Validity of the Self-Report Psychopathy Scales (SRP-III Full and Short Versions) in a Community Sample

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Abstract

The psychometric properties of the 64-item Self-Report Psychopathy Scale–III (SRP-III) and its abbreviated 28-item SRP–Short Form (SRP-SF) seem promising. Still, cross-cultural evidence for its construct validity in heterogeneous community samples remains relatively scarce. Moreover, little is known about the interchangeability of both instruments. The present study addresses these research gaps by comparing the SRP-III and SRP-SF factorial construct validity and nomological network in a Belgian community sample. The four-factor model of psychopathy was evaluated (N = 1,510) and the SRP scales' relationship with various external correlates (i.e., attachment, bullying and victimization, right-wing attitudes, right-wing authoritarianism, and response styles) was examined (n = 210). Both SRP versions demonstrated a good fit for the four-factor model and a considerable overlap with the nomological network of psychopathy. The results suggested that the SRP-SF provides a viable alternative to the SRP-III for assessment in the community. Theoretical and practical implications are discussed.

Psychopathy is characterized by a pervasive pattern of interpersonal (e.g., manipulation), affective (e.g., lack of empathy), and behavioral (e.g., impulsivity) features (Hare, 2003; Hare & Neumann, 2006). It is regarded as one of the most destructive personalities (Hare, 1998), showing robust correlations with criminality, recidivism, and aggression (Coid, Yang, Ullrich, Roberts, & Hare, 2009; Hare & Neumann, 2009; Olver, Neumann, Wong, & Hare, 2013). Recently, studies have documented that psychopathy can be present in different degrees in prison and community samples, and that there are little qualitative differences between these samples, suggesting that the construct is dimensional in nature (e.g., Edens, Marcus, Lilienfeld, & Poythress, 2006; Hare, 1998; Neumann & Hare, 2008). Consequently, the interest for psychopathic traits in the community has grown (e.g., Coid, Freestone, & Ullrich, 2012; Neumann & Pardini, 2012; Watt & Brooks, 2012).

The Self-Report Psychopathy Scale (SRP; Hare, 1980; SRP-II; Hare, Hemphill, & Harpur, 1989; SRP-III; Neumann, Schmitt, Carter, Embley, & Hare, 2012; Paulhus, Neumann, & Hare, in press) was developed because the Psychopathy Checklist (PCL; Hare, 1980; PCL–Revised [PCL-R]; Hare, 1991, 2003) and its shorter screening version (PCL-SV; Hart, Cox, & Hare, 1995) remain difficult to administer in the broader population. Particularly, an efficient PCL assessment

in the broader community is hampered as the PCL requires a clinical interview complemented by a review of collateral file information (e.g., criminal record), the latter often not available in nonforensic samples (Uzieblo, Verschuere, Van den Bussche, & Crombez, 2010; Williams, Paulhus, & Hare, 2007). Moreover, observer-rated research in the community remains expensive and time consuming (Lilienfeld, 1998; Williams et al., 2007, but see Neumann & Hare, 2008; Vitacco, Neumann, & Jackson, 2005). Hence, researchers have started focusing on the development of *self-report* instruments of psychopathy, and this approach is increasingly considered as a reliable and valid way to assess psychopathic traits in the broader community (e.g., Neumann, Uzieblo, Crombez, & Hare, 2013; Ray et al., 2013).

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The SRP Scale (Hare, 1980) is a long-standing self-report instrument that is gaining considerable empirical support in its ability to assess psychopathic traits. The original SRP scale was developed in the 1980s as a self-report instrument correspondent to the PCL (Hare, 1980). The SRP scale has since undergone several revisions, including the SRP-II (Hare et al., 1989) and the SRP-III (Neumann et al., 2012; Paulhus et al., in press). Its current version, the SRP-III (Paulhus et al., in press) consists of 64 items which are answered on a 5-point Likert-type scale and comprises four subscales mirroring the suggested four-factor structure of the PCL-R: Interpersonal Manipulation (IPM; i.e., interpersonal factor, which taps into characteristics such as pathological lying and manipulating), Callous Affect (CA; i.e., affective factor, which includes items relating to low empathy and a general lack of concern for other people), Erratic Lifestyle (ELS; i.e., lifestyle factor, which reflects features such as recklessness and impulsivity), and Criminal Tendencies (CT; i.e., antisocial factor, which measures characteristics such as overt antisociality as well as criminal acts and versatility; Williams et al., 2007). A recent evolution is the shortening of the SRP-III to a 28-item version (SRP-SF; Carré, Hyde, Neumann, Viding, & Hariri, 2012; Neumann & Pardini, 2012; Paulhus et al., in press). The SRP-SF provides important advantages, one of which is reduction of the administration time, but more important that it was developed using model-based measurement theory (Neumann, Uzieblo, et al., 2013).

Over the past decade, the SRP-III has been relatively well examined regarding its psychometric properties in various populations including college students (e.g., Williams et al., 2007), community (e.g., Watt & Brooks, 2012), and offender samples (e.g., Sandvik et al., 2012). Construct validity studies that have examined its factor structure report a four-factorial structure for the SRP-III in college students (Neal & Sellbom, 2012; Seibert, Miller, Few, Zeichner, & Lynam, 2011; Williams et al., 2007) and community samples (Freeman & Samson, 2012; Mahmut, Menictas, Stevenson, & Homewood, 2011; Neumann et al., 2012; Watt & Brooks, 2012). A number of these studies examined competing factor solutions and all report a superior fit for the four-factor model compared with a one-, two-, or three-factor model of psychopathy (Mahmut et al., 2011; Neal & Sellbom, 2012; Williams et al., 2007). The SRP-III also shows convergent relations with other widespread self-report measures of psychopathy (e.g., Seibert et al., 2011), such as the Psychopathy Personality Inventory Revised (Lilienfeld & Widows, 2005) and the Levenson Self-Report of Psychopathy (Levenson, Kiehl, & Fitzpatrick, 1995). Moreover, the SRP-III relates to constructs relevant to the psychopathic syndrome, such as normal-range personality traits (e.g., Seibert et al., 2011; Tapscott, Vernon, & Veselka, 2012; Williams et al., 2007), low levels of empathy (e.g., Mahmut et al., 2011; Neal &

Sellbom, 2012; Watt & Brooks, 2012), and antisocial behavior (e.g., Mahmut et al., 2011; Watt & Brooks, 2012). However, studies have largely focused on the usual suspects to examine the SRP scales' nomological net, such as antisocial behavior or externalizing constructs. The nomological net of the SRP-III and its overlap with that of the broader psychopathic construct needs to be further mapped beyond typical constructs measured.

Since the SRP-SF was only recently developed, fewer studies have targeted the psychometric properties of the 28-item SRP-SF. So far, support for a four-factorial structure akin to the SRP-III has been documented in several samples, including students (e.g., Carré et al., 2012;), community participants (e.g., Foulkes, Seara-Cardoso, Neumann, Rogers, & Viding, 2013; Foulkes, McCrory, Neumann, & Viding, 2014), adult males from the Pittsburg Youth Study (Neumann & Pardini, 2012), and in a North American mega sample (N = 1,730; Neumann, Hare, & Pardini, 2014) comprising college students, community participants, and offenders. Similar to the SRP-III (e.g., Fite, Raine, Stouthamer-Loeber, Loeber, & Pardini, 2010; Vitacco, Neumann, & Pardini, 2014), the SRP-SF relates to psychopathy-relevant constructs such as delinquent behavior and externalizing psychopathology (Neumann & Pardini, 2012), and new research is beginning to reveal links to other psychopathy-relevant constructs such as a deviant amygdala structure and functioning (e.g., Carré et al., 2012) and a deviant social reward and information processing (Foulkes et al., 2014). The SRP-SF is increasingly employed in research, since it offers a more efficient way to capture psychopathic traits. Surprisingly though, the psychometric properties of the SRP-SF have not yet been directly compared with those of the SRP-III. Because of the lack of such comparison, it remains unclear whether the SRP-SF taps into the same construct as the SRP-III, and thus whether both scales are interchangeable.

So far, findings are promising for both the SRP-III and SRP-SF in terms of their psychometric properties since they suggest that both scales reflect an underlying structure and a nomological net that is reminiscent of that of the broader psychopathic construct. Yet college samples often leave little variation in terms of gender, age, and level of psychopathic traits. Studies that include noncollege participants also remain somewhat limited in terms of heterogeneity. For example, most samples only include a higher educated segment of the population or relatively young participants (e.g., Freeman & Samson, 2012; Watt & Brooks, 2012). Although evidence from two recent studies in larger and more heterogeneous samples adds considerable weight to the construct validity of the SRP scales (Neumann et al., 2014; Neumann et al., 2012), these studies did not administer the full 28- or 64-item SRP scales. So, the SRP-III and SRP-SF could benefit from additional findings in larger, representative community samples.

Another interesting challenge for the SRP scales is to examine its construct validity across cultural contexts. Psychopathic traits are found across the globe (e.g., Neumann et al., 2014; Sullivan & Kosson, 2006) and are considered to surpass cultural context. However, administering an instrument in different populations can affect its psychometric properties such as its underlying factorial structure and external validity (Bolt, Hare, & Neumann, 2007). Although generally little is known on the cross-cultural validity of self-report assessments of psychopathic traits, studies examining sub-clinical psychopathy in different cultures are starting to reveal that psychometric features of self-report instruments can vary across countries and cultures (e.g., Shariat et al., 2010; Yokota, 2012). The SRP scales were developed in North America and have mainly been validated in its cultural context of origins. Increasingly, studies are paying attention toward its cross-cultural performance. A recent study (Neumann et al., 2012) employed a 19-item SRP version in 11 world regions and found strong cross-cultural support for its structural and external validity. Additionally, the 64-item SRP-III has been validated in Australian samples (Freeman & Samson, 2012; Watt & Brooks, 2012) and the SRP-SF is increasingly being used in Anglo-Saxon samples (e.g., Foulkes et al., 2013; Foulkes et al., 2014; Seara-Cardoso, Dolberg, Neumann, Roiser, & Viding, 2013). Yet studies targeting the construct validity of the SRP-III and SRP-SF in European regions and employing particularly larger samples are still lacking and sorely needed given the potential moderating impact of culture. Such analysis provides insight in the universality of SRP-defined psychopathy and whether the SRP-III and SRP-SF can be readily implemented in different populations.

In sum, the SRP Scale–III and its Short Form are frequently employed to assess psychopathic traits. Although empirical support for its construct validity is encouraging, some critical steps in its validation process are still lacking. First, the SRP-III and SRP-SF are both frequently used and findings from the SRP scales are often interpreted exchangeable. Yet due to the lack of a direct comparison between the psychometric properties of the SRP-III and its shorter version, it remains unclear whether findings from both scales are interchangeable. The exploration whether the SRP-SF is a viable representation of the SRP-III is an essential step in extending its validation process. Second, the overlap in the nomological net for the SRP scales with that of the broader psychopathic construct beyond traditional antisocial correlates deserves further attention. Third, continued construct validation can be provided by additional examination of its psychometric properties within diverse cultural communities. Such validation will help clarify whether the SRP scales tap into a similar construct when applied in different cultural contexts.

The Current Study

The present study aims to further augment the validity of the SRP-III and SRP-SF by additional examinations and a direct comparison of their psychometric properties focusing on European and especially larger, representative community samples. A first key aim of this study is to directly compare the psychometric properties (i.e., internal consistency, factor structure, and nomological net) of the SRP-III and SRP-SF in a large European community sample. To the best of our knowledge, this is the first study to address its interchangeability.

Second, we aim to further place the SRP scales in the nomological network of the broader psychopathic construct in a subset of the community sample by moving beyond traditional correlates. Unlike most previous studies, we focus on a broad range of external correlates that capture various aspects related to the psychopathic construct by considering attachment constructs (i.e., attachment-avoidance and attachment-anxiety), personality variables (i.e., right-wing authoritarianism), social attitudes (i.e., right-wing extremist attitudes), antisocial behavior (i.e., bullying), and victimization (i.e., peer victimization). Together, these correlates cover a broad spectrum of constructs allowing for a more extensive examination of the nomological net. We also included two response styles: social desirability and feigning. Whereas social desirability is a form of positive impression management, feigning taps into faking bad response distortion (see Rogers, 2008; Rogers et al., 2014). Considering these response styles in the validation process is important given the deceitful and manipulative nature attributed to psychopathy (Edens, Hart, Johnson, Johnson, & Olver, 2000; Hare, 1991; Lilienfeld & Fowler, 2006). Although current findings suggest that high scores on the SRP-III are in fact inversely related to impression management tactics (Freeman & Samson, 2012; Watt & Brooks, 2012), it remains unclear to what extent the Dutch SRP scales are influenced by response distortion.

A third aim of this study is to evaluate whether the psychometric properties (i.e., mean scores, internal consistency, factor structure, and nomological net) of the SRP-III and SRP-SF hold in a European community sample. To our knowledge, this is the first study to address the performance of the SRP-III and SRP-SF in a large European community sample. If the SRP scales are transferable from one culture to another, we expect that its psychometric properties found in previous studies across the globe will extend to a Belgian context.

Method

Participants

The community sample ($N = 1,510$) consisted of 48.01% male ($M = 33.68$ years, $SD = 13.89$, range: 17-90) and 51.85% female ($M = 32.05$ years, $SD = 13.86$, range: 17-85) participants. Educational background was relatively varied among participants: approximately one half of the sample had completed higher education (53.0%), over one-third had completed

higher secondary education (37.5%), 6.1% and 2.4% indicated they completed primary or lower secondary education, respectively. Most participants had a Belgian nationality (91.7%). Relationship status was quite diverse across the sample: the majority of the sample was single (35.4%), in a relationship (23.2%), or married (19.9%), and a smaller number of participants was divorced (8%), living with their partner (7.2%), or were a widow or widower (0.3%). Over half of the participants had no children (63.6%), 14.3% had two children, 7.5% three, 6.5% one child, and 1.9% having four or more children. Missing values for demographic information ranged from 0.1% (i.e., gender) to 6.2%. (i.e., number of children).

Additional external correlates were collected in a subgroup of the total sample ($n = 210$) consisting of 37.1% male ($M = 28.38$ years, $SD = 10.93$) and 62.9% female ($M = 23.39$ years, $SD = 9.24$) participants.[1] A third smaller subset of the first subsample ($n = 97$) comprising 37.1% male ($M = 21.03$ years, $SD = 4.95$) and 62.9% female ($M = 18.34$, $SD = 0.77$) participants were used for a second SRP-III assessment.[2]

Measures

The *SRP-III* (Paulhus et al., in press) is a 64-item self-report measure of psychopathy. Responses are given on a 5-point Likert-type scale (1 = *disagree strongly* to 5 = *agree strongly*). Similar to the PCL-R (Hare, 2003), the SRP-III constitutes of an interpersonal (IPM), affective (CA), lifestyle (ELS), and antisocial factor (CT). In this study, the Dutch version of the SRP-III was administered (Uzieblo, de Ruiter, Crombez, Paulhus, & Hare, 2007). The Dutch SRP-III was translated according to the Functional Assessment of Chronic Illness Therapy (i.e., FACIT) guidelines for translation (Eremenco, Cella, & Arnold, 2005). This involves two independent forward translations from English to Dutch, after which a Dutch native speaker reconciles these two Dutch-translated versions. Then, a back translation was performed from Dutch to English and reviewed by bilingual experts resulting in one translated version based on these reviewers.

Its factor structure is not examined yet, however, results suggest a good internal consistency for the Dutch SRP-III (Caes et al., 2012). The SRP-III was administered twice, with an interval of 52 days, to assess test–retest reliability in a subset of the total sample ($n = 97$). Next, we derived the SRP–Short Form (SRP-SF; Paulhus et al., in press) from the SRP-III items. The SRP-SF consists of a subset of 28 of the original 64 items. Results indicate that the SRP-SF demonstrates a satisfactory to excellent internal consistency (e.g., Carré et al., 2012; Jones, 2013; Neumann & Pardini, 2012). The Dutch version of the SRP-SF has not yet been evaluated for internal consistency.

The *Experiences in Close Relationships–Revised* (ECR-R; Fraley, Waller, & Brennan, 2000) is a 36-item self-report measuring individual differences in adult attachment-related anxiety (i.e., anxiety and vigilance concerning rejection and abandonment) and avoidance (i.e., discomfort with closeness and dependency or a reluctance to be intimate with others) (Fraley & Shaver, 2000, pp. 142-143). Participants are asked to answer statements on a 7-point Likert-type scale (from 1 = *disagree strongly* to 7 = *agree strongly*). Participants were instructed to respond to the items with regard to their relationship with their mother. The Dutch translation of the ECR-R was used (ECR-R-NL; Buysse & Dewitte, 2004). The Dutch ECR-R has demonstrated good psychometric properties in Dutch-speaking participants, including a two-factorial factor structure, good internal consistency, and test–retest reliability (Kooiman, Klaassens, van Heloma Lugt, & Kamperman, 2013). The Dutch ECR-R also demonstrates meaningful relationships with external correlates (e.g., Dewitte, De Houwer, Goubert, & Buysse, 2010; Kooiman et al., 2013). In the present study, the ECR-R-NL demonstrated good to excellent internal consistency for both the anxiety ($\alpha = .84$) and avoidance scale ($\alpha = .94$).

The *Adolescent Peer Relations Instrument–Bully and Target Scale* (APRI-BT; Parada, 2000) is a 36-item measure consisting of six subscales, namely verbal, physical, and social-relational bullying and victimization behavior. Participants are asked to indicate on a 6-point Likert-type scale (from 1 = *never* to 6 = *everyday*) how often they have engaged in or were victim of bullying behaviors at school. More specifically, participants were instructed that the items refer to their experiences in high school period. All APRI-BT scales have demonstrated sound psychometric properties (e.g., Marsh et al., 2011). In this study, the Dutch version of the APRI-BT was used. The Dutch APRI-BT was translated based on the FACIT (Eremenco et al., 2005) procedures and guidelines for translation including forward and back translation. Its internal consistency was found to be good to excellent in this study (ranging from $\alpha = .71$ to $\alpha = .94$ across subscales).

The *Qualitative Questionnaire for Right-Wing Extremism, Racism and Xenophobia General Extremist Attitude Scale* (RERAX; Petri, 2006) comprises 44 items assessing right-wing extremist, racist, and xenophobic attitudes (i.e., dislike of foreigners). Participants are asked to indicate one of the following answers on each item: "yes," "no," or "?" (i.e., "I don't know" or "not applicable"). The RERAX was not translated since its original form is in Dutch. Psychometric properties are not published yet, however, the internal consistency of the RERAX *General Extremist Attitude Scale* in this study was found to be good ($\alpha = .77$).

The *Right-Wing Authoritarianism Scale* (RWA; Altemeyer, 1981) assesses a personality trait reflecting submission to authority, readiness for aggressive behavior when the individual believes it is legitimized by the authority, and conventionality (Altemeyer, 2004). Responses are given for each of the 11 statements (11-item Dutch version

translated by Meloen, 1991) on a 5-point Likert-type scale (1 = *disagree strongly* to 5 = *agree strongly*). The Dutch version of the RWA displays good psychometric properties in studies with Dutch-speaking participants such as good internal consistency (e.g., Dhont & Van Hiel, 2009; Duriez, Klimstra, Luyckx, Beyers, & Soenens, 2012) and relations to relevant variables such as punitive attitudes and social dominance orientation (Colémont, Van Hiel, & Cornelis, 2011; Duriez & Van Hiel, 2002). In the present study, the internal consistency was found to be nearly acceptable (α = .67). Mean interitem correlations, calculated since the RWA is particularly short, were found to be acceptable (*r* = .16).

The *Eysenck Personality Questionnaire–Revised: Lie Scale* (EPQ-R Lie Scale; Eysenck & Eysenck, 1975) assesses positive impression management or the degree to which individuals respond in a social desirable way. A 21-item (yes or no answer format) Dutch version was administered (Sanderman, Arrindell, Ranchor, Eysenck, & Eysenck, 1995). The Dutch EPQ-R-Lie scale has demonstrated satisfactory internal consistency in Dutch participants (e.g., Barelds & Luteijn, 2002; Sanderman, Arrindell, Ranchor, Eysenck, & Eysenck, 2012). Its internal consistency in this study was found to be nearly acceptable (α = .69).

The *Structured Inventory of Malingered Symptomatology* (SIMS; Smith & Burger, 1997) evaluates a malingering response by measuring atypical psychiatric, cognitive, and memory complaints that indicate whether an individual fakes or exaggerates symptoms. The exaggeration of symptoms without an underlying motivation, however, can be considered as a feigning response tendency (see Rogers, 2008). Participants respond to 75 dichotomous "yes or no" items. We employed the Dutch SIMS (Merckelbach & Smith, 2003) in this study. The Dutch SIMS was developed using a translation and back translation procedure and exhibits a good internal consistency, test–retest reliability, and good diagnostic accuracy (e.g., Merckelbach & Smith, 2003). The Dutch SIMS also shows significant relationships to meaningful constructs such as depression, trait anxiety, and fantasy proneness (Merckelbach & Smith, 2003). The internal consistency in this study was bordering acceptability (α = .68).

Procedure

The ethical committees of Ghent University or of the University College Thomas More approved the involved studies conducted between 2011 and 2013.[3] Before the assessment, all participants signed an informed consent. Two sampling procedures[4] were applied. First, the majority of the current sample (66.6%) was recruited through snowball sampling, an economic and efficient method commonly used in social sciences (Atkinson & Flint, 2001). In total, seven undergraduate students contacted participants among their acquaintances, who in turn provided another series of

volunteers, and so on. Second, 33.4% of the sample consisted of undergraduate students who obtained a course credit for their participation. The undergraduates participated individually (86.1%) or in group (13.9%). The questionnaire order was counterbalanced across participants. The second SRP assessment took place 52 days after the first assessment.

Psychopathy Factors. Means and standard deviations of psychopathy scores were calculated for total and subscale scores for the SRP scales. Differences in psychopathy scores between male and female participants were interpreted using Cohen's *d* effect size. Due to missing values, the sample size was reduced to *n* = 1,504 and *n* = 1,501 for the SRP-III and SRP-SF scores, respectively. Psychopathy scores for the current sample were compared with descriptive findings from previous studies using Cohen's *d* as an indicator for the magnitude of difference between the scores (*d* = .20 indicates a small effect, *d* = .50 indicates a moderate effect, and *d* = .80 indicates a large effect; Cohen, 1988).

Confirmatory Factor Analysis. CFA was performed on the SRP-III and SRP-SF (Paulhus et al., in press). The CFA models tested whether the SRP items could be accounted for in terms of the interpersonal, affective, lifestyle, and antisocial four-factor structure of psychopathy, in line with previous research (Carré et al., 2012; Neumann et al., 2014; Neumann & Pardini, 2012). Specifically, a four-factor model with each of the 64 items (16 items/factors) was specified to load onto their respective factors, which included a method factor for the reverse scored items since such items have unique covariance associated with this wording effect. Also, we tested a four-factor parcel model in which four-item "mini" composites (i.e., parcels) were computed such that there were four parcels per factor, consistent with previous research on psychopathy (Neumann, Kosson, Forth, & Hare, 2006). The use of parcels stemming from unidimensional factors generally results in less bias in structural parameters than the use of individual items (Bandalos, 2002). Although some debate has surrounded the use of parcels (e.g., Marsh, Lüdtke, Nagengast, Morin, & Von Davier, 2013), parceling has demonstrated to be a reliable tool to estimate latent models and may provide some benefit compared with using single-item indicators (e.g., Bandalos, 2002; Little, Rhemtulla, Gibson, & Schoemann, 2013).[5] The key point is, if the items that make up a parcel stem from an underlying unidimensional factor, then it is often reasonable to aggregate such items into parcels. If multidimensional item subsets are inappropriately parceled together (cf. Cooke, Michie, & Skeem, 2007), then the aggregation across such multidimensionality into parcels will by definition result in a misspecified model (for more on parcels, see Hare & Neumann, 2006). Finally, the 28 items that comprise the SRP-SF were used to test the

Table 1. Internal Consistencies, Scale Homogeneity, Means, Standard Deviations, Skewness, and Kurtosis Statistics for the SRP-III and SRP-SF.

	α	r	M (SD)	Skewness	SE	Kurtosis	SE	Bivariate test–retest	Partial test–retest
SRP-III	.90	.13	134.23 (25.01)	0.43	0.06	0.13	0.13	.92***	
IPM	.82	.23	37.16 (8.96)	0.46	0.06	0.33	0.13	.88***	.72***
CA	.75	.16	35.04 (7.72)	0.45	0.06	0.45	0.13	.79***	.69***
ELS	.78	.19	39.43 (9.03)	0.23	0.06	−0.38	0.13	.92***	.86***
CT	.69	.14	22.62 (6.48)	1.25	0.06	1.34	0.13	.77***	.64***
SRP-SF	.84	.16	52.50 (11.81)	0.54	0.06	0.06	0.13	.89***	
IPM	.73	.28	14.56 (4.41)	0.49	0.06	0.08	0.13	.81***	.60***
CA	.60	.17	13.53 (3.90)	0.56	0.06	0.01	0.13	.82***	.62***
ELS	.68	.24	15.79 (4.56)	0.33	0.06	−0.25	0.13	.83***	.76***
CT	.44	.15	8.61 (2.32)	1.67	0.06	2.95	0.13	.70***	.61***

Note. SE = standard error; SRP-III = Self-Report Psychopathy Scale Full Form, Total score; SRP-SF = Self-Report Psychopathy Scale Short Form, Total score; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; CT = Criminal Tendencies; r = mean interitem correlation.

four-factor model at the item level, consistent with previous research (Carré et al., 2012). For the item-level models, all model analyses were conducted with M*plus* (Muthén & Muthén, 1998-2012), using the robust weighted least squares estimation procedure, given the ordinal nature of the SRP items. Robust maximum likelihood was used for parameter estimation for the parcel-based model. As recommended by Hu and Bentler (1999) a two-index strategy was used to assess model fit: the comparative fit index (CFI) and an absolute fit index, the root mean square error of approximation (RMSEA). Instead of relying on stringent model fit indices, we used more conventional fit criteria (Hoyle, 1995; CFI ≥ .90, RMSEA < .08), given that as model complexity increases, so does the difficulty of achieving conventional levels of model fit (Marsh, Hau, & Wen, 2004). To avoid falsely rejecting viable latent variable models, we believed use of conventional criteria was reasonable. Differences in model fit for the nonparceled models were evaluated using the relative improvement in the CFI. Following Cheung and Rensvold (2002; from Neumann, Johansson, & Hare, 2013), a change in CFI (i.e., ΔCFI) larger than .01 was regarded as a significant difference in model fit.

Reliability Analysis. Internal consistency and test–retest reliability coefficients were calculated for the SRP-III and SRP-SF and their separate subscales. For test–retest reliability on the subscale level, both bivariate and partial correlations were examined since partial correlations allow for the controlling of other SRP-subscale scores. Internal consistency (Cronbach's alpha) was considered acceptable from the lower limit of α ≥ .70, good for α = .80 to .90, and excellent for α ≥ .90 (Nunnally & Bernstein, 1994). Because scale length affects Cronbach's alpha (Cortina, 1993; Cronbach, 1951), additional mean interitem correlations indexing scale homogeneity were calculated and considered acceptable if r ≥ .15 (Clark & Watson, 1995; Schmitt, 1996).

Correlational Analysis. Correlations with external correlates were examined for the SRP-III and SRP-SF total and subscale scores using Pearson correlation coefficients. The size of the correlational effects was evaluated using Cohen's *d*. Effect sizes around *r* = .10 were deemed as small, around *r* = .30 moderate, and around *r* = .50 as large (Cohen, 1988). Williams's (1959) T^2 statistic was calculated to estimate significant differences between correlations of the SRP-III and SRP-SF (Steiger, 1980).

Results

Descriptive statistics including means, standard deviations, internal consistencies, mean interitem correlations, skewness and kurtosis statistics, and test–retest reliabilities for the SRP-III and SRP-SF total scores and subscales are reported in Table 1. The SRP scores in our sample were widely distributed ranging from 68 to 239. Also, 43 participants (2.9%) scored 2 standard deviations over the mean, indicating that the sample comprised a reasonable proportion of individuals with psychopathic traits. Overall, highest scores were observed for the ELS and IPM subscales, followed by the CA subscale. Scores for the CT subscale were markedly lower compared with the other subscales. Male participants also scored significantly higher on both SRP scales and its subscales compared with female participants. Cohen's *d* indicated a moderate to large effect (*d* = .78) for the difference in total SRP-III scores between male (*M* = 143.70, *SD* = 25.06) and female participants (*M* = 125.50, *SD* = 21.58), and a moderate effect for the difference in total SRP-SF scores between male (*M* = 56.50, *SD* = 12.31) and female participants (*M* = 48.82, *SD* = 9.99).

Compared with North American norm scores, mean SRP-III scores in the current sample were considerably smaller compared with norm scores for male (*d* = .82) and female (*d* = .60) participants (Paulhus et al., in press), but

Table 2. Model Fit Results for the 64-Item and 16-Parcel SRP-III and 28-Item SRP-SF Four-Factor Model of Psychopathy.

SRP four-factor model	CFI	RMSEA	$\chi^2(p)$
Full version 64-item (and method factor)	.84	.05	
Parcel model 64-item (four parcels/factors)	.92	.06	$\chi^2(98) = 785.91\ (p < .001)$
Short version 28-item	.90	.05	$\chi^2(344) = 2352\ (p < .001)$

Note. SRP-III = Self-Report Psychopathy Scale–III full version 64-item Form; SRP-SF = Self-Report Psychopathy Scale–Short Form; RMSEA = root mean square error of approximation; CFI = comparative fit index; $\chi^2(p)$ = robust chi-square indicator and *p* value. Method refers to a factor specified to account for reverse scored item covariances across factors. The robust chi-square indicator cannot be used for chi-square difference testing when using the robust weighted least squares estimator.

were similar to mean scores reported in a larger North American college sample (*d* = .12; Neal & Sellbom, 2012). The mean SRP-SF scores in our sample were very similar (*d* = .03) to mean scores from a large community sample including largely North American respondents and a smaller proportion of Indian, Canadian, and European participants (i.e., 14%; Foulkes et al., 2014). Moreover, the mean scores found in our study were considerably lower compared with offender samples for both the SRP-III (*d* = 1.91; Sandvik et al., 2012; *d* = 1.67; Baskin-Sommers, Newman, Sathasivan, & Curtin, 2012) and the SRP-SF (*d* = 1.20; see Paulhus et al., in press).

Reliability

Reliability coefficients for the SRP-III and SRP-SF total score level were found to be good to excellent (see Table 1). On the SRP-III subscale level, internal consistencies for the subscales were also found to be nearly acceptable to excellent (range from α = .69 to α = .90). For the SRP-SF subscales on the other hand, alpha reliability ranged from poor to satisfactory (from α = .44 to α = .73; see Table 1). It is worth considering the mean interitem correlations for the SRP-SF subscales given the impact of scale length on the alpha coefficient. Though mean interitem correlations for the SRP-SF IPM, CA, and ELS subscales were good, it is of note that the SRP-SF CT subscale mean interitem correlation only just reached the minimum threshold (Clark & Watson, 1995). For this subscale, the exclusion of the item registering gang activity would improve the alpha reliability to α = .58. This was the only item in the CT subscale characterised by a curvilinear response pattern. Overall, most responses for this item were situated at the low or high extreme values.

Test–retest reliability coefficients for the SRP-III and SRP-SF total scores were deemed as excellent (see Table 1). On the subscale level, test–retest reliability was satisfactory to excellent when calculated via bivariate test–retest correlations. Test–retest reliability decreased for all subscales using partial correlations ranging from *r* = .60 to *r* = .86.

Confirmatory Factor Analysis

Table 2 displays the model fit for the CFAs for the SRP-III (64-item and 16-parcel) and the 28-item SRP-SF. Model fit

for the SRP parcel model and the SRP-SF were associated with good model fit, and the RMSEA indicated good fit for the full version 64-item SRP model and that the four-factor model was able to reproduce the observed data with a high degree of precision. Chi-square indices for the SRP-III and SRP-SF parcel models did not indicate a good fit. The CFI for the 64-item model fell short of the conventional (.90) benchmark, but this is not surprising given the challenges of modeling all 64-items which requires 134 parameters to be estimated (64 factor loadings, 64 errors variance, 6 factor correlations). Results for this model are consistent with previous research that has supported the structural validity of the SRP scales (Neal & Sellbom, 2012).

The change in CFI indicated a significant difference between the full SRP-III 64-item version and the SRP-SF model (ΔCFI = .06). Figure 1 and Figure 2 represent the latent factor structure and the respective indicator loadings for the SRP parcel and SRP-SF four-factor models (items loadings for the 64-item model available on request from the corresponding author). All manifest variable indicators loaded significantly on their respective latent variables, and each model was associated with good fit. The results also indicated that all latent factors for the SRP-III and SRP-SF were significantly intercorrelated.

Interrelations Between the SRP Scores and External Variables

The SRP-III and SRP-SF total scores were inversely related to social desirability, specifically through the IPM and ELS subscales. The SRP-SF was positively related to a feigning response style, though this effect was weak. Given the retrieved association, subsequent analyses for the external correlates were controlled for response styles using partial correlations (see Tables 3 and 4). Overall, the external correlations for the SRP scores only generated large effects for verbal and physical bullying, and moderate effects for attachment avoidance and social bullying. The SRP scales only related weakly to victimization and right-wing extremist attitudes. No significant relationships between the SRP scales and attachment anxiety or right-wing authoritarianism were found. Correlational patterns for significant effects also differed across the subscales: IPM was associated with
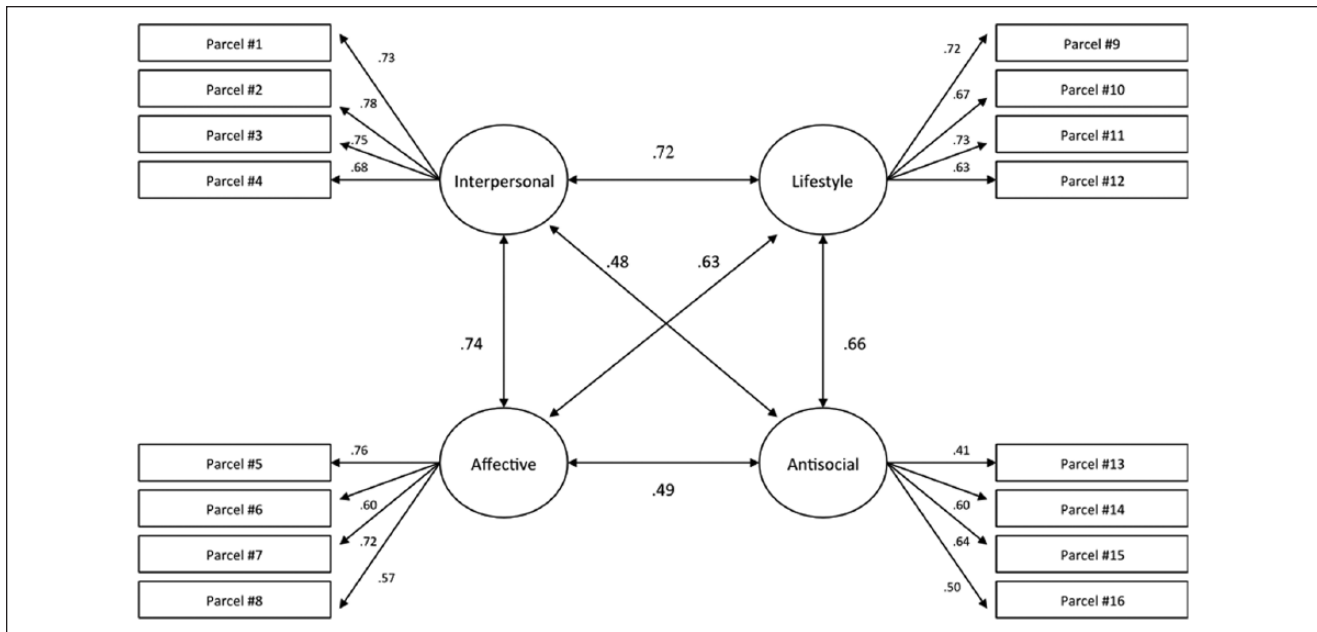
Figure 1. SRP-III parcel model.
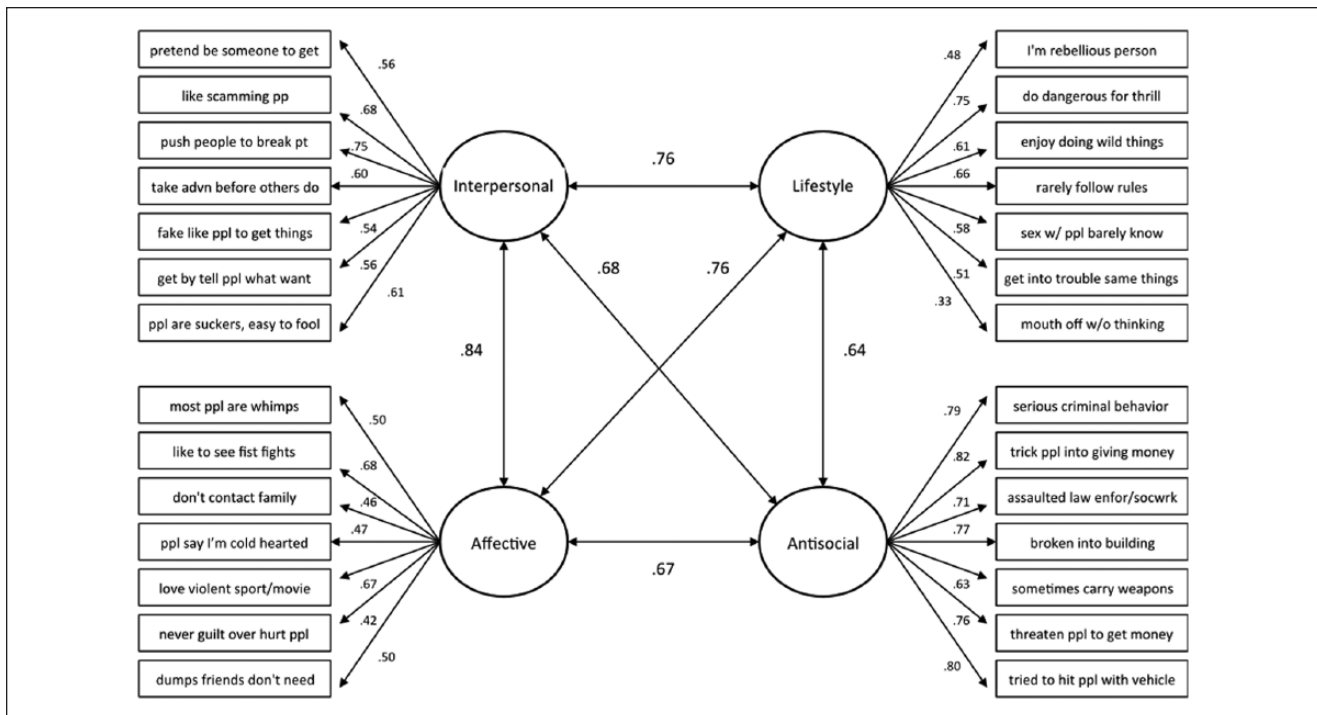*Note.* SRP-III = Self-Report Psychopathy Scale–III.

Figure 2. SRP-SF model.
Note. SRP-SF = Self-Report Psychopathy Scale–Short Form.

social bullying and social victimization, whereas CA was related to higher levels of physical bullying, attachment-avoidance, verbal bullying, and right-wing extremist attitudes. ELS generated relations to verbal and physical

bullying, and higher scores for CT were most strongly related to physical bullying and victimization. A handful of effect sizes for the nomological network differed significantly between the two SRP scales ($p < .01$; see Table 3).

Table 3. Partial Pearson Correlations Between SRP-III or SRP-SF and External Correlates, Controlling for Response Styles (EPQ-R; SIMS).

	M (SD)	SRP TOT		IPM		CA		ELS		CT	
		SRP-III	SRP-SF	SRP-III	SRP-SF	SRP-III	SRP-SF	SRP-III	SRP-SF	SRP-III	SRP-SF
ECR–R Anxiety	45.97 (14.74)	.06	.04	−.02	−.06	.14*a	.06a	−.01b	.10b	−.08	−.10
ECR–R Avoidance	50.13 (20.84)	.35***	.36***	.09	.11	.22**	.17*	−.01	.02	.08	.13
Right-Wing Attitudes	10.90 (5.70)	.16*	.15*	−.06	−.02	.21**a	.14*a	.00	.06	−.01	−.04
RWA	32.10 (5.25)	.00	.04	−.11	−.04	.22**a	.15*a	−.02	.01	−.11	−.09
APRI-BT											
Verbal Bullying	13.18 (4.75)	.57***	.55***	.09	.13	.24**	.21**	.29***	.29***	.02	.01
Social Bullying	9.05 (2.87)	.37***	.40***	.25***	.24***	.06	.10	.14*	.18*	−.08	−.13
Physical Bullying	8.60 (3.36)	.61***	.57***	−.12	−.06	.30***	.29***	.29***	.33***	.28***a	.19**a
Verbal Target	11.10 (5.60)	.20**	.20**	.13b	.02b	−.09b	.01b	.05	.08	.11	.15*
Social Target	9.25 (4.49)	.17*	17*	.16*b	.06b	−.09a	−.02a	−.02	.02	.13	.16*
Physical Target	7.67 (3.52)	.31***	.29***	.01	−.03	.08a	.15*a	.00	−.03	.24**	.31***
SIMSc	6.73 (3.88)	.11b	.18*b	.03	−.04	−.06	.00	.05a	.12a	.09	.14
EPQ-R Lie Scaled	16 (6.76)	−.47***	−.44***	−.20**a	−.27***a	.02	.06	−.30***	−.26***	.09	.07

Note. SRP-III = Self-Report Psychopathy Scale Full Form; SRP-SF = Self-Report Psychopathy Scale–Short Form; SRP TOT = Self-Report Psychopathy Scale Full and Short Form Total score; ECR-R = Experiences in Close Relationships Scale; Right-Wing Attitudes = RERAX General Extremist Attitudes Scale; RWA= Right-Wing Authoritarianism; APRI-BT= Adolescent Peer Relations Instrument–Bullying and Target; SIMS= Structured Inventory of Malingering Scale; EPQ-R = Eysenck Personality Questionnaire–Revised; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; CT = Criminal Tendencies.
[a]Significant difference in effect size between the full and short form, *p* < .05. [b]Significant difference in effect size between the full and short form, *p* <.01. [c]Only controlled for EPQ-R Lie Scale. [d]Only controlled for SIMS.
*p < .05. **p < .01. ***p < .001.

The SRP-SF was weakly, but significantly related to a feigning response style, while the SRP-III was not. Also, the IPM subscale of the SRP-III was weakly but significantly related to social victimization, whereas this correlation was absent for the SRP-SF. Additional differences between the scales that were weaker in magnitude (*p* < .05) are displayed in Table 3.

Discussion

Self-report instruments of psychopathic traits represent an efficient means to elucidate psychopathy in the community. Although the use of self-reports for the assessment of psychopathy has sparked debate, support for its utility is accumulating. The present study investigated the psychometric properties of the SRP-III and its shorter version (SRP-SF) in a European community sample. Overall, the SRP-III and SRP-SF shared similar psychometric properties in terms of its internal consistency, factor structure, and nomological net. The analysis also revealed the SRP's relations with relevant correlates beyond traditional constructs such as bullying and attachment-avoidance. Finally, the SRP scales demonstrated overall satisfactory psychometric qualities in a continental European sample. Although future work should address some inconsistencies found in the current study, the results here are promising for the use of the SRP scales in Belgian culture.

Overall, the descriptive characteristics for the SRP scales retrieved in the current sample were consistent with previous findings for the SRP scales. Specifically, the gender differences found in this study are reflective of a robust pattern across the globe for SRP scores (Neumann et al., 2012) and findings with other psychopathy measures, such as the PCL-R (Jackson, Rogers, Neumann, & Lambert, 2002). The elevations on the SRP facets also match a recurrent pattern reported for the SRP scales across a myriad of world regions (e.g., Neumann et al., 2012). As one would expect, the observed gender differences for the SRP-SF and scoring patterns on the psychopathy facets mirrored those of the SRP-III. The mean scores for the SRP scales also deserve some further comment. Overall, the SRP scores in our sample were similar to mean scores reported in particularly larger samples comprising North American participants (Foulkes et al., 2014; Neal & Sellbom, 2012). However, comparing current SRP mean scores across cultures provides to be difficult given the dearth of other, large community studies in both North American and European regions. More future work is to be done to explore scalar differences of the SRP scales between cultural contexts.

Reliability of the SRP Scales

The SRP scales performed well in terms of internal consistency on the total score level (e.g., Carré et al., 2012; Freeman

Table 4. Partial Pearson Correlations Between SRP-III or SRP-SF and External Correlates, Without Controlling for Response Styles (EPQ-R Lie Scale; SIMS).

	SRP TOT		IPM		CA		ELS		CT	
	SRP-III	SRP-SF	SRP-III	SRP-SF	SRP-III	SRP-SF	SRP-III	SRP-SF	SRP-III	SRP-SF
ECR–R Anxiety	.01	.08	−.02	−.08	.04	.06	.04	.13	−.08	−.06
ECR–R Avoidance	.39***	.40***	.10	.12	.22**	.17*	−.01	.02	.08	.13
Right-Wing Attitudes	.17*	.17*	−.06	−.02	.21**	.14	.00	.06	−.00	−.04
RWA	−.06	−.02	−.13	−.09	.21**	.15*	−.05	−.04	−.09	−.06
APRI-BT										
Social Bullying	.47***	.49***	.27***	.25**	.04	.09	.18*	.21**	−.09	−.14
Verbal Bullying	.64***	.62***	.12	.14	.23**	.20**	.34***	.34***	.01	.00
Physical Bullying	.67***	.64***	−.11	−.06	.30***	.28***	.33***	.38***	.28***	.17*
Social Target	.23***	.24***	.17*	.07	−.12	.02	.08	.05	.15*	.19**
Verbal Target	.26***	.27***	.13	.03	−.11	−.01	.01	.11	.13	.18*
Physical Target	.35***	.35***	.02	−.02	.06	.16*	.03	.006	.25***	.32***

Note. SRP-III = Self-Report Psychopathy Scale Full Form; SRP-SF = Self-Report Psychopathy Scale–Short Form; SRP TOT = Self-Report Psychopathy Scale Full and Short Form Total score; ECR-R = Experiences in Close Relationships Scale; Right-Wing Attitudes = RERAX General Extremist Attitudes Scale; RWA = Right-Wing Authoritarianism; APRI-BT = Adolescent Peer Relations Instrument–Bullying and Target; IPM = Interpersonal Manipulation; CA = Callous Affect; ELS = Erratic Lifestyle; CT = Criminal Tendencies; SIMS = Structured Inventory of Malingering Scale; EPQ-R = Eysenck Personality Questionnaire–Revised.
*$p < .05$. **$p < .01$. ***$p < .001$.

& Samson, 2012), although most of the SRP-SF subscales demonstrated a lower internal consistency compared with findings in samples comprising North American or Anglo-Saxon participants (e.g., Carré et al., 2012; Foulkes et al., 2014). The item homogeneity indicators did suggest that all subscales, except the SRP-SF antisocial subscale, tap into unidimensional constructs (Schmitt, 1996). Item homogeneity for the SRP-SF CT was somewhat lower as expected (e.g., Carré et al., 2012; Seara-Cardoso, Neumann, Roiser, McCrory, & Viding, 2012) and flags a potential reliability issue for this SRP-SF subscale for the Dutch SRP scale. This finding could partly result from a certain degree of skew of the variable, though analysis also suggests that one deviant item (i.e., involvement in gang activity) in particular decreased its internal consistency. Future research for the Dutch SRP forms should further explore this subscale to examine the sample specificity of this finding and whether this is related to specific aspects of Belgian culture.

Additionally, the test–retest assessment suggests that the SRP scales capture a construct that is relatively stable over time on the total and subscale level. When filtering out effects for other psychopathy facets, the test–retest reliability did not decrease dramatically, further indicating a relatively stable assessment over time. Although we included a satisfactory time frame to assess test–retest reliability (i.e., nearly 8 weeks), it would be helpful to further address the test–retest reliability for the SRP scales over longer time periods.

Factor Structure of the SRP Scales

A key aim of the study was to evaluate the SRP scales in terms of the PCL-R four-factorial structure (Hare, 2003).

Overall, the analyses for the total sample support an underlying four-factor solution for both SRP scales, each characterized by four interrelated latent factors akin to the PCL-R. Because of the large and representative sample used in the present study, these findings add significant weight to the evidence for a four-factorial structure for the SRP scales. The chi-square value was the only fit index that did not indicate a good fit for the SRP-III and SRP-SF models. However, the chi-square fit index is very sensitive to sample size and tends to inflate in large samples, implying a poor model fit incorrectly (Schumacker & Lomax, 2004). The high latent correlations for the SRP factors correspond to a wealth of research on both the PCL-R and the SRP (Neumann et al., 2014). Moreover, these findings are in line with early theory on the psychopathy construct (Hare & Neumann, 2008) and other structural equation modeling research that shows the syndrome of psychopathy can be represented by a superordinate factor, given the strong correlations among the four first-order factors (e.g., Neumann et al., 2006; Neumann & Hare, 2008; Neumann, Hare, & Newman, 2007).

Although most items demonstrated good factor loadings, some loadings were slightly lower than traditionally expected when modeling structural properties using interview-based methods such as the PCL-R (Hare, 2003). Yet this is a recurrent finding when modelling structural properties of self-report measures of psychopathic traits and could stem from multiple sources (see Neumann et al., 2014; Neumann & Pardini, 2012). For example, reporting on affective traits via self-report is likely to be more difficult compared with assessing these traits via interview-based methods (Neumann & Pardini, 2012).

Importantly, the findings here supplement previous findings across cultures including Australia, the United Kingdom, and North America (e.g., Carré et al., 2012; Foulkes et al., 2013; Foulkes et al., 2014; Freeman & Samson, 2012; Neumann et al., 2012; Neumann & Pardini, 2012; Williams et al., 2007) and indicate that the proposed four-factorial structure for the SRP scales extends to the Dutch SRP scales in a Belgian context.

Nomological Network of the SRP Scales

Overall, the SRP scales relations to the external correlates were indicative of overlap with robust correlates of psychopathy. Both SRP scales generated the strongest relationships with bullying behavior and attachment dysfunction (i.e., attachment avoidance), correlates that are part of the nomological net of psychopathy in community and forensic samples across other world regions, including Europe and North America (e.g., Bender & Lösel, 2011; Craig, Gray, & Snowden, 2013; Flight & Forth, 2007; Schimmenti et al., 2014). For example, similar to the current findings, psychopathy appears related to an avoidant attachment style toward romantic partners in North American college students (Mack, Hackney, & Pyle, 2011; Miller et al., 2010). The link between SRP-based psychopathy and bullying replicates findings in a North American college sample using the SRP-III (Williams et al., 2007). Moreover, the relation of the SRP scales across various types of bullying fits in with the notion that psychopathy is associated to both direct and indirect antisocial behavior (e.g., Bender & Lösel, 2011).

Although more explorative, the retrieved associations with victimization and right-wing constructs tentatively lend support to the SRP scales construct validity. Its links with peer victimization are reminiscent of a larger body of research that relates psychopathic traits and victimization (e.g., Fanti & Kimonis, 2012; Ragatz, Anderson, Fremouw, & Schwartz, 2011; though see Bender & Lösel, 2011). Additionally, the relation between SRP-psychopathy and right-wing extremist attitudes concurs with previous self-report findings that psychopathy is related to constructs such as intergroup threat (e.g., negative attitudes toward immigrants; Hodson, Hogg, & MacInnis, 2009), racism (Grigg & Manderson, 2014), and social dominance (Hodson et al., 2009). Importantly, effects for victimization and right-wing extremist attitudes in our study were notably small and strong interpretations should be cautioned.

Thus, overall, the relations found for the nomological net analysis resemble correlational effects from findings in other world regions. This suggests that the nomological net of the SRP scales shares some overlap across cultural contexts, at least for the variables included in this study. Because we only included a certain amount of external correlates in this study, the nomological net of the SRP scales should still be further uncovered by including other relevant

variables. Particularly, its relation to other frequently used self-reports of psychopathy, such as the Triarchic Psychopathy Measure (Patrick, 2010) remains an interesting research topic.

It is also of note that the SRP subscales were differentially related to the external correlates. For example, the IPM subscale for both scales was related to constructs in the interpersonal sphere (i.e., social bullying and victimization), whereas the affective SRP component showed strongest relations to direct forms of aggressive behavior (i.e., verbal and physical bullying). The lifestyle component also showed the strongest relations to direct forms of bullying, whereas the antisocial facet was uniquely associated to physical confrontation (i.e., physical bullying) and physical victimization. Still, it is important to keep in mind that some of these correlations were notably small and do not reflect a strong differential correlational pattern across subscales. Since this is the first study that takes on a fine-grained approach for these external correlates by including the relations for all four psychopathy facets, replication of these effects is warranted.

Some unexpected findings for the nomological net are to be noted. First, we did not find a link between the SRP scores and an anxious attachment style contrary to recent self-report findings for romantic attachment (Mack et al., 2011). Likely, the inclusion of either romantic or parental attachment affects the psychopathy–attachment link. It would be helpful for future research to address this moderation. Another unexpected finding was that the impulsive component of the SRP scales did not relate to peer victimization, particularly since impulsivity as measured with the Antisocial Process Screening Device Youth Version (Frick & Hare, 2001) seems an important correlate of peer victimization during adolescence (Fanti & Kimonis, 2012, 2013). Possibly, the SRP-ELS subscale measures risky behavior and sensation seeking rather than impulsivity, as suggested in previous research (Carré et al., 2012). Alternatively, findings that highlight the role of impulsivity in victimization stem from adolescent samples in which antisocial features are conceptualized differently (e.g., conduct problems) and ongoing rather than retrospective victimization is investigated (e.g., Fanti & Kimonis, 2012). Such methodological differences could have contributed to discrepancies with previous findings. Hence, it would be helpful for future research to elucidate the relation of antisocial features with peer victimization. Finally, the null findings for right-wing authoritarianism were somewhat at odds with previous SRP-III studies indicating a negative relation with RWA (Hodson et al., 2009) and positive relations to antiauthority misconduct (Williams et al., 2007). However, a more recent SRP study also reports no significant relation with RWA in the general community (Jones, 2013). Based on the current literature, the link between psychopathic traits and RWA seems complex, but recent findings suggest that particularly the combination of psychopathy and right-wing authoritarianism can lead to destructive interpersonal

outcomes such as racist-endorsed violence (Jones, 2013). Given the potential moderating role of psychopathy on right-wing attitudes and related violence, future research should continue to uncover these relations more thoroughly. It is important to stress that some of the variables included, such as bullying, victimization, and right-wing authoritarianism, consist of a social component that can differ considerably across cultures and instill cultural differences in the understanding and the expression of these constructs (e.g., Craig et al., 2009). Hence, cultural differences might afflict the overlap between and consistency of findings for these variables across European and North American samples.

Finally, a frequent critique on self-report measures of psychopathy is that psychopathic individuals are likely to distort their responses in order to present themselves in a more positive light. In line with previous findings, our results do not suggest that this is the case, since individuals with higher psychopathic traits were less likely to respond in a socially desirable way (see also Freeman & Samson, 2012; Ray et al., 2013; Watt & Brooks, 2012). The findings here also indicate that higher SRP-SF scores coincided with a response tendency to feign symptoms, a form of a faking bad response style. These findings fit in with correlational results which indicate a positive relation between psychopathy and the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) and MMPI-A (Butcher et al., 1992) F scales (see Rogers et al., 2002, for a brief overview of these results), and at least some evidence suggests that self-reports of psychopathy are associated with a tendency to fake bad in contexts where self-reports are not associated with incentives (Ray et al., 2013). It is of note that the findings here index a relation between the SRP scales and a faking bad response tendency rather than clinical malingering (i.e., the production of symptoms motivated by external incentives; American Psychiatric Association, 2000, pp.739; see Rogers, 2008). Although currently the role of psychopathic traits in clinical malingering seems limited (e.g., Kucharski, Duncan, Egan, & Falkenbach, 2012; Rogers & Cruise, 2000), future research could further clarify whether the SRP scales are linked to malingering in contexts that hold incentives for response distortion.

It has recently been argued that correlations between self-reports of psychopathy and response styles at least partly reflect an intrinsic feature of psychopathy (Ray et al., 2013; Verschuere et al., 2014). Similar to these recent findings (Verschuere et al., 2014), controlling for response styles in our study actually weakened the relations to psychopathy-relevant correlates. An interesting future research avenue is to examine whether the relation for the SRP scales, and the broader psychopathic syndrome, to response styles reflect true variance in psychopathy or response distortion. Such analysis can shed further light on the vulnerability of the SRP scales to response distortion. In all, the present findings can temper fundamental concerns about the reliability of self-reports (e.g., Edens et al., 2000; Lilienfeld & Fowler, 2006; but see Miller, Jones, & Lynam, 2011), at least in a context where there are no incentives for participants to present oneself differently.

Direct Comparison of the SRP Scales

The third key aim of the present study was to evaluate whether the SRP-SF provides a viable alternative for the SRP-III with regard to its psychometric properties. The SRP-SF was able to retain good internal consistency with a reduced 28-item set relative to the SRP-III. In all, it seems that the SRP-SF does not compromise its reliability for efficiency on the total score level. However, the current findings also suggest that the subscales of the short SRP scale do not perform as well in terms of reliability as the full SRP scale, at least in a Belgian context. This is surprising since the reliability of the SRP-SF subscales has been found to be good in several samples comprising North American and Anglo-Saxon participants (e.g., Carré et al., 2012; Foulkes et al., 2014). An important future research task is to further explore and advance the cross-cultural psychometric functioning of the SRP-SF subscales.

The findings also showed that the SRP-SF and SRP-III can both be adequately described by an underlying four-factorial structure. This is consistent with the theoretical underpinnings of the SRP scales, as they were designed to reflect the four-factor structure of psychopathy comprising an interpersonal, affective, lifestyle, and antisocial component (Hare, 2003). Thus, the SRP-SF as an abbreviated version of the SRP-III manages to effectively capture the proposed four-factor structure of the SRP scales. Compared with the SRP-III, the SRP-SF even showed a better fit for the four-factor model, although the aforementioned modeling challenges for a full 64-item version are likely to be responsible for this difference in fit. Importantly, the overall results suggest good similarity between the full and short form SRP measures, and thus provide additional validation of the short form.

Finally, the SRP-III and SRP-SF have very similar relations to the external correlates included in our sample. Overall, differences between the SRP scales were small and the SRP-SF largely mirrored the relations that the SRP-III demonstrated with relevant variables such as attachment-avoidance, bullying, and victimization. These similar relations were also reflected on the facet level. However, there were also some differences between the SRP-III and SRP-SF in terms of their nomological net. First, the SRP-SF total scores were weakly related to a feigning response style, whereas the SRP-III was not. Second, only the interpersonal component of the SRP-III but not the SRP-SF was related to social victimization. Although preliminary, these differences suggest that the items retained in the SRP-SF share common

variance with this response tendency, whereas they might lack some of the common variance with social peer victimization contrary to the SRP-III. These results are the first to report the relation between the SRP scales and these constructs, so future replication is strongly needed. Beyond these differences, the substantial overlap in nomological net for the SRP-III and SRP-SF is indicative that they both tap into a similar construct. This being said, some relations for the SRP scales with external correlates were weak, even though both scales showed similar correlational patterns. Continued validation should be carried out to investigate potential overlap or differences in criterion validity using additional constructs that are strongly related with psychopathic traits and thus core to the psychopathic syndrome.

Limitations and Conclusions

The present study was not without limitations. First, all variables were measured using self-report questionnaires. Although response distortion is a potential caveat when employing self-report questionnaires, psychopathy self-reports are not affected as strongly as often assumed by response distortion (e.g., Ray et al., 2013; Verschuere et al., 2014). For the nomological network relations, we corrected for two types of response styles to attempt to reduce response distortion. Second, the use of snowball sampling does not guarantee a representative sample. However, the overall sample in the present study exhibits a relatively wide variation in educational level, marital status, and a proper balance between male and female participants. A particular issue in this study is that for the external correlates, the vast majority of respondents were relatively young, leaving less age variation compared with the total sample. However, since this sample did not differ in terms of mean psychopathy scores from the larger sample, and differences on the subscale were notably small, sample-dependent results for the nomological network due to deviant psychopathy scores are unlikely. Third, by focusing on similarities and differences between the long and short forms of the SRP, we did not differentiate across gender in terms of factor invariance or associations with external correlates. Additionally, some measures did not demonstrate high reliability which cautions its interpretation. However, for some instruments such as the Dutch EPQ-R Lie scale and the SIMS, internal consistency under the benchmark of $\alpha = .70$ (e.g., see Sanderman et al., 2012) or near this threshold has previously been reported (e.g., Merckelbach & Smith, 2003). Finally, the reliance on retrospective self-report for attachment-dysfunction and bullying limits the generalizability of these findings since they only provide a single perspective on past events. This is, however, a limitation when assessing large samples.

In conclusion, the present findings are promising for the SRP full and short form's utility in the broader community.

We found that the SRP scales in a Belgian context are characterized by a four-factorial factor structure and by a number of nomological network relations akin to its psychometric properties beyond continental Europe. The findings here tentatively suggest that the 28-item SRP-SF captures a construct akin to its full SRP-III version in a cross-cultural context, although future work should further focus on resolving some important questions on the performance of the SRP-SF in cross-cultural contexts, such as the reliability of its subscales. In all, the study extends evidence for the construct validity for the most recent SRP scales in a large Belgian community sample and is the first to provide a direct comparison of the psychometric properties of the SRP-III and SRP-SF. As such, the present research contributes to maximizing the efficiency of psychopathy research and allows for an important step forward in uncovering the psychopathic construct in the community.

Notes

1. The smaller subsample ($n = 210$) did not differ significantly from the larger sample in terms of mean psychopathy total scores. SRP-IPM scores were significantly higher in the smaller subsample ($n = 210$) compared with the large sample ($d = .28$).
2. The smaller subsample ($n = 97$) scored on average significantly higher on both SRP scales compared with the large sample.
3. One subgroup ($n = 631$) incorporated in this study is described in De Smet, Uzieblo, Loeys, Buysse, and Onraedt (2015).
4. No significant differences emerged from confirmatory factor analyses (CFAs) in the different samples.
5. Parcels and their associated items are provided in the supplementary materials (available online at http://asm.sagepub.com/content/by/supplemental-data).

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