

Protective Factors for Violence Risk: The Value for Clinical Practice

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Violence risk assessment tools in forensic psychiatry have traditionally solely been focused on risk factors. Recently, positive psychology inspired a more strengths-based approach to treatment and sparked an innovation in the assessment of violence risk: the introduction of protective factors. The *Structured Assessment of Protective Factors for Violence Risk* (SAPROF) was developed to complement violence risk assessment with an assessment of protective factors. In this article, clinical experiences with the use of protective factors in forensic practice are described and empirical findings on incorporating protective factors in the risk assessment procedure are discussed. The results of this study underline the value of protective factors for a balanced and more accurate violence risk assessment and exemplify their potential in guiding treatment planning, evaluating treatment progress and improving positive risk management strategies.

Keywords: Protective Factors; Violence Risk Assessment; SAPROF; Strengths-Based; Positive

Introduction

Positive psychology has inspired an innovative direction for treatment not only in general psychiatry but also in forensic psychiatry. Encouragement of the healthy aspects of mentally disordered patients and their environment can provide a valuable contribution to the treatment and reintegration process. Therefore, treatment aimed at reducing violent recidivism should not only be focused on diminishing risk factors, but also on reinforcing protective factors (De Ruiter & Nicholls, 2011; Ullrich & Coid, 2009). Strengths-based approaches are eagerly being adopted by clinicians seeking hopeful and positive alternatives for the gloomy vision of the risk-only approach. Inspired by this new direction in (forensic) psychology, over the past decade clinicians and researchers in forensic psychiatry have increasingly focused on positive and changeable treatment related issues. As such, treatment approaches have more and more adopted positive strategies and strengths-based interventions (see for example the *Good Lives Model*; Ward & Brown, 2004). Although positive factors have traditionally been addressed in most treatment efforts, the notion that these positive factors can indeed act as protective factors for violence risk in forensic psychiatric patients is relatively new. Moreover, linking this positive preventive approach to a structured evaluation of personal and situational strengths in risk assessment was virtually non-existing before the turn of the century. Rogers (2000) stated that most assessments were risk-only evaluations, which were inherently inaccurate and implicitly biased. According to Miller (2006), the mere focus on risk factors in most risk assessment instruments likely results in pessimism among therapists and over-prediction of recidivism, possibly leading to the wrongful, lengthy detention of forensic psychiatric patients, which is costly both for the patients, in terms of loss of personal liberties, and for society, in terms of financial burden.

Many researchers now agree that by focusing solely on risk factors, important information concerning the other side of the

violence risk equation, the possible risk reducing effect of protective factors, is wrongfully ignored and that a balanced risk assessments including both risk- and protective factors is vital for an accurate appraisal of the risk of relapse into violence (e.g., DeMatteo, Heilbrun, & Marczyk, 2005; Gagliardi, Lovell, Peterson, & Jemelka, 2004; Haggård-Grann, 2005; Salekin & Lochman, 2008). However, as of yet the specific assessment of protective factors remains understudied and the concept of protective factors is still ambiguous (Braithwaite, Charrette, Crocker, & Reyes, 2010; De Vogel, De Ruiter, Bouman, & De Vries Robbé, 2011). Protective factors can be personal factors or situational factors. They are defined as: any characteristic of a person, his or her environment or situation which reduces the risk of future violent behavior (De Vogel, De Ruiter, Bouman, & De Vries Robbé, 2009, 2012). If protective factors are dynamic in nature, they make for promising positive targets for violence risk reduction by providing positive goals for treatment programming and risk management planning (Douglas & Skeem, 2005). In recent years, many researchers and clinicians in forensic treatment have started to acknowledge the value of protective factors for accurate risk assessment and effective violence prevention (Fougere & Daffern, 2011; Lösel & Farrington, 2012; Ullrich & Coid, 2009; Webster, Martin, Brink, Nicholls, & Desmarais, 2009). In this article protective factors for violence risk will be investigated and a tool for the structured assessment of protective factors will be introduced. The benefits of protective factors for the risk assessment and treatment of forensic psychiatric patients will be described.

Assessment Tools for Protective Factors

Many risk assessment tools in forensic clinical practice follow the *Structured Professional Judgment* (SPJ; see Douglas, 2009) approach. SPJ tools are checklists containing empirically derived risk related factors. After coding the items in the tool, the assessor interprets and integrates the evidence to come to an

overall final judgment on the level of risk or protection present. Integrating empirical knowledge with clinical expertise ensures a well-informed risk judgment. Moreover, the SPJ approach provides valuable insights into possible risk scenarios and is able to guide treatment planning and risk management. Very few structured violence risk assessment tools include a specific focus on strengths. Only three SPJ tools have been developed which include protective factors. The *Structured Assessment for Violence Risk in Youth* (SAVRY; Borum, Bartel, & Forth, 2006) is a checklist for violence risk assessment in youth containing six protective factors in addition to 24 risk factors (e.g., *Prosocial involvement, Resilient personality traits*). Several studies on the SAVRY found that the protective factors in the SAVRY are good predictors of reduced violence and that they have additional value to risk factors (Lodewijks, De Ruiter, & Doreleijers, 2010; Rennie & Dolan, 2010). The *Short-Term Assessment of Risk and Treatability* (START; Webster et al., 2009) is a clinical guideline for the dynamic assessment of short-term risks. The 20 dynamic items have to be simultaneously coded on two three-point scales: first as strength, then as risk. In other words, risks and strengths are regarded as opposing ends of the same variable rather than being unique concepts. The START is intended to be used for short-term assessments of acute risk and is repeated bimonthly. In recent studies the START strengths-scale (the total score of the strength side of all items) showed to be predictive of less violence in the short-term and of successful community reintegration (Braithwaite et al., 2010; Nonstad et al., 2010; Viljoen, Nicholls, Greaves, De Ruiter, & Brink, 2011; Wilson, Desmarais, Nicholls, & Brink, 2010).

The SAPROF

Given the lack of a suitable protective factors assessment tool which could be used in accordance with the most commonly used forensic assessment tools for risk factors with a medium-term time-frame (i.e., the *Historical Clinical Risk management-20* (HCR-20); Webster, Douglas, Eaves, & Hart, 1997), the SAPROF was developed. The tool was inspired by findings from positive treatment aspects in clinical practice and by a strong wish from clinicians for a more strengths-based yet empirically sound approach. Through extensive literature reviews on protective and contextual factors, qualitative studies on the working positive aspects of forensic clinical treatment and pilot studies among several Dutch forensic psychiatric institutions, in 2007 the *Structured Assessment of Protective Factors for violence risk* (SAPROF; De Vogel, De Ruiter, Bouman, & De Vries Robbé, 2007; English version 2009) was developed in the Netherlands. The SAPROF was designed as a SPJ checklist. It was intended as a positive dynamic addition to structured risk assessment in forensic clinical practice and thus to be used in combination with a SPJ risk evaluation instrument, like the HCR-20 or the *Historical Clinical Risk management: Version 3* (HCR:V3; Douglas, Hart, Webster, Belfrage, & Eaves, in preparation). Since the publication of the English manual in 2009, the SAPROF was subsequently translated in 10 different languages and was quickly adopted by forensic psychiatric institutions in various countries.

The SAPROF consists of two static and fifteen dynamic protective factors organized within three scales according to their general background: the Internal factors (e.g., *Coping, Self-control*), the Motivational factors (e.g., *Work, Attitudes towards authority*) and the External factors (e.g., *Social network, Pro-*

fessional care). Appendix 1 shows the coding sheet with an overview of all protective factors in the SAPROF. The factors are rated on a three-point scale (0-2), reflecting the extent to which they are present as a protective factor for violence risk for a given patient in a specific situation. Additionally, factors can be indicated as particularly important for the individual in two ways. Factors that provide much protection at the time of assessment can be marked as *key factors*, while factors that are seen as potential targets for treatment intervention can be marked as *goal factors*. In clinical practice, the indication of key factors and goal factors sharpens the view on the importance of specific protective factors for the individual, which can be useful for the development of risk management plans and treatment intervention strategies. Following the SPJ approach, the SAPROF concludes with a final judgment on the overall protection that is present to counterbalance violence risk in the assessed situation (low, moderate, or high). Like with all SPJ tools, the final judgment is composed by interpreting, weighing and integrating the factors that are present. Finally, this Final Protection Judgment is combined with the risk factors from a SPJ risk tool to come to an integrative and balanced Final Risk Judgment for future violent behavior. In De Vogel et al. (2011) the background and content of the SAPROF is explained further and its protective factors are discussed in more detail.

The Benefits of a Positive Approach Clinical

The predominantly dynamic protective factors in the SAPROF aim to inform treatment with positive and attainable goals for interventions. By doing so, the assessment of protective factors can offer valuable guidance in narrowing the gap between risk assessment and risk management. In 2007, the SAPROF was implemented into general risk assessment practice for violent and sexually violent offenders in the Van der Hoeven Kliniek, a forensic psychiatric hospital in The Netherlands, to complement traditional risk assessment with risk-only tools like the HCR-20 and the *Sexual Violence Risk-20* (SVR-20; Boer, Hart, Kropp, & Webster, 1997). Mental health professionals, clinical psychologists and researchers in Dutch forensic psychiatry state that they appreciate the usefulness of the assessment of protective factors for the atonement of treatment plans and implementation of feasible and effective risk management strategies (Van den Broek & De Vries Robbé, 2008). For example, clinicians value the use of key-factors and goal-factors when assessing and reporting patient strengths in relation to treatment progress. In turn, this supports well-informed decision making regarding treatment phasing. Moreover, the use of a positive tool with a focus on the healthy aspects and strengths of a patient and his or her environment encourages positive communication between staff and patients and enhances treatment motivation in both patients and clinicians. The value of these positive changes for treatment progress has also been recognized in the *therapeutic assessment* approach by Finn and colleagues (see Finn, 2007). Although this collaborative assessment procedure revolves much more around patient involvement, the primary goals is very similar: facilitating positive change in people.

Empirical

In order to provide more insight into the nature of the relationship between positive factors and a reduced likelihood of

recidivism, several validation studies were carried out on the SAPROF protective factors. Although the greatest supplemental value of the SAPROF is its importance for guiding treatment evaluation and planning, proper examination of its predictive validity for violent recidivism, both retrospectively and prospectively, is essential.

Two retrospective file studies were carried out in order to assess the psychometric qualities of the SAPROF and evaluate the additional value of using the SAPROF alongside traditional risk only evaluations in clinical practice with: 1) violent offenders; and 2) sexually violent offenders. The first validation study (De Vries Robbé & De Vogel, 2012; De Vries Robbé, De Vogel, & De Spa, 2011) included 105 male violent offenders discharged from forensic psychiatric treatment after intensive clinical and outpatient treatment (mean treatment duration 5.5 years). Interrater reliability was good for the total SAPROF item scores (*intraclass correlation coefficient* (ICC) = .88). Predictive validities for non-recidivism with violent offenses after treatment within three different follow-up periods, one year, three year and long-term (M = 8 year), after treatment were excellent. Patients with more protective factors at discharge recidivated significantly less often and less quickly than patients with lower protective factors scores (*area under curve value* (AUC) = .85 at one year; .74 at three year; and .71 at long-term follow-up). The predictive validity of the protective factors in the SAPROF and the risk factors in the HCR-20 combined significantly outperformed the risk-only evaluation. In addition to ratings at the time of discharge, for part of the sample data were also collected on ratings at the time of admission to assess the progress made by patients during their forensic psychiatric treatment. A comparison between the pre- and post-treatment ratings showed significant improvements in protective factors scores during treatment, providing evidence for the changeability of the dynamic protective factors in the SAPROF and their potential usefulness for positive treatment progress evaluation and risk management planning.

A subsequent study (De Vries Robbé & De Vogel, 2012; De Vries Robbé, De Vogel, Koster, & Bogaerts, submitted for publication) investigated the value of the SAPROF protective factors for sexual offenders. The study included 83 discharged sexually violent male offenders (mean treatment duration 5.4 years). As was found for the violent offender sample, the interrater reliability of the SAPROF protective factors was good for the sexual offenders (ICC = .85). Predictive validity results were high as well for the sexual offender sample: the SAPROF showed good predictive validity at different follow-up times of 1 year, 3 year and long-term (M = 15 year) both for non-recidivism in sexual violence (AUC = .83; .77; .74, respectively) and for non-recidivism in general violence (AUC = .93; .76; .71, respectively). Again, adding the SAPROF protective factors produced significantly more accurate assessments than assessments with the risk-only HCR-20 or SVR-20 alone. Comparison of pre- and post-treatment ratings showed very similar effects for the sexual offender sample as for the violent offender sample: significant positive changes on the SAPROF factors during treatment. These treatment changes in themselves were predictive of less recidivism, meaning that those patients who showed the most progress on their protective factors during treatment, also recidivated the least after treatment. Although the results from these studies were equally good for violent and sexual offenders, analyses revealed different protective factors that were most predictive of no future (sexual) violence for the

two offender groups: *Self-control, Work and Financial management* for the violent offenders; *Coping, Self-control, Motivation for treatment* and *Attitudes towards authority* for the sexual offenders (De Vries Robbé & De Vogel, 2012).

In order to assess the usefulness of protective factors for the assessment of inpatient aggression, a prospective study was carried out within clinical practice (De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, submitted for publication). The study included data on 315 assessments, which had been carried out during different stages of clinical treatment at a Dutch forensic psychiatric hospital. Predictive validity analyses for no inpatient aggression within the year following the assessment showed good results for the protective factors in the SAPROF for different groups of patients including male violent offenders (AUC = .77), male sexual offenders (AUC = .81) and female offenders (AUC = .70). Overall, similar to the findings in the retrospective file studies, combining the protective factors with the risk factors showed to provide the most accurate predictions. When patients at different stages during their treatment were compared, the presence of dynamic protective factors showed to increase as treatment progressed, while the presence of dynamic risk factors showed to decrease over time. Together the improved protective factors and the diminished risk factors resulted in an overall reduction in violence risk and consequently less inpatient aggression. It was found that there were far fewer incidents of violence at the later stages in treatment and that protective factors were particularly useful later on in treatment, when patients had been able to use their increased protective factors to their advantage outside the hospital walls.

Conclusion

Although protective factors inevitably have always been part of clinical practice, their true potential for positive treatment outcome has long been underestimated and wrongfully received little acknowledgement. In order for treatment programs aimed at increasing protective factors to be meaningful it is essential to be able to evaluate the presence of protective factors that are empirically related to reductions in violence risk. Structurally assessing the positive characteristics of offenders and their environment offers a valuable additional starting point for effective and achievable positive treatment interventions. Complementing the risk-only focus with protective factors brings forth a more balanced assessment of future violence risk and consequently leads to better informed risk management. Validation studies to date on the SAPROF as a tool for the structured assessment of protective factors have provided support for a strong relationship between the presence of protective factors and the reduced likelihood of future violence. Moreover, the changeability of dynamic protective factors makes them valuable positive treatment targets and provides clinicians with a tool to evaluate treatment progress and guide interventions. Focusing on strengthening these dynamic protective factors provides clinicians in forensic psychiatry with a promising improvement in the prevention of violent recidivism.

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