# Protective factors for violent behavior: Clinical results with the SAPROF

Michiel de Vries Robbé & Vivienne de Vogel, Van der Hoeven Kliniek, Utrecht, The Netherlands

## The SAPROF

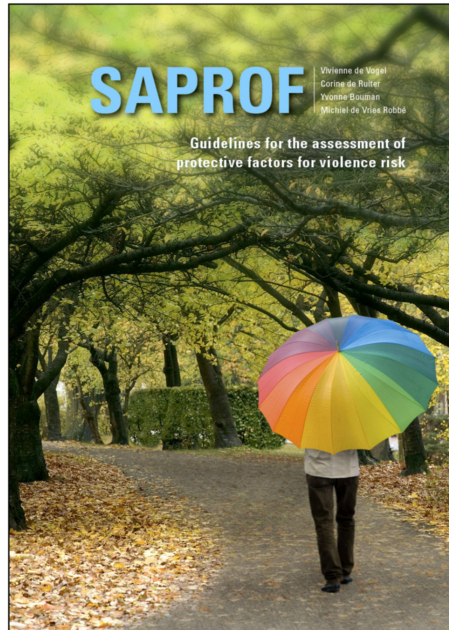
The Structured Assessment of PROtective Factors for violence risk (SAPROF) is a checklist for the assessment of **protective factors** for violent behavior. The SAPROF was developed as a positive, dynamic and treatment focused assessment tool, intended to complement and counterbalance commonly used risk assessment instruments in forensic psychiatry. Following the SPJ approach, the SAPROF is designed to be used in combination with SPJ risk instruments like the HCR-20.

***Advantages***

The addition of protective factors creates a more balanced risk assessment for future violence risk, enabling a more positive approach to (sexual) violence prevention. The SAPROF aims to contribute to an increasingly accurate and well-rounded assessment of risk for future violent behavior. Moreover, the dynamic positive approach of protective factors aims to create new opportunities for effective and achievable treatment interventions.

***Translations***

The SAPROF is now available in Dutch, English, German, Italian, Spanish, French, Swedish and Norwegian. Portuguese, Russian and Danish translations are in preparation.




## The present study

This study presents prospective clinical findings on the predictive validity of the protective factors in the SAPROF for a sample of 245 assessments of male offenders (148 violent and 97 sexual). The study was carried out at the Van der Hoeven Kliniek in The Netherlands, an inpatient forensic psychiatric hospital. The SAPROF, the HCR-20 and the PCL-R were scored for all offenders during clinical forensic psychiatric treatment. Follow-up data collected over a 12 month period following the assessment concerned violent incidents during treatment including both physical violence and severe threats.

***Assessments in Consensus***

All assessments were carried out in multidisciplinary consensus meetings involving a sociotherapist, treatment supervisor and researcher. For 47 cases the individual scores of the three raters were also available, which made comparison possible between the predictive accuracies of the individual raters and consensus scores for the assessments (HCR-SAPROF scores ICC = .80).

***Different stages of treatment***

Average treatment length at the Van der Hoeven Kliniek is about 6 years. During this time patients move through four different treatment stages: *Intramural*, *Supervised leaves*, *Unsupervised leaves* and *Community supervision*. Average SAPROF scores and incidents at the different stages are compared.

## Results: Predictive validity

| Follow-up (N=245) | violent | sexual | total |
|---|---|---|---|
| Total score SAPROF | .77 | .81 | .78 |
| Total score HCR-20 | .74 | .85 | .79 |
| Total HCR-20 – Total SAPROF | .81 | .84 | .82 |
| Final Protection Judgment | .69 | .73 | .70 |
| Integrative Final Risk Judgment | .75 | .81 | .77 |

Predictive validity (AUC-values) for violent incidents during clinical treatment, all $p < .05$.

Results show **good predictive validities** for violent incidents during clinical treatment for the SAPROF and the combined HCR-SAPROF. This was true for **violent as well as sexual offenders**. Overall, the **combination of HCR-SAPROF** was the best predictor for future violence and provided better predictions than either the SAPROF or the HCR-20 alone. The best individual predicting factors differed for both groups: Violent offenders: *Self-control, Attitudes towards authority, Work, Motivation for treatment* and *Medication*; Sexual offenders: *Coping*, *Leisure activities*, *Attitudes towards authority* and *Social network.*

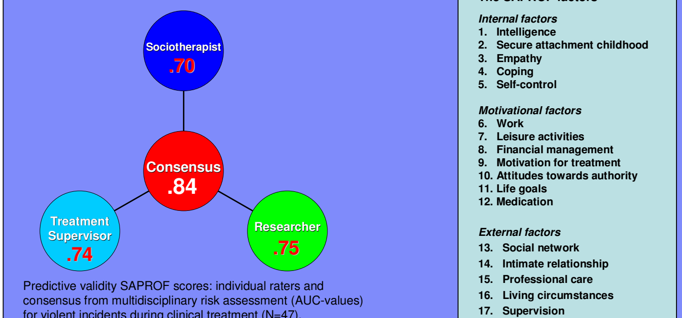
## Results: Changes during clinical treatment

| Treatment phase | SAPROF total (M) | violent incidents | AUC SAPROF |
|---|---|---|---|
| Inpatient (N=34) | 13 | 29% | .65 |
| Supervised leave (N=64) | 18 | 14% | .68 |
| Unsupervised leave (N=48) | 19 | 6% | .75 |
| Community supervision (N=99) | 20 | 4% | .80 |

Mean SAPROF scores, incident rates and predictive validity at different treatment stages.

The table shows the **development of protective factors during treatment** and the according decrease in violent incidents. Results show increasing predictive power of the SAPROF as treatment becomes more community focused.

## Results: The value of Consensus




Predictive validity SAPROF scores: individual raters and consensus from multidisciplinary risk assessment (AUC-values) for violent incidents during clinical treatment (N=47).

**The SAPROF factors**

*Internal factors*
1. Intelligence
2. Secure attachment childhood
3. Empathy
4. Coping
5. Self-control

*Motivational factors*
6. Work
7. Leisure activities
8. Financial management
9. Motivation for treatment
10. Attitudes towards authority
11. Life goals
12. Medication

*External factors*
13. Social network
14. Intimate relationship
15. Professional care
16. Living circumstances
17. Supervision

Although the SAPROF total scores of the different individual raters each demonstrated fairly good predictive validity, the **Consensus** SAPROF total score was by far the best predictor of violence in the year following the assessment. This finding provides further evidence for the value of doing risk assessment in multidisciplinary teams. Moreover, consensus meetings offer a fruitful opportunity to share clinical views and formulate well-informed **risk management strategies** and release decision making.

For more information please contact mdevriesrobbe@hoevenstichting.nl
To order the SAPROF guidelines or download free coding sheets see www.forumeducatief.nl