# Is the Mask of Sanity Impenetrable? Using the Observations of Correctional Staff to Detect Psychopathy According to the CAPP Model

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**Psychopathy is a complex and elusive phenomenon, defined as a severe form of personality disorder characterized by deficient affective experience, such as lack of empathy and shallow affect, grandiose and arrogant interpersonal functioning, as well as pervasive impulsive and deviant behaviour.[1] The Psychopathy Checklist Revised (PCL-R)[2] is currently the most widely used measure of psychopathy in clinical use. However, its dominance as a standard tool for defining and measuring psychopathy, in addition to its over reliance on antisocial behaviour, has been put to question.[3] Furthermore, it is a static measure, making it less useful for assessing symptom remission. Partly in response to this, recent years have seen the development of several new conceptualizations and measures of psychopathy. The Comprehensive Assessment of Psychopathic Personality (CAPP) is a concept map encompassing pathological personality traits considered to be key elements of psychopathy.[4] It attempts to integrate historical and contemporary conceptualizations of psychopathy in order to revisit the question of what psychopathy is, and what it is not, aiming to capture psychopathy in its full dimensionality, as formulated in natural language. Additionally, it is devised to measure fluctuations in symptom burden. The 33 symptoms included in the model are grouped in six domains: attachment, behavioural, cognitive, dominance, emotional and self domains. The CAPP is available in several formats: as expert-rating (CAPP Institutional Rating Form; CAPP-IRS), as a questionnaire for institutional staff (CAPP Staff Rating Form; CAPP-SRF), as well as self-report (CAPP-SR).[5] So far, two studies have investigated the associations of the CAPP and the PCL-R, both demonstrating high correlations concerning CAPP-IRS total and domain scores.[6]**

1. Hart, S. D., & Cook, A. N. (2012). Current issues in the assessment and diagnosis of psychopathy (psychopathic personality disorder). *Neuropsychiatry*, 2(6), 497-508.
2. Hare, R. D. (2003). *Hare PCL-R 2nd ed. Technical manual*. Multi-Health Systems Inc.
3. Skeem, J. L., & Cooke, D. J. (2010). Is Criminal Behavior a Central Component of Psychopathy? Conceptual Directions for Resolving the Debate. *Psychological Assessment*, 22(2), 433-445.
4. Cooke, D. J., Hart, S. D., Logan, C., & Michie, C. (2012). Explicating the Construct of Psychopathy: Development and Validation of a Conceptual Model, the Comprehensive Assessment of Psychopathic Personality (CAPP). *International Journal of Forensic Mental Health,* 11(4), 242-252.
5. Sellbom, M., Cooke, D. J., & Shou, Y. (2019). Development and initial validation of the Comprehensive Assessment of Psychopathic Personality-Self-Report (CAPP-SR). *Psychological Assessment*, 31(7), 878-894.
6. Florez, G., Ferrer, V., Garcia, L. S., Crespo, M. R., Perez, M., Saiz, P. A., & Cooke, D. J. (2020). Comparison between the Psychopathy Checklist-Revised and the Comprehensive Assessment of Psychopathic Personality in a representative sample of Spanish prison inmates. *PLoS One*, 15(2), e0228384; Sandvik, A. M., Hansen, A. L., Kristensen, M. V., Johnsen, B. H., Logan, C., & Thornton, D. (2012). Assessment of Psychopathy: Inter-correlations between Psychopathy Checklist Revised, Comprehensive Assessment of Psychopathic Personality - Institutional Rating Scale, and Self-Report of Psychopathy Scale-III. *International Journal of Forensic Mental Health,* 11(4), 280-288.

Expert-rating is the recommended method of assessing psychopathy. However, that is a time-consuming process, requiring the resources of highly trained professionals, which are a sparse resource in many institutions. A possible complement, and a novel avenue for research, is to use the ratings of institutional staff as a triage procedure to screen for psychopathic personality traits. In addition to being cost efficient, asking personnel in daily contact with the clients to screen for psychopathy might provide additional information.

In the context of forensic psychiatry, staff are regularly involved in procedures such as imminent violence risk assessment in institutional settings, for example using the Short-Term Assessment of Risk and Treatability; a dynamic risk assessment tool that combines a structured clinical judgement and risk management, performed by a multidisciplinary team, involving mental health caretakers and nurses.[7] However, in the field of psychopathy it is not practice to employ staff ratings and to our knowledge there is no research investigating the usefulness of staff in rating psychopathic traits.

In a previous study, we demonstrated that correctional staff find most symptoms of the CAPP model to be highly typical of psychopathy in their view of a prototypically psychopathic person.[8] The next step, and the aim of the current study, was to investigate association validity evidence of the CAPP-SRF as a measure of psychopathic traits in the setting of a high security correctional facility. Additionally, we aimed to investigate its usefulness as a screening measure of psychopathy. We hypothesized that CAPP-SRF would demonstrate strong correlations with the PCL-R as well as with a self-rating instrument of psychopathy; the Triarchic Psychopathy Measure (TriPM).[9]

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## Method

### Participants

Participants were men incarcerated at high security correctional facilities in Sweden, aged 20 to 65 years, that were initially recruited for a cross-sectional genetic study.[10] Of the 309 men invited to participate, 206 (67 per cent) agreed, although five of them dropped out or were excluded due to lack of valid data. CAPP-SRF protocols were available for 88 participants, though six were excluded for having more than three missing items (> 10 per cent), resulting in a final CAPP-rated study sample of 82. The mean age was 38.4 years (SD = 11.3). Most participants reported having a history of violence (75.6 per cent) and more than one fourth (28.0 per cent) reported a history of lethal violence. Substance abuse problems were common (64.6 per cent), as were having been diagnosed with antisocial personality disorder (ASPD, 42.7 per cent) and Attention Deficit Hyperactivity Disorder (ADHD, 25.6 per cent).

### Procedure

The study was reviewed and approved by the Regional Ethical Review Board of Stockholm (#2014/1192-31/1). The data collection was performed consecutively in 2015 to 2017. Participants were recruited and informed of the study by a clinically experienced research assistant, who subsequently interviewed them using a structured

7. Webster, C. D., Martin, M. L., Brink, J., Nicholls, T. L., & Middleton, C. (2004). *Manual for the Short-Term Assessment of Risk and Treatability (START), Version 1.0 (consultation ed.)*. St. Joseph's Healthcare Hamilton: Ontario, Canada–Forensic Psychiatric Services Commission.
8. Pauli, M., Essemyr, K., Sörman, K., Howner, K., Gustavsson, P., & Liljeberg, J. (2018). Gendered Expressions of Psychopathy: Correctional Staffs' Perceptions of the CAPP and CABP Models. *International Journal of Forensic Mental Health*, 17(2), 97-110.
9. Patrick C. J. (2010). *Operationalizing the Triarchic Conceptualisation of Psychopathy: Preliminary Description of Brief Scales for Assessment of Boldness, Meanness, and Disinhibition*. Available online at: https://patrickcnslab.psy.fsu.edu/wiki/images/b/b2/TPMmanual.pdf.
10. Pauli, M., Liljeberg, J., Gustavsson, P., Kristiansson, M., & Howner, K. (2019). Assessing the relevance of self-reported ADHD symptoms and cognitive functioning for psychopathy using the PCL-R and the TriPM. *Journal of Forensic Psychiatry & Psychology,* 30(4), 642-657; Pauli, M., Ölund Alonso, H., Liljeberg, J., Gustavsson, P., & Howner, K. (2021). Investigating the Validity Evidence of the Swedish TriPM in High Security Prisoners Using the PCL-R and NEO-FFI. *Frontiers in Psychiatry*, 12:704516; Pauli, M., Ölund Alonso, H., Liljeberg, J., Gustavsson, P., Tiihonen, J., & Howner, K. (2021). Exploring the relation between high-activity COMT Val158Met genotype and psychopathy in male offenders. *The Journal of Forensic Psychiatry & Psychology*, 33(1), 171-177.

protocol regarding medical and socioeconomic history (self-reported) as well as a semi-structured interview for PCL-R scoring. Their correctional files were reviewed for collateral information. All participants provided written informed consent to participate and were informed that they could discontinue their participation whenever they wanted to do so. They received a small compensation of phone credits for their involvement in the study.

At the start-up of the study, we arranged three-hour workshops on psychopathy and the CAPP-SRF at each facility. The staff participating in the workshops were allocated by the management at each facility, striving to include staff from all housing units to perform the ratings in the project. The participating staff mainly consisted of staff placed at the housing units and case workers.

When a new participant was included in the study, a CAPP-trained member of staff was directed by the on-site study liaison officer at the facility to complete a CAPP-SRF rating of the participant. The liaison officers were instructed that the rating should be performed by a correctional officer with good knowledge of the participants (preferably their contact person at the housing unit or their case worker). Typically, as contact person or case worker, they would have knowledge of the participant's history, including their criminal history, as well as insight in their social situation and daily functioning at the facility. However, as the trained staff did not always have a close contact with each participant, if needed, they were encouraged to seek the help of a member of staff with a closer acquaintance with the participant to complete the rating.

CAPP-SRF is intended for primary use in conjunction with the CAPP-IRS. It can then be used as a second source of information for the clinician performing the assessment, asking staff in forensic psychiatric care and correctional institutions to document their perceptions of the clients' psychopathic traits.

## Materials

### *CAPP-SRF (Staff Rating Form)*

CAPP-SRF is intended for primary use in conjunction with the CAPP-IRS. It can then be used as a second source of information for the clinician performing the assessment, asking staff in forensic psychiatric care and correctional institutions to document their perceptions of the clients' psychopathic traits.[11] We used the Swedish translation of the CAPP-SRF,[12] containing all 33 symptoms of the CAPP model, rated from 0 ('not present') to 6 ('very severe'), yielding a maximum score of 198. For the total score a maximum of three missing values were imputed using the mean item value. As the domain subscales consist of only 4-7 items, we did not summate the domain subscales for participants with any missing values.

### *The Hare Psychopathy Checklist — Revised*

The PCL-R is an expert rating scale assessing psychopathy through a semi-structured interview in addition to file information.[13] The 20 items are scored from 0 to 2, with a maximum score of 40. The items are divided into four facets, encompassing different aspects of psychopathic traits and behaviour: interpersonal (facet 1) and affective function (facet 2), behavioural deviance linked to an impulsive lifestyle (facet 3) and antisocial behaviour (facet 4).

### *The Triarchic Psychopathy Measure (TriPM)*

The triarchic model conceptualizes the core construct of psychopathy in three domains; boldness, meanness, and disinhibition,[14] that can be measured through the TriPM, available in

11. Cooke, D. J., Hart, S. D., Logan, C., & Michie, C. (2012). Explicating the Construct of Psychopathy: Development and Validation of a Conceptual Model, the Comprehensive Assessment of Psychopathic Personality (CAPP). *International Journal of Forensic Mental Health*, 11(4), 242-252.
12. Pauli, M., Essemyr, K., Sörman, K., Howner, K., Gustavsson, P., & Liljeberg, J. (2018). Gendered Expressions of Psychopathy: Correctional Staffs' Perceptions of the CAPP and CABP Models. *International Journal of Forensic Mental Health*, 17(2), 97-110.
13. Hare, R. D. (2003). *Hare PCL-R 2nd ed. Technical manual*. Multi-Health Systems Inc.
14. Patrick, C. J., Fowles, D. C., & Krueger, R. F. (2009). Triarchic conceptualization of psychopathy: developmental origins of disinhibition, boldness, and meanness. *Development and Psychopathology*, 21(3), 913-938.

Swedish.[15] The self-report questionnaire contains 58 items that are rated on a 4-point Likert-type scale with the response options 0 (false) to 3 (true), and a maximum total score of 176. The items are divided into the three triarchic domain; boldness (19 items), meanness (19 items) and disinhibition (20 items). A maximum of three missing values were imputed using the mean item value for each subscale.

### Statistical Analyses

We investigated internal consistency using Cronbach's alpha. Because all CAPP variables violated the assumptions of normality according to the Shapiro-Wilk test of normality, we calculated Spearman's (rank order) correlation coefficients to investigate the interrelatedness of the CAPP domains as well as the association with other measures of psychopathy. Secondly, we investigated if CAPP levels differed by levels of PCL-R rated psychopathy (i.e. investigating if the CAPP ratings might be accentuated only at specific levels of psychopathy), comparing participants grouped according to quartile levels on the PCL-R using one-way independent measurements ANOVA models and Kruskal Wallis tests. Levene's test indicated that the assumption of homogeneity of variance was violated for the behaviour and cognitive domains, thus Welch's test is reported. Post hoc comparisons were calculated using REGWQ and Games-Howell (robust). Analyses were conducted in SPSS (Version 28).

### Results

Mean values, standard deviations, internal consistency values, as well as correlation coefficients are presented in Table 1. All CAPP domains were significantly correlated to CAPP total score (rs = .809 to .921). Furthermore, the domain scores showed strong intercorrelations (rs = .621 to .904.). However, the level of CAPP ratings, both regarding total score and domain scores, were low and distributions were positively skewed.

### Associations to the PCL-R and the TriPM

PCL-R total score did not correlate to CAPP total score. As shown in Table 1, Facet 1 showed significant associations to CAPP total score (rs = .289) as well as to the dominance (rs = .401) and self (rs = .341) domains. Facet 2 was significantly correlated to CAPP total score (rs = .227) as well as the attachment (rs = .226), cognitive (rs = .220) and dominance (rs = .264) domains. None of the CAPP domains were significantly correlated to PCL-R total score.

Regarding the TriPM, no significant coefficients were found.

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### CAPP levels by quartile levels of PCL-R rated psychopathy

The distribution of CAPP total and domain scores at various levels of PCL-R rated psychopathy are summarized in Table 2, where mean and median values as well as standard deviance and range are presented. Both mean and median values were generally lower at the highest level of psychopathy, compared to the second and third quartile. However, neither ANOVA models nor Kruskal Wallis tests indicated that CAPP total and domain scores differed significantly by PCL-R level, except for the cognitive domain (see Table 2), although pairwise comparisons indicated that the scores differed significantly specifically comparing those who scored in the first two quartiles (p = .044), thus not at elevated levels of psychopathy. As Figure 1 exemplifies, CAPP scores were diversely spread in relation to PCL-R rated psychopathy level (with both low PCL-scorers rated high on the CAPP and vice versa).

15. Kelley, S. E., Edens, J. F., Donnellan, M. B., Mowle, E. N., & Sörman, K. (2018). Self- and informant perceptions of psychopathic traits in relation to the triarchic model. *Journal of Personality*, 86, 738–751.

Table 1. Internal consistency values, mean values, standard deviations, and Spearman's correlation matrix

| | *n* | □ | *M* (*SD*) | CAPP | A | B | C | D | E | S | PCL-R | F1 | F2 | F3 | F4 | TriPM | DIS | BOLD | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CAPP | 82 | .954 | 47.3 (37.7) | – | .809** | .843** | .911** | .890** | .903** | .921** | .103 | .289** | .227* | .048 | -.004 | -.014 | .010 | .030 | -.020 |
| A | 78 | .876 | 6.7 (5.5) | | – | .634** | .666** | .621** | .806** | .688** | .050 | .124 | .226* | -.006 | -.005 | -.096 | -.037 | -.127 | -.038 |
| B | 79 | .845 | 7.4 (6.9) | | | | .817** | .695** | .671** | .693** | .123 | .174 | .156 | .155 | .080 | .206 | .201 | .044 | .188 |
| C | 78 | .581 | 6.8 (6.8) | | | | – | .779** | .776** | .781** | .109 | .195 | .220* | .142 | .005 | .133 | .095 | .113 | .164 |
| D | 78 | .919 | 7.5 (8.1) | | | | | | .774** | .904** | .113 | .401** | .264* | -.002 | -.067 | -.144 | -.170 | .055 | -.142 |
| E | 79 | .877 | 9.1 (7.1) | | | | | | – | .841** | .081 | .175 | .207 | .035 | .048 | -.041 | .016 | -.044 | -.044 |
| S | 72 | .905 | 9.0 (9.2) | | | | | | | | .016 | .341** | .195 | -.086 | -.120 | -.146 | -.144 | -.006 | -.149 |
| PCL-R | 82 | .881 | 19.8 (8.4) | | | | | | | | – | .596** | .655** | .832** | .798** | .620** | .569** | .298** | .529** |
| F1 | 82 | .712 | 3.1 (2.1) | | | | | | | | | | .416** | .310** | .194** | .153* | .109 | .297** | .052 |
| F2 | 82 | .779 | 4.6 (2.3) | | | | | | | | | | – | .437** | .337** | .236** | .146* | .156* | .255** |
| F3 | 82 | .739 | 5.2 (2.7) | | | | | | | | | | | | .691** | .641** | .663** | .138 | .571** |
| F4 | 82 | .837 | 4.6 (3.1) | | | | | | | | | | | | – | .684** | .642** | .260** | .598** |
| TriPM | 79 | .948 | 79.6 (29.5) | | | | | | | | | | | | | | .859** | .466** | .922** |
| DIS | 79 | .932 | 27.4 (15.2) | | | | | | | | | | | | | | – | .091 | .737** |
| BOLD | 79 | .822 | 33.3 (9.0) | | | | | | | | | | | | | | | – | .296** |
| MEAN | 79 | .945 | 18.8 (13.9) | | | | | | | | | | | | | | | | – |

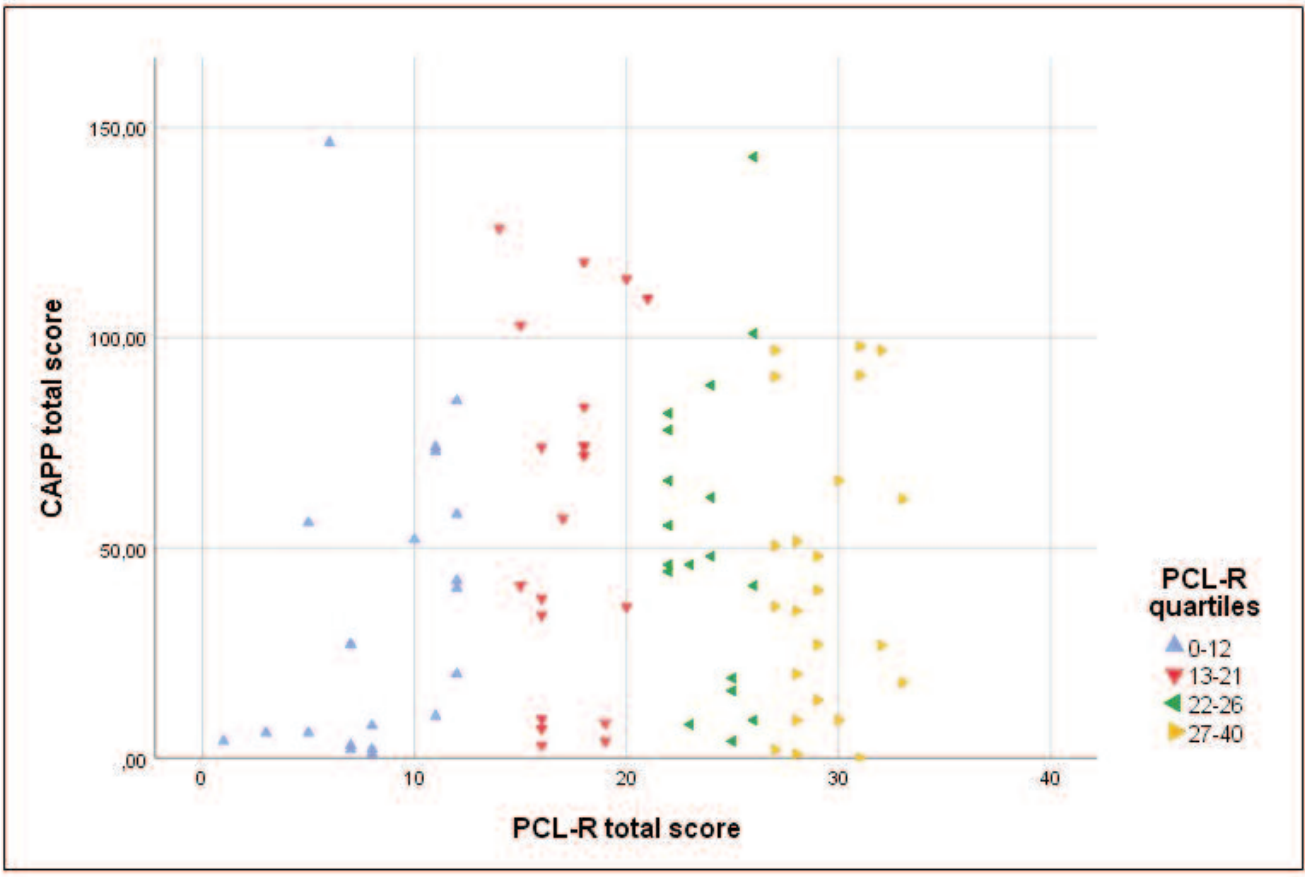
Note. **Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed). *CAPP* CAPP total score, *A* Attachment, *B* Behavior, *C* Cognitive, *D* Dominance, *E* Emotional, *S* Self, *PCL-R* PCL-R total score, *F1* PCL-R Factor 1, *F2* PCL-R Factor 2, *F3* PCL-R Factor 3, *F4* PCL-R Factor 4, *TriPM* TriPM total score, *DIS* TriPM Disinhibition, *BOLD* TriPM Boldness, *MEAN* TriPM Meanness.

Table 2. CAPP levels by levels of PCL-R rated psychopathy, grouped according to quartiles on the PCL-R using one-way independent measurements ANOVA and Kruskal Wallis tests.

| | CAPP total | | Attachment | | Behavior | | Cognitive | | Dominance | | Emotional | | Self | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCL-R quartiles | *M* (*SD*) | *Mdn* (range) | *M* (*SD*) | *Mdn* (range) | *M* (*SD*) | *Mdn* (range) | *M* (*SD*) | *Mdn* (range) | *M* (*SD*) | *Mdn* (range) | *M* (*SD*) | *Mdn* (range) | *M* (*SD*) | *Mdn* (range) |
| 0-12 (*n* = 21) | 35.4 (37.4) | 27.0 (1-146) | 5.3 (5.2) | 4.0 (0-19) | 5.4 (6.6) | 3.5 (0-22) | 4.1 (4.4) | 3.0 (0-17) | 6.1 (8.6) | 3.0 (0-32) | 7.3 (7.3) | 6.0 (0-23) | 6.7 (8.4) | 3.0 (0-24) |
| 13-2 (*n* = 20) | 59.3 (41.5) | 64.5 (3-126) | 8.4 (5.8) | 8.0 (0-19) | 9.4 (8.3) | 11.0 (0-24) | 9.0 (6.7) | 11.0 (0-21) | 9.1 (8.3) | 9.0 (0-27) | 10.8 (7.5) | 11.0 (1-27) | 12.2 (9.5) | 13.5 (0-31) |
| 22-26 (*n* = 18) | 53.2 (36.5) | 47.0 (4-143) | 7.7 (6.0) | 6.0 (0-21) | 7.0 (5.0) | 7.0 (1-21) | 6.9 (4.3) | 7.0 (0-13) | 9.9 (9.5) | 7.0 (0-34) | 10.0 (6.8) | 9.5 (1-21) | 11.1 (11.1) | 6.5 (0-35) |
| 27-40 (*n* = 23) | 43.0 (33.5) | 36.1 (0-98) | 5.8 (4.9) | 5.0 (0-13) | 7.9 (7.1) | 6.0 (0-22) | 7.2 (9.3) | 4.0 (0-40) | 5.7 (5.5) | 5.0 (0-19) | 8.5 (7.0) | 7.5 (0-22) | 6.5 (6.7) | 5.0 (0-20) |
| *F*(*df*) | 1.66 (3, 78) | | 1.45 (3, 74) | | 1.00[a] (3, 41) | | 2.89[a] (3, 40) | | 1.35 (3, 74) | | .97 (3, 75) | | 1.98 (3, 68) | |
| *p* | .182 | | .235 | | .404 | | .047 | | .264 | | .413 | | .126 | |
| *H*(*df*) | 5.44 (3) | | 3.61 (3) | | 3.66 (3) | | 7.74 (3) | | 4.83 (3) | | 2.99 (3) | | 4.58 (3) | |
| *p* | .142 | | .307 | | .300 | | .052 | | .184 | | .393 | | .205 | |

Note. [a]Welch's robust test of equality of means

Figure 1. The association of CAPP and PCL-R total score grouped by PCL-R quartile levels.




## Discussion

In this cross-sectional study we aimed to investigate validity evidence of the CAPP-SRF in a Swedish high security correctional sample. Furthermore, we aimed to investigate its usefulness as a screening measure of psychopathy. The results in the current study were in part contradictory to both the theoretical description of the CAPP model as well as to previous findings. Most importantly, the CAPP-SRF demonstrated to be weakly associated to other measures of psychopathy. Furthermore, previous studies using the CAPP-IRS (i.e. expert rated psychopathy) have yielded notably higher CAPP scores in samples with comparable scores on the PCL-R,[16] reporting mean values of 68.5 (*SD* = 33.8) respectively 84.4 (*SD* = 42.0), compared to a mean value of 47.3 (*SD* = 37.7) in the current sample. We were surprised to find that, as indicated in Figure 1, the CAPP scores varied at all levels of PCL-R rated psychopathy.

In their study from 2020, Florez and colleagues demonstrated that the associations of the CAPP-IRS and PCL-R were weaker in a subsample of the most high-scoring participants (PCL-R ≥ 30), compared to the total sample, meaning that in the high ends of the psychopathy construct, the CAPP-IRS and the PCL-R might not perform equally. In our sample we found no significant effect of level of PCL-R rated psychopathy on CAPP scores, although median values might point to a trend of comparably lower ratings at elevated levels of psychopathy, possibly indicating that the CAPP-SRF ratings were generally less accurate in capturing

16. Florez, G., Ferrer, V., Garcia, L. S., Crespo, M. R., Perez, M., Saiz, P. A., & Cooke, D. J. (2020). Comparison between the Psychopathy Checklist-Revised and the Comprehensive Assessment of Psychopathic Personality in a representative sample of Spanish prison inmates. *PLoS One,* 15(2); Florez, G., Ferrer, V., Garcia, L. S., Crespo, M. R., Perez, M., Saiz, P. A., & Cooke, D. J. (2018). Clinician ratings of the Comprehensive Assessment of Psychopathic Personality (CAPP) in a representative sample of Spanish prison inmates: New validity evidence. *PLoS One,* 13(4), e0195483; Florez, G., Ferrer, V., Garcia, L. S., Crespo, M. R., Perez, M., Saiz, P. A., & Cooke, D. J. (2018). Novel validity evidence of the Psychopathy Checklist- Revised (PCL-R) in a representative sample of Spanish inmates. *Forensic Sci Int*, 291, 175-183; Sandvik, A. M., Hansen, A. L., Kristensen, M. V., Johnsen, B. H., Logan, C., & Thornton, D. (2012). Assessment of Psychopathy: Inter-correlations between Psychopathy Checklist Revised, Comprehensive Assessment of Psychopathic Personality - Institutional Rating Scale, and Self-Report of Psychopathy Scale-III. *International Journal of Forensic Mental Health*, 11(4), 280-288.

psychopathic traits at high levels of psychopathy. If that is the case it is problematic, as it is generally the high ends of the construct that we want to identify. Nevertheless, the skewed distributions with generally low CAPP-SRF ratings in our sample rather indicate that the ratings did not capture the intended symptoms of psychopathy accurately at any level of psychopathy.

Even though staff rating procedures like the START have been shown to perform well in similar settings,[17] it is important to note that the START is performed by a multidisciplinary team, with mental health experts (i.e. psychologists or psychiatrists) chairing the procedure. Correspondingly, using the CAPP-SRF with a comparable approach, probing and discussing problematic traits and behaviour under the guidance of a mental health expert, might be a more suitable use. Furthermore, adequate training in the instrument, previous experience of participating in evaluations as well as close acquaintance with the assessed individual, might be crucial factors to ensure the quality and accuracy of instruments like the CAPP-SRF. Although participating staff were provided training, it might not have been sufficient for the purpose of the study. Additionally, it needs to be said that observational ratings of immediate violence risk factors are less complex than personality assessments, wherefore it might be difficult to compare an assessment instrument of psychopathy to the START.

Although the study results were unexpected, and unfortunately provided limited association validity evidence regarding the CAPP model as compared to the PCL-R and the TriPM, they do provide interesting information on staff as observers of psychopathy in particular. Despite the fact that correctional staff perceive the symptoms of the CAPP as indicative of psychopathy,[18] the results from the current study point to that when observing a specific individual, they may not recognize these same traits. If indeed correctional officers are not observant of manifestations of psychopathy, as might be inferred from the results in our study, they could be more vulnerable to unlawful influence, raising the risk of inappropriate relationships. The few available studies exploring inappropriate relationships between correctional staff and people in prison indicate that some of them take a more premeditated and active role in engaging staff in illicit behaviour and rule breaking.[19] Although some may court staff members out of romantic interests, others have exploitative or disruptive purposes, aiming to get staff to bend the rules, bring in contraband items or acting as a go between for criminal contacts.[20] Core features of psychopathy include traits of interpersonal dominance, that is for example being manipulative, deceitful and insincere, which in combination with lack of empathy and remorse heightens the risk of disruptive behaviour such as inappropriate relationships. However, the results from the current study raise questions of the possibilities for prison officers to be observant of psychopathic features of people under their supervision. This is important, as this is to the detriment both of the agency and of persons in prison, possibly leading to disciplinary actions as well as a disruption of rehabilitative measures. As of yet, there are to our knowledge no available studies exploring the role of psychopathy in boundary violations and the engagement in inappropriate relationships and unlawful influence within correctional services.

However, the results from the current study raise questions of the possibilities for prison officers to be observant of psychopathic features of people under their supervision

**Limitations**

There are some limitations of this study that warrant consideration. Firstly, it would have been optimal to investigate association validity evidence of

17. O'Shea, L. E., & Dickens, G. L. (2014). Short-Term Assessment of Risk and Treatability (START): systematic review and meta-analysis. *Psychological Assessment*, 26(3), 990-1002.
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the CAPP-SRF in conjunction with the CAPP-IRS. However, the data collection was originally planned as a cross-sectional study with a larger scope and necessitating the use of PCL-R, and we lacked the resources to complement it with expert-ratings of the CAPP model. Furthermore, we unfortunately had a large proportion of missing data specifically for the CAPP ratings. As the staff were approached by the liaison officer, we did not have any way of supervising which raters were approached nor the exact procedure for the ratings. It is possible that participating staff did not see any potential use of the CAPP-SRF and therefore did not have the motivation to perform the ratings. Similarly, an alternative explanation to the lack of convergence of CAPP-SRF to the PCL-R and the TriPM might be that participating staff were not fully engaged.

Even though the current study sample did not differ regarding PCL-R psychopathy level compared to those where CAPP-SRF was not available, the ratings for TriPM (with exception for boldness) as well as for the antisocial facet of the PCL-R were significantly lower, which might suggest a selection effect. However, it does not seem likely that this could explain the lack of concurrence of the CAPP-SRF to other measures of psychopathy, especially seeing as the PCL-R levels of the study sample were in a range comparable to similar correctional samples. It is more plausible that the seeming lack of accuracy in capturing psychopathic traits is explained by the raters' limited observations of and contact with the participants. The CAPP-SRF is devised for use in secure treatment settings (e.g. forensic psychiatric care or prison) with staff who work closely with those rated. As compared to secure treatment units, such as forensic psychiatric care, the staff of regular prison units will typically have less personal interaction with the individuals under their supervision. Therefore, the use of correctional officers to test the instrument might have been suboptimal. Lastly, as all participants were men with Swedish ethnicity, results are not generalizable to women or to persons with a different ethnicity.

## Conclusions

The main finding was that correctional staff ratings using the CAPP-SRF demonstrated a low correspondence to the other measures of psychopathy. The results from the current study provide limited validity evidence for the CAPP model and do not support the use of CAPP-SRF as a screening tool for psychopathy in correctional services. An interesting question for future research is to investigate if the CAPP-SRF might be more useful in the context of for example forensic psychiatric care. Additionally, although somewhat beyond the scope of the current study, the results highlight that the opportunities of staff to be properly observant of psychopathy might be lacking. Further research is warranted regarding management of psychopathic individuals within correctional services, including the exploration of psychopathy as a risk factor for boundary violations and unlawful influence within correctional services.

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