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Effect of Protective Factors on Outward Aggression within Forensic Inpatients

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Master Thesis
PPT (10 EC)
July 2018

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Abstract

Introduction: Research on risk assessment in the field of forensic psychiatry has focused mainly on taxation instruments that measure risk factors for violence risk and has disregarded factors that protect from violence risk. Based on the scarcity of empirical knowledge about these factors, the present study was aimed to investigate the predictive value the Structured Assessment of Protective Factors for Violence Risk (SAPROF), a taxation instrument with the purpose of measuring protective factors for violence risk in forensic patients. In more detail, the study´s aim was to examine whether the protective factors of the SAPROF predicted outward aggression during the treatment time of forensic inpatients.

Methods: The sample consisted of 50 Dutch forensic inpatients from the psychiatric department "De Boog", with different diagnoses according to DSM IV or DSM 5 criteria. Their level of outward aggression was assessed weekly by means of the Social Dysfunction and Aggression Scale-11 (SDAS-11). The SAPROF was scored three times in the course of the treatment. The resulting data was then analyzed by means of linear mixed effects analyses.

Results: From the analyses arose that the dynamic factors of the SAPROF changed significantly over time, while aggression did not change over time. Besides, the results showed that factors referring to internal and motivational protection were negatively related to aggression, indicating that participants, who showed higher scores on these scales, reported less aggression over time.

Conclusion: Given the results the SAPROF appears to be a promising tool for predicting inpatient aggression and providing guidance to psychiatric treatment. Further research should focus on the working of protective factors in reducing violence risk, which can help to provide a theoretical framework for the SAPROF.

Introduction

The Study´s Aim

A prominent evolution in the field of violence risk assessment in forensic psychiatry, is the focus on research about risk taxation instruments (Douglas, Ogloff & Hart; 2003). The current research was aimed to investigate the predictive quality of the *Structured Assessment of Protective Factors for Violence Risk* (SAPROF; De Vogel et al., 2011), a taxation instrument with the purpose of measuring protective factors for violent behavior within forensic inpatients (de Vogel et al., 2011). In more detail, the study´s aim was to examine whether the SAPROF predicted outward aggression, measured by the *Social Dysfunction and Aggression Scale-11* (SDAS-11; Wistedt et al., 1990), within a sample of Dutch forensic inpatients. As a consequence, research was conducted to answer following research question: Do the protective factors of the SAPROF predict outward aggression over the treatment time?

Background

Forensic Psychiatry and Inpatient Aggression

Forensic psychiatry is an area of psychiatry, addressing subject-specific assessment and treatment of mentally disturbed offenders, by mental health professionals (Nedopil, 2007). Common disorders are personality disorders and concomitant mood disorders or psychotic disorders (McCann, Ball & Ivanoff, 2000; Žarkovic Palijan, Mužinić & Radeljak, 2009).

When deciding a verdict about the mentally disturbed offender at court and there exists a high-level-risk of reoffending, which is (partly) the product of the psychiatric disorder, a judicial measure is provided, called “terbeschikkingsstelling” (TBS, engl.: “at the discretion of the state”) in the Netherlands. It implies the involuntary admission to a forensic institution and is aimed to treat the patient´s mental disorder in order to diminish the risk of reoffending (Van Marle, 2002; Philipse, 2005; Harte & Breukink, 2010). A significant predictor for reoffending and a frequent problem in forensic psychiatry is aggressive behavior during incarceration. Besides causing structural damage to the penitentiary and danger to personnel and other inmates, inpatient aggressive behavior poses an obstacle to the effective treatment, by inhibiting the work environment. Therefore, increasing study focusses on factors predicting violent behavior, which might help to recognize early signs of aggressive behavior and ultimately increase the treatment

success in preventing it (Wistedt et al., 1990; Ogloff, & Daffern, 2006; Endrass, Rossegger, Noll & Urbaniok, 2008; De Vries Robbé, De Vogel, Douglas & Nijman, 2014).

Risk Assessment

Much research in forensic psychiatry came up with different approaches to making a prognosis about violence risk (Douglas, Ogloff & Hart, 2003). The current research draws on the Structured Professional Judgement approach (SPJ; De Vogel et al., 2011), which is appreciated in the clinical practice due to its empirical support (De Vogel et al., 2011). In the process of the SPJ approach, a mental health professional makes use of a risk taxation instrument to check for factors within the patient, which are associated to violent behavior in scientific literature (Douglas, Ogloff & Hart, 2003; De Vogel, De Vries, Robbé, De Ruiter & Bouman, 2011). Based on the occurrence of these factors within the patients, predictions about future violent behavior can be made (Douglas, Ogloff & Hart, 2003). The assessment should be repeated in short-term intervals during the treatment, to monitor changes in the patients´ behavior and to evaluate the treatment progress (Schuringa, Heininga, Spreen & Bogaerts, 2016). Risk taxation instruments working according to the SPJ approach make the changes in the patients´ behavior observable and provide suitable guidance to the treatment, as they comprise mainly dynamic factors, which are changeable in the course of the treatment, such as insight into own mental disease (Harte & Breukink, 2010; Robbé, De Vogel & Douglas, 2013).

Empirical research on risk assessment has mainly focused on risk factors, characteristics that promote violent behavior, and disregarded the influence of factors that protect from violence risk (Ullrich & Coid, 2011; Robbé, De Vogel & Douglas, 2013). This one sided, risk-focused approach to risk assessment is confronted to growing criticism by clinical practice and international research literature (Robbé, De Vogel & Douglas, 2013). It is argued that the overreliance on risk factors may lead to unbalanced and inaccurate predictions, such as over-prediction of recidivism or stigmatization of offenders (De Vogel et al., 2011). As a consequence, the SAPROF has been developed, according to the SPJ approach, to complement risk focused tools with the measurement of protective factors for violence risk (De Vries Robbé, De Vogel & De Spa, 2011; Robbé, De Vogel & Douglas, 2013).

Protective Factors

Protective factors for violence risk are characteristics of an offender and his environment, which contribute directly or indirectly to the prevention of violence risk (De Vries Robbé, De Vogel & De Spa, 2011; De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016). To date, studies addressing protective factors in risk assessment are scarce and much is unknown about their contribution to the assessment of violence risk (Ullrich & Coid, 2011; De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016). It is argued, whether protective factors lie at the opposite end of risk factors, exist without correspondence to risk factors, or are defined as the absence of risk factors (De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016).

Despite this ambiguity on the theoretical assumptions, studies reported good results for the predictive value of strength factors for inpatient aggression and violence recidivism in discharged prisoners (De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016). Furthermore, a lot of researchers agree, that the risk-minimizing effect of protective factors has been ignored wrongfully and that including them into further research and risk assessment is crucial for an accurate appraisal of the relapse-risk for violence (De Vries Robbé, De Vogel & De Spa, 2011; Robbé, De Vogel & Douglas, 2013).

SAPROF

In the clinical setting the SAPROF is intended to be used in conjunction with a risk-focused SPJ assessment tool, such as the *Historical, Clinical, Risk Management-20* (HCR-20; Webster et al., 1997), in order to get a balanced risk judgment. Through evaluating dynamic protective factors in addition to risk factors, the SAPROF aims to inform clinicians about potential goals for the treatment of inpatients (De Vries Robbé, De Vogel & De Spa, 2011; De Vries Robbé, De Vogel, Douglas & Nijman, 2014). As there is little scientific knowledge about the working mechanisms of protective factors, the SAPROF is not provided with a specific theoretical model yet (De Vogel et al., 2011).

The protective factors of the tool are empirically related to reduced future violent behavior in scientific literature. They are organized into three scales. The internal scale (items 1-5), which refers to personal characteristics, e.g. coping skills. The motivational scale (items 6-12), relating to the individuals motivation to participate in society in a positive manner, and the external scale (items 13-17), which concerns protective factors outside the individual, such as supervision (De Vogel et al., 2011). Except for two static items (Item 1 *Intelligence* and Item 2 *Secure Attachment*

in Childhood), all items are dynamic (De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016).

At the start of the treatment external protection from factors, such as *Professional Care* (Item 15), are expected to provide most of the protection from violence risk. However, in the course of the treatment, it is the goal to strengthen dynamic factors, which reflect internal-, social functioning and motivation in social participation, so that intensive protection from the intervention will no longer be necessary. In other words, an improvement in protective factors implies a shift from external to internal and motivational protection. Scores on factors relating to external protection from mandatory professional care are supposed to decrease, while scores on factors addressing internal-, social functioning, and motivation in social participation are supposed to increase (De Vogel et al., 2011; De Vries Robbé, De Vogel & De Spa, 2011).

The SAPROF is widely used in international clinical practice and preliminary findings in several international samples showed good results for its clinical utility. Studies showed that the dynamic protective factors appeared to be changeable during treatment and that improvements on these factors predicted a decrease in risk factors and less violent recidivism over the treatment time (De Vries Robbé, De Vogel, Douglas & Nijman, 2014). Still, the SAPROF is relatively new and validation studies on the empirical relevance are sparse. Therefore, the predictive value of its factors needs to be investigated further in different samples in order to confirm their generalizability (Robbé, De Vogel & Douglas, 2013; De Vries Robbé, De Vogel, Douglas & Nijman, 2014).

The present Study

Given the scarcity of empirical research on protective factors for violence risk (De Vries Robbé, De Vogel, Douglas & Nijman, 2014), the present study counts as follow-up research on the changeability of the protective factors of the SAPROF and their value in predicting violence risk. More insight into this topic can be supportive for evaluating the usefulness of the SAPROF in guiding treatment and risk management (De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016). The study was set out to test whether scores on the scales of the SAPROF predicted the level of aggression during the treatment time (described by three measurements of both tools during the treatment). It was expected that the protective factors changed over the treatment time and that patients who reported higher scores on the SAPROF, would report less outward aggression. More specifically it was hypothesized, that:

1. The dynamic internal and motivational factors would increase over time, while dynamic external factors and outward aggression would decrease

2. The protective factors would have a negative effect on outward aggression, during the treatment

Method

Design

The research design was a naturalistic prospective study. Data were collected in the forensic psychiatric department "de Boog" (lower section of "GGNet") between 2012 and 2017. The criteria for inclusion comprise the presence of a diagnosis, according to DSM IV or DSM-5 (APA, 2000; APA 2013) criteria, diagnosed by a psychiatrist or psychologist during the admission. All relevant data for the study were gathered by mental health professionals in clinical practice.

Participants

The sample of the study consisted of 50 participants, divided into 8 different groups of diagnoses as depicted in Table 1. The participants were diagnosed by a registered psychologist or psychiatrist and admitted to a forensic psychiatric hospital. The majority of the sample was male. The minimum age of the participants was 23.30 years and the maximum age 74.90 years. The mean treatment time, indicated in days, was 709 (*SD=466, range=2963*).

Every participant was convicted at least once. Further information about the index offense was not available.

Table 1

Background information of the participants (N=50)

Background information	n (%)	Mean (SD)
Gender		
Male	44 (88)	
Female	6 (12)	
Age, years		42 (10.88)
Group of Diagnoses		
ADHD	2 (4)	
Anxiety Disorders	5 (10)	
Autism Spectrum Disorders	12 (24)	
Personality Disorders	8 (16)	
Schizophrenia/ other Psychotic Disorders	16 (32)	
Sexual Disorders/ Gender Identity Disorders	3 (6)	
Somatoform Disorders	1 (2)	
Affective Disorders	3 (6)	
Treatment Time, days		709.02 (469.46)

Procedure

All relevant data were assessed by mental health professionals in routine clinical practice. The SAPROF was scored three times during the treatment, by therapists and nurses. The first measurement took place during admission, the second half way during treatment and the third one at the end of the treatment. Afterwards the attained scores were discussed in multidisciplinary teams, which resulted in consensus scores. These scores were used in the current study.

The SDAS-11 was scored weekly by nurses. The assessment was based on the patients observed behavior on the ward. Mean scores were calculated on three measurement points. The first one during the admission period (four weeks after the SAPROF assessment), the second one half way during treatment (in the period between two weeks before till two weeks after the SAPROF assessment) and the last one at the end of the treatment (four weeks before the SAPROF assessment).

Materials

SDAS-11

In order to measure aggression within the participants, the Social Dysfunction and Aggression Scale-11 (SDAS-11; Wistedt et al., 1990) was used. The SDAS-11 consists of 11 factors divided into two scales, 9 items concerning overt aggression (SDAS-9; Wistedt et al., 1990) and 2 items (item 9 and item 11) concerning self-directed aggression (SDAS-2; Wistedt et al., 1990). All items are scored on a five point scale from zero (zero incidents) to four (very severe incidents). A score of ≥11 on the overt aggression scale counts as high (Kobes, Nijman & Bulten, 2012).

The inter-observer reliability of the SDAS-11 has been evaluated through the inter class coefficient. The inter class coefficient was very high with 0.97 (Wistedt et al., 1990). Both subscales, SDAS-2 (inward aggression) and SDAS-9 (outward aggression) show a low negative correlation (-0.23) (Wistedt et al., 1990). The SDAS-2 is excluded from the current research, as the internal consistency (Cronbach´s α) of the two items is low compared to the SDAS-9, which is relatively high with 0.79 (Wistedt et al., 1990). Therefore, only a total score for the remaining 9 items was computed. Study on the Dutch version of the SDAS-11 found a good convergent validity (Kobes, Nijman & Bulten, 2012).

SAPROF

The SAPROF is a checklist which consists of 17 protective factors. All of them are rated on a three point scale: 0= *item does not apply*, 1= *item probably or partially applies,* 2= *item definitely applies.* The scores reflect the extent to which the protective factors are present as protection from violence risk, within a given patient in a specific situation (De Vogel et al., 2011; De Vries Robbé, De Vogel & De Spa, 2011). The items can be divided into static factors (items 1-2), dynamic improving factors (items 3-14) and dynamic decreasing factors (items 15-17), according to their expected direction of change due to the treatment intervention (De Vries Robbé, De Vogel & De Spa, 2011).

The coding of the SAPROF is a multiple step process. At first, the assessor has to ascertain the presence or absence of each factor. The second step involves the marking of so-called "critical items" , which are specific factors that are essential for the prevention of violent behavior, with regard to the case at hand: factors, providing protection at the time of the assessment, can be marked as *key factors* and factors considered to be potential targets of the

treatment, are referred to as *goal factors.* After that, the assessor has to integrate the results of the earlier steps into a final protection judgement, which is coded as low, moderate or high level of protection and is valid for a specific time period, for example the treatment phase (De Vogel et al., 2011; de Vries Robbé, de Vogel & de Spa, 2011).

In a sample with Dutch forensic patients, the SAPROF was found to have an excellent interrater reliability (ICC= 0.88) (De Vries Robbé, De Vogel, & Stam, 2012). As well, studies revealed good predictive validity for SAPROF´s factors for desistance from violence, in a sample of Dutch forensic patients with violent histories (AUC= .85-.74, for one- to three-year follow up) (De Vries Robbé, De Vogel & De Spa, 2011).

Statistical Analysis

R (R Core Team, 2018) and *lme4* (Bates, Maechler, Bolker & Walker, 2015) were used to perform linear mixed effects analyses in order to test the hypotheses. The relations between time (referring to the three measurement points of SAPROF and SDAS-11) and outward aggression and between time and each of the protective factors (internal, external and motivational factors) were analyzed to test the first hypothesis. Time was set as a fixed effect in all models. The second hypothesis was tested, by analyzing the relationship between either internal, motivational or external factors and outward aggression. Each of the protective factors were added as fixed effects. As random effects intercepts per subject as well as random slopes per subject, were chosen for all models. The assumptions of linearity and normality were not violated, which was controlled by visual inspection of the residual plots. The assumption of homoscedasticity was also not violated, which was controlled by visual inspection of the residual plots and a variation of "Levene's test". The *p*-values, indicating a significant fixed effect on the respective dependent variable, were received by likelihood ratio tests of the full model with the fixed effects in question and the null model without the fixed effects in question. The chosen level of significance was $p<0.05$.

Results

Descriptive Statistics

Table 2 shows the means and standard deviations of aggression and the three scales of protective factors over the treatment time, segmented into three measurement points. It is noticeable that the means of aggression decreased over time. Though, the standard deviations were bigger than the means per measurement point, which suggests a strong variance in scores between the participants.

Table 2

Mean and Standard deviations of Aggression, Internal Factors, External Factors, Motivational Factors over the three Measurement Points (T1-T3) (N=50)

	Measurement Points			
	T1	T2	T3	
	M(SD)	M(SD)	M(SD)	
Aggression	2.35(2.54)	2.14(2.20)	1.77(2.84)	**N=50**
Internal Factors	3.56(1.84)	3.84(1.84)	4.06(1.87)	
External Factors	6.92(1.33)	6.58(1.40)	6.50(1.26)	
Motivational Factors	7.00(2.73)	7.26(2.93)	7.52(3.11)	

Main Analyses

Effect of Time on Aggression and Protective Factors (Internal, External, Motivational)

The results of the mixed level analyses, testing whether time affected aggression and the protective factors are displayed in Table 3. It is shown, that there was no significant effect of time on aggression ($\chi_2(1)=2.29$, $p=0.777$), indicating, that aggression did not change significantly over time. Time did have a significant effect on internal factors ($\chi_2(1)=7.05$, $p=0.008$), suggesting that they increased from one measurement point to the next. Time also had a significant effect on external factors ($\chi_2(1)=4.46$, $p=0.031$), indicating, that they decreased between the measurement points. Moreover, time significantly affected motivational factors ($\chi_2(1)=4.41$, $p=0.035$), referring to an increase from one measurement point to the next.

Table 3

Fixed Effect of Time on Aggression and Protective Factors (Internal, External, Motivational)

Fixed Effect of Time on the Dependent Variables:	Intercept(*SE*)	Estimates(SE_{β})	Random Effect (Intercept): Variance (*SE*)
Aggression	2.66(0.45)	-0.29(0.19)	4.58(2.14)
Internal Factors	3.32(0.29)	0.25(0.09)*	3.06(1.75)
External Factors	7.09(0.27)	-0.21(0.09)*	2.86(1.69)
Motivational Factors	6.74(0.41)	0.26(0.12)*	6.88(2.62)

Note. *p<0.05

Effect of Protective Factors (Internal, External, Motivational) on Aggression

The results of the mixed effects analyses, testing whether each of the protective factors was related to aggression, showed that there was a significant effect of internal factors on aggression ($\chi_2(1)=9.82$, p=0.002), indicating that aggression lowered by about -0.37± 0.11 (standard errors) per increase by 1 in internal factors (see also Fig. 1). Furthermore, there was no significant relation between external factors and aggression ($\chi_2(1)=0.73$, p=0.391) (see also Fig. 2). The effect of motivational factors on aggression was significant ($\chi_2(1)=6.34$, p=0.012), suggesting a decrease by about -0.24± 0.09 (standard errors) in aggression per increase by 1 in motivational factors (see also Fig. 3).

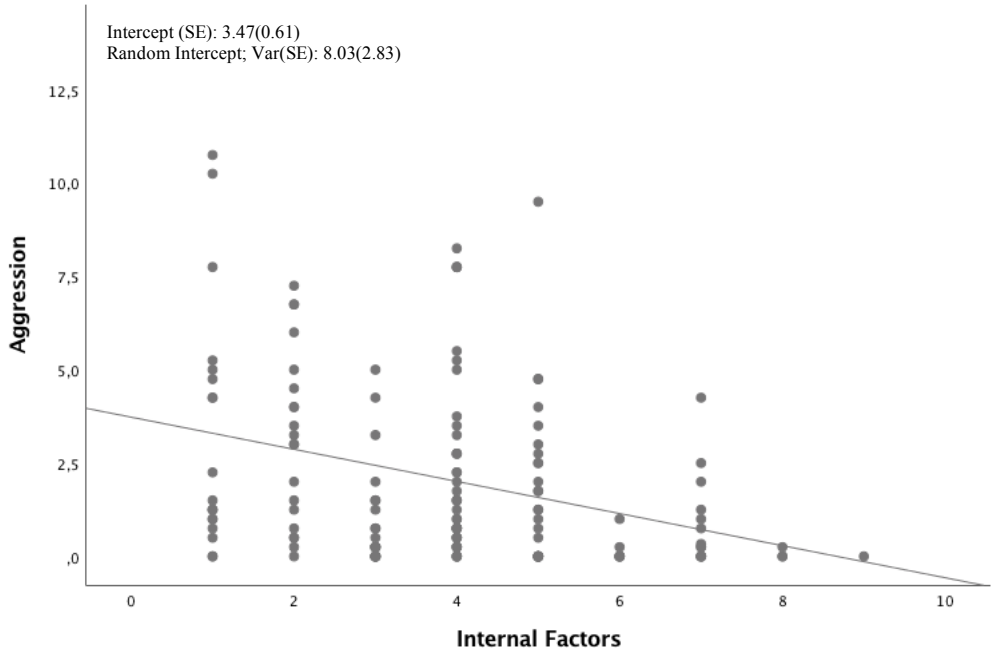

Figure 1. Estimated fit line for aggression as a function of internal factors

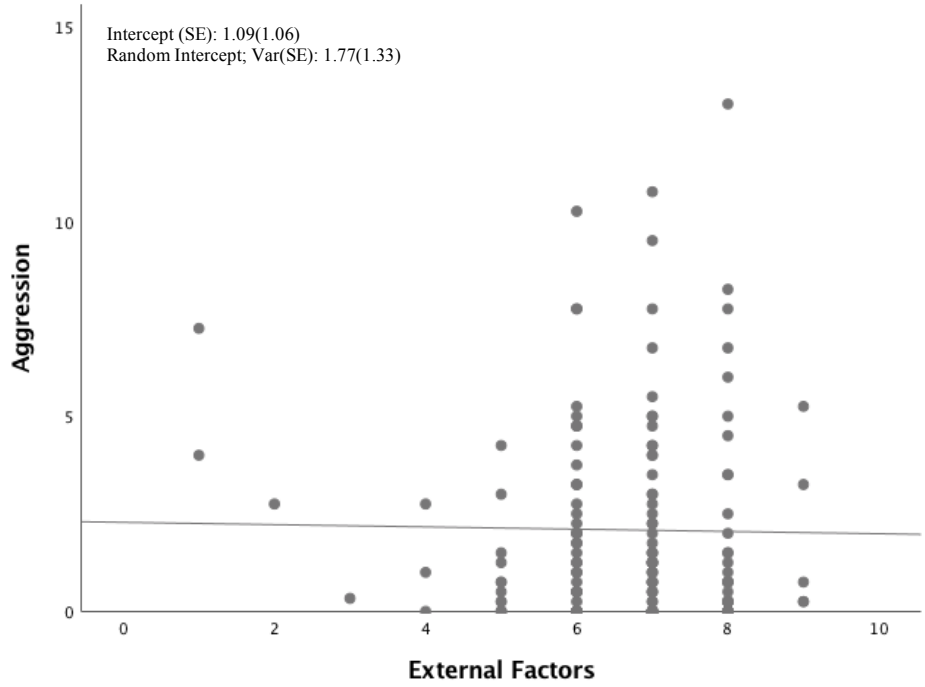

Figure 2. Estimated fit line for aggression as a function of external factors

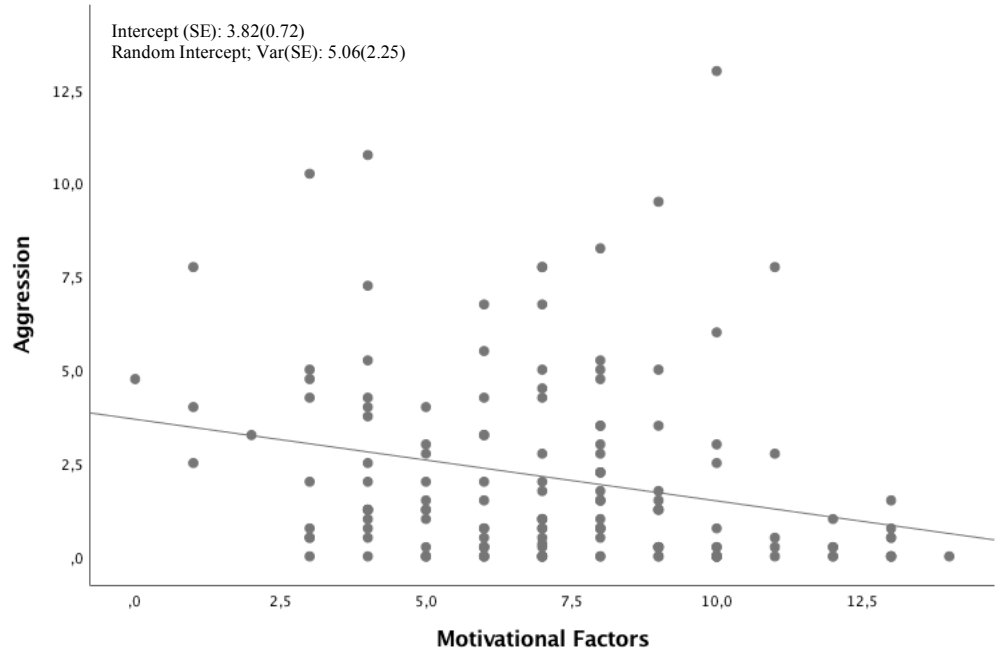

Figure 3. Estimated fit line for aggression as a function of motivational factors

Discussion

Outcomes of the current Study

The purpose of this research was to examine whether the protective factors of the SAPROF predicted outward aggression in forensic patients during the treatment. It was hypothesized, that the dynamic protective factors changed over the treatment time, and that they would be negatively related to outward aggression. As expected, the dynamic internal and motivational factors increased significantly over the treatment time, while the dynamic external factors decreased. However, only the internal and motivational factors had a significant (negative) effect on aggression. Therefore, considering the research question, it could be stated, that the internal and motivational factors predicted outward aggression during the treatment, indicating that these factors would be negatively related to aggression. In other words, it could be concluded, that participants who reported higher scores on the internal and motivational scales, reported less outward aggression during the treatment. Furthermore, results showed, that the overall level of aggression did not decrease significantly over the treatment time. Indeed, the means of aggression suggested, that it decreased averagely over time, but the size of the standard deviations indicated

a strong variance between the participants, which might explain why no significant result was found.

Even if expected, the findings showing a negative relation between internal and motivational factors and aggression did not suggest, that participants who would improve on these factors would decline more in aggression. In order to test such an outcome, improvement scores would have been needed.

The results, indicating a significant change in the internal, motivational and external protective factors during the treatment, are comparable to the outcomes of De Vries Robbé, De Vogel, Douglas & Nijman (2014), which suggested that SAPROF´s dynamic factors would change over the treatment time. However, the study from De Vries Robbé, De Vogel, Douglas & Nijman (2014) differed from the current research, by measuring violent behavior as a binary variable and considering whether participants were non-recidivists or recidivists after the treatment, depending on their level of protective and risk factors during the treatment. The present study measured outward aggression behavior on a continuous scale instead and examined its relation with protective factors during the treatment time. Still, the outcomes of both studies point into the same direction: both indicated a negative relation between protective factors and violent behavior.

Furthermore, the increase in internal and motivational factors and the decrease in external factors, supports the notion that there is a shift from external protection to protection from internal and motivational factors, across the treatment. External protection is supposed to be provided in the start of the treatment, but decreases in necessity, as mostly internal and motivational factors are stressed and improved in the course of the treatment (De Vogel et al., 2011; De Vries Robbé, De Vogel & De Spa, 2011). Theoretically, one could argue whether this notion might also relate to why no significant effect of external factors on aggression over time was found. Anyway, it is difficult to provide a clear explanation, as the effects of the protective factors on aggression were not tested for each of the three measurement points but over the whole treatment period.

To sum up, it can be concluded that the findings of the present research support the outcomes of studies which reported positive results for the predictive value of strength factors for inpatient aggression (De Vries Robbé, De Vogel, Wever, Douglas, & Nijman, 2016). In more detail, the outcomes indicated that SAPROF´s internal factors, such as coping or self-control and

its factors reflecting the motivation to participate in society tend to provide protection from outward aggression in forensic patients (De Vries Robbé, De Vogel & De Spa, 2011).

Limitations and Suggestions

There are a number of limitations to the present research. The first shortcoming concerns the predictive value of the results on the long term. Even though the results might be helpful in guiding the treatment intervention by giving insight into the relation between protective factors and outward aggression during the treatment, they do not provide information whether the factors still provide protection and predict actual outward aggression after the treatment. Furthermore, the findings related to outward aggression and disregarded whether the protective factors of the SAPROF also predicted and protected from inward aggression, such as self-harm or destructive thoughts. Future studies should also address this side of aggression.

Another limitation relates to the generalizability of the outcomes. Such as most other comparable studies, investigating the predictive value of the SAPROF, the current research also relied on a Dutch sample. Future studies will have to focus on other inpatient samples from different, international treatment settings in order to know whether similar results as in the present study or comparable other studies could be observed in other populations.

Furthermore, even if the study indicated that the SAPROF may be useful as evaluation tool for changes in personal and environmental factors inside the patient, it does not provide insight into what treatment efforts might have promoted the changes in the dynamic protective factors.

Moreover, studying the direction of change of the SAPROF´s factors by dividing them into internal, motivational and external factors posed a limitation to the significance of the results. The reason is, that two of the five external factors (Item 13 *Social Network* and Item 14 *Intimate Relationship*) are supposed to increase, while the other three Items (Item 15 *Professional Care*, Item 16 *Living Circumstances* and Item 17 *External Control*) are supposed to decrease over the treatment time (De Vries Robbé, De Vogel & De Spa, 2011). More precise results might have been obtained by dividing the items into *static*, *improving* and *decreasing* factors, as it was done by De Vries Robbé, De Vogel & De Spa (2011). Besides, the relevance of the factors may vary per patient, as they benefit from different ones. Therefore, it could be helpful to discuss with the patient beforehand, which factors shall be addressed and improved (De Vogel et al., 2011; De Vries Robbé, De Vogel & De Spa, 2011)

Another limitation is that some protective factors of the SAPROF could be risk factors under particular circumstances. For example the item *Intelligence* might be an attribute that increases the risk for violence within a psychopath (De Vogel et al. ,2011). Hence, De Vogel et al. (2011) suggested to consider the likely protective role of the items individually for each patient, rather than regarding them as generally applicable.

The main limitation of this research is that the SAPROF is studied without a risk focused SPJ assessment tool, such as the HCR-20. According to De Vogel et al. (2011) the SAPROF is intended to be used in conjunction with a risk focused SPJ assessment tool in order to provide a balanced assessment of risk and protective factors.

Recommendations and concluding remarks

Despite the limitations of the research, the results can be seen as further empirical support into the still understudied field of protective factors for violence risk in forensic patients. It can be concluded, that the present study suggested that the SAPROF might be a promising tool for predicting inpatient aggression and providing guidance in risk management and treatment efforts. Whether this guidance does lead actually to more successful clinical interventions, remains to be seen in the future. So, studies on the effectiveness of using dynamic factors of SPJ assessment tools (such as SAPROF or HCR-20) as guidance for clinical interventions in different forensic psychiatric populations are recommended (De Vries Robbé, De Vogel, Douglas & Nijman, 2014). Moreover, future studies should also focus on the working of protective factors in the reduction of violence risk, which might be helpful to provide a theoretical framework for the SAPROF.

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Appendix

Appendix A - Structured Assessment of Protective Factors for Violence Risk (SAPROF)

Codeerblad SAPROF Beschermende factoren voor gewelddadig gedrag

Te gebruiken in combinatie met de HCR-20 / HKT-30 / HCR:V3 of verwant risicotaxatie-instrument

Naam:	**Invuldatum:**
Leeftijd:	**Geslacht:** ❑ Man ❑ Vrouw
Context risicotaxatie:	

Interne items		**Score**	**Key**	**Doel**
1.	Intelligentie		❑	
2.	Hechte band in de kindertijd		❑	
3.	Empathie		❑	❑
4.	Coping		❑	❑
5.	Zelfcontrole		❑	❑

Motivationele items		**Score**	**Key**	**Doel**
6.	Werk		❑	❑
7.	Vrijetijdsbesteding		❑	❑
8.	Financieel beheer		❑	❑
9.	Motivatie voor behandeling		❑	❑
10.	Houding tegenover autoriteit		❑	❑
11.	Levensdoelen		❑	❑
12.	Medicatie ❑ n.v.t.		❑	❑

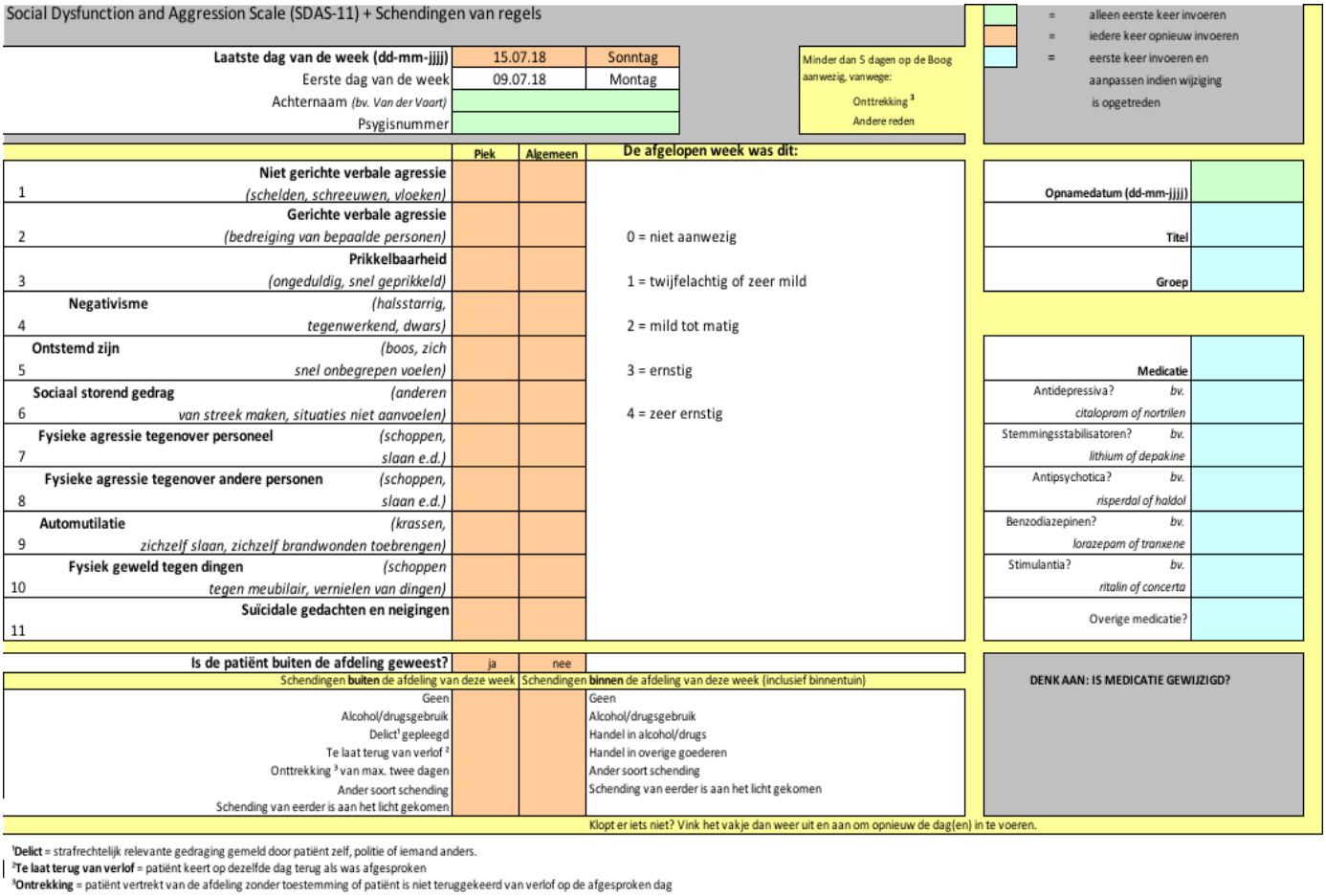
Externe items		**Score**	**Key**	**Doel**
13.	Netwerk		❑	❑
14.	Intieme relatie		❑	❑
15.	Hulpverlening		❑	❑
16.	Woonsituatie		❑	❑
17.	Toezicht		❑	❑

Aanvullende beschermende factoren:

Eindoordeel Bescherming en Geïntegreerd Eindoordeel Risico *HCR-20 / HKT-30 / HCR:V3*	**Bescherming**	**Risico**
	❑ Weinig	❑ Laag
	❑ Weinig - Redelijk	❑ Laag - Matig
	❑ Redelijk	❑ Matig
	❑ Redelijk - Veel	❑ Matig - Hoog
	❑ Veel	❑ Hoog

Naam beoordelaar(s):	**Functie:**

Appendix B - Social Dysfunction and Aggression Scale-11 (SDAS-11)



Social Dysfunction and Aggression Scale (SDAS-11) + Schendingen van regels

= alleen eerste keer invoeren
= iedere keer opnieuw invoeren
= eerste keer invoeren en aanpassen indien wijziging is opgetreden

Laatste dag van de week (dd-mm-jjjj)	15.07.18	Sonntag
Eerste dag van de week	09.07.18	Montag
Achternaam *(bv. Van der Vaart)*		
Psygisnummer		

Minder dan 5 dagen op de Boog aanwezig, vanwege:
Onttrekking [3]
Andere reden

		Piek	Algemeen	De afgelopen week was dit:
1	**Niet gerichte verbale agressie** *(schelden, schreeuwen, vloeken)*			
2	**Gerichte verbale agressie** *(bedreiging van bepaalde personen)*			0 = niet aanwezig
3	**Prikkelbaarheid** *(ongeduldig, snel geprikkeld)*			1 = twijfelachtig of zeer mild
4	**Negativisme** *(halsstarrig, tegenwerkend, dwars)*			2 = mild tot matig
5	**Ontstemd zijn** *(boos, zich snel onbegrepen voelen)*			3 = ernstig
6	**Sociaal storend gedrag** *(anderen van streek maken, situaties niet aanvoelen)*			4 = zeer ernstig
7	**Fysieke agressie tegenover personeel** *(schoppen, slaan e.d.)*			
8	**Fysieke agressie tegenover andere personen** *(schoppen, slaan e.d.)*			
9	**Automutilatie** *(krassen, zichzelf slaan, zichzelf brandwonden toebrengen)*			
10	**Fysiek geweld tegen dingen** *(schoppen tegen meubilair, vernielen van dingen)*			
11	**Suïcidale gedachten en neigingen**			

Opnamedatum (dd-mm-jjjj)		
Titel		
Groep		
Medicatie		
Antidepressiva? *bv. citalopram of nortrilen*		
Stemmingsstabilisatoren? *bv. lithium of depakine*		
Antipsychotica? *bv. risperdal of haldol*		
Benzodiazepinen? *bv. lorazepam of tranxene*		
Stimulantia? *bv. ritalin of concerta*		
Overige medicatie?		

Is de patiënt buiten de afdeling geweest?	ja	nee

Schendingen **buiten** de afdeling van deze week			Schendingen **binnen** de afdeling van deze week (inclusief binnentuin)
Geen			Geen
Alcohol/drugsgebruik			Alcohol/drugsgebruik
Delict[1] gepleegd			Handel in alcohol/drugs
Te laat terug van verlof [2]			Handel in overige goederen
Onttrekking [3] van max. twee dagen			Ander soort schending
Ander soort schending			Schending van eerder is aan het licht gekomen
Schending van eerder is aan het licht gekomen			

DENK AAN: IS MEDICATIE GEWIJZIGD?

Klopt er iets niet? Vink het vakje dan weer uit en aan om opnieuw de dag(en) in te voeren.

[1] **Delict** = strafrechtelijk relevante gedraging gemeld door patiënt zelf, politie of iemand anders.
[2] **Te laat terug van verlof** = patiënt keert op dezelfde dag terug als was afgesproken
[3] **Ontrekking** = patiënt vertrekt van de afdeling zonder toestemming of patiënt is niet teruggekeerd van verlof op de afgesproken dag