# Theoretical and practical issues for the measurement of protective factors

Jacinta R. Cording *, Sarah M. Beggs Christofferson

University of Canterbury, Christchurch, New Zealand

ABSTRACT

Although research into the theoretical and practical implications of protective factors within a rehabilitative context is still in its infancy, it is possible that they can provide improvements in a number of key areas related to offender management and treatment. However, there are several important issues that must be considered and resolved for the measurement of protective factors to be regarded as valid and reliable. Some of these relate to core questions regarding the nature of protective factors, including how to best clarify current conceptualisations of protective factors and questions regarding our current approach to the identification and validation of protective factors. We additionally discuss more practical issues related to the incorporation of protective factors into current risk assessment methodologies, including implications that this will have for the scoring of actuarial tools. We hope that raising awareness of these issues results in fruitful directions for further discussions and research in this area.

© 2016 Published by Elsevier Ltd.

## Contents

## 1. Theoretical and practical issues for the measurement of protective factors

Measurement is increasingly considered a core role function for many justice system professionals who work with those who have committed criminal offenses. Measurement in relation to an individual's risk (i.e., likelihood of reoffending) is particularly prominent, and findings typically factor heavily in decision making across a number of domains affecting an individual's progression through the system, including sentence management, treatment provision, and consideration of release. The rationale for this is clear: individuals are known to vary in their propensity to commit (further) criminal acts, and treatment aimed at reducing the likelihood of reoffending is most effective when appropriately matched to participants' risk level (Andrews & Bonta, 2010).

* Corresponding author at: c/o Sarah Christofferson, University of Canterbury, Department of Psychology, Private Bag 4800, Christchurch, New Zealand.
  E-mail address: jacinta.cording@gmail.com (J.R. Cording).

Given the impact that an individual's assessed risk level can have on their interaction with the system during their sentence, their opportunities for appropriately matched treatment, and consequently the potential long term broad impact on their life as well as others' lives (e.g., family members, potential future victims and their families), validity and accuracy in this kind of measurement is clearly vital. With a number of important advances in risk assessment techniques having occurred in recent years – including the development of third-generation actuarial tools incorporating empirically informed risk factors – modern approaches to the prediction of future offending are becoming increasingly accurate (Hanson & Morton-Bourgon, 2009). Yet, the fact that the majority of such instruments rely exclusively on risk factors (defined by Andrews & Bonta, 2010, p. 20, as "characteristics of people and their circumstances that are associated with an increased chance of future criminal activity") has led to what some have considered to be a 'deficits-focussed' approach to the determination of future offending probability (Maruna & LeBel, 2003). This exclusive focus on the negative characteristics or environmental factors of individuals has also contributed to problems with current risk assessments over-estimating risk level for particular; for example, individuals categorised into the highest risk band for sexual recidivism using the Violence Risk Scale — Sexual Offender version (VRS-SO; Wong, Olver, Nicholaichuk, & Gordon, 2003) are estimated to offend at a rate of approximately 36%, meaning that just under two-thirds of these 'high risk' offenders are effectively predicted to not re-offend sexually, according to official recidivism data (Olver, Beggs Christofferson, Grace, & Wong, 2013). Although official recidivism data is likely to be an under-estimate of true recidivism rates and the actual reoffending rates of these high-risk individuals is likely to be somewhat higher than the 36% reported, it is clear that these individuals are potentially not as "high risk" as one might expect. In order to combat this source of inaccuracy, we need to develop a clearer understanding of why at-risk individuals are not reoffending at the rates one might expect.

Protective factors have been suggested as one possible explanation for desistance from offending (or refraining from offending at all), despite an individual possessing a number of identified risk factors (Yesberg, Scanlan, Hanby, Serin, & Polaschek, 2015). We discuss issues related to the development of a clear conceptualisation of protective factors at a later stage, however they are broadly considered to be factors that enable or assist desistence from offending for those who have already offended, or prevent the onset of offending amongst at-risk populations of non-offenders (de Vries Robbé, Mann, Maruna, & Thornton, 2015). Although research into the nature and role of protective factors within forensic psychology is still in its infancy, there is a growing amount of attention being paid to the possibility of incorporating protective factors into the assessment of future offending (or desistance) probability, leading to an increased focus on the strengths possessed by the individual being assessed.

In the current paper, we will discuss some of the challenges and issues that must be addressed when measuring protective factors and incorporating them into assessment methods, in the hopes of generating discussion about this important emerging field within forensic psychology. We begin by outlining the main arguments supporting research and measurement of protective factors, including increasing predictive accuracy of assessments, enhancing rapport with clients, and identifying new treatment targets. We then discuss issues relating to the construct validity of measures of protective factors, including current evidence of their predictive and concurrent validity, and the influence of alternative conceptualisations of construct validity on the identification of protective factors. Following this, we highlight issues relating to the current lack of understanding around how to best conceptualise or define protective factors, and discuss the implications this has for incorporating protective factors into risk and needs measurement. This includes an examination of the argument that protective factors are merely the 'mirror images' of protective factors and what this means for the different functions that measures are used for. Finally, we

consider the role of protective factors in risk assessment, including an exploration of how protective factors might best be combined with risk factors in assessment tools.

## 2. The added value of protective factors

As discussed by de Vries Robbé, Mann, et al. (2015), there are broadly speaking three main reasons why protective factors should be assessed by clinicians. The first of these has already briefly been discussed above; that is, the possibility that the current one-sided focus on deficits in risk assessment is leading to the over-estimation of risk and inherent bias towards the individual being assessed (Rogers, 2000). This over-estimation of risk has large negative implications for individual liberties, including imposing overly restrictive custodial sentences or parole conditions on offenders (Miller, 2006). Additionally, because a majority of treatment programmes internationally adhere to the Risk–Need–Responsivity (RNR; Andrews & Bonta, 2010) model of offender treatment, over-estimating risk is likely to result in the provision of treatment that is more intensive than required to meet the true needs of the individual. Thus, correct identification of those posing a lower risk is required, to ensure that individuals are not being delivered treatment that might *increase* their probability of committing future offenses (as per the "*Risk*" principle of the Risk–Need–Responsivity (RNR) model; Andrews & Bonta, 2010). Thus, the measurement of protective factors is necessary to ensure that risk is not over-estimated and that strengths are instead incorporated into our current assessment of the risk and needs of individuals.

Related to this, the second major argument for the measurement of protective factors is to improve the accuracy of risk assessment overall. As outlined above, a majority of the risk assessment or needs measurement tools currently used in forensic practice focus exclusively on risk factors or deficits. Although all commonly-used measures predict at levels significantly greater than chance, there is still room for improvement; the most accurate measures tend to attain area under the curve (AUC) values of around 0.70, which is approximately equivalent to Cohen's $d = 0.75$ (Cording, Beggs Christofferson, & Grace, 2016; Rice & Harris, 2005). It is therefore possible that including protective factors in these measures will increase the predictive accuracy further, providing that protective factors really are tapping into a construct that is distinct from risk factors (see discussion below). It is important to note, however, that there is likely to be an upper limit on achievable AUC values given practical issues with obtaining reliable and valid outcome measures (e.g., the well-documented issue of official arrests or reconvictions likely underestimating true recidivism rates).

The exact added value of assessing protective factors during risk assessment is still uncertain (Andrews & Bonta, 2010), however one common conceptualisation of protective factors is that they are able to directly mitigate the negative impact of risk factors on offending (this type of protective factor is discussed in greater detail below). If accurate, this hypothesised interaction between protective factors and risk means that in order to more accurately measure likelihood of offending, one must consider the strengths and positive attributes possessed by an individual in addition to deficits that increase risk (Farrington, 2007; Yesberg et al., 2015). Supporting this claim, there have been a number of studies that have been able to demonstrate that measurement of protective factors can contribute incremental predictive validity over assessments containing risk factors only (de Vries Robbé, Mann, et al., 2015; Hanby, 2013; Yesberg et al., 2015). We discuss the implications of incorporating a strengths-based approach to current risk assessment methods in greater detail below.

In addition to improving the accuracy of risk assessment, measurement of protective factors may broaden the scope for rehabilitative interventions; as well as identifying criminogenic needs to be reduced during treatment, a more complete understanding of protective factors and their relationship with risk may lead to a greater focus on enhancing the strengths of an individual and the identification of related