	.005	.076	.049
Grandiosity	.189	.064	.161*
Deceitfulness	.002	.085	-.001
Lack of Remorse	.210	.082	.199*
Lack of Empathy	.210	.087	.183*
Unable to Take Responsibility	.068	.082	.067
Irresponsibility	-.172	.098	-.154
Poor Behavioral Controls	.350	.084	.334*
Impulsivity	.148	.074	.140*
Lacks Realistic Goals	-.040	.070	-.034
Adult Antisocial Behavior	.082	.074	.079
Juvenile Antisocial Behaviors	.073	.060	.076

Note: $R^2 = .749$

* $p < .05$

Table 3

Summary of Linear Regression Analysis for Psychopathy Variables Predicting Clinicians' Judgments of Dangerousness for Sex Offenders ($N = 136$)

PSYCHOPATHY VARIABLES	B	SE B	β
Superficiality	.055	.066	.059
Grandiosity	.055	.065	.060
Deceitfulness	.084	.083	.082
Lack of Remorse	.320	.093	.352*
Lack of Empathy	-.109	.083	-.119
Unable to Take Responsibility	-.037	.084	-.042
Irresponsibility	.027	.096	.030
Poor Behavioral Controls	.077	.078	.077
Impulsivity	.083	.099	.093
Lacks Realistic Goals	.294	.069	.328*
Adult Antisocial Behavior	.000	.081	-.001
Juvenile Antisocial Behaviors	.165	.054	.197*

Note: $R^2 = .667$

* $p < .05$.

if statistically significant, indicated that the betas were significantly different. Indeed, clinicians weighed several risk factors differently for civil psychiatric patients and sex offenders. Clinicians from the civil psychiatric unit considered both poor behavioral controls ($t = -2.019$, $p = .045$) and lacks empathy ($t = -2.684$, $p = .008$) as more closely related to dangerousness to others than did clinicians working with sex offenders. Conversely, the latter group of clinicians perceived lacks goals to be more strongly associated with violence risk than did the former group ($t = 3.291$, $p < .001$).

Discussion

The results of this study show some support for Becker and Murphy's (1998) hypothesis that, in general, clinicians evaluate sex offenders and psychiatric patients similarly. However, some important caveats exist. On one level of analysis, clinicians were making remarkably similar judgments, relying almost exclusively upon clinical and behavioral factors. Likewise, in making judgments for both groups, clinicians tended to ignore other types of risk cues such as social history, demographic, and testing information (Elbogen, Mercado, Tomkins & Scalora, in press). Clinicians listed many of the exact same factors as highly relevant to assessment of dangerousness for both groups, including social support, aggressiveness while in care, history of violence, substance abuse, insight, social skills, and anger. Additionally, in terms of the psychopathy risk models, Lack of Remorse contributed to a large percentage of the variance in clinical judgments for both civil and sex offender populations.

However, there are some notable distinctions between clinicians' judgments of civil psychiatric patients and sex offenders suggesting that the emphasis of risk cue consideration is different. For civil psychiatric patients, clinicians emphasized primarily medication compliance as well as underlying psychotic processes such as delusional thinking and guardedness. Most salient for sex offenders were contextual cues and those of future relevance, such as social support, employment opportunities, and relationship to victim. With regard to the twelve PCL-SV variables, clinicians also used different models in making predictions of dangerousness. For civil psychiatric patients, Grandiosity, Lack of Remorse, Lack of Empathy, Poor Behavioral Controls, and Impulsivity were regarded as most predictive of future dangerousness, while for sex offenders Lack of Remorse, Juvenile Antisocial Behavior, and Lack of Realistic Goals were deemed most relevant in assessing risk of dangerousness. The greater weight given to Lack of Realistic Goals for clinicians working with sex offenders and the greater weight given to Poor Behavioral Controls for clinicians working with psychiatric patients is consistent with a picture of considering prospective and contextual factors for sex offenders and considering cues related to psychosis and coping skills for psychiatric patients.

Another salient finding was that for both sex offenders and civilly committed psychiatric patients, Lack of Remorse was perceived as a highly relevant risk factor. These results are at odds with Werner and Meloy's (1992) findings that lack of feelings of guilt were unrelated to predictions of violent behavior in a forensic facility. Grandiosity was viewed as an important risk factor among civil psychiatric patients only. These findings are consistent with those of Werner, Rose, Yesavage, and Seeman (1984) on an acute unit, where grandiosity was shown to predict judgments of dangerousness. Findings are consistent with studies showing that poor behavioral monitoring and anger are linked to judgments of dangerousness in both civil (Menzies and Webster, 1995) and forensic (Zabow, 1994) populations. Additionally, results support previous research indicating that demographic characteristics exert little influence over dangerousness judgments (Zabow & Cohen, 1994; Menzies & Webster, 1995; Quinsey & Maguire, 1986).

This finding appears to reflect ways in which clinicians conceptualise violence of sex offenders versus civil psychiatric patients. A distinction has been made in the literature on violence between instrumental and reactive violence (Berkowitz, 1993). Instrumental aggression is thought of as more purposeful and planned violent behavior and is more likely to be present in criminals, especially those with who have extensive histories of planned and premeditated criminal acts (Kingsbury, Lambert, & Hendrickse, 1997). Reactive violence, on the other hand, is usually committed out of hostility because an individual has been provoked or threatened in some manner and typically denotes aggression committed impulsively and without forethought (Cornell et al., 1996). The difference in emphasis in violence risk assessment between sex offenders and civil psychiatric patients may reflect differences in how clinicians apply instrumental-reactive violence dimensions. For civil psychiatric patients, the concern seems to mainly be about reactive violence stemming from psychotic relapse. Thus, there is greater attention to medication compliance and delusions. For sex offenders, clinicians appear to worry about a blend of reactive/impulsive and instrumental/premeditated violence. In other words, sex offenders appear to be perceived as having difficulty *controlling* their impulses, but also they are seen as being able to *consciously select* their victims. For this rea-

son, clinicians working with sex offenders expressed more consideration of cue that would place a sex offender in situations that would increase their *impulses* to reoffend, which simultaneously would increase their chances of *planning* a sexual assault. This appears to represent one critical difference between civil commitment of psychiatric patients and sex offenders. Of course, there is overlap between the groups, in that the chronically mentally ill patients may have prior criminal histories while sex offenders may have histories of serious mental disorders.

This study design did, however, have some limitations. The "clinicians" in this study included both paraprofessional and professional staff. Although the total sample was involved to some extent in risk decisionmaking, a sample of exclusively professionals, who are generally involved more directly in such judgments, may have been more meaningful. Further, though the overall number of judgements obtained was high, more clinicians would have bolstered these findings. Moreover, dangerousness was examined at discharge only. Ideally, differential risk assessment should be examined in a number of different contexts, at both admission and discharge, as well as during various stages of the legal process, such as pretrial, post-conviction, or pre-incarceration (Becker & Murphy, 1998). Future studies might replicate the methods at other hospitals or in other jurisdictions to increase the generalisability of the findings to all clinicians involved in assessments of future violence.

It is also important to note that some of the cues utilised require further clarification. For instance, clinicians frequently mentioned impulse control when asked to list risk cues of heightened importance for judging dangerousness of sex offenders. However, the variable impulsivity did not account for a significant amount of the variance in the sex offender risk model comprised of the twelve PCL-SV factors, implying that clinicians view impulse control and impulsivity differently. Perhaps impulse control refers to the ability to resist specific types of behaviors in specific types of situations, such as the inability to stop a deviant arousal or resist an urge to touch someone. Impulsivity, however, may refer to a pattern of behavior or lifestyle involving hasty decision-making and poor planning, such as abruptly quitting jobs, rushing into bad business transactions, and frequent moves. If this distinction is accurate, cli-

nicians perceive the ability to stop specific urges as more salient to risk assessment than a lifestyle of impulsive decision-making and poor planning.

While some research has considered how clinicians judge dangerousness among civilly committed patients, little is known about how clinicians make such judgments for sex offenders. In light of the developments in sex offender laws, further research is needed on how clinicians make risk judgments for sex offenders, and how these judgments differ from those used in other populations. This study begins to shed light on the decision-making process, showing a number of similarities in how clinicians assess dangerousness between the groups while highlighting some notable differences. Additionally, further research should be aimed at examining whether the cues clinicians are using lead to more accurate judgments of dangerousness. Such research can help determine areas of risk assessment in need of improvement and develop or refine actuarial instruments that are empirically validated, but reflect clinical practice. Ultimately, if sex offender commitment statutes continue to expand in the United States, it will be increasingly important for clinicians and researchers to understand, and hopefully improve, the process of risk assessment decision-making in "real-world" practice.

References

- Apperson, L.J., Mulvey, E.P., Lidz, C.W. (1993). Short-term clinical prediction of assaultive behavior: Artifacts of research methods. *American Journal of Psychiatry*, *150*, 1374-1379.
- Becker, J.V. & Murphy, W.D. (1998). What we know and do not know about assessing and treating sex offenders. *Psychology, Public Policy, and Law*, *4*, 116-137.
- Berkowitz L. *Aggression: Its causes, consequences and control*. Philadelphia: Temple University Press, 1993.
- Cohen, J., & Cohen, P. (1975). *Applied multiple regression/correlations analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Cornell D.G., Warren J., Hawk G., Stafford E., Oram G., Pine D., (1996). Psychopathy of instrumental and reactive violent offenders. *Journal of Consulting and Clinical Psychology*, *64*, 783-90.
- Cornwell, J.K. (1998). Understanding the role of the police and parens patriae powers in involuntary civil commitment before and after Hendricks. *Psychology, Public Policy, and Law*, *4*, 377-413.
- Douglas, K.S., Webster, C.D., Eaves, D., Winthrop, A., & Hart, S. D. (1996, March). *A new scheme for the assessment of dangerousness and the prediction of violence*. Paper presented at the biennial meeting of the American Psychology-Law Society, Hilton Head, SC.
- Elbogen, E. B., Mercado, C.C, Tomkins, A. J., & Scalora, M. J. (in press). Clinical practice and violence risk assessment. In D. Farrington, C. R. Hollin, & M. McMurrin (Eds.) *Sex and violence: The psychology of crimes and risk assessment*. Reading, UK: Harwood Academic Publishers.
- Gardner, W., Lidz, C.W., Mulvey, E.P., & Shaw E.C. (1996). Comparison of actuarial methods for identifying repetitively violent patients with mental illnesses. *Law and Human Behavior*, *20*, 35-48.
- Grisso, T. (1996). Clinical assessments for legal decision-making in criminal cases: Research recommendations. In B.D. Sales & S. Shah (Eds.), *Mental health and Law: Research, Policy, and Services*. (pp. 109-140). Durham, North Carolina: Carolina Academic Press.
- Grisso, T. & Tomkins, A.J. (1996). Communicating violence risk assessments. *American Psychologist*, *51*, 928-930.
- Hanson, R.K. (1998). What do we know about sex offender risk assessment? *Psychology, Public Policy, and Law*, *4*, 50-72.
- Hare, R.D. (1991). *Manual for the Hare Psychopathy Checklist - Revised*. Toronto, Ontario, Canada: Multi-Health Systems.
- Harris, G.T., & Rice, M.E. (1997). Risk appraisal and management of violent behavior. *Psychiatric Services*, *48*, 1168-1176.
- Hiday, V.A. (1992). Coercion in civil commitment: Process, preferences, and outcome. *International Journal of Law and Psychiatry*, *15*, 359-377.
- Kansas v. Hendricks*, (1997) 117 S.Ct. 2072
- Kansas Statute Annotated §59-29a02(a)
- Kingsbury S.J., Lambert M.T., Hendrickse W., (1997). A two-factor model of aggression. *Psychiatry: Interpersonal and Biological Processes*, *60*, 224-232.
- Kropp, P.R., & Hart, S.D. (2000). The spousal assault risk assessment (SARA) guide: Reliability and validity in adult male offenders. *Law and Human Behavior*, *24*, 101-118.
- Lidz, C.W., Mulvey, E.P., Appelbaum, P.S., & Cleveland, S. (1989). Commitment: The consistency of clinicians and the use of legal standards. *American Journal of Psychiatry*, *146*, 176-181
- Lindsey, K.P., & Paul, G.L. (1989). Involuntary commitment to public mental institutions: Issues involving the over representation of blacks and assessment of relevant functioning. *Psychological Bulletin*, *106*, 171-188.

- Menzies, R. & Webster, C.D. (1995). Construction and validation of risk assessments in a six-year follow-up of forensic patients: A tridimensional analysis. *Journal of Consulting and Clinical Psychology, 63*, 766-778.
- McNeil, D.E., & Binder, R.L. (1994). Screening for risk of inpatient violence. *Law and Human Behavior, 18*, 579-586.
- Melton, G.B., Petrila, J., Poythress, N.C., & Slobogin, C. (1998). *Psychological Evaluations for the Courts: A Handbook for Mental Health Professionals and Lawyers*, Second Edition. New York, NY: Guilford Publications, Inc.
- Monahan, J., & Steadman, H.J. (1994). *Violence and Mental Disorder: Developments in Risk Assessment*. Chicago, IL: University of Chicago Press.
- Monahan, J., Hoge, S.K., Lidz, C., W., Roth, L.H., Bennett, N.S., Gardner, W.P., Mulvey, E.P. (1995). Coercion and commitment: Understanding involuntary mental hospital admission. *International Journal of Law and Psychiatry, 18*, 249-263.
- Mulvey, E.P., & Lidz, C.W. (1995). Conditional prediction: A model for research on dangerousness to others in a new era. *International Journal of Law and Psychiatry, 18*, 129-143.
- Nicholson, R.A. (1986). Correlates of commitment status in psychiatric patients. *Psychological Bulletin, 100*, 231-250.
- Quinsey, V.L. & Maguire, A. (1986). Maximum security psychiatric patients: Actuarial and clinical prediction of dangerousness. *Journal of Interpersonal Violence, 1*, 143-171.
- Quinsey, V.L., Harris, G.T., Rice, M.E., & Cormier, C.A. (1998). *Violent Offenders: Appraising and Managing Risk*. Washington, DC: American Psychological Association.
- Schopp, R.F. (1996). Communicating risk assessments: Accuracy, efficacy, and responsibility. *American Psychologist, 51*, 939-944.
- Schopp, R.F., Pearce, M., Scalora, M. (1998). Expert testimony and sexual predator statutes after Hendricks. *Expert Evidence, 6*, 1-21.
- Segal, S.P., Watson, M.A., Goldfinger, S.M., & Averbuck, D.S. (1988a). Civil commitment in the psychiatric emergency room: I. The assessment of dangerousness by emergency room clinicians. *Archives of General Psychiatry, 45*, 748-752.
- Segal, S.P., Watson, M.A., Goldfinger, S.M., & Averbuck, D.S. (1988b). Civil commitment in the psychiatric emergency room: II. Mental disorder indicators and three dangerousness criteria. *Archives of General Psychiatry, 45*, 753-758.
- Segal, S.P., Watson, M.A., Goldfinger, S.M., & Averbuck, D.S. (1988c). Civil commitment in the psychiatric emergency room: III. Disposition as a function of mental disorder and dangerousness indicators. *Archives of General Psychiatry, 45*, 759-763.
- Steadman, H.J., Monahan, J., Appelbaum, P.S., Grisso, T., Mulvey, E.P., Roth, L.H., Robbins, P.C., & Klassen, D. (1994). Designing a new generation of risk assessment research. In J. Monahan & Henry J. Steadman (Eds.), *Violence and Mental Disorder: Developments in Risk Assessment*. Chicago, IL: University of Chicago Press.
- Steadman, H., Mulvey, E., Monahan, J., Clark-Robbins, P., Appelbaum, P., Grisso, T., Roth, L., & Silver, E. (1998). Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Archives of General Psychiatry, 55*, 393-402.
- Watson, M.A., Segal, S.P., & Newhill, C.E. (1993). Police referral to psychiatric emergency services and its effect on disposition decisions. *Hospital and Community Psychiatry, 44*, 1085-1090.
- Werner, P.D. & Meloy, J.R. (1992). Decision making about dangerousness in releasing patients from long-term psychiatric hospitalization. *Journal of Psychiatry and Law, 20*, 35-47.
- Werner, P.D., Rose, T.L., Yesavage, J.A., & Seeman, K. (1984). Psychiatrists' judgments of dangerousness in patients on an acute care unit. *American Journal of Psychiatry, 141*, 263-266.
- Winick, B.J. (1998). Sex offender law in the 1990s: A therapeutic jurisprudence analysis. *Psychology, Public Policy, and Law, 4*, 505-570.
- Witt, P.H., DelRusso, J., Oppenheim, J., & Ferguson, G. (1997). Sex offender risk assessment and the law. *The Journal of Psychiatry & Law, 25*, 343-377.
- Zabow, T. & Cohen, A. (1993). South African psychiatrists' criteria for predicting dangerousness. *Medicine and Law, 12*, 417-430.