

## ORIGINAL ARTICLE

# Clinicians' Perceptions of the Implementation of the Structured Assessment of Protective Factors for Violence Risk (SAPROF) on an Inpatient Forensic Unit

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*The Structured Assessment of PROtective Factors for Violence Risk (SAPROF) is an assessment tool that examines protective factors when assessing violence risk. There is limited research on clinicians' perceptions of the use and implementation of risk assessment tools, and this study aimed to examine the experiences of clinicians using the SAPROF in a low secure forensic rehabilitation inpatient unit in Canada. An exploratory research design was used, and five clinicians participated in semi-structured interviews. Data was analyzed using a thematic approach and three central themes were identified: "understanding of the patient from a strengths-based point of view, providing clinicians with a focus on how to help the patient, and bringing in opportunities to collaborate as a team". The findings highlight the additional value of the SAPROF as a tool in helping forensic teams to adopt strengths-based approaches to risk assessment, enhancing treatment planning, and inter-professional collaboration.*

## Key words

*Strengths, Risk assessment, SAPROF, Consensus scoring, Recovery*

## Introduction

In the last decade, international attention has been given to the need to apply recovery principles, including strengths-based approaches in mental health settings [1,2]. Similarly, it has been advocated by various professionals for this same shift towards a more positive frame of reference, to be applied to mentally disordered offenders [3,4]. The recovery model has been proposed to be beneficial in forensic services, where patients are often faced with numerous challenges, such as hopelessness, social isolation, and

childhood trauma [5]. Similar views were highlighted in a systematic review of qualitative studies from forensic patients on their perspectives of recovery, showing that two central themes were 'connectedness and a sense of self' [6].

Applying recovery principles in forensic mental health settings has also been shown to increase treatment motivation or engagement beyond that of enhancing quality of life alone [7]. Treatment models incorporating strengths have been developed, such as the 'good lives model', which focuses on providing rehabilitation to allow patients to fulfill goals related to their basic human needs that lead to valued outcomes [8]. This model has been applied to forensic mental health services to provide a framework for formulating treatment for forensic patients [9].

The shift towards incorporating strengths within a mental health practice has extended beyond treatment approaches to also include the area of risk assessment, as risk assessment tools have been criticized as solely focusing on factors that enhance risk rather than protective factors that mitigate risk [10,11]. In light of this perceived imbalance, a number of risk assessment tools have been developed to examine the role of protective factors in diminishing risk of future violence, including: the Short-Term Assessment of Risk and Treatability [12], the Structured Assessment of PROtective Factors for Violence Risk [13] and the Dangerousness, Understanding, Recovery and Urgency Manual Quartet [14].

The SAPROF, a Structured Professional Judgement (SPJ) tool was created to examine medium term risks (over a 6

month period) and was designed to be used in conjunction with the Historical Clinical Risk management 20 (HCR-20) [15]. The SAPROF incorporates factors that are grouped into three categories: internal (e.g., empathy, self-control), motivational (e.g., work, leisure) and external (e.g., intimate relationship, living circumstances). The factors are rated on a scale from 0-2, with a score of 0 equating to the absence of the protective factor, a score of 1 demonstrating the partial presence of a protective factor, and a score of 2 indicating the protective factor is clearly present. As recommended in the SAPROF's instructional manual, a consensus model can be used, in which coding is done by the inter-professional team following discussion to reach a score. Following scoring, the team identifies key factors, which are currently present and critical for the prevention of violent behavior from the individual, and goal factors, which are believed to be an important treatment goal and would increase their level of protection [16]. In terms of psychometric properties, the SAPROF has demonstrated good predictive validity for the prediction of recidivism in forensic psychiatric patients in short, medium and long term follow-ups, as well as after discharge [16,17]. Furthermore, the SAPROF has also shown satisfactory to good inter-rater reliability and an interactive effect with the HCR-20 [17,18].

While risk management is central to the work done in forensic mental health, there has been limited research exploring forensic mental health professionals' attitudes towards the use and implementation of risk assessment tools in formulating a risk management plan. Research has explored clinicians' perceptions of the specific risk enhancing variables, demonstrating valuable insights into which factors clinicians find risk enhancing or protective [19,20]. To find similar research examining clinicians' broader insights into risk management one needs to look outside the forensic literature, where studies have shown a mix of negative and positive perceptions. A study by Clancy and Happel [21] recognized the importance of team-based communication

when evaluating risk in geriatric settings. However, the clinicians commented on how a focus on documentation and completing risk assessment forms could lead to them overlooking the complex nature of the individual patient. Similarly, another study separated community health workers' interpretation of risk management policies and requirements into two categories: positive risk rationalities and critical risk rationalities. Individuals expressing positive risk rationalities discussed risk management in terms of helping to build therapeutic relationships with patients, practicing in a patient-centered manner and enhancing safety. Individuals expressing critical thoughts on risk management discussed labelling patients, limiting patient choice, and restricting service delivery [22]. Notably, research by Crocker and colleagues [23] argue that there is a need for further implementation research in forensic mental health services to bridge the gap between clinical practice and research and that risk assessment literature needs to be more widely disseminated into clinical practice [22]. To address this gap, the present study aimed to examine the utilization and implementation of the SAPROF on a forensic inpatient unit.

## **Methods**

### *Setting and Context*

The SAPROF was implemented with the goal of introducing a team-based method of examining the protective factors in relation to risk of violence for forensic patients on a mixed-gender, low-secure forensic rehabilitation inpatient unit located in a large Canadian city. The aim of this particular unit is to provide rehabilitation to patients with a wide range of diagnoses, who have been admitted under the auspices of a provincial review board after a finding of either Not Criminally Responsible on Account of Mental Disorder (NCRMD) or unfit to stand trial. There are 16 patients on the unit, many of whom have been identified for admission to the unit based on complexities which may include diagnostic co-morbidities, longer duration under the auspices of the provincial review board, or engagement in behaviors which

require a more extensive risk management plan. When the unit is fully staffed, it includes two members of each of the following disciplines: behaviour therapy (BT), recreation therapy (RT), occupational therapy (OT), social work, psychiatry, nursing staff, and a dedicated peer support worker. The unit's aim is to provide intensive treatment to patients, to increase their engagement in rehabilitation, and to prepare them for reintegration into the community. As a result of this staff compliment, the unit is able to offer a range of interventions such as, individualized counselling, evening and weekend programming (recreational and therapeutic) and comprehensive behavioral plans.

The SAPROF was first implemented on the inpatient unit in August 2015. Clinicians were introduced to the SAPROF by a psychiatrist working on the unit and social workers who were part of a consultation service within the broader forensic service. The individuals who provided education in relation to the SAPROF had received formal training in the tool. The initial SAPROFs were conducted with the social workers, who were paired with clinicians on the unit. In addition, an informal education session on the SAPROF was conducted on the unit and the SAPROF manual was purchased for unit clinicians to use as a reference guide to complete the scoring. Following the initial orientation, the unit occupational therapist continued providing education and assistance to other staff members scheduled to complete a SAPROF. Clinicians completed a six-month file review and collected collateral information from the patient and other care providers. The SAPROF was presented in a clinical team meeting, where all clinicians involved in the patient's care were invited to attend. Initially, it was scored by the individual completing the information gathering (chart review, patient/family interviews) and presented to the team for further discussion. Approximately a year into the implementation the team moved to a consensus scoring model. This was done to stay true to the consensus scoring model outlined in the manual and was possible as the majority of staff involved were familiar

with the scoring during this time. At the time of the study, mainly allied health professionals had completed the information-gathering portions of the SAPROF, while nursing staff had received exposure through attending SAPROF team meetings and education sessions on the unit.

### *Participants*

Ethical approval was obtained through the ethics review boards both at the hospital and the affiliated university prior to the commencement of the study. Written consent was obtained from participants, which outlined the possible risks and benefits of being involved in the study.

The clinician sample ( $n = 5$ ) was recruited from all staff that had exposure to the SAPROF, either through attending education sessions, team meetings or completing SAPROF presentation. Eligible participants were identified by the research team, which totaled 30 staff members. Clinicians eligible for the study included nurses, psychiatry residents, personal assistants, behaviour therapists, recreation therapists, occupational therapists, peer support workers, and social workers. Given the small sample size and single-unit location, demographic information and professional designations were not included in the information gathered by researchers to ensure that the results remained confidential and anonymized.

Recruitment was conducted by the research students through email, which detailed the purpose of the study, procedures, risks and benefits, confidentiality of data, and participant criteria. In addition, students attended bi-weekly meetings to discuss the study and recruit participants in person. Once clinicians expressed interest the students arranged a time to meet off the unit where the interviews took place.

### *Procedure*

A purposeful sampling technique was used as it was an effective way of utilizing limited resources and participants were recruited as they were knowledgeable about the phenomenon being investigated [24].

As the researchers included members of the team, (unit OT, unit manager, and psychiatrists) measures were taken to ensure confidentiality and the anonymity of the participants. The interviewers were student occupational therapists who were completing a research placement as part of their course requirements. Interviewers received supervision from two of the authors. Additionally, as part of the research students' course work, they received lectures in qualitative research methods and had access to faculty who specialized in this methodology.

The interviewers engaged in data collection for a period of 2 months and conducted interviews in a location off the unit as arranged by hospital administration staff. Recruitment was done through email, and interviewers periodically attended team meetings to recruit staff. To ensure the authors did not influence participation, they removed themselves from the unit, when they were informed the interviewers were attending the unit to recruit staff.

Together, the interviewers administered a semi-structured interview, which took 15-20 minutes and included thirteen questions regarding the implementation of the SAPROF on the inpatient unit. Questions aimed at eliciting participants' views on the utility of the SAPROF, such as, 'Does using the SAPROF impact or change your perceptions of patients, if so how?' and 'What do you think the overall impact of the SAPROF has been?' were asked by interviewers (See interview schedule in Table 1). Interviewers were also trained by the first author to utilize neutral follow up questions if the answers given were unclear. The interviews were recorded and transcribed by the interviewers and possible identifying information was removed at this time. The data set was organized and labeled manually by the interviewers and backed up on an encrypted password-protected computer. The interviews were deleted from all devices once they had been transcribed.

The data analysis was completed simultaneously with data collection which allowed the researchers to identify when a point of saturation was achieved as

repetitive patterns emerged from interview responses. Given the small final sample size, no specific software program was used for data entry or management. The texts of each interview transcript were read and codes were identified through highlighting and labeling repetitive key words or concepts from the literature, through a process known as open coding [25]. Open coding involves creating conceptual labels through comparing interactions within the data set for similarities and differences and then grouping these concepts together to form categories and sub categories [26]. Following this axial coding was used, whereby words or quotations are coded around the core emerging themes or categories [27].

Practically these processes involved having categories peer-reviewed by the interviewers and primary author. This enabled the verification of data integrity as multiple individuals were reviewing and developing the codes. The codes were revisited numerous times and double-checked for consistency and validation until all parties were satisfied with the refined codes. As this process continued, themes and categories emerged by comparing code labels to the original transcript. These categories were used to organize and group codes. Categories were exhaustive as all relevant data was captured into the categories and were mutually exclusive, meaning that a relevant unit of data could fit into one category [25]. Several titles were created for each category and these were reviewed by the entire research team before final category titles were chosen, ensuring that they were sensitive and accurately represented the data in the categories.

## Results

The participants' perceptions of the use of the SAPROF tool on the inpatient unit, yielded three unique central themes: 1) understanding the patient from a strengths-based point of view; 2) providing clinicians with a focus on how to help the patient, and; 3) bringing different perspectives and opportunities to collaborate as a team. Excerpts from the



participants are provided to demonstrate their relation to the broader themes identified.

*Theme 1: Understanding the patient from a strengths-based point of view*

The first theme identified reflected the strengths-based nature of the SAPROF tool and how this contributed to a clinician's understanding of the patient. One clinician described how often clinicians tended to focus on patients' deficits, particularly with individuals who had been diagnosed with personality disorders and how the SAPROF provided a valuable contrast to this line of thinking.

*"...it kind of gave us a focus as a sidebar outside the tool to kind of work on. So, that was helpful and I think it was also helpful in, sometimes especially with people with personality disorders you, you focus on the negative and you focus on how they can't follow through and they don't do this and they don't do that, so it highlighted some of the really great strengths that she has... and if you can focus on someone's strengths, I think kind of twists your mind back to look at them in a positive light. Because you can get burnt out working with personality disorders really easily, so if you can kind of keep bringing up their positive aspects which you don't see on a daily basis I think..."*

These individuals with the label of 'forensic patient' and 'personality disordered' associated with them, have been described by clinicians with negative connotations and lead to interactions that could be less than therapeutic [28]. Another clinician reported a similar observation on how completing a SAPROF was effective in highlighting the strengths of a patient with antisocial personality disorder and helped them alter their perception of the patient:

*"...the last one I did was a client who on his diagnosis says he has antisocial traits. Reading, if you read his file, he's been quite antisocial in the past, quite violent...but in doing the SAPROF, he had so many strengths, and one of them was empathy, he scored a two on his empathy. Which, somebody with antisocial traits, generally doesn't score that high. So it kind of*

*reframed the way that I think of this person, in terms of where is he at right now...it really kind of reframes the way I think of him, and he had a lot of strengths that weren't really shown in the day-to-day."*

This excerpt illustrates the role that a strength-based tool like the SAPROF can have in combating neglect in case formulation, which can result when mistakes or misinterpretations regarding a patient are reiterated over time [29]. When describing their individual involvement in completing a SAPROF, another clinician mentioned how overtime patient strengths may be forgotten and how meeting with the patient and discussing these strengths can provide a useful reminder, *"It identified a lot of her strengths that we kind of lost sight of over time. It was an opportunity to kind of interact with her and find out how she felt"*.

*Theme 2: Providing clinicians with a focus on how to help the patient*

The second theme that emerged from the interviews was the effect that the SAPROF had helping clinicians to devise plans or ways that they could assist the patient in their recovery. In particular, when one clinician was asked to describe how the SAPROF was used in an inpatient context versus an outpatient team, they described its utility in helping the patient move out of the hospital. *"... I guess we use it as a tool to kind of guide where we're going to go to help people move through the system and get out. Right, so how do we, like what goals do we focus on with the strengths of the person so that they can leave the hospital and live successfully."* This notion of helping the patient progress was echoed in a similar study looking at both service users and service providers perspectives of how they define success in the forensic mental health system [30].

When asked about the overall impact of the assessment another clinician discussed how the tool helped them develop a deeper understanding of the patient based on the information gathering they were required to do when presenting the SAPROF and how this enabled them to contribute more to treatment planning:

*“Well, it’s definitely sort of forced clinicians to look at the clients in a different light. It helps sort of clinicians to get a deeper look into the clients that they’re assigned, so like, I’ve become like an expert on this—these two clients that I’ve done, because I’ve really done a lot of research on them...so that sort of helps and sort of as we formulate as a team how to move forward with them, I can sort of put a little bit more into it, because of— just I’ve done a lot more in terms of the research”*

This quote corresponds to previous research where both patients and staff have reported valuing the deeper understanding, focused beyond risk and illness, which develops as a result of treatment planning and getting to know the patient [31].

When a clinician was asked about the usefulness of the tool in treatment planning, they discussed how the scoring process was helpful in this regard:

*“...someone has tons of amazing things and they then aren’t so great on others, we would want to focus on those to get them up to a 2 per se...So then it was kind of like focusing on where we think we could build his strengths so that he could move through the system. So I think it’s really helpful there to focus on the goals. Like what’s realistic and achievable for some people.”*

This view of equating progress and increasing scores on protective factors is the expected direction of change when individuals are moving through the security levels in the forensic system. The articulated goal of team members is to assist in the rehabilitation of patients, so that they have opportunities to bolster their internal and motivational factors, and rely less on external factors (such as living in hospital) to manage their recovery.

When another clinician was asked about the usefulness of the tool in treatment planning, they discussed how the SAPROF could be used in the complex process of discharging an individual into the community and assisting them in their recovery:

*“I think it’s been helpful when they’ve been clinically discharged, when we know that*

*they consider their family to be a protective factor— I guess specific things that we would make sure are a part of the discharge planning – like for example if they’re really involved with their family, then making sure that the family doesn’t live too far away...if they identify engaging activities, making sure that there’s lots of activities planned and staffing available, and all that stuff, so that we can find things that they have identified are more helpful in recovery.”*

*Theme 3: Bringing different perspectives and opportunities to collaborate as a team:*

Several clinicians discussed the collaborative nature of the tool and how it provided new information about the patients. For example, when asked to comment on their thoughts regarding team scoring, a clinician expressed:

*“I guess the collaborative nature of kind of agreeing on the score before it’s kind of finalized. It was nice how, you know some of my colleagues would present information, you know in the various categories to help us kind of recognize where somebody’s strength are, and then we can start to think about, you know do they have additional information that we might have missed or other examples of somebody being empathic.”*

Another clinician discussed their positive perceptions in relation to moving from individually scoring the assessment to a team consensus scoring model and how it encouraged other members of the team to engage in discussion:

*“...It was better because, I mean, I have sort of my, my ideas of like what the score should be. But it’s supposed to be consensus scoring...kind of putting my score up there, kind of skews what the team may think...I may look at it and not, not agree with it but not speak up, versus if we score it as a team everybody sort of has their input and we get the true consensus for it which is the idea of what the tool is supposed to be used for”*

Two individuals commented on how, in general, the team members were usually in agreement but also reported the coming together and collaborating aided in this process:

*“I find that usually we’re all on the same page. A couple times we have some debates and its good because we all kind of bring our information together and then come to a consensus score.”* Another clinician echoed how frequently the team agreed on what was important for the patient but that coming together to make that assessment was important:

*“Everybody kind of felt the same about the person. So there wasn’t like “oh like you think that’s an issue, well I really don’t think that’s an issue”. So it’s like, and this particular person has like actual very definitive issues that we’re aware of and she worked closely with quite a few of us, so as a team we were quite- we were able to collaborate together and make like an actual assessment that we all agreed with, so it was actually okay.”*

These qualitative accounts of the benefits of consensus scoring corresponded to a quantitative study examining the predictive validity of the HCR 20, which showed that

consensus scoring model was more accurate than the individual ratings, highlighting the importance of conversations with colleagues in risk assessment procedures [32].

One clinician commented on how incorporating different individuals perspectives using their unique ‘lens’ was beneficial, stating *“my focus kind of gives me a lens to look through things and then having other people in the room looking through a different lens I think is really helpful”*. Similar findings have been shown in a previous qualitative study examining treatment planning in forensic hospitals, where it was identified that involvement by inter-professional staff was described to enhance relationships between team members and lead to favourable patient outcomes [31].

Table 1 – Semi Structured Interview Questions

The following are a sample of questions for the interview:

1. Can you describe your exposure to the SAPROF (ex. Attended training, scored, attended team meeting related to SAPROF)
2. How do you typically assess for risk of violence? What assessment tools does this involve?
  - a. How do protective factors differ from risk factors?
3. Describe how SAPROF is used with your clients?
4. What are some of the protective factors within the SAPROF that you find particularly relevant for your clients?
5. How do the factors within the SAPROF relate to your discipline specific work or theories of practice?
6. Does using the SAPROF impact or change your perceptions of clients, if so how?
  - a. Does it have an impact on your therapeutic alliance or rapport? If so how?
7. Describe any changes you have seen in clients following the administration of the tool.
8. Describe how information from SAPROF has been used to plan treatment.
9. What barriers do you experience when administering SAPROF?
  - a. How comfortable or confident are you in gathering information for a SAPROF independently? How feasible is it?
  - b. What are your thoughts on consensus scoring as a team?
  - c. How do you think the use of SAPROF could be improved on the unit?
10. Do you foresee any obstacles in implementing this tool in other units? If so how could these be addressed?
11. Do you think it is worthwhile reviewing SAPROF scores after they have been completed?
12. How do you think implementing the SAPROF on an inpatient unit is different from an outpatient population?
13. What do you think the overall impact of the SAPROF has been?

## Discussion

In this article, we describe the results of a qualitative study exploring the perceptions of forensic inpatient staff on the implementation and use of the SAPROF tool on a forensic rehabilitation unit. Clinicians interviewed placed value on the SAPROF, beyond the predictive ability in relation to violent recidivism, but rather as a tool that facilitated meaningful discussion between team members, developing a strengths-based approach, and focusing clinical decision making in relation to treatment planning.

A recent review of strength-based approaches in offenders with mental illness proposed that there was a need to change the perception of these individuals to an “abilities-oriented” view instead of one focused on deficits [33]. Moore and Drennan [29] have also commented on how integrating recovery-oriented practice into formulations aligns well with strength and value-based models. The participants in commenting on the use of the SAPROF discussed how the SAPROF played a role in changing their focus from solely being on patients’ risk factors, to also including their strengths. Some participants specifically discussed how a strength-based approach was particularly helpful in working with individuals diagnosed with personality disorders and how strengths could often be overlooked with these individuals. This may support the use of the SAPROF on forensic inpatient units to provide a framework for strengths oriented discussions and for the integration of this information into risk management planning.

Cording and Christofferson’s [34] exploration of protective factors in risk assessment described the variance between settings and how self-reflection by clinicians can be useful. They also comment that when these assessments are viewed beyond their predictive accuracy in relation to violence, other factors such as promoting collaboration, and balance in assessment, are important considerations. The interviews with staff within this study

further highlighted these points, in particular, the role of the SAPROF in promoting collaboration and integrating various disciplines’ viewpoints regarding a patients’ level of protection. The clinicians on the unit who were involved in the SAPROF came from a variety of disciplines. Vandeveld et al. [33] discussed that despite a general paradigm shift in understanding forensic patients using a strength’s based point of view, multidisciplinary teams working with forensics patients may have a different frame of reference. They also note there might be different language used to describe this shift across the professions (e.g. strengths-based, quality of life, recovery) and that there needs to be efforts to prevent confusion and loose definitions. The findings in this article can support the implementation of SAPROF on other forensic units, where the SAPROF could be used to bring together multiple disciplines to talk about the patients’ strengths, in a structured, cohesive manner. Rapp & Sullivan [35] also discussed the importance of continuing to refine the concept of a strengths based approach and ensuring that organizations that promote this are practicing in this manner. The SAPROF provides a means in which organizations can demonstrate their commitment to recovery principles and strength based assessments, by ensuring that clinicians are provided time to gather, discuss, document and plan treatment based on a patients’ strengths.

There were several limitations that were present during the study which must be considered when interpreting the results. Firstly, the sample size of the study was relatively small, with five of thirty eligible participants (17%) that had chosen to be involved. Factors that contributed to this included the interviewers being restricted to a short time frame for data collection and analysis. Furthermore, there were institutional changes occurring within the hospital, that the research team felt had impacted the staff’s willingness to



participate in activities outside of their routine clinical responsibilities during the time of data collection. Additionally, there was another, more time consuming, research project involving staff eligible for this study that was being carried out on the unit at the same time, which may have further precluded staff from participating. It was also noted that the participants generally made positive comments regarding the tool and it is possible that staff that were already more engaged with the SAPROF chose to participate. It is possible that despite measures taken to ensure confidentiality that staff were less inclined to participate if they had negative perceptions of the tool or that this dissatisfaction was characterized by non-participation.

Future research on staff perceptions of the SAPROF could be carried out in different settings (e.g. high secure inpatient unit, or outpatient program). Studies could explore staff's perception of effectiveness over multiple points of implementation including pre-implementation, during and several times post-implementation. Future research involving a higher number of participants with multiple methods of

collecting data (i.e. surveys in addition to interviews) will likely lead to collection of richer data. Lastly, involving incentives for staff participation in future qualitative studies could lead to wider recruitment.

## Conclusion

This qualitative study aimed to examine the staff perceptions of the use of a risk assessment tool, the SAPROF, in a low secure forensic unit and has demonstrated value related to its strength-based nature, ability to focus clinicians on how to help their patients and has promoted team collaboration. This study has also addressed an important gap in the literature, examining how clinicians perceive the impact of the SAPROF on forensic patients and their recovery and the process of implementing this on a forensic inpatient unit.

Conflict of Interest: none

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