

Summary and conclusion

The importance of protective factors in risk assessment of forensic psychiatric patients

Introduction

Risk assessment is an important task for professionals working in forensic psychiatry. On a daily basis, numerous decisions are made in which risk assessment plays a leading role. Risk assessment is also involved at different stages of the criminal law process. Traditionally, risk assessment of violent behavior is focused on scoring *risk* factors, factors that may increase the risk of violent behavior. More recently, the importance of *protective* factors as part of the risk assessment process is recognized. These are factors that are assumed to decrease the risk of violent behavior. In this report, the following research questions were asked: *Does the inclusion of protective factors in the risk assessment process add supplemental value to the risk assessment process as it currently is being conducted in Dutch forensic psychiatric practice? And if so, in which manner?* To answer these and related questions, a literature review was conducted.

Additional value protective factors

At present, we were able to find three possible additional values of including protective factors into the risk assessment process. These are: 1) to obtain a more all-round/multifaceted and complete image of a forensic psychiatric patient, 2) to reduce the number of false positive and false negative risk predictions, which makes it possible to reduce the number of inaccurate decisions about for instance leaves of absence and thereby to reduce the number of recidivism, and 3) to improve the treatment of forensic psychiatric patients (by increasing the strengths of a patient, by improving the treatment alliance, and by finding new clues for therapeutic goals).

Trend in positive psychology

In most risk assessment instruments that are currently being used in the forensic psychiatric field, only risk factors are included. This is in line with an important guiding principle in forensic psychiatry: the disease or risk model in which identifying risk factors for a certain disease, or antisocial behavior, is of central interest. The authoritative model in this tradition in forensic psychiatry is the *Risk-Need-Responsivity*-model. The addition of protective factors in the risk assessment process can be interpreted as part of a larger trend in forensic psychiatry, in which not (only) the negative sides but more the positive sides of a patient are of central importance. This can be seen in the emergence of positive psychological models in forensic psychiatric practice such as the *Good Lives Model* (GLM), the *Quality of Life*-model (QoL), the *Strengths-based*-model and treatment programs that follow these guidelines. These models and treatment programs are increasingly used in forensic psychiatry. This is not only happening in the Netherlands, but also in international forensic psychiatry. This positive psychological trend is important, since it is assumed to lead to a reduction in the number of recidivism.

Conceptualization protective factors

To further examine the additional value of protective factors, it is important to know exactly what protective factors are and to fully understand what their potential influence is. Unlike the literature on risk factors, however, there is lack of clarity on

these topics regarding protective factors. There is discussion on at least three topics. First, in the English literature there are several terms used to indicate protective factors, among which: protective factor, promotive factor, interactive protective factor, direct protective factor, buffering protective factor, et cetera. Further, different researchers use different definitions of these terms. This lack of clarity on which term to use to describe different protective influences is possibly due to the fact that there are several different research traditions all relating to protective factors. There is also lack of clarity regarding the type of protection that is studied: Is it protection against the onset of violent behavior (first offender) or against repeated violent behavior (recidivist)? Second, it is uncertain if protective factors are unique, other factors than risk factors (unipolar) or if they are (merely) the opposite of protective factors (bipolar). This is important, because if there are no unique protective factors, it is legitimate to question whether the research into protective factors and the construction of separate risk assessment tools for protective factors is relevant. The third point of discussion is whether or not protective factors have a direct or indirect influence on the total risk of violent behavior. If the influence is direct, the protective factors influence the total risk without influencing a specific risk factor. If the influence is indirect, it is more likely that the protective factor influences a specific risk factor, which in turn has its influence on the total amount of risk. An indirect influence of protective factors may follow two different pathways: the buffering and the mediating model. By examining main as well as interaction effects of protective factors in future studies, the exact nature (unipolar or bipolar) and the exact influence (direct or indirect) may become more clear. For future studies into protective factors it is also important to provide more clarity on the discussion points that are mentioned above. The conceptual framework of a model that was developed for youth forensic psychiatric health care may be a starting point for these matters.

Special circumstances

Factors that generally have a protective influence on violent risk, do not have this influence at all times and for everyone. In the literature there is some evidence that there are at least four special circumstances regarding protective factors. These are: the type of delinquent, age, gender, and the type of risk that is assessed. It is found that there are differences in the factors that have a protective influence depending on the type of delinquent that is studied (e.g., sex offenders versus other violent offenders). Regarding age, protective factors have been found to assert their influence differently depending on the developmental stage a person is in (e.g., at a young age, the family domain is more important; at an older age the social environment becomes more dominant). Also, the same factor may protect against violent behavior at a certain age and at the same time be a risk factor at a later age. In adults, the influence of protective factors may also be changeable over time. Depending on early adulthood, middle adulthood or late adulthood different protective factors may assert their influence. However, research into this topic is scarce. Gender also seems to be able to influence protective factors, in at least three ways. First, different protective factors seem to protect against violent behavior for boys as compared to girls; second, the (subjective) exposure to protective factors seems to be smaller for boys as compared to girls; and third, the strength of the relations between protective factors and the total amount of violence risk is smaller for boys than for girls. Also, a protective factor may increase instead of decrease the total amount of risk depending on the kind of risk that is assessed (e.g., violent recidivism or violent incidents in a forensic mental hospital). Finally, a protective factor may reduce the risk of recidivism and at the same time may increase the risk of other negative (non-criminal) behavior such as depression or anxiety.

Assessment of protective factors

The lack of clarity on the exact influence and conceptualization of protective factors is reflected in the two main instruments that exist at present to assess protective factors. In the *Structured Assessment of Protective Risk Factors for violence risk* (SAPROF), protective factors are seen as unipolar, unique factors. Each factor is unique and is scored once, namely for its protective influence. The *Short Term Assessment of Risk and Treatability* (START) is an instrument in which all factors are considered bipolar, that is, all factors are scored for both their potential risk influence as well as for their potential protective influence. From the studies on these instruments that we examined, the following results came forward. The SAPROF appears to be of additional value as compared to the use of only a risk assessment instrument. Especially in the long-term (after an average of 11 years in the community), a better prediction of recidivism can be given when combining both a risk assessment instrument as well as an instrument to assess protective factors. With the START, it is possible to predict which patients will exhibit aggressive behavior towards themselves and/or towards others. Furthermore, although the strength-items of the START did not always contribute to the accuracy of the prediction of violent recidivism, they were useful in clinical practice.

Factors with protective influence

Due to the differences in terminology, in visions on the assumed type of influence and in research traditions on protective factors, within the timeframe of the present study it was not possible to provide an exhaustive overview of all factors that protect against repeated violent behavior. For this reason, some examples of protective factors are given.

Factors measured at a young age, that protect against repeated violent behavior as an adult

There are several protective factors measured in adolescence that appear to protect against repeated violent behavior as an adult. These factors are important since prevention strategies employed in the adolescence may prevent violent behavior as an adult. We found some evidence for the following factors measured at a young age, that were protective of violent behavior as an adult: stabile home environment, no birth complications, involvement of youth in family activities, living in a small family, having a good relationship with peers, strong social support, and strong attachments and bonds. We also found that the number of protective factors influences the recidivism rate, that is, the recidivism rate is lower when two or more protective factors are present than when zero or no protective factors are present. Furthermore, with the addition of protective factors to the total risk assessment (that is, the assessment of risk factors), the prediction of recidivism was improved. The results further implied that there are important differences in the study design regarding average age, the way delinquent behavior is put into operation, and the way comparative analyses are conducted. These study design differences may cause differential results regarding the relation between a protective factor and an outcome measure of violent behavior such that this relation is sometimes found and sometimes not. This makes it difficult to infer general conclusions on a certain protective factor in children/adolescents varying in age from 0 to 18 years old. For instance, it is possible that a certain protective factor is protective of violent behavior at a very young age (under 12) but is no longer protective in adolescence (12-18 years old).

Factors measured in adults that protect for repeated violence as an adult

There is (some) evidence that there are several different protective factors detectable in adults. These are: participating in organized leisure time activities, good relationships at work, satisfaction about the financial situation, satisfaction about health status, having goals in life and having the opinion that these goals are reachable, self control, work, finances, coping, motivation, attitude towards authorities, medication, network, intelligence, impulse control, external influences, to have an agreement on rules and conditions, enhanced activity of the autonomic nerve system, to have a stable home environment, treatment with atypical antipsychotic medication, a higher level of serotonin, to be married, older (current) age, older age of onset of criminal behavior and lower level of pro-criminal thinking style.

Conclusion

The conclusion of the present study is:

Research into protective factors is up and coming. On the one hand the first findings appear promising; on the other hand further studies are warranted.

Additional value

On the one hand the first research results regarding protective factors are promising. More particularly, from the first studies on protective factors, several significant results emerge. These are: A more complete and all-round comprehension of the patient becomes available with protective factors, the number of incorrect predictions regarding recidivism is decreased, the treatment alliance improves, several factors (special circumstances) may be identified that seem to have an influence, in their turn, on protective factors, protective factors are assessed in a reliable and valid manner, different factors may be identified that have a protective value against violent behavior and recidivism, the inclusion of instruments that measure protective factors, increases the number of correct predictions regarding recidivism, and the combined score of both risk factors and protective factors is best able to predict risk of recidivism.

Limitations

On the other hand, more studies are warranted. Research into protective factors has only been conducted for ten years. The last five years, the most studies have been published. This indicates that for many of the results, replications are necessary. Further, there is lack of clarity on the terminology to describe protective factors (what terms are used best?, what is the right definition to use?, and what type of protection is intended?), on the conceptualization of protective factors (are they unipolar or bipolar in nature?, do they have a direct or indirect influence) and on the theoretical framework. More and structured academic studies on these issues are warranted. When the potential influence of protective factors is studied in two ways, namely, as a main effect as well as an interaction effect, this will productively contribute to the evidence base underlying protective factors.