Stable Dynamic Risk Factors in Child Sexual Abusers: the Incremental Predictive Power of Narcissistic Personality Traits beyond the Static-99/Stable-2007 Priority Categories on Sexual Reoffense

Reinhard Eher[1,2], Martin Rettenberger[2], Anna Matthes[3] & Frank Schilling[2]
[1] Forensic Psychotherapy, University Hospital Ulm, Germany
[2] Federal Evaluation Centre for Violent and Sexual Offenders, Vienna, Austria
[3] Jugendanstalt Hameln, Germany

[Sexual Offender Treatment, Volume 5 (2010), Issue 1]

Abstract

A group of hands on child sexual abusers were diagnosed according to DSM-IVR criteria within a routinely performed risk assessment process in the Austrian prison system. Actuarials showed moderate to good predictive accuracy, and a combination of static and stable risk factors (Static-99 and Stable-2007) significantly improved the predictive power for sexual reoffense.
In addition, the clinical diagnosis of narcissistic personality disorder significantly added incremental validity once the Static-99/Stable-2007 factors were accounted for. Clinical diagnoses of an exclusive pedophilia, exhibitionism, voyeurism and a paranoid personality disorder - although linked to sexual recidivism - failed to add predictive utility beyond the Static-99/Stable-2007 priority factors.

Key words: Sexual offenders, pedophilia, Static-99, Stable-2007, mental disorders, incremental predictive validity

Introduction

Dynamic risk factors are defined as psychological or behavioural features of the offender that on the one hand raise the risk of reoffending, but on the other hand are potentially changeable (Bonta & Andrews, 2008). Therefore, these factors are of particular significance to assessors and treatment providers. In addition, risk assessments and the determination of treatment gains, or the lack thereof, a central concern for decision makers, who need to balance the interests of the offender, the community, and potential future victims. Also, recent findings have confirmed that sex offender treatment methods (Hanson, Bourgon, Helmus, & Hodgson, 2009) that adhered to the risk-need-responsivity (RNR) principles - thus addressing empirically derived dynamic risk factors - showed the largest reductions in sexual and general recidivism. Dynamic risk factors, therefore, are criminogenic needs, which do not only contribute to estimates of future risk but also represent goals for treatment and general risk management.

Hanson & Harris (2001) suggested that stable dynamic risk factors for sexual reoffense are represented by the following domains: 1. sexual self regulation, 2. general self regulation, 3. intimacy deficits, 4. compliance and understanding for the need of treatment and control, 5. existence of supportive significant others, and 6. distorted attitudes or attitudes tolerant to sexual violence. These findings led to the development of the Stable-2000 and the Stable-2007,

specialized tools designed to assess and track changes in dynamic risk status. These instruments have not only been found to significantly predict sexual, violent and general recidivism, but they have also been found to add useful information about risk beyond that captured by actuarials assessing static risk factors alone (Hanson, Harris, Scott, & Helmus, 2007; Hanson & Harris, 2001). Both, the Stable-2000 and the Stable-2007 made a significant incremental contribution to most recidivism types.

To be a "real dynamic predictor" a change of the predictor variable should be proven to be linked to a change in risk. However, this would require the variable to be measured at least at 2 points in time. Hanson et al. (2007) found that the second Stable assessment in their study significantly contributed beyond the first stable assessment as regards to sexual reoffense. However, since there were only six recidivists the authors recommended treating their results with caution.

In an independent replication study of 59 sexual offenders with a preventive order for high risk offenders, the Stable-2007 was also found to significantly predict general recidivism (Lussier, Deslauriers-Varin, & Ratel, 2010): however, in this study no data about its predictive power for the sexual reoffense category could be obtained since only one of the offenders recidivated sexually.

Similar risk relevant stable domains are described by Olver, Wong, Nicholaichuk, & Gordon (2007) in the Violence Risk Scale - Sexual Offender Version (VRS-SO). A factor analysis revealed 3 underlying factors: 1. sexual deviance, 2. criminality, and 3. treatment responsivity. Again, also these domains could be shown to add incremental predictive power to static risk assessment tools (Olver, Wong, & Nicholaichuk, 2009). Moreover, the total dynamic change of the scale was related to risk as the greater the change the lower the recidivism rate.

Comorbid psychiatric disorders may also represent dynamic risk variables in sexual offenders. Sexual deviance, for example, can not only be conceptualised as a dynamic risk factor by a dimensional approach, but may also fulfil categorical diagnostic criteria of a paraphilia (American Psychiatric Association, 2000). Also, findings of psychologically meaningful risk factors (Mann, Hanson, & Thornton, 2010), as for example, general lifestyle impulsivity, a lack of emotionally intimate relationships, and callousness or empathy deficits as may result from an underlying diagnosis of a borderline, narcissistic or antisocial personality disorder, have been found to be relevant to risk assessors. In a case-control study based on Swedish national registers, sexual offenders were found to be 6 times more likely to have a history of psychiatric hospitalisation compared with the general population (Fazel, Sjostedt, Langstrom, & Grann, 2007). Also, Raymond, Coleman, Ohlerking, Christenson, & Miner (1999) found remarkably high prevalence rates of axis I (75%) and axis II (60%) disorders in a sample of child sexual abusers. Similar results were found by Harsch, Bergk, Steinert, Keller, & Jockusch (2006) for sexual offenders detained in a forensic psychiatric facility and for incarcerated sexual offenders in Germany, as well as by Eher, Rettenberger, & Schilling (2010) for a sample of imprisoned rapists and child molesters in Austria. Of course, these findings do not necessarily mean nor prove a distinct psychiatric disorder is related to increased risk. Moreover, expert opinion holds the view that psychiatric diagnoses do not play a significant role in sexual reoffending (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005). For example, Hanson and Bussiere (1998) found that the diagnosis of a personality disorder or alcohol use during the offense could only be found to be related to general, but not to sexual and non sexual violent recidivism. However, an antisocial orientention or psychopathy was consistently reported to be linked to all types of recidivism in sexual offenders.

Only some clinical diagnoses have yet been investigated as regards to their possible risk relevance in sexual offenders. There has been, for example, research on the predictive power of clinical diagnoses of pedophilia and sexual sadism. These studies tend to find that clinical diagnoses of

pedophilia and sexual sadism do not add predictive power, likely due to the difficulties inherent in making such diagnoses. Rather, penis plethysmography results have found to be predictive (Kingston, Seto, Firestone, & Bradford, 2010). In the present study, therefore, we analysed the utility of clinical psychiatric diagnoses for the prediction of risk in child sexual offenders. In a prospective longitudinal research design we were particularly interested in the predictive power of diagnosed mental disorders when the established static and dynamic risk factors were controlled for.

Subjects

The sample was comprised by 127 male child molesters with a Category "A" sexual offense with a minor under the age of 14 (according to the Static-99 coding rules). All offenders were serving prison sentences at time of assessment. The offenders underwent routine risk assessment that contributed to treatment allocation at the Federal Documentation Centre for Violent and Sexual Offenders in Austria (for further details see also Rettenberger, Matthes, Boer, & Eher, 2010). Assessments were done between 2002 and 2005. Criminal history and recidivism information was obtained from the computerized data base of the Austrian Ministry of Internal Affairs on August 1, 2010.

The average follow-up time was 6.38 years (SD=0.83, minimum=4.79 years, maximum=8.42 years). Mean age at time of release was 45.63 years (SD=12.20, minimum= 20.45 years, maximum = 71.79 years). Forty three percent (N=55) of the offenders had previously been convicted for a general crime, 25% (N=32) for a violent offense, 17% (N=22) for a sexual offense, and 12% (N=15) for a sexual offense against minors.

During follow-up, 29% (N=37) offenders were reconvicted in general, and 16% (N=21) imprisoned again. 13% (N=16) offenders were reconvicted for a sexual offense, 6.5% (N=8) for a sexual hands-on offense, 12% (N=15) for a violent (sexual and non sexual) crime.

Measures

Static risk factors were measured using the Static-99 (Harris, Phenix, Hanson, & Thornton, 2003), stable risk factors were measured using the Stable-2007 (Hanson et al., 2007; Harris & Hanson, 2010). DSM-IV-TR criteria were used for psychiatric diagnoses of personality disorders and paraphilias (American Psychiatric Association, 2000).

The interrater reliability of risk assessment instruments (Rettenberger, Matthes, Boer, & Eher, 2010; Matthes, Rettenberger, & Eher, 2010) was assessed on 15 randomly selected cases and evaluated by intraclass correlation coefficients (ICCs). All ICCs were highly significant (< 0.001) and excellent for the Static-99 (ICC = .98), the Stable-2007 (ICC = 0.90). No interrater reliability, however, was assessed for clinical diagnoses. Psychiatric diagnoses were set consensually by at least two experienced forensic psychiatrists or psychologists at the end of a 2 weeks inpatient diagnostic procedure (Eher, Rettenberger, & Schilling, 2010).

Overview of Analyses

The predictive accuracy of risk assessment instruments was measured by calculating AUC values of ROC curves. This procedure is commonly used to examine the predictive accuracy of binary decisions. Because of its low sensitivity to base rates of recidivism and to users' biases for or against Type I or Type II prediction error the AUC is a standard measure of diagnostic and predictive accuracy in clinical and forensic research (Rice & Harris, 1995). For calculating 5-years

estimates associated with each Static/Stable priority category we used logistic regression analyses. Confidence intervals for the estimated recidivism rates for each Static-99/Stable-2007 score were obtained from standard errors (SE).

In order to test predictive accuracy and incremental validity of relevant variables, we also performed Cox regression survival analyses. Cox regression estimates relative risk ratios associated with one or more predictor variables from data with unequal follow-up times. Similar to OR the rate ratio (hazard rate; exp B) resulting from Cox regression analysis is an indicator for the strength of the association between predictor and outcome.

Results

Descriptive statistics

Table 1 shows the prevalence of paraphilias and personality disorders in the sample. At least one paraphilia was diagnosed in 73.7% of the sample and at least one personality disorder was diagnosed in 59.3% of the sample. As expected, the most common diagnosis was pedophilia (66.9%). However, only about 12% of the whole sample fulfilled the diagnostic criteria of an exclusive form of pedophilia. The diagnosis of a cluster B personality disorder was given most often (40.8%) compared to only 20.8% of cluster C and 15.8% of cluster A personality disorders (table 1).

Table 1: Prevalence of paraphilias and personality disorders (lifetime) in the child molester sample

Diagnoses	N (%)
Any Paraphilia (N=114)	84 (73.7%)
Exhibitionism (N=121)	12 (9.9%)
Fetishism (N=122)	4 (3.3%)
Frotteurism(N=122)	4 (3.3%)
Pedophilia (N=118)	79 (66.9%)
Pedophilia, exclusive (N=127)	15 (11.8%)
Sexual Masochism (N=120)	2 (1.7%)
Sexual Sadism (N=118)	3 (2.5%)
Transvestic Fetishism (N=121)	3 (2.5%)
Voyeurism (N=120)	9 (7.5%)
Paraphilia NOS (N=119)	9 (7.6%)
Any Personality Disorders (N=120)	71 (59.2%)
Cluster A	19 (15.8%)
Paranoid (N=120)	9 (7.5%)
Schizotypal (N=120)	5 (4.2%)
Schizoid (N=120)	6 (5.0%)

Cluster B	49 (40.8%)
Histrionic (N=120)	1 (0.8%)
Narcissistic (N=120)	16 (13.3%)
Borderline (N=120)	22 (18.3%)
Antisocial (N=120)	30 (25.0%)
Cluster C	25 (20.8%)
Avoidant (N=120)	11 (9.2%)
Dependent (N=120)	8 (6.7%)
Obsessive-Compulsive (N=120)	13 (10.8%)
NNB	0

The mean score of the Static-99 was 2.8 (SD = 2.6, minimum=0, maximum=10), the mean score of the SORAG was 1.6 (SD = 12.3, minimum= - 21, maximum=30), the mean score of the PCL-R was 16.3 (SD = 7.4, minimum = 4, maximum=34). The mean total score of the Stable-2007 was 11.9 (3.0, minimum=4.3, maximum=20.6)[1]. The distribution of the nominal need categories of the Stable-2007 were found as follows: low need [N=0], moderate need [N=60 (54.3%)], and high need [N=58 (54.7%)]. The revised algorithm for combining the static and stable factors of Static-99 and the Stable-2007 creates five nominal risk/need (priority) categories. N=32 (25.2%) were allocated to the low priority category, N=42 (33%) to the moderate-low priority category, N=22 (17.3%) to the moderate-high priority category, N=15 (11.8%) to the high priority, and N=16 (12.6%) to the very high priority group.

Predictive validity of risk assessment instruments and clinical diagnoses

Results of ROC analyses revealed that all risk assessment instruments were significantly related to sexual recidivism, and most were also significantly related to violent and general recidivism. However, combining the static[2] and stable items into nominal priority categories [see combining rules in (Hanson et al., 2007)] or simply adding the scores of Static-99 and Stable-2007 yielded the best predictive accuracy of all risk assessment methods leading to high AUC-values (Table 2). Moreover, the sexual recidivism category was predicted best by all instruments and all combinations of instruments.

Table 2: ROC-analyses of risk assessment instruments (*p<0.05, ** p<0.01, ***p<0.001)

	Static-99	Stable-2007	Static-99 and Stable-2007 added	Static-99 and Stable 2007 (nominal)
Relapse				
Sexual Crime	0,832***	0,768**	0,855***	0,859***
Violent Crime	0,723**	0,623 n.s.	0,693*	0,716**

Any Crime	0,709***	0,669**	0,734***	0,704***
Any prison sentence	0,786***	0,724**	0,815***	0,799***

We calculated 5-years recidivism rates for the Static-99/Stable-2007 priority categories based on predicted values from the fitted (smoothed) logistic regression curves (Hanson, Helmus, & Thornton, 2010) for sexual and general recidivism (table 3). Observed (43.75%) and calculated (45.81%) 5-years recidivism rates for the sexual reoffense category of the very high priority group reached the 44%, the 5-years recidivism rates for general reoffense reached the 50% (observed: 50.0%, estimated: 56.57%).

Table 3: Observed and estimated (logistic regression estimates.) 5 year sexual and general recidivism rates of child molesters – Static-99/Stable-2007 nominal priority categories

Static-99/Stable-2007 priority categories	N	Observed recidivism rates	Predicted recidivism rates	95% Confidence interval	
Sexual recidivism					
Low	32/0	0.00	1.18	0.24	5.60
Low-moderate	42/0	0.00	3.34	1.09	9.74
Moderate-high	22/6	27.27	9.11	4.50	17.59
High	15/3	20.00	22.55	13.40	35.38
Very high	16/7	43.75	45.81	25.87	67.19
General recidivism					
Low	32/5	15.63	13.74	7.28	24.43
Low-moderate	42/6	14.29	21.23	14.10	30.64
Moderate-high	22/10	45.45	31.30	22.93	41.05
High	15/8	53.33	43.52	30.63	57.28
Very high	16/8	50.00	56.57	37.07	74.18

A correlation analysis also revealed some psychiatric diagnoses to be linked to sexual reoffense. The diagnoses of an exclusive version of pedophilia ($r = 0.30$, $p<0.001$), exhibitionism ($r = 0.23$, $p<0.05$), voyeurism ($r=0.19$, $p<0.05$), paraphilia NOS ($r = 0.19$, $p< 0.05$) of a paranoid ($r=0.29$, $p<0.01$) and narcissistic personality disorder ($r=0.32$, $p<0.001$) were significantly related to sexual reoffense (table 4).

Table 4: Paraphilias and personality disorders in relation to sexual reoffense

(*p<0.05, ** p<0.01, ***p<0.001)

	Sexual reoffense
Paraphilias	
Exhibitionism	0.23*
Fetishism	0.08
Frotteurism	-0.07
Pedophilia	-0.02
Pedophilia, exclusive	0.30***
Sexual Masochism	0.16
Sexual Sadism	-0.06
Transvestic Fetishism	0.11
Voyeurism	0.19*
Paraphilia NOS	0.19*
Personality Disorders	
Cluster A	0.13
Paranoid	0.29**
Schizotypal	-0.08
Schizoid	-0.08
Cluster B	0.12
Histrionic	-0.03
Narcissistic	0.32***
Borderline	0.03
Antisocial	0.09
Cluster C	
Avoidant	-0.03
Dependent	0.01
Obsessive	-0.04

The stable risk factors selected for the construction of the Stable-2000 and the Stable-2007 inherently also cover underlying clinical constructs or personality dimensions which are captured by distinct clinical diagnoses. As such, we were especially interested whether clinical diagnoses found to be linked to sexual recidivism would also add useful information beyond 1. the risk prediction by static risk factors alone, and beyond 2. the risk prediction of a combination of static (Static-99) and stable risk factors (Stable-2007). Cox regression analyses were conducted to test the relationship of clinical diagnoses while static risk (first analysis; table 5) and the combination of static and stable factors (second analysis; table 6) and time on risk were controlled for. Therefore, in the first analysis, the Static-99 total score and those clinical variables were entered, which could be shown

to be significantly related to sexual reoffense in the bivariate analyses. The Static-99 total score (exp(b)=1.45, p<0.001) and the diagnosis of narcissistic personality disorder (exp(*b*)=4,78, p<0.01), but no other clinical diagnoses, demonstrated a significant unique relationship to sexual reoffense (table 5).

Table 5: Incremental contribution of DSM-IV-TR diagnoses after controlling for Static-99 scores (first analysis)

	X^2change	ß	SE	p
Exhibitionism	.082	-.105	.367	.775
Pedophilia, exclusive	2.082	.807	.541	.135
Voyeurism	.782	.320	.343	.351
Paraphilia NOS	1.108	.746	.660	.258
Paranoid PD	2.244	.993	.619	.109
Narcissistic PD	7.097	1.563	.545	.004

When entering the added sum score of Static-99 and Stable-2007 and clinical diagnoses as covariates, again, only the addition of static and dynamic scores (exp(*b*)=1.25, p<0.001) and the diagnosis of a narcissistic personality disorder (exp(*b*)=6.44, p<0.01), but no other clinical diagnosis, demonstrated a significant relationship to sexual reoffense. Similar results were obtained when entering the Static-99/Stable-2007 priority categories (exp(*b*)=2,35, p<0.001) and narcissistic personality disorder (exp(*b*)=3,90, p<0.01) (see also table 6).

Table 6: Incremental contribution of DSM-IV-TR diagnoses after controlling for Static-99/Stable-2007 nominal priority categories (second analysis)

	X^2change	ß	SE	p
Exhibitionism	.007	-.027	.329	.935
Pedophilia, exclusive	1.851	.764	.545	.161
Voyeurism	.625	.278	.335	.406
Paraphilia NOS	.693	.586	.668	.380
Paranoid PD	1.891	.894	.610	.143
Narcissistic PD	5.502	1.361	.546	.013

Discussion

The current study investigated the usefulness of psychiatric diagnoses according to DSM-IV-TR criteria in convicted child sexual abusers for the prediction of sexual reoffense. So far, to our knowledge, no such study was done. Mann et al. (2010) presented a list of potential dynamic risk factors according to the strength of evidence for their relationship with reoffending. They described risk factors with supported empirical evidence, such as sexual preoccupation, deviant sexual interest, offense supportive attitudes, lack of emotionally intimate relationships, general self-regulation problems, resistance to rules and negative social influences. Some of those risk factors, however, might also represent symptoms of underlying clinical disorders. Other empirically supported risk relevant stable domains, e.g. "sexual preoccupation", "sexual preference for children", or "multiple pharaphilias", represent mental disorder per definition.

Modern risk assessment for sexual offenders is heavily influenced by the findings of Hanson & Bussiere (1998) and Hanson & Morton-Bourgon (2005) leading to the construction of risk assessment tools which include empirically supported risk factors (Hanson & Thornton, 2001; Hanson et al., 2007; Olver, Wong, Nicholaichuk, & Gordon, 2007).

However, although the SVR-20 (Boer, Hart, Kropp, & Webster, 1997) and the SORAG (Quinsey, Harris, Rice, & Cormier, 2006) consider some clinical variables, there is a lack of knowledge about the possibly unique contribution of certain psychiatric disorders to the risk of reoffense in sexual offenders.

The current study found a positive significant correlation between the diagnoses of voyeurism, exhibitionism, paraphilia NOS, and exclusive pedophilia, as well as narcissistic and paranoid personality disorder with risk of sexual reoffense. Given the knowledge about empirically supported dynamic risk variables in sexual offenders, these findings were not surprising, since all these diagnoses are at least in some way considered by empirically supported dynamic risk domains (Craissati & Beech, 2003; Harkins & Beech, 2007; Mann et al., 2010; Harris & Hanson, 2010). However, once the static-actuarial variables and domains of established dynamic risk factors were controlled for, only the diagnosis of a narcissistic personality disorder still incrementally contributed to the prediction of sexual reoffense in child sexual abusers.

DSM IV-TR criteria (American Psychiatric Association, 2000) for the narcissistic personality disorder are represented by a pervasive pattern of grandiosity, by the need for admiration and by a lack of empathy demonstrated by a grandiose sense of self-importance, a preoccupation with fantasies of power, brilliance, or ideal love, a believe that s/he is "special" and unique requiring "special treatment". Narcissistic persons are interpersonally exploitative by definition and are unwilling or unable to recognize or identify with the feelings and needs of others. Another important personality domain is a strong enviousness of others. Some of these narcissistic personality traits are already known to represent dynamic risk factors for sexual reoffense. Lack of concern for others, for example, is one of the Stable-2007 items, grandiose self-importance is one of the risk factors on the psychopathy checklist revised [PCL-R; (Hare & Neumann, 2009)]. Also, callousness and lack of concern is not only one item of the "intimacy deficit" domain of the Stable-2007, it also relates to the concept of psychopathy, especially to factor one (facette two) of the PCL-R (Hare, 1999). A preoccupation with fantasies of power, brilliance and the conviction that one has to be treated better than others may be related to a poor understanding of risk relevant problems. This, in turn, may contribute to noncompliance or resistance to treatment and supervision. Interpersonal problems deriving from an exploitative personality might also lead to a lack of experience of mature intimate relationships and to conflicts in partnerships in general.

However, a narcissistic personality disorder might account for several empirically supported risk factor variables in sexual offenders, but could nevertheless incrementally add predictive power. In

our study, the diagnosis of a narcissistic personality disorder could be found to be a strong predictor for sexual reoffense in child sexual abusers even when well established risk factors were controlled for. The risk for sexual reoffending increased up to 6 times once a narcissistic personality disorder was diagnosed.

The present study, of course, suffers from a comparably small offender sample, and therefore, the generalizability of these findings is open to question. Also, the lack of interrater reliability indices for clinical diagnoses is a limitation. Nevertheless, the current findings highlight the potential relevance and importance of considering clinical diagnoses when assessing risk and highlight potential areas for consideration for those constructing risk assessment measures.

References

1. American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders (4th ed., text revision). Washington, DC: Author.
2. Boer, D. P., Hart, S. D., Kropp, P. R. & Webster, C. D. (1997). Manual for the Sexual Violence Risk-20 (SVR-20): Professional Guidelines for Assessing Risk of Sexual Violence. Vancouver: British Columbia Institute Against Family Violence.
3. Bonta, J. & Andrews, D. A. (2008). Risk-Need-Responsivity Model for Offender Assessemnt and Rehabilitation. Public Safety Canada [Electronic version]. Available: http://www.ps-sp.gc.ca/res/cor/rep/_fl/Risk_Need_2007-06_e.pdf
4. Craissati, J. & Beech, A. (2003). A review of dynamic variables and their relationship to risk prediction in sex offenders. Journal of Sexual Aggression, 9(1), 41-55.
5. Eher, R., Rettenberger, M., & Schilling, F. (2010). Psychiatrische Diagnosen von Sexualstraftätern - eine empirische Untersuchung von 807 inhaftierten Kindesmissbrauchstätern und Vergewaltigern (Psychiatric diagnoses in sexual offenders - an Investigation of 807 incarcerated child molesters and rapists). Zeitschrift für Sexualforschung, 23, 23-35.
6. Fazel, S., Sjostedt, G., Langstrom, N. & Grann, M. (2007). Severe mental illness and risk of sexual offending in men: a case-control study based on Swedish national registers. J. Clin. Psychiatry, 68, 588-596.
7. Hanson, R. K., Bourgon, G., Helmus, L. & Hodgson, S. (2009). The Principles of Effective Correctional Treatment Also Apply To Sexual Offenders: A Meta-Analysis. Criminal Justice and Behavior, 36, 865-891.
8. Hanson, R. K. & Bussiere, M. T. (1998). Predicting relapse: a meta-analysis of sexual offender recidivism studies. J Consult Clin.Psychol., 66, 348-362.
9. Hanson, R. K. & Harris, A. J. (2001). A structured approach to evaluating change among sexual offenders. Sex Abuse, 13, 105-122.
10. Hanson, R. K., Harris, A. J. R, Scott, T.-L. & Helmus, L. (2007). Assessing the risk of sexual offenders on community supervision: The Dynamic Supervision Project . Retrieved 19-8-2010, from http://www.publicsafety.gc.ca/res/cor/rep/_fl/crp2007-05-en.pdf
11. Hanson, R. K., Helmus, L. & Thornton, D. (2010). Predicting recidivism amongst sexual offenders: a multi-site study of static-2002. Law Hum. Behav., 34, 198-211.
12. Hanson, R. K. & Morton-Bourgon, K. E. (2005). The characteristics of persistent sexual offenders: a meta-analysis of recidivism studies. J. Consult Clin.Psychol., 73, 1154-1163.
13. Hanson, R. K. & Thornton, D. (2001). Static 99: Improving actuarial risk assessments for sex offenders 1999-02.
14. Hare, R. (1999). Psychopathy as risk factor for violence. Psychiatric Quarterly, 70, 181-197.
15. Hare, R. D. & Neumann, C. S. (2009). Psychopathy: assessment and forensic implications. Can.J.Psychiatry, 54, 791-802.

16. Harkins, L. & Beech, A. R. (2007). A review of the factors that can influence the effectiveness of sexual offender treatment: Risk, need, responsivity, and process issues. Aggression and violent behavior, 12, 615-627.
17. Harris, A. J., Phenix, A., Hanson, R. K. & Thornton, D. (2003). Static-99 Coding Rules Revised - 2003. Retrieved 24-9-2010, from http://www.publicsafety.gc.ca/res/cor/rep/_fl/2003-03-stc-cde-eng.pdf
18. Harris, A. J. R. & Hanson, R. K. (2010). Clinical, Actuarial, and Dynamic risk assessment of sexual offenders: Why do things keep changing? Journal of Sexual Aggression, in press.
19. Harsch, S., Bergk, J. E., Steinert, T., Keller, F. & Jockusch, U. (2006). Prevalence of mental disorders among sexual offenders in forensic psychiatry and prison. Int. J. Law Psychiatry, 29, 443-449.
20. Helmus, L., Babchisin, K. M., Hanson, R. K. & Thornton, D. (2010). Static-99-R: Revised Age Weights. Retrieved 9-9-2010, from http://www.static99.org/pdfdocs/static-99randage20091005.pdf
21. Kingston, D. A., Seto, M. C., Firestone, P. & Bradford, J. M. (2010). Comparing indicators of sexual sadism as predictors of recidivism among adult male sexual offenders. J. Consult Clin. Psychol., 78, 574-584.
22. Lussier, P., Deslauriers-Varin, N. & Ratel, T. (2010). A descriptive profile of high-risk sex offenders under intensive supervision in the province of British Columbia, Canada. Int. J. Offender. Ther. Comp Criminol., 54, 71-91.
23. Mann, R. E., Hanson, R. K. & Thornton, D. (2010). Assessing risk for sexual recidivism: some proposals on the nature of psychologically meaningful risk factors. Sex Abuse, 22, 191-217.
24. Matthes, A., Rettenberger, M. & Eher, R. (2010). Predictive and incremental validity of the STABLE-2000 and the STABLE-2007 in an Austrian sample of child sexual abusers. Forensische Psychiatrie und Psychotherapie, 17 [Supplement 1], 66.
25. Olver, M. E., Wong, S. C., Nicholaichuk, T. & Gordon, A. (2007). The validity and reliability of the Violence Risk Scale-Sexual Offender version: assessing sex offender risk and evaluating therapeutic change. Psychol.Assess., 19, 318-329.
26. Olver, M. E., Wong, S. C. & Nicholaichuk, T. P. (2009). Outcome evaluation of a high-intensity inpatient sex offender treatment program. J. Interpers. Violence, 24, 522-536.
27. Quinsey, V. L., Harris, A. J., Rice, M. E. & Cormier, B. M. (2006). Violent Offenders: Appraising and Managing Risk. (2nd ed.) Washington DC: American Psychological Association.
28. Raymond, N. C., Coleman, E., Ohlerking, F., Christenson, G. A. & Miner, M. (1999). Psychiatric comorbidity in pedophilic sex offenders. Am. J. Psychiatry, 156, 786-788.
29. Rettenberger, M., Matthes, A., Boer, D. P. & Eher, R. (2010). Prospective actuarial risk assessment: a comparison of five risk assessment instruments in different sexual offender subtypes. Int. J. Offender. Ther. Comp Criminol., 54, 169-186.
30. Rice, M. E. & Harris, G. T. (1995). Violent recidivism: assessing predictive validity. J Consult Clin.Psychol., 63, 737-748.

Author address

Reinhard Eher
Federal Evaluation Centre for Violent and Sexual Offenders
Gerichtsgasse 6, A–1210 Vienna, Austria

reinhard.eher@justiz.gv.at
Phone: ++43 1 27 85 300 31
Fax: ++43 1 27 85 300 32

Martin Rettenberger
Federal Evaluation Centre for Violent and Sexual Offenders
Vienna, Austria

Anna Matthes
Jugendanstalt Hameln, Germany

Frank Schilling
Federal Evaluation Centre for Violent and Sexual Offenders
Vienna, Austria