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# Clinical applications of the structured assessment of protective factors against sexual offending (SAPROF-SO), Version 1

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**ABSTRACT**

The Structured Assessment of PROtective Factors against Sexual Offending (SAPROF-SO) is a new assessment tool designed to capture protective factors for individuals with a history of sexual offenses and aligns with a strengths-based approach to treatment. The SAPROF-SO, Version 1 consists of 14 items across three subscales: Resilience, Adaptive Sexuality, and Prosocial Connection & Reward. The optional fourth subscale, Professional Risk Management, consists of six items. The current paper seeks to provide guidance in the applied clinical use of the SAPROF-SO by addressing three advantages of the use of this instrument: (1) Facilitating engagement: establishing collaborative treatment goals and a therapeutic alliance, especially with clients who remain ambivalent about treatment; (2) Using the SAPROF-SO for risk management decision: determining the readiness for decreased supervision / increased level of privileges and the development of a risk management plan; and (3) Release planning for individuals with special needs. Case examples are provided.

**Practice impact statement**

The current paper provides an overview of a new assessment tool, Structured Assessment of PROtective Factors against Sexual Offending (SAPROF-SO), Version 1. The SAPROF-SO is designed to offer clinicians an assessment tool that aligns with a strengths-based approach to treatment, provides a structured assessment of protective factors, and brings balance to risk assessments. The current paper provides clinical guidance in using the SAPROF-SO to increase treatment engagement, assist with risk management decisions, and better assess individuals with special needs.

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Sexual risk; risk management; treatment; protective factors; SAPROF-SO

It is now well accepted that treatment programmes that incorporate all three principles of the Risk-Need-Responsivity (RNR) model have the best success in reducing sexual, violent, and general recidivism (Bonta & Andrews, 2017; Gannon et al., 2019; Hanson et al., 2009). These three principles include providing a level of treatment intensity that is matched to the individual's assessed risk to reoffend, targeting those treatment needs (i.e. dynamic risk factors) that are empirically related to recidivism, and tailoring the treatment to meet the individual's literacy, cognitive, cultural, mental health, and motivational needs. Amongst those with sexual offense histories, the Static-99R has become the most popular actuarial risk tool to date (Helmus et al., 2012; Kelley, Ambroziak, et al., 2020). There has also been increased use of structured measures to identify dynamic risk factors with the STABLE-2007 (Hanson et al., 2007) currently being the most frequently used in a wide

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range of settings (Kelley, Ambroziak, et al., 2020). Dynamic risk assessment tools lend themselves to treatment goals focused on reducing or ameliorating dynamic risk factors, in contrast to using a collaborative, strengths-based approach, appealed to by many clinicians (e.g. Willis et al., 2014). Accordingly, most evaluators consider protective factors when completing assessments even if a formal measure is not being used (Kelley, Ambroziak, et al., 2020).

Protective factors can be defined as those factors that are theoretically or empirically associated with reduced rates of sexual or violent recidivism in individuals with offense histories (de Vogel et al., 2012; Willis et al., 2017–2020). While some protective factors can reflect the positive end on a distribution of risk (e.g. self-control versus impulsivity), additional protective factors have been identified that are independent of known risk factors (e.g. goal-directed living, medication, therapeutic alliance; de Vogel et al., 2012; Willis et al., 2017–2020). Research utilising the Structured Assessment of PROtective Factors for violence risk (SAPROF; de Vogel et al., 2012) has demonstrated higher scores (i.e. high protection) are associated with reduced violence in forensic psychiatric samples (Davoren et al., 2013; de Vries Robbé et al., 2013; de Vries Robbé, de Vogel, Douglas, et al., 2015) and correctional samples (Coupland & Olver, 2020) as well as reduced violence including self-harm during inpatient treatment (Abidin et al., 2013; Viljoen, 2014). Most recently, Coupland and Olver (2020) found the SAPROF to have incremental predictive validity to the Violence Risk Scale (Wong & Gordon, 2006), a measure of dynamic risk. The SAPROF was also found to have incremental predictive validity to the HCR-20 (Webster et al., 1997) when examining increases in positive outcomes. Overall, protective factors are not simply a positive spin on risk factors. Rather, they appear to be an important part of a comprehensive and accurate assessment.

There have only been a few studies examining the utility of protective factors in the prediction of decreased sexual recidivism risk. de Vries Robbé, de Vogel, Koster, et al. (2015) followed 83 individuals with histories of sexual offenses for up to 15 years and found the SAPROF effectively discriminated recidivists from nonrecidivists (AUC = .71) as well as uniquely predicted risk beyond the HCR-20 and the SVR-20 (Boer et al., 1997). Although other studies reported weaker AUC results, this may be related to the fact that the only SAPROF rating for participants was at the beginning of custody rather than near release, which would not effectively capture changes in this highly dynamic tool (Abbiati et al., 2016; Turner et al., 2016). Additionally, the SAPROF does not contain any items that pertain to the treatment and environment needs of individuals with histories of sexual (versus nonsexual) offending.

The Structured Assessment of PROtective Factors – Sexual Offence version (SAPROF-SO pilot version; Willis et al., 2017–2020) was designed to capture those protective factors specifically of interest for individuals with a history of sexual offenses. The SAPROF-SO scoring instructions were written specifically for sexual risk assessments of adult biologically born males with at least one prior arrest for a sexual offense. The pilot version of the SAPROF-SO consisted of 24 items across five theoretically informed domains (see Figure 1). Findings from pilot research including a factor analysis and predictive validity results (Nolan, 2021; Willis & Thornton, 2021) informed the SAPROF-SO Version 1. (Willis et al., 2021a), consisting of 14 items across three subscales: Resilience, Adaptive Sexuality, and Prosocial Connection & Reward (see Figure 2). Six optional items are captured in the Professional Risk Management domain. The SAPROF-SO Version 1 (henceforth SAPROF-SO) is accompanied by a detailed coding manual and potential users are strongly encouraged to undergo the certified training prior to using this measure.

Each of the SAPROF-SO items are intended to capture dynamic change and align with the strengths-based Good Lives Model (GLM; Ward & Stewart, 2003) and theories of desistance from crime (e.g. Giordano et al., 2002; Laub & Sampson, 2003; Laws & Ward, 2011; Maruna, 2001). Several items are directly linked to the GLM and theories of desistance (e.g. *Adaptive Schemas, Prosocial Sexual Identity, Goal-Directed Living,* and *Emotional Connection to Adults*). In addition, many items can be associated with measuring decreased criminogenic needs as a result of increased protection (i.e. *Empathy, Coping, Self-Control, Sexual Self-Regulation, Prosocial Sexual Interests, Attitudes Towards Rules and Regulations, Work, Leisure Activities, Social Network, and Intimate Relationship*). Existing research suggests these items will perform well (Bonta & Andrews, 2017; Hanson et al.,

| | |
|---|---|
| **Name:** | **Date:** |
| **DOB:** **Ethnicity:** | **Sex:** ❑ Male ❑ Female ❑ Gender diverse |
| **Current context:** | |
| **Predictable future context:** | |
| **Name assessor(s):** | |
| **Information used to make ratings (interview, file notes, etc.):** | |

| | | Score (0,1,2,3,4) | |
|---|---|---|---|
| **Internal capacity** | | **Current** | **Future** |
| 1. | Intact cognitive functioning | | |
| 2. | Secure attachment in childhood | | |
| 3. | Adaptive schema | | |
| 4. | Empathy | | |
| 5. | Coping | | |
| 6. | Self-control | | |
| 7. | Sexual self-regulation<br>1. 2.<br>3. 4. | | |
| | ***Internal capacity subtotal*** | | |
| **Prosocial identity** | | **Current** | **Future** |
| 8. | Prosocial sexual interests | | |
| 9. | Prosocial sexual identity | | |
| 10. | Goal-directed living *(describe goal/s)*: | | |
| 11. | Motivation for managing risk ❑ N/A | | |
| 12. | Attitudes towards rules and regulations | | |
| | ***Prosocial identity subtotal*** | | |
| **Prosocial connection** | | **Current** | **Future** |
| 13. | Work | | |
| 14. | Leisure activities | | |
| 15. | Social network | | |
| 16. | Emotional connection to adults | | |
| 17. | Intimate Relationship | | |
| | ***Prosocial connection subtotal*** | | |
| **Stability** | | **Current** | **Future** |
| 18. | Housing stability | | |
| 19. | Financial management | | |
| | ***Stability subtotal*** | | |
| **Professionally provided support** | | **Current** | **Future** |
| 20. | Sexual offence-specific treatment ❑ N/R | | |
| 21. | Medication ❑ N/A | | |
| 22. | Therapeutic alliance ❑ N/A | | |
| 23. | Supervised living | | |
| 24. | External control | | |
| | ***Professionally provided support subtotal*** | | |
| ***TOTAL SCORE*** | | | |

**Treatment/intervention planning (optional)**
Keys: _____
Goals: _____

**Figure 1.** Coding sheet for the SAPROF-SO – pilot version.

**Coding sheet SAPROF-SO – *Version 1***

*For use in combination with sexual recidivism risk assessment instruments (e.g., Static-99R & Stable-2007; VRS-SO)*

| | |
|---|---|
| **Name:** | **Date:** |
| **DOB:** **Ethnicity:** | **Sex:** ❑ Male ❑ Female ❑ Gender diverse |
| **Current context:**<br>**Future context/s (optional):** | |
| **Name assessor(s):** | |

| | | Score (0,1,2,3,4) | |
|---|---|---|---|
| **Resilience** | | **Current** | **Future[1]** |
| 1. | Adaptive schemas | | |
| 2. | Empathy | | |
| 3. | Coping | | |
| 4. | Self-control | | |
| 5. | Attitudes towards rules and regulations | | |
| | ***Resilience Total*** | | |
| | ***Resilience Average*** *(Total/5)* | | |
| **Adaptive Sexuality** | | | |
| 6. | Sexual self-regulation<br>#1= #2= #3= #4= | | |
| 7. | Prosocial sexual interests | | |
| 8. | Prosocial sexual identity | | |
| 9. | Intimate relationship | | |
| | ***Adaptive Sexuality Total*** | | |
| | ***Adaptive Sexuality Average*** *(Total/4)* | | |
| **Prosocial Connection & Reward** | | | |
| 10. | Goal-directed living | | |
| 11. | Work | | |
| 12. | Leisure activities | | |
| 13. | Social network | | |
| 14. | Emotional connection to adults | | |
| | ***Prosocial Connection & Reward Total*** | | |
| | ***Prosocial Connection & Reward Average*** *(Total/5)* | | |
| | ***TOTAL SAPROF-SO SCORE*** | | |
| | ***AVERAGE SAPROF-SO SCORE*** *(Total/14)* | | |

| **Professional Risk Management (optional items)** | | | **Current** | **Future[1]** | **Long-term[2]** |
|---|---|---|---|---|---|
| 1. | Sexual offence-specific treatment | ❑ N/R | | | |
| 2. | Therapeutic alliance | ❑ N/A | | | |
| 3. | Motivation for managing risk | ❑ N/A | | | |
| 4. | Medication | ❑ N/A | | | |
| 5. | Supervised living | | | | |
| 6. | External control | | | | |
| | ***Professional Risk Management Total*** | | | | |
| | ***Professional Risk Management Average*** *(Total/applicable items)* | | | | |

[1] Optional ratings for proposed future context/s
[2] Complete when sentence conditions, supervision/case management, and/or group home level care will continue for at least 3 years

**Figure 2.** Coding sheet for the SAPROF-SO – Version 1.

2007; Mann et al., 2010). Unlike traditional measures of dynamic risk factors or criminogenic needs, the SAPROF-SO has reconceptualized the measurement of these treatment needs and gains in terms of strengths to increase engagement and motivation.

The SAPROF-SO pilot version demonstrated good interrater reliability in both an inpatient sample (*ICC* = .90) and a community sample (*ICC* = .94; Willis et al., 2020), with reanalysis based on Version 1 items also demonstrating good interrater reliability in both samples (*ICC* = .87 and .95) for the inpatient and community samples, respectively (Willis et al., 2021b). Willis and colleagues (2020) also found the SAPROF-SO to have convergent and divergent validity correlating with the Static-99R, Violence Risk Scale – Sexual Offense version (VRS-SO; Wong et al., 2003–2017), and Dynamic Risk Assessment scale for Offender Reentry (DRAOR; Serin, 2007) in expected ways. The SAPROF-SO was created to be scored as an actuarial tool and a number of outcome studies designed to provide information on its predictive and incremental validity as well as provide base rate data are in progress. One study so far suggests the SAPROF-SO has good predictive validity in a retrospective archival study involving 210 men convicted of sexual offenses against children in New Zealand (Nolan, 2021). In this study, the SAPROF-SO demonstrated good relative predictive validity with an average follow-up period of 12.24 years (AUC = .81) and its prediction contributed incrementally to the Static-99R (Nolan, 2021). Although further validation research from multiple samples is needed before the SAPROF-SO is ready for use as an actuarial measure, the SAPROF-SO currently offers several clinical advantages. Specifically, the SAPROF-SO offers clinicians an assessment tool that aligns with a strengths-based approach to treatment and provides a structured assessment of protective factors when completing treatment needs and risk management needs evaluations for those who have committed sexual offenses (Willis et al., 2019).

A distinct advantage of the SAPROF-SO, even as it continues its development into a final actuarial form, is its utility in assisting clinicians working with clients to develop treatment goals directed towards positive treatment outcomes while increasing trust and motivation from the people served. One can imagine that it is easier to agree to work towards increasing strengths than to decrease deficits. In that vein, the SAPROF-SO may be particularly helpful with facilitating engagement and establishing a therapeutic relationship with clients who are ambivalent about treatment. A second advantage of the SAPROF-SO is the information it provides for readiness for release and dispositional assessments as well as the development of risk management plans. In other words, is the individual ready for the proposed release plan? When will he be ready for an increased level of privileges? Such information would be important to clinicians, supervising agents, and community reentry staff. A third advantage of the SAPROF-SO is its consideration of the intersection between an individual's risk, strengths, and environmental factors, which can be particularly important to consider when creating release plans for individuals with special needs. This contrasts with traditional actuarial risk tools, which tend to consider risk as something that is inherently internal to the individual. As such, it can be difficult to utilise traditional actuarial risk tools with clients whose success in the community will depend on their environmental supports (e.g. clients with intellectual disabilities). The current paper aims to explore these three advantages to provide specific guidance in how the SAPROF-SO can be applied in clinical settings. While we believe this clinical guidance will be helpful to those providing treatment and supervision, professionals should be mindful that until empirically developed estimates of sexual recidivism rates are generated and findings published, the SAPROF-SO cannot be used to adjust an actuarial risk assessment based on validated static and dynamic risk tools.

## *Facilitating engagement*

As already highlighted, a focus on increasing strengths is inherently more motivating than decreasing deficits. Indeed, in the field of sexual offending treatment, research suggests that approach-goal oriented interventions are more engaging than avoidant goal oriented interventions (Mann et al, 2004). Yet dynamic risk assessments often lend themselves to a focus on removing or modifying deficits, given they are concentrated on those negative, problematic or "deviant" characteristics of an individual (e.g. antagonistic behaviours; paraphilic interests). The SAPROF-SO incorporates several items largely independent of known risk factors that are theoretically and/or empirically

linked to desistance from crime and necessitate a holistic assessment, including attention to the client's current personal goals, leisure interests, and professional support. In essence, the SAPROF-SO complements a GLM based assessment through providing a structured measure to help inform treatment goals and monitor treatment progress. For example, when scoring *Goal-Directed Living,* raters are guided to consider the extent to which an individual's goals motivate prosocial behaviour, provide a source of one or more GLM primary human goods (e.g. relatedness, inner peace, autonomy; e.g. Ward & Stewart, 2003), and counteract key risk related propensities. Consider the case of Craig, who offended against children at a time in his life when he was struggling to cope with life stressors, had withdrawn himself from friends and family and was spending increasing amounts of time communicating with young teenage girls online. Craig's risk related propensities included a lack of emotionally intimate relationships with adults and sexualised coping (Mann et al., 2010). In response to a GLM based assessment including open ended questions surrounding his life values and goals, Craig reported he wanted to "be a better son and brother" and "be healthy and get fit."

| | |
|---|---|
| Clinician: | What does being a better son and brother look like for you? |
| Craig: | It's about staying in touch with them and helping out when I can – like looking after my brother's cats when he goes away and helping about the house at Dad's. At the time of my offending I'd cut myself off from them entirely. |
| Clinician: | How about now, how's that been going for you? |
| Craig: | Pretty good. I've been going over to Dad's most Sundays and my brother often comes too. We get in the garden and we cook dinner together. If the weather isn't great we sit around and play cards, talk about the news and sometimes watch a movie. |
| Clinician: | And you also mentioned wanting to be healthy and get fit. What does that look like for you? |
| Craig: | Sometimes I manage to motivate myself to go for a walk or a light jog, eat healthy and all that. I've been eating pretty well but not exercising as much as I'd like to. |
| Clinician: | Where would you like to be with respect to this goal 6 months from now? |
| Craig: | I'd like to be walking or running three times per week. |
| Clinician: | And what would that mean for you, how would that improve your life? |
| Craig: | It would make me feel better about myself, and feel more motivated to get out and meet people, make friends. |

Craig's valued GLM primary human goods included relationships, happiness and life (healthy living and functioning; Ward & Stewart, 2003), his goals in relation to valued primary goods motivated pro-social behaviour to some extent, and goal-directed behaviour appeared to help manage risk related propensities (lack of emotionally intimate relationships with adults). Accordingly, *Goal-Directed Living* is rated as present to some extent, with Craig's rating providing a baseline from which to evaluate treatment progress against GLM related goals over time. A focus on the client's values and priorities may be less confronting than discussing a client's offending behaviour or risk related propensities, especially with clients who present with partial or categorial denial of offending. Consistent with a GLM approach, exploring domains covered by the SAPROF-SO can therefore help facilitate engagement with clients who are ambivalent about offense related assessment or treatment.

In addition to its holistic focus, the SAPROF-SO assesses the opposing or "healthy poles" of risk related propensities for sexual recidivism (see de Vries Robbé, de Vogel, Koster, et al., 2015), which translate into more engaging and less stigmatising treatment goals than those inferred from dynamic risk assessment tools. To illustrate, a focus on strengthening emotional connection to adults, prosocial sexual interests, sexual self-regulation, self-control and adaptive schemas (all SAPROF-SO items) is likely more engaging than a focus, for example, on addressing one's intimacy deficits, sexual deviance, sexual preoccupation, criminal personality and cognitive distortions (as measured by dynamic risk assessment tools; e.g. Fernandez et al., 2014; Wong et al., 2003–2017). As emphasised by Helmus (2018), consideration of healthy poles may improve the assessment of risk related propensities. Put another way, treatment goals inferred from the SAPROF-SO focus on developing personal strengths and resiliency which can be linked to the acquisition of good life

goals, rather than overcoming, reducing or managing deviance or dysfunction. With knowledge of the client's values and priorities, strengths-based treatment goals can be linked to bettering the client's life rather than solely reducing or managing risk. For example, Craig would receive a low score on the SAPROF-SO *Coping* item, which is concerned with the individual's ability to manage general life stressors in effective ways. A simple goal to reduce sexualised coping (or even improve general coping skills) will likely be less motivating to Craig than strengthening coping skills to improve his relationships and achieve other personally meaningful goals. In other words, aligning treatment goals with improving client wellbeing is likely more motivating than strengthening coping skills to avoid re-activating an offense process – and does not require the client to acknowledge committing any offense. The protective factors included in the SAPROF-SO reflect desirable personal, social and environmental characteristics for humans in general, thus framing treatment and risk management plans around increasing protection is inherently more engaging than decreasing or avoiding risk.

The SAPROF-SO strives to bring balance to risk assessment rather than replace existing risk tools. Although not necessary in all contexts, we recommend scoring the SAPROF-SO after scoring a dynamic risk tool so that the clinician is cognizant of relevant risk related propensities when scoring the SAPROF-SO; however, as previously highlighted, an exploration of protective factors towards the beginning of an assessment interview might help build rapport and communicate interest in the client beyond their offense history.

### *Using the SAPROF-SO for risk management decisions*

Agencies such as courts, parole boards, conditional release programmes, and psychiatric hospitals are often faced with having to determine the readiness of individuals with sex offending histories for less restrictive placements and increased privileges/freedom as well as determining what type of risk management plan needs to be in place as they transition into the community. These decisions can be incredibly difficult when working with individuals who continue to have a high level of sexual recidivism risk despite nearing the completion of their criminal sentence or having completed the treatment expectations within a secure setting. For example, Willis and colleagues (2020) describe their "high risk" sample as individuals who were civilly committed under a Sexually Violent Persons law in Wisconsin, USA. The combination of their average Static-99R scores ($M = 5.52$, $SD = 1.81$) and pretreatment dynamic risk scores as measured by the VRS-SO ($M = 38.69$, $SD = 4.44$), placed them in the IVb Well Above Average category using the Common Language of risk communication (Hanson et al., 2017; Olver et al., 2021). Even though this sample made an average level of change (average change score = 4.03, $SD = 2.92$), which reduced their absolute sexual recidivism risk, they did not move below the IVb risk category. Had they moved to the IVa Above Average category, this would still present a large degree of continued sexual risk that potential supervising agencies would see as worrisome. Yet, for some individuals who have met the treatment expectations of the programme, the only way to continue to make further treatment progress is to begin generalising learned skills within community settings. Determining the right balance between managing risk with external controls while allowing them progressively increased opportunities to use their skills in more independent settings may be the key to successful reintegration.

The theory of changing protection was first put forth by de Vogel and colleagues (2011) to describe the initial reliance on external protective factors of the SAPROF to manage risk until there is the development of strong internal and motivational protective factors. Thus, the goal of treatment and community supervision is to decrease the reliance on external protective factors like supervised living situations and close monitoring (i.e. dynamic decreasing factors) while increasing factors that are within the individual's own motivation and control such as coping skills and employment (i.e. dynamic increasing factors). The theory of changing protection can also be applied to the SAPROF-SO, such that items included in the core subscales (Resilience, Adaptive Sexuality, and Prosocial Connection & Reward) can also be thought of as *dynamic increasing factors*. In

other words, the focus of treatment should be on increasing the level of protection amongst the 14 items within these three subscales. The SAPROF-SO also acknowledges that individuals may require additional sources of professional risk management when the overall level of protection is low due to being recently engaged in treatment, having a high level of static and dynamic risk, or having special needs that require consideration of external supports to best manage risk. As such, the six optional items in the Professional Risk Management subscale can be utilised to consider one's need for these additional protective factors. However, these should be considered *dynamic decreasing factors* since the goal of treatment and/or case management is to decrease the individual's reliance on these items. Of note, a reduction of some of these protective factor items may not be an appropriate goal (*Motivation for Managing Risk*) or realistic for some specific populations (e.g. psychiatric medication for those with major mental illness).

In applying the theory of changing protection to those in sex offense specific treatment within secure settings, we recommend completing the SAPROF-SO as part of a treatment needs assessment early in treatment and targeting those dynamic increasing factors (i.e. the core components of the SAPROF-SO) so that an overall level of protection is built up over time to help mitigate continued sexual recidivism risk at the time of the release date. Note that this includes addressing treatment needs that are not necessarily routinely addressed within offense specific treatment programmes such as helping clients to identify and work towards prosocial future goals, developing structured leisure activities, maintaining employment, and considering their sexual identity. The SAPROF-SO should be scored again near the time of release to assist in determining the supervision needs of the individual as well as treatment goals within a community setting.

Once individuals are residing in the community, the SAPROF-SO can be re-administered on a regular basis to guide supervision and treatment planning. We generally recommend annual re-evaluation or when there are notable environment changes (e.g. change of residences). Consistent with the theory of changing protection, treatment intensity, case management, and/or supervision may be incrementally decreased as treatment gains and SAPROF-SO protective factors increase. This allows the practice of skills in more generalised settings in a graduated way. Oftentimes, supervising agents err on the side of caution maintaining clients on a higher level of external control than is warranted. However, unless individuals have opportunities to practice learned skills in increasingly more complex real-world settings, beneficial effects may not generalise to other community settings and may lead to hopelessness and despair (Kras et al., 2016).

Figure 3 describes how treatment/supervising agents can utilise the SAPROF-SO in combination with static and dynamic risk measures to better ascertain when Professional Risk Management items can begin to decrease in response to treatment gains and increased protection in other areas. The top row describes the client's current risk category after accounting for static and dynamic risk as well as treatment change. The left column describes the level of protection based on the average SAPROF-SO score (i.e. Total score / 14; see Figure 2 coding sheet). Average SAPROF-SO scores that are low are associated with low levels of protection and are therefore areas of treatment need. High scores are associated with high levels of protection, which serve to mitigate sexual offense risk and indicate that the level of supervision suggested by risk scores alone may be more restrictive than what is needed to manage the individual's risk after considering the level of protective factors.

In order to best integrate the categorical risk levels from a risk assessment measure, the risk categories in the top row were recoded to have consistent meaning with the SAPROF-SO (i.e. higher scores indicate less risk): Very Low Risk = 4, Below Average Risk = 3, Average Risk = 2, Above Average Risk = 1, and Well Above Average Risk = 0. The recoded risk categories (0–4) and SAPROF-SO scores (0–4) were combined and averaged to generate the theorised amount of protection after accounting for baseline risk (i.e. risk level (0–4) + averaged SAPROF-SO score (0–4) / 2). As can be indicated by the middle cells of Figure 3, higher levels of protection after accounting for baseline risk may necessitate less need for supervision while the reverse would be indicated for low levels of protection. This results in the following: 4 = No supervision needed; 3.5 = Limited supervision needed; 3 = Low levels of supervision needed; 2.5 = Low-moderate levels of supervision needed; 2

Level of community supervision / case management by level of sexual risk and SAPROF-SO dynamic increasing factors

| *Risk →* / *Average SAPROF-SO Score ↓* | **Very Low Risk (4)** | **Below Average Risk (3)** | **Average Risk (2)** | **Above Average Risk (1)** | **Well Above Average Risk (0)** |
|---|---|---|---|---|---|
| **Low (0)** | Moderate supervision (2) | Moderate-high supervision (1.5) | High supervision (1) | Very high supervision (0.5) | Highest level of supervision (0) |
| **Low-Moderate (1)** | Low-moderate supervision (2.5) | Moderate supervision (2) | Moderate-high supervision (1.5) | High supervision (1) | Very high supervision (0.5) |
| **Moderate (2)** | Low supervision (3) | Low-moderate supervision (2.5) | Moderate (average) supervision (2) | Moderate-high supervision (1.5) | High supervision (1) |
| **Moderate-High (3)** | Very low / limited supervision (3.5) | Low supervision (3) | Low-moderate supervision (2.5) | Moderate supervision (2) | Moderate-high supervision (1.5) |
| **High (4)** | None needed (4) | Very low / limited supervision (3.5) | Low supervision (3) | Low-moderate supervision (2.5) | Moderate supervision (2) |

*Note*. Categorical risk levels were recoded to have consistent meaning with the SAPROF-SO so that higher scores (0 - 4) indicate less supervision needs due to higher protection. The numerical numbers in the middle cells represent the theorized amount of protection after accounting for risk that was obtained from adding risk level (0 – 4) with average SAPROF-SO score (0 – 4) and dividing by 2.

**Figure 3.** Level of community supervision / case management by level of sexual risk and SAPROF-SO dynamic increasing factors.

= Moderate (average) levels of supervision needed; 1.5 = Moderate-high levels of supervision needed; 1 = High levels of supervision needed; 0.5 = Very high levels of supervision needed; and 0 = Highest level of supervision needed.

Figure 3 was created as something that supervision agents, case managers, treatment providers, and evaluators can use to help inform treatment goals, make dispositional decisions, create release plans, and modify the level of supervision/risk management in response to changing levels of risk and protection. However, the levels of supervision need are empirically theorised and will need to undergo further validation. The intensity of supervision ranges from very high and highest levels, which suggest the need for external containment such as secure institutions, to none and limited supervision, which suggest that individuals should be largely free to navigate about the community with check-ins or supportive services on an as needed basis. Professionals utilising this table can also consider this in relationship to the Professional Risk Management domain on the SAPROF-SO. The level of protection after accounting for baseline risk could determine not only the individual's supervision level, but it may also drive decisions about when to increase or reduce Professional Risk Management items, which include *Sexual Offense-Specific Treatment, Supervised Living*, and *External Control*. A systematic way of making such decisions is to subtract the theorised level of protection after accounting for baseline risk (i.e. numbers in the middle cells of Figure 3) from 4 (the highest possible average protection in this domain). This will produce the amount of Professional Risk Management protection needed: 0 = None, 1 = Low-moderate, 2 = Moderate, 3 = Moderate-high, and 4 = High. This number (i.e. needed amount of Professional Risk Management protection) can then be compared with the individual's actual average protection on the Professional Risk Management domain (total score of the six Professional Risk Management items divided by 6). Risk management interventions can be adjusted accordingly.

How does this work in practice? Let us take a case, Mr. Protection, who has served a criminal sentence in prison for sexual assault of a female stranger. He was convicted of similar sexual offenses in the past. During his most recent incarceration period, he availed himself of sexual offense focused treatment as well as educational and vocational opportunities. An assessment of suitability for

release under supervision was completed in anticipation for his parole board hearing. He was found to have a Static-99R of 6 (Well Above Average) (Hanson et al., 2017), VRS-SO pretreatment dynamic score of 41 (Well Above Average) (Olver et al., 2021), and a VRS-SO change score of 9 (large change), which translated into a category IVa Above Average Risk (Olver et al., 2021) and would ordinarily require a very strict level of monitoring despite the large amount of change he evidenced on the VRS-SO. On the SAPROF-SO, he was found to have a total SAPROF-SO score of 33 and an average SAPROF-SO score of 2.36, which can be interpreted as a Moderate level of protection (see Figure 3). He had a moderate level of protection across all three domains with notably high protection coming from the following items: *Coping, Self-Control, Sexual Self-Regulation, Prosocial Sexual Identity, Leisure Activities*, and *Social Network*. His treatment needs included *Adaptive Schemas, Goal-Directed Living, Work*, and *Emotional Connection to Adults*.

When considering his SAPROF-SO results in combination with risk assessment results, Mr. Protection required a parole plan that initially offered a moderate-high degree of supervision/risk management. When using Figure 3, his risk level obtained by the Static-99R/VRS-SO combination (i.e. IVa: Above Average Risk) was matched with his level of protection from the average SAPROF-SO score (2.36: Moderate). How varying intensities of risk management might translate into the parole release plan will vary by jurisdiction and nature of the case. In Mr. Protection's case, it was understood to mean that he required a moderate-high level of community supervision (Figure 3), and a moderate-high level of amount of Professional Risk Management (4–1.5 (from Figure 3) = 2.5) but could be safely managed within independent housing with weekly parole meetings, weekly offense focused treatment, and an expectation to abide by a daily schedule that included prosocial work, meaningful leisure activities, and the development of community supports. His compliance with rules and his schedule as well as progress on his identified goals were followed closely by his reintegration team. As Mr. Protection continued to make treatment progress in the community, and he addressed the protection needs identified in the previous assessment thereby increasing in level of protection within his dynamic increasing factors (i.e. overall SAPROF-SO score), his need for supervision/case management support as measured by the optional Professional Risk Management subscale on the SAPROF-SO incrementally decreased. Annual re-assessments helped to align his increased protection with a lowered level of supervision expectations. Thus, towards the end of his parole period, he demonstrated good progress on the dynamic increasing factors such that his average total SAPROF-SO score indicated a high level of protection and a need for a low-moderate level of supervision. Accordingly, his risk management needs as measured by the Professional Risk Management subscale should have decreased to a moderate level (4–2.5 = 1.5). Mr. Protection benefitted from the incremental opportunity to develop and practice his learned skills in the community such that at the time of his parole discharge, his level of freedom was closer to what he could expect upon discharge. Compare this with individuals who are discharged when still on a very high level of monitoring and then must navigate novel high-risk situations outside a safety net. In Mr. Protection's case, he may benefit from continued aftercare in the community following discharge from parole.

## *Release planning for individuals with special needs*

Not all clients can be assessed with mainstream methodologies and be expected to demonstrate an internalisation of treatment gains. For example, actuarial dynamic risk assessment instruments may not demonstrate well calibrated results for certain individuals with intellectual disability, major mental illness, and traumatic brain injury (Hanson et al., 2013; Kelley, Thornton, et al., 2020). These groups may also demonstrate slow treatment gains, and their success in the community may rely heavily on the availability of professionally provided supports (Boer et al., 2007; Thornton et al., 2017). It may be useful to frame the risk assessment more as a question of whether the protective factors within the proposed release setting combined with treatment gains will be sufficient

to manage the individual's risk for sexual recidivism as opposed to only focusing on the individual's internally assessed risk.

The SAPROF-SO can be useful when developing release plans and determining whether a proposed setting and plan will meet the risk management needs of the client, which is especially important for clients whose stability and risk management rely heavily on the environment. As can be seen in the coding sheet in Figure 2, the SAPROF-SO can be scored for the current setting as well as a future setting for some items provided that details about the future setting are known. Scoring a future context is typically recommended when the individual's living situation is expected to change within the next six to twelve months (Willis et al., 2021a). This allows the evaluator to compare the levels of protection in the current and proposed release environment to determine if there will be a qualitative change such that the future setting needs to be tailored to better meet the needs of the individual. When a future setting has not yet been identified but stakeholders are interested in devising a release plan, the SAPROF-SO can be used to develop a sketch for such a plan. This tends to be helpful when working with individuals who have special needs, as professionals typically rely on psychosexual assessments to help guide dispositional decisions. When used in this way, the SAPROF-SO items should first be coded to reflect the level of protection in the current environment. This helps to identify what is working well to mitigate the individual's sexual recidivism risk, what will need to be provided in the future environment in order to maintain these gains, and what additional interventions are needed to enhance further protective factors prior to his release. The SAPROF-SO items for the current environment are rated numerically and ratings averaged to produce subscale scores. In contrast, while under some circumstances numerical ratings may also be made for a Future Setting, it is sometimes more useful to consider future items in qualitative terms (e.g. when the future setting does not yet exist).

Using a case example, Mr. Future is an adult male with a history of sexual offense convictions and Traumatic Brain Injury (TBI). Compared with his previous functioning in the community, Mr. Future has demonstrated increased stability, emotional control, and sexual self-regulation in his current secure setting. His treatment team has requested an assessment to determine whether he is ready for a less restrictive placement and, if so, what type of placement he would require to maintain his current gains. The evaluator starts with an assessment of risk and level of protection in his current environment by using the Static-99R, STABLE-2007, and SAPROF-SO. As seen in Table 1, care is taken to not just provide numerical scores on the SAPROF-SO, but to describe how the protection is manifested or supported within his current environment. This information is then used to consider and describe how the future environment can provide parallel interventions in order to facilitate continuing stability.

Referring to the first item, *Adaptive Schemas*, as an example, the evaluator provides a rationale that can support a numerical score for this item. This rationale includes information that both supports and challenges a high score. In so doing, this rationale reflects continued treatment issues with regard to adaptive schemas as well as interventions that have been more successful. The evaluator uses this information together with other known clinical information to consider how his future placement can continue to help build upon these treatment gains. Thus, it appears that Mr. Future generally has positive self-schemas, which are further enhanced when he is able to engage in activities that promote his talent (e.g. artwork) and self-efficacy (e.g. activities that he can do independently) as well as having input (e.g. making decisions about his schedule). These are realistic ideas, which can be easily incorporated into his future placement. When detailed rationales are provided for all the items in this manner, the SAPROF-SO informs the development of a detailed release plan incorporating both treatment and risk management strategies. Importantly, Mr. Future's readiness for a less restrictive placement will need to be considered based on what degree he demonstrates good risk management at his current placement as evidenced by having an overall moderate to high level of protection on SAPROF-SO items and whether the future setting can realistically provide ways of paralleling this level of protection in the community.

**Table 1.** Use of the SAPROF-SO for release planning with special needs populations: Case example with selected items.

| SAPROF-SO Item | Current Placement | Future Placement |
|---|---|---|
| Adaptive schemas 1 | Mr. Future generally has a positive view of himself and others around him. He describes staff as helpful and kind. On the other hand, he has a good deal of awareness of his cognitive limitations as well as his pre-morbid level of functioning. He can be sensitive to feeling a loss of his former independence and adulthood. He occasionally becomes bored and depressed, and he complains that staff treats him like a child. During the past year, he has verbalised increased negative schema when experiencing cognitive confusion. | Mr. Future's mood may be more resilient when his internal self-view is fostered through activities that promote talent, self-efficacy, and feeling that he has input. He does well with a structured schedule that provides opportunities for work, leisure, and socialisation. He enjoys painting and sharing his artwork with others. He will require support and assistance when experiencing periods of increased disorientation. |
| Attitude towards rules and regulations 1 | Mr. Future has a positive relationship and attitude towards therapy and unit staff. He has an adequate understanding of the hospital rules. However, he frequently forgets that rules have changed or why a rule has been put into effect. He can become quickly agitated when stopped from doing something he has become fixated on. It is not clear that a punitive approach actually deters future behaviour given his problems with learning and memory. | Mr. Future will be slow to learn new rules and routines. He will struggle with temptations and self-control in a less restrictive environment. As such he will benefit from frequent reminders about rules and schedules. This may involve re-explaining rules even after a 30-minute delay. The more staff are prepared for this possibility, the more potential for patient and compassionate staff responses. Again, punitive approaches may not always be effective. |
| Sexual self-regulation 0 | Mr. Future has not engaged in deviant behaviours since his psychiatric hospital admission. He has consistently reported his sexual interest involves consenting adult females. His sexual drive is diminished due to anti-androgen medication. However, he is apt to attempt to engage in masturbation when bored. He also struggles with boundaries when working with female staff. It is difficult for him to understand that staff are not his friends or potential dating partners. He responds well to firm redirection. | Mr. Future can be expected to continue to confuse boundaries between staff and potential dating partners. Professional staff should be clear, firm, and quick to redirect any verbal or behavioural transgressions. Such immediate and consistent feedback is warranted when this occurs with non-professional people in the community and with other peers. He exhibits an awareness of his need to avoid stimuli that could trigger hypersexuality (e.g. pornography), but he may need reminders. |
| Goal directed living 2 | Mr. Future's expressed life goals include having a committed intimate relationship, having an exhibit of his artwork, and working in an art store. He has re-established contact with his former art teacher who sends him art books. | Allowing Mr. Future to identify ways he can work towards his life goals can provide him with purpose and meaning in his life. This may include learning to communicate with females who also have histories of TBI, inquiring about custodial jobs in art stores, and having art show events for staff and peers. |
| Work 3 | Mr. Future has maintained a part-time patient work position doing custodial work on his hospital unit. As his work tasks have become routine, he needs little assistance. He occasionally asks for more varied job duties. This job helps to provide structure to his schedule, financial rewards, and purpose and meaning (e.g. something that he is proud of and which is associated with being an adult). | Mr. Future has demonstrated the ability to maintain regular work and it would be beneficial to him to obtain work in the community. This may need to be on a very part-time basis. |
| Therapeutic alliance 4 | Mr. Future works regularly with two recreation therapists and one social worker. Mr. Future values these three staff members, regularly utilises them in times of need, and has described them in positive terms. Further, these staff appear to be knowledgeable about his triggers, and signs to look for to indicate he is not doing well, and effective interventions in times of need. | Mr. Future has worked best in treatment environments when there are a few staff who remain consistent in his schedule and with whom he can develop a trusting therapeutic relationship. |
| Supervised living 4 | Treatment records have consistently described Mr. Future as doing best when in a highly supervised and structured environment. The following factors have been identified as being important in decreasing the amount of disruptive incidents he is involved in: (1) Consistent staff routines; (2) | Mr. Future has not fared well in an independent living situation even with regular case management support. Based on the environment supervision and support that has worked best for him at his current psychiatric hospital, he will likely require a 24-hour/7 days a |

(*Continued*)

**Table 1.** Continued.

| SAPROF-SO Item | Current Placement | Future Placement |
|---|---|---|
| | Use of a non-confrontational approach that utilises Motivational Interviewing techniques; (3) Flexibility depending on Mr. Future's mood or concerns; (4) Linking activities to his stated goals; (5) Emphasising his strengths; and (6) Regularly providing him with the ability to make decisions and input. It is important to note that environmental factors such as crowded spaces and perception of being teased by others can potentially trigger angry outbursts. | week group home. Ideally, the staff at the group home would have experience with TBI clients, offer a high level of supervision and structured activities, and does not involve a high degree of staff turnover. |

Figure 3 can also be utilised in helping to anticipate Mr. Future's risk management needs. The evaluator found Mr. Future to have an Average Risk level based on the Static-99R and STABLE-2007 combination. His average SAPROF-SO score was 1.29, which suggests a Low-Moderate level of protection. When considering his baseline risk, the results suggested Mr. Future had a need for a moderate-high level of supervision in the community (1.5). This would be consistent with a highly supervised group home and the availability of monitors when he is in the community. Theoretically, this may also suggest that his average Professional Risk Management domain score should be around a 2.5 (Moderate level of protection in this domain) (4–1.5 = 2.5). Mr. Future's actual average score on this domain was 3.5 (High level of protection) indicating that some areas within this domain can be incrementally decreased. In his case, it would make sense to start with *Supervised Living* and *External Control* while trying to maintain *Therapeutic Alliance* by having him begin working with his future treatment provider prior to discharge.

## Limitations and conclusions

Protective factors are commonly considered in sexual recidivism risk assessments (Kelley, Ambroziak, et al., 2020); however, methods for their integration into structured risk assessment and risk management are lacking. In its current form, the SAPROF-SO provides a comprehensive review of protective factors that can form the basis of an empirically guided approach to their assessment. Although more recidivism studies are needed before the SAPROF-SO can be used to adjust an actuarial risk assessment, average subscale and total scores can be reported, and the extent to which SAPROF-SO items are present can be reported qualitatively and help inform ongoing risk management.

This paper has two main limitations. First, although there is evidence speaking to the reliability and construct validity of the SAPROF-SO and the items were constructed based on prior research, only one research study into its predictive value relative to recidivism has been completed. Second, although the recommendations for clinicians/supervising agents are plausible, we do not yet know empirically whether seeking to follow them actually improves the performance of these professionals. These areas are actively being investigated in research projects within the United States, Canada, and New Zealand. Therefore, we propose the SAPROF-SO can be useful in treatment and risk management planning, but users should be cautious in adjusting the results of static and dynamic risk assessments.

The SAPROF-SO was designed intentionally to align with strengths-based approaches to treatment as exemplified by the Good Lives Model, and desistance theories and research. We purport that the SAPROF-SO offers three advantages for clinical practice: it can assist clinicians' work with clients to develop treatment goals directed towards personally meaningful and desistance oriented outcomes while increasing trust and motivation from the people served; it assists assessment of readiness for release and supports the development of risk management plans; and it enables consideration of the intersection between an individual's risk, strengths, and environmental factors. This paper aimed to explore these three advantages in order to provide specific guidance in how the

SAPROF-SO can be applied in clinical settings through a focus on increasing treatment motivation, risk management, and assessment of sub-populations whose treatment and risk management needs are better understood in the context of the environment. We described these advantages in abstract, generalisable ways. We provided specific guidance on how to attain the advantages. We also provided case studies illustrating how the advantages can be attained. Taken together, we hope that the current paper helps facilitate understanding for clinicians with different learning styles and degrees of experience.

More generally, the advantage of considering dynamic increasing (Resilience, Adaptive Sexuality, Prosocial Connection & Reward) and dynamic decreasing sources of protection separately allows professionals to make recommendations concerning when more restrictive risk management practices can be lessened due to increased protection in areas that may continue to be intrinsically self-motivating even after supervision is withdrawn. These two sources of protection should be balanced in a manner that affords the most autonomy to the individual consistent with community safety. A focus on facilitating prosocial reward like goal-directed living, social network, work, and leisure can increase treatment engagement and are important areas to target for all clients regardless of the density of their dynamic risk factors.

This paper was primarily written for clinicians and supervising agents; however, it can also be regarded as setting an agenda for researchers. We propose that: (1) initially exploring protective factors will be more engaging than beginning by exploring risk factors; (2) use of the SAPROF-SO to guide risk management decisions will facilitate the gradual reduction of external control during supervision rather than maintaining high external control up to the point of discharge, with ultimately better post-discharge outcomes; (3) use of the SAPROF-SO will allow the balancing of different kinds of risk and protective factors in a way that facilitates safe community reintegration for special needs populations, allowing them placements that afford more autonomy without increasing risk for the community. Each of these are plausible propositions which could be tested through empirical research. Research of this kind would also allow the kind of guidance incorporated in this paper to be refined.

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