

The Caring-Uncaring Emotional (CUE) Inventory: A Pilot Study of a New Measure of Affective Psychopathy Traits

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Abstract

An affective dimension of psychopathy, e.g., callousness, lack of empathy, unemotional responsiveness, is essential to the study and understanding of psychopathy. It may be advantageous to have available brief measures of the affective dimension that may be utilized with adults and/or youths. The current study aims to provide preliminary validation of a new, brief, self-report measure of the affective dimension of psychopathy that may be suitable in the study of both adults and adolescents. A pilot study of the Caring-Uncaring Emotional (CUE) Inventory was conducted with 155 men and women recruited from a community sample. The 23-item CUE Inventory was found to have high internal consistency reliability ($\alpha = .91$) and was found to have high correlations with an expanded, 36-item version of the Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995), especially with the expanded LSRP Callous subscale ($r = .85$), thus supporting preliminary concurrent validity. The CUE was only modestly associated with the Antisocial subscale of the expanded LSRP, further supporting it as a measure of affective rather than behavioral traits. The CUE accounted for an additional 57% of the variance in LSRP total scores after controlling for demographic variables. An Exploratory Factor Analysis suggested a three-factor solution, with the first factor accounting for approximately 37% of the variance in scores and with high to very high loadings on this factor, which appears, tentatively, as a good measure of callousness. In conclusion, the CUE may function as an operational representative of callousness in adults in a community sample. Further study is needed to better clarify the latent structure of this scale and to determine its associations with other similar measures of the affective dimension of psychopathy and with other external correlates. The potential application of this measure in youths remains to be studied.

Keywords: psychopathy, affective, callous, uncaring, self-report, psychometric properties

1. Introduction

1.1 *The Study of Psychopathy in Adults and Youths*

The past two decades have seen the greatly expanded study of psychopathy in adults in both forensic and non-forensic samples (Lilienfeld & Fowler, 2006; Seibert, Miller, Few, Zeichner, & Lynam, 2010; Miller & Lynam, 2015; Miller, Maples-Keller, & Lynam, 2016). Similarly, psychopathic or psychopathic-like traits in youths have been studied extensively in recent years in community, clinical, and adjudicated samples (Frick & Dickens, 2006; Frick & White, 2008; Frick, Ray, Thornton, & Khan, 2014). Psychopathy is generally understood to represent a manifestation of affective, interpersonal, and behavioral traits or dimensions (Cleckley, 1941/1976; Cooke & Michie, 2001; Hare, 1991, 2003; Patrick, Fowles, & Krueger, 2009), as illustrated, for example, by shallow emotions, callous lack of empathy, absence of guilt or remorse, lying/deceitfulness, egocentricity, narcissism, manipulation/exploitation of others, impulsive, irresponsible, reckless behavior, and anti-social behavior including crime and aggression. A comprehensive review of the literature by Frick et al. (2014) on the role of Callous and Unemotional (CU) traits in understanding severe conduct problems in youths concluded that "...children and adolescents with severe conduct problems and elevated CU traits show distinct genetic, cognitive, emotional, biological, environmental, and personality characteristics that seem to implicate different etiological factors underlying their behavior problems relative to other youths with severe conduct problems" (p. 1). An affective dimension, e.g., callousness, lack of empathy, unemotional responsiveness, is essential to the study and understanding of psychopathy. The current study aims to provide preliminary validation of a new, brief,

self-report measure of the affective dimension of psychopathy that may be suitable in the study of both adults and adolescents.

1.2 Ongoing Debate about the Construct of Psychopathy

As discussed in a review of psychopathy by Skeem, Polaschek, Patrick, and Lilienfeld (2011), there continues to be debate as to what exactly constitutes psychopathy and distinguishes it from other disorders (see also Miller & Lynam, 2015; Patrick, Fowles, & Krueger, 2009). A primary unresolved issue concerns whether psychopathy is a unitary construct or a configuration of several distinguishable but overlapping trait dimensions. There also is debate whether antisocial behavior is a core feature of psychopathy and whether so-called positive-adjustment indicators as identified by Cleckley (1941/1976), e.g., emotional stability as suggested by non-neurotic, non-delusional characteristics, are essential to psychopathy. Cleckley (1941/1976) did not describe psychopathic patients as persons who are prone to committing brutal, sadistic, heinous acts of violence and aggression. "Inadequately motivated antisocial behavior", which downplays criminal intention, was one among 16 of Cleckley's diagnostic criteria for psychopathy. Although Hare (1991, 2003) developed a model of psychopathy that was based on Cleckley's criteria, his model emphasizes criminal behavior and de-emphasizes positive-adjustment indicators. Miller and Lynam (2015) note a lack of consensus in the field as to what traits are necessary and sufficient for a person to be considered psychopathic, and what traits are more essential than others. Miller and Lynam do not view low fear and anxiety, or boldness, as necessary features of psychopathy. However, as will be discussed further, they regard disagreeableness/antagonism, based on the Five-Factor Model of Personality (FFM; Costa & McCrae, 1992), as a core feature of psychopathy.

1.3 Use of Self-Report Measures in the Study of Psychopathy

The voluminous body of research on psychopathy and psychopathic traits in non-forensic samples has been accumulating to a significant extent through methodology that employs self-report measures. Generally speaking, psychometrically reliable and valid self-report measures offer certain advantages in comparison to labor intensive measures that require extensive interview and/or record review, e.g., they are time saving and easy to administer and score. With respect to the study of psychopathy, large numbers of persons, recruited from college or community samples, can be studied in an economical fashion, and abbreviated psychopathy measures also lend themselves to epidemiological study (Eisenbarth, Lilienfeld, & Yarkoni, 2015). Lilienfeld and Fowler (2006) note with respect to the assessment of psychopathy that self-report measures may also permit persons to report on the absence of affective states and traits. Lilienfeld and Fowler also note certain disadvantages to the use of self-report measures in the assessment of psychopathy. People who are high on dimensions of psychopathy tend to be dishonest and lack insight, and may be limited in their ability to report their emotional experiences. Response distortion may be particularly problematic with youth in forensic settings (Berkout, Young, & Gross, 2011; Murrie & Cornell, 2002; Vermeiren, 2003).

1.4 Conceptualizations Underlying Current Psychopathy Measures

Given the somewhat different historical and contemporary conceptualizations of psychopathy, it is not surprising that existing self-report measures of psychopathy involve somewhat different operationalizations of psychopathy (Drislane, Patrick, & Arsal, 2014). Several self-report measures developed for adults (e.g., the Levenson Self-Report Psychopathy Scale, LSRP; Levenson, Kiehl, & Fitzpatrick, 1995; the Self-Report Psychopathy Scale-III, SRP-III; Williams, Paulhus, & Hare, 2007) were designed to tap the same constructs of psychopathy as reflected in the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). The PCL-R is the most widely used measure of psychopathy in adults, particularly in forensic and correctional samples. It is also widely used for research purposes. The PCL-R is an intensive, clinician-rated, multisource, validated measure of psychopathy. It is comprised of interpersonal, affective, antisocial, and behavioral features. Similarly, several empirically supported self-report measures for youths (e.g., the Antisocial Process Screening Device, APSD; Frick & Hare, 2001; the Inventory of Callous-Unemotional Traits, ICU; Frick, 2004) were designed to tap dimensions of psychopathy as measured by the Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2003), a modified version of the PCL-R. The ICU may hold promise as a measure of callousness or "meanness" in young adults as well as in youths (Drislane et al., 2014; Kimonis, Branch, Hagman, Graham, & Miller, 2013).

The Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005), which is the most widely used self-report measure of psychopathy in non-forensic and non-clinical samples, is comprised of eight unidimensional subscales and three higher-order factors, i.e., Fearless Dominance, Self-centered Impulsivity, and Coldheartedness. The PPI was developed to operationalize psychopathy in a manner consistent with Cleckley's (1941/1976) conceptualization of psychopathy. Unlike the PCL-R, the PPI-R does not reference criminal or other anti-social behavior.

There have been some efforts to integrate the varied conceptualizations and operational models of psychopathy. The triarchic model of psychopathy (Patrick et al., 2009) is an integrative model of psychopathy based on essential phenotypic components of psychopathy, and is operationalized in the Triarchic Psychopathy Measure (TriPM; Patrick, 2010), which includes the domains Boldness, Meanness, and Disinhibition. Hall et al. (2014) assert that the latter traits may be conceptualized as “open constructs” that can be operationalized by different measures in differing ways. Drislane et al. (2014) demonstrated that alternative self-report measures of psychopathy can index the TriPM scales. The Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke, Hart, Logan, & Michie, 2004, 2012) is another model of psychopathy assessment that was developed through an integrative process. Extensive literature review and interviews of many international scholars and clinicians of diverse theoretical backgrounds resulted in a measure composed of six broad domains (Attachment, Behavioral, Cognitive, Dominance, Emotional, and Self) comprising 33 personality traits that provide a comprehensive representation of the psychopathy construct. As noted by Sellbom, Cooke, and Hart (2015), evidence for the construct validity of the CAPP is rapidly developing. In a recent study that yielded support for the construct validity of the CAPP, Sellbom et al. (2015) obtained results suggesting that “affective-interpersonal” features, meanness, or callous-unemotional traits, as represented by various measures appear to be at the core of the psychopathy disorder.

There has been growing interest and empirical support for understanding psychopathy in reference to the Five Factor Model (FFM; Costa & McCrae, 1992) of personality. Lynam et al. (2011), who developed a measure of psychopathy based on the FFM, the Elemental Psychopathy Assessment, proposed and demonstrated empirically that psychopathy maps onto maladaptive variants of 18 FFM facet traits. Strong empirical support for this proposal was further provided by O’Boyle, Forsyth, Banks, Story and White (2015), whose meta-analytic review of the FFM correlates of the Dark Triad (Machiavellianism, narcissism, and psychopathy) found that the FFM explained “nearly all of the variance in psychopathy.....” (p. 644). O’Boyle et al. (2015) contended that “the Lynam et al. (2011) model maps exceptionally well onto psychopathy” (p. 651). Miller and Lynam (2015) contend that the FFM domain of Agreeableness, i.e., extremely low agreeableness along with very high personal antagonism is most essential to the construct of psychopathy. As per Miller and Lynam, a personality description of psychopathy derived from FFM domains and facets would also include low levels of Conscientiousness (or inhibition/constraint), a mixture of low and high levels of Neuroticism (including low anxiety, low depression, high anger), and a mixture of low and high levels of Extraversion (low warmth, high assertiveness and excitement seeking).

1.5 Limitations and Further Directions for Psychopathy Measures

Various self-report measures of psychopathy have demonstrated differences in their factor structures, problems with convergent or discriminant validity, findings not consistent with the intended parameters of the measure, and problems with internal consistency reliability. Seibert et al. (2010) opined that the use of self-report measures of psychopathy in community settings with adults and youths may be most desirable if such measures can identify similar higher order constructs and if such measures are associated with particular personality traits and external correlates. To that end, Seibert et al. (2010) conducted an exploratory factor analysis using the scales from three different psychopathy measures that yielded a factor consistent with Factor 1 (affective-interpersonal) psychopathy traits on the PCL-R. The psychopathy scales also loaded strongly with the Five-Factor Model (FFM; Costa & McCrae, 1992) indicating that the psychopathy scales can be interpreted in line with a comprehensive measure of personality.

1.6 Rationale for Developing Additional Psychopathy Measures

Given that an affective dimension is considered a primary feature of psychopathy in both youth and adults, it is common to all conceptualizations of psychopathy, it is arguably the most essential dimension in the identification of psychopathy, and it has been associated with externalizing behaviors in adults and in youths (Christian & Sellbom, 2016; Frick & White, 2008; Frick et al., 2014; Kimonis et al., 2014; Salekin, Chen, Sellbom, Lester, & MacDougall, 2014), it may be advantageous to have available brief measures of the affective dimension that may be utilized with adults and/or youths. Among such advantages is developmental, long-term study spanning adolescent and adulthood years utilizing the same measure(s). Such study may shed light on mediating and moderating factors affecting stability of affective psychopathy traits and responsiveness to interventions over the course of adolescence through adulthood. Particularly when researchers are interested in focusing specifically on the affective dimension of psychopathy, brief measures of this dimension may be valuable. Kimonis et al. (2013) noted the shortcomings of various psychopathy measures in indexing the affective dimension of psychopathy, particularly callous and unemotional traits. The ICU as well as some other youth psychopathic traits inventories has had some application with young adults; however, such measures have been utilized primarily with youth.

Drislane et al. (2014) and Kimonis et al. (2013) studied the ICU using samples of college undergraduates (mean age 18.8, and 21.3, respectively). Furthermore, Skeem et al. (2011) recommended the development of measures to specifically index each of the triarchic constructs of boldness, meanness, and disinhibition as separately as possible from one another. As noted earlier, controversies remain as to the precise definition of psychopathy and what are the necessary and sufficient characteristics or traits in order to be considered psychopathic. Within this greater context there also is a need for greater understanding of the affective dimension of psychopathy and its personality and behavioral correlates in community samples of adults and youths.

1.7 Purpose of Current Study

A new scale developed by this author was initially designed with the intention to measure callous and unemotional traits in juvenile offenders. The scale is titled the Caring-Uncaring Emotional Inventory (CUE). However, with a slight modification of the scale, it was decided for pragmatic purposes to conduct a pilot study with a community sample of adults to examine the psychometric properties and convergence of the CUE Inventory with another measure of psychopathy, the LSRP. The LSRP is a 26-item self-report scale of psychopathy designed to measure primary psychopathy (associated with the interpersonal-affective dimension) and secondary psychopathy (associated with the behavioral, anti-social deviance dimension). An expanded, 36-item version of the LSRP was developed by Christian and Sellbom (2016) and was associated with improved internal consistency and construct coverage. This expanded version yielded three factors, identified by the investigators as Egocentric, Callous, and Antisocial. The results were replicated in a second sample. The expanded LSRP correlated significantly with other measures, including the TriPM and measures of empathy, narcissism, temperament, sensation seeking, and antisocial behavior. The Egocentric subscale appeared to measure narcissism, while the Callous subscale appeared to measure lack of affective empathy and meanness. The Antisocial subscale appeared to measure impulsivity, sensation seeking, disinhibition and antisocial behavior. The CUE was designed principally to measure the affective dimension of psychopathy, with consideration also of the interpersonal dimension of psychopathy. It was predicted that the CUE would demonstrate significant association with the 36-item version of the LSRP, with the strongest association being with the Callous subscale of the LSRP. In order to better understand the relationship between the CUE and the LSRP, a hierarchical multiple regression analysis was used to determine if LSRP total scale scores could be predicted from CUE scores after controlling for demographic variables. Additionally, an exploratory approach was conducted to identify the latent structure of the CUE.

2. Method

2.1 Participants

Participants were recruited through Amazon Mechanical Turk (MTurk). MTurk is an online labor market created by Amazon in which “workers” perform Human Intelligence Tasks, or HITs, for “requesters” for the completion of computerized tasks. The MTurk labor market has become a popular source of survey data among social scientists (Paolacci & Chandler, 2014). Participants included 81 men (51.6%) and 76 women (48.4%) between the age ranges of 18-24 and 65-74. Due to incomplete data for three cases, most analyses were performed on a sample of 155 persons. Eighty-one (51.6%) participants were in the 25-34 age category, 37 (23.6%) were in the 35-44 age category, and 19 (12.1%) were in the 45 to 54 age category. Collectively, 12.7% were in the age categories of 18-24, 55 to 64, and 65 to 74. With regard to highest level of education completed, 15.3% completed high school or GED, 29.9% attended some college, 14% completed a 2-year college, 32.5% completed a 4-year college, and 8.3% completed graduate school.

2.2 Procedure

Participants recruited from MTurk were directed to a link at SurveyMonkey to complete the survey. Participants were paid through Mturk for their participation. Following several demographic items, the 36 items of the expanded LSRP were presented first and were followed by the 23 items of the CUE Inventory, thus appearing as a single questionnaire or survey. All participants received the same order of items.

2.3 Measures

The expanded, 36-item version of the Levenson Self-Report Psychopathy Scale as reported by Christian and Sellbom (2016) consists of 11 items comprising the Egocentric subscale, 12 items comprising the Callous subscale, and 13 items comprising the Antisocial subscale. Christian and Sellbom reported internal consistency reliability coefficients (alpha) of .90 for the Total scale, .85 for the Egocentric subscale, .80 for the Callous subscale, and .81 for the Antisocial subscale. Internal consistency reliability was very similar in their replication

study. The response format for the LSRP items utilized a 4-point Likert-type scale that included the choices “Disagree strongly”, “Disagree somewhat”, “Agree somewhat”, “Agree strongly”. Scores ranged from 1 to 4.

The Caring-Uncaring Emotional (CUE) Inventory, developed by this author, in its current form is a 23-item self-report scale designed to assess the construct of callous and insensitive affective and interpersonal traits in youths and adults. Items for the CUE Inventory were developed by a theory-neutral, rational approach. The author initially generated a pool of items with the aims that items attempt to operationalize cold, callous, insensitive feelings and attitudes, utilizing a mixture of phrases that endorse callousness and others that endorse caring, utilizing semantics that may be appealing to youth through blunt and bold expression, and developing some items that incorporate a vernacular that may be more oriented to youth, including unrefined language. None of the retained items utilize expressions that would be unfamiliar to adults or youths. The CUE incorporates some item content that might not suggest an undesirable mode of feeling or rationalizing about situations for some persons who are higher on the dimension of callousness. In this sense, items were developed in a manner similar to items on the Youth Psychopathic Traits Inventory (YPI; Andershed, Kerr, Stattin, & Levander, 2002). The YPI incorporates items that frame psychopathic features as abilities rather than deficits, thus potentially minimizing social desirability bias. As noted, some CUE items incorporate semantics that are blunt and bold. An initial moniker for the CUE considered by the author was the “Bold and Cold Inventory”. Items that were eliminated from the item pool included items that were more generally reflective of angry, reactive, or oppositional attitudes rather than items more specific to callousness and lack of empathy. Other items eliminated were strongly focused on an interpersonal perspective. Some items were considered redundant. An example of items retained include the following: “*I have the power to hear about terrible things happen to people and not let it bother me*”; “*I know it may sound cold, but I’ve got to think about myself first, that’s just the way it is*”; “*I might say I’m sorry, but I really don’t give a ...*”; “*It really doesn’t bother me if someone gets shot or dies, unless it’s my family or friend*”; “*I care about what other people think of me*”. The response format for the CUE items utilized a 4-point Likert-type scale that included the choices “Disagree strongly”, “Disagree somewhat”, “Agree somewhat”, “Agree strongly”. Scores ranged from 1 to 4. All items on the CUE are keyed so that higher scores reflect higher callousness or lack of care.

3. Results

3.1 Descriptive Statistics

Descriptive statistics for the CUE and for the LSRP total scale and subscale scores can be seen in Table 1. With the exception of the LSRP Antisocial subscale, men scored significantly higher than women on the LSRP scales and on the CUE scale. Gender differences on most of the LSRP scales may be viewed as consistent with findings by Levenson et al. (1995) and by Salekin et al. (2014) in which men scored significantly higher than women on the LSRP primary psychopathy and secondary psychopathy scales. One-way between-groups analysis of variance was conducted for age and education. Results indicated no significant differences in mean scores between the groups for each of these demographic variables.

Table 1. Descriptive statistics for LSRP and CUE scales

Scale	<i>n</i>	<i>M</i>	<i>SD</i>	α
LSRP-Total score	156	62.46	15.46	.927
LSRP-Egocentric	156	19.54	6.56	.899
LSRP-Callous	156	20.64	6.22	.876
LSRP-Antisocial	156	22.48	6.26	.839
CUE	155	41.51	11.47	.911

Note. LSRP = Levenson Self-Report Psychopathy total scale, 36-item version. The Egocentric subscale consists of 11 items, the Callous subscale consists of 12 items, and the Antisocial subscale consists of 13 items. CUE = Caring-Uncaring Emotional Inventory, which consists of 23 items.

3.2 Reliability

As seen in Table 1, all scales and subscales had high internal consistency coefficients. The reliability coefficients of the LSRP total scale and subscales were slightly higher than those reported by Christian and Sellbom (2016), especially for the Callous subscale. The reliability coefficient for the CUE scale was high (.91) and was very similar to that of the LSRP total scale (.93) for the current sample.

3.3 Concurrent Validity

It was expected that the CUE Inventory scale would correlate positively with an existing measure that assesses a similar construct. In particular, it was expected that the CUE Inventory would be highly correlated with the Callous subscale of the expanded 36-item LSRP. Bivariate correlations among the CUE and LSRP total and subscales can be seen in Table 2. In this sample, the CUE was highly correlated with the LSRP Total Score ($r = .83, p < .001$) and with the LSRP Callous subscale ($r = .85, p < .001$), but only moderately correlated with the LSRP Antisocial scale ($r = .45, p < .001$). The correlation of the CUE, particularly with the LSRP Callous subscale, suggests that the same construct is largely being measured by these two scales (Campbell & Fiske, 1959; John & Benet-Martinez, 2000). The correlation between the LSRP Callous and Antisocial subscales in this sample was quite similar to that reported by Christian and Sellbom (2016), while the correlation between the Egocentric and Callous subscales was higher in the current sample. With respect to the correlation between the Egocentric and Antisocial subscales, the current sample displayed a somewhat lower correlation in comparison to that reported by Christian and Sellbom (2016), indicating less convergence in the current sample. In the current sample, the association between both the CUE Inventory and the LSRP Callous subscale with the LSRP Antisocial subscale was moderate, displaying much lower levels of shared variance with the Antisocial subscale.

Table 2. Zero order correlations between the LSRP total scale and subscales and the CUE inventory

Scale	1	2	3	4	5
1. LSRP-Total	—	.87*	.84*	.73*	.83*
2. LSRP-Egocentric	.87*	—	.71*	.46*	.76*
3. LSRP-Callous	.84*	.71*	—	.37*	.85*
4. LSRP-Antisocial	.73*	.46*	.37*	—	.45*
5. CUE	.83*	.76*	.85*	.45*	—

* $p < .001$

Several partial correlations were performed to explore the relationships between the CUE and LSRP subscales while controlling for other subscales. A strong, albeit decreased relationship remained between the CUE and the LSRP Callous subscale controlling for the Egocentric subscale ($r = .68, p < .001$). A moderate relationship was seen between the CUE and the LSRP Egocentric subscale controlling for the Callous subscale ($r = .43, p < .001$). A low to moderate correlation was found between the CUE and the Antisocial subscale controlling for the Callous subscale ($r = .27, p = .001$).

3.4 Multiple Regression Analysis

Hierarchical multiple regression analysis was performed to assess the ability of the CUE to predict scores on the LSRP total scale after controlling for gender, age, and education variables. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. Gender, age, and education were entered at Step 1, explaining 13.2% of the variance in LSRP scores. After entry of CUE scores at Step 2, the total variance explained by the model was 70.1%, $F(4, 150) = 87.86, p < .001$. The CUE explained an additional 57% of the variance in LSRP scores, after controlling for gender, age, and education, R squared change = .57, F change (3, 150) = 285.22, $p < .001$. In the final model, only CUE scores were statistically significant ($\beta = .83, p < .001$).

3.5 Exploratory Factor Analysis

An exploratory approach was used in an effort to identify the underlying structure of the CUE Inventory. The 23 items of the CUE were subjected to a Principal Axis Factor Analysis (PAF) using SPSS Version 22. An examination of the sampling distribution indicated mild positive skewness for the CUE total score, the distribution being positively skewed in particular for females (< 1). All CUE items were within acceptable ranges for skewness according to criteria suggested by Kline (2011) (skewness not exceeding 3) and by Curran, West and Finch (1996) (skewness not exceeding 2). Nevertheless, PAF was selected as a conservative approach with respect to multivariate normality (Costello & Osborne, 2005). PAF “explicitly focuses on the common variance among the items and, therefore, focuses on the latent factor” (Henson & Roberts, 2006, p. 398). Prior to performing PAF, the sample was assessed for its suitability for factor analysis. Examination of the correlation matrix revealed that 22 of the 23 items correlated at least .3 with at least one other item, suggesting reasonable factorability. However, two items were removed due to low communalities ($< .30$); these were the same items whose skewness approached 2. Subsequent EFA analyses were conducted based on 21 items. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .89, which exceeded the recommended value of .6 (Kaiser, 1970, 1974). Guidelines for sampling adequacy provided by Hutcheson and Sofroniou (1999) would describe this KMO measure as falling between the great and superb ranges. Bartlett’s Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

Principal Axis Factor Analysis (PAF) revealed four factors with eigenvalues exceeding 1 (eigenvalues were 8.31, 2.29, 1.69, and 1.19) explaining 39.5%, 10.9%, 8.0%, and 5.6% of the variance, respectively. An inspection of the scree plot suggested a break around the third or fourth factor. Results of Parallel Analysis showed only three factors with eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix of the same size (21 variables x 155 respondents), supporting a three-factor solution. Given that the CUE was designed to measure a specific trait, it was an assumed probability that factors would be correlated. Oblique (Oblimin) rotation was performed to aid in the interpretation of these three factors. The three-factor solution explained 51.5% of the variance, with Factor 1 contributing 37.5%, Factor 2 contributing 8.5%, and Factor 3 contributing 5.5%. An examination of the Reproduced Correlation Matrix revealed 31% nonredundant residuals with absolute values greater than .05, suggesting this three-factor model to be an adequate fit of the data.

The first factor had high to very high loadings on 13 items (see Table 3 for items and factor loadings and Table 4 for pattern matrix). Items with factor loadings less than .4 were omitted for interpretation based on Stevens’ (2002) recommendation. An inspection of the content of these items suggested that this first factor may be labeled “Callous”. The items, which are primarily from the perspective of self toward others, relate to particularly cold, unfeeling, self-centered, spiteful qualities, as well as exploitive tendencies. The second factor may be labeled Care/Approval Seeking. The items, which are from the perspective of the concern of others toward self, appear to be associated with a desire for others to like and care about the individual, or the tendency to be absent of such concern. The third factor may be labeled Indifference/Detachment. The items appear to be associated with being strongly disconnected from painful feelings, being impassive, indifferent, and virtually invulnerable to sadness. These items strictly concern feelings, or lack thereof, of self, as opposed to attitude toward others.

As seen in Table 3, the three factors were not highly correlated with one another, but were not independent. Internal consistency for each of the three subscales was examined using Cronbach’s alpha. The alpha coefficient was high for Callous (.93) (13 items) and alphas were moderate for Care Seeking (.70) (3 items), and for Indifference/Detachment (.69) (4 items).

A further examination of the zero-order correlations (not shown here) between the CUE factors, represented as subscales, and the LSRP scales, indicated that the CUE Callous subscale had high correlations with the LSRP Total, Egocentric, and Callous scales ($r_s = .84, .79, \text{ and } .83$, respectively, all $p < .001$), but only a moderate correlation with the Antisocial subscale ($r = .48, p < .001$). The CUE Care/Approval Seeking subscale had moderate correlations with the LSRP Total and LSRP Callous scales ($r_s = .38 \text{ and } .42$, respectively, $p < .001$), and a low to moderate correlation with the Antisocial subscale ($r = .29, p < .001$). The CUE Indifference/Detachment subscale had a moderate relationship with the LSRP Callous subscale ($r = .41, p < .001$), and nearly a zero correlation with the Antisocial subscale, indicating no relationship between these measures.

Table 3. Items and factor loadings for the Caring/Un caring Emotional (CUE) inventory

Factor	Callous	Care/Approval Seeking	Indifference/Detachment
	1	2	3
1 Let's be honest, if I don't know you, why should I care about you?	.84		
2 I can act nice to someone just to get what I want, and then I don't think about that person unless I need something again from them.	.78		
3 I can be good at pretending to care about people but most of the time I really don't care.	.77		
4 I might say I'm sorry, but I really don't give a76		
5 It really doesn't bother me if someone gets shot or dies, unless it's my family or friend	.76		
6 If there is someone I don't like, it would feel good to see them get hurt.	.74		
7 I have the power to hear about terrible things happen to people and not let it bother me.	.72		
8 I know it may sound cold, but I've got to think about myself first, that's just the way life is.	.66		
9 The only thing I might ever cry about is if someone in my family died.	.64		
10 If someone gets me really mad, I have great ways to get even.	.61		
11 I am able to know that I did something wrong, but not really care about it.	.59		
12 I can act real cool and nice if it works to get what I want.	.57		
13 I don't spend my time worrying about people's feelings getting hurt.	.57		
14 I care about what other people think of me.		.78	
15 I want others to like me.		.68	
16 If people tell me I did something wrong, I will probably listen and think about if what they said is true.		.53	
17 I am very good at not letting myself get hurt emotionally.			.66
18 I am the type of person who worries sometimes.			.60
19 Nothing much bothers me.			.58
20 I basically never feel sad.			.41
21 Maybe it sounds cold, but I have the power to just not care about what anyone thinks of me.			
Correlations among factors			
Factor2	.25	—	.21
Factor3	.29	.21	—

Note. Factor loadings < .4 are suppressed.

Table 4. Pattern matrix for PAF with oblimin rotation of three factor solution of CUE items

Items	Pattern coefficients			Communalities
	Factor			
	1	2	3	
Let's be honest...	.837	.004	-.023	.692
I can act nice...	.778	-.033	.007	.596
I can be good...	.767	.105	.007	.642
I might say...	.764	.196	-.080	.661
It really doesn't bother...	.758	.078	-.033	.595
If there is someone...	.735	.027	-.192	.506
I have the power...	.715	.005	.281	.706
I know it may sound...	.659	-.049	.145	.493
The only thing I might...	.635	-.031	.251	.544
If someone gets me	.606	-.095	.006	.350
I am able to know...	.589	.230	-.055	.447
I can act real cool...	.573	-.197	.079	.337
I don't spend my time...	.573	.348	.172	.658
I care about what other...	-.071	.781	.134	.643
I want others to...	-.037	.676	.189	.532
If people tell me...	.187	.528	-.174	.335
I am very good at...	.106	-.132	.664	.466
I am the type of person...	-.205	.178	.599	.390
Nothing much bothers...	.198	.033	.582	.456
I basically never feel...	.190	.075	.407	.271
Maybe it sounds cold...	.337	.281	.365	.486

Note. Factor loadings greater than .40 are shown in boldface.

As seen in Table 5, an examination of the structure matrix revealed that four items were complex variables, with two items ("I don't spend my time worrying about people's feelings getting hurt."; "Maybe it sounds cold, but I have the power to just not care about what anyone thinks of me.") having high loadings (coefficients) on all three factors.

Table 5. Structure matrix for PAF with oblimin rotation of three factor solution of CUE items

Items	Structure coefficients		
	Factor		
	1	2	3
Let's be honest...	.831	.206	.215
I can act nice...	.771	.160	.219
I can be good...	.795	.296	.246
I might say...	.790	.368	.177
It really doesn't bother...	.767	.258	.198
If there is someone...	.688	.168	.021

I have the power...	.796	.241	.484
I know it may sound...	.688	.144	.321
The only thing I might...	.698	.179	.424
If someone gets me	.584	.056	.157
I am able to know...	.631	.364	.160
I can act real cool...	.547	-.039	.200
I don't spend my time...	.707	.526	.407
I care about what other...	.159	.791	.278
I want others to...	.183	.707	.320
If people tell me...	.268	.537	-.010
I am very good at...	.261	.034	.667
I am the type of person...	.008	.253	.578
Nothing much bothers...	.371	.204	.645
I basically never feel...	.324	.208	.477
Maybe it sounds cold...	.510	.441	.520

Note. Factor loadings greater than .40 are shown in boldface.

4. Discussion

An affective dimension of psychopathy, e.g., callousness, lack of empathy, lack of remorse, unemotional responsiveness, is essential to the study and understanding of psychopathy in youth and adults. An affective dimension is considered a primary dimension of psychopathy in both youth and adults, it is common to all conceptualizations of psychopathy, it is arguably the most essential dimension in the psychopathy construct, and it has been associated with externalizing behaviors in adults and in youths (Christian & Sellbom, 2016; Frick & White, 2008; Frick et al., 2014; Kimonis et al., 2014; Salekin et al., 2014). Brief, validated, self-report measures of psychopathy or psychopathic traits may be advantageous for basic research purposes, for epidemiological study, and may also have potential for applied interventional uses. Particularly when researchers are interested in focusing specifically on the affective dimension of psychopathy, brief measures of this dimension may be valuable. A pilot study was conducted of a new measure intended to index affective traits associated with the construct of psychopathy. The current study presented preliminary validation of a new measure by study of its psychometric properties and relation to a recently expanded version of the Levenson Self-Report Psychopathy Scale (LSRP). Results indicated that, with this initial sample, the CUE had high internal consistency and was highly correlated with the LSRP Total, Egocentric, and Callous scales, the highest correlation being with the Callous subscale. CUE scores accounted for a substantial portion of the variance in LSRP scores after controlling for demographic variables. The most robust factor identified in the CUE Inventory appears to be associated with callousness, which is consistent with the research literature on the affective dimension of psychopathy. The bivariate and partial correlations and EFA indicated that with respect to the current sample the CUE may well tap into the construct of callousness which is a prime feature of psychopathy. Thirteen of 21 items (two items were removed due to low communalities) had high to very high loadings on this first factor. The items comprising this factor appear to be associated with particularly cold, unfeeling, self-centered, spiteful qualities, as well as exploitive tendencies. Tentatively speaking, the CUE may function as an operational representative of callousness in adults in a community sample.

A second factor identified in the CUE appeared to be associated with the relative desire or absence of desire to be cared about and approved of by others. This factor had only modest association with the other two CUE factors and with the LSRP scales. This factor was composed of only three items; however, none of these items cross-loaded with other factors, suggesting it may represent a separate factor with respect to the current sample. The relevance of such a factor to affective or interpersonal psychopathic traits remains to be further studied.

A third factor, tentatively labeled Indifference/Detachment, is composed of items that appear to be associated with being strongly disconnected from painful feelings, being impassive, indifferent, and virtually invulnerable to sadness. These items concern feelings, or the relative lack of feelings, with respect to self, as opposed to

attitude toward others. However, the structure matrix revealed that some items in the third factor cross-loaded particularly with the first factor. Thus, it is not clear to what extent this factor might represent an affective trait overlapping with, but somewhat distinct from callousness or coldness.

It is noteworthy that there was a moderate relationship between the CUE and the LSRP Egocentric subscale while controlling for the Callous subscale, suggesting that the CUE may overlap with the interpersonal dimension of psychopathy, and particularly as operationalized in the expanded LSRP. The overlap between affective and interpersonal dimensions of psychopathy found in this study is quite consistent with the literature on psychopathy, including the finding of a moderate correlation between the Egocentric and Callous subscales of the expanded LSRP as reported by Christian and Sellbom (2016).

An interesting finding was that the CUE demonstrated only a moderate zero-order correlation with the Antisocial subscale of the modified LSRP. The partial correlation was in the low range while controlling for the LSRP Callous subscale. This suggests that the CUE is tapping primarily into an affective dimension of coldness, and also tapping into an interpersonal dimension, and that the CUE may be significantly but at best modestly associated with impulsive, irresponsible, antisocial behavior as operationalized by the LSRP Antisocial subscale when considering overlapping variance among these scales.

This study found that, with the exception of the LSRP Antisocial subscale, men scored significantly higher than women on the LSRP scales and on the CUE scale. Gender differences on most of the LSRP scales may be viewed as consistent with the findings by Levenson et al. (1995) and by Salekin et al. (2014) in which men scored significantly higher than women on the LSRP primary psychopathy and secondary psychopathy scales. However, to the extent that the Antisocial subscale of the expanded LSRP represents a measure of secondary psychopathy in the original LSRP, one would have expected men in this sample to have scored significantly higher than women on the Antisocial subscale. It is not clear why this was not the case. In a review of the study of psychopathy, Skeem et al. (2011) reported that researchers generally agree that men display higher levels of psychopathy than women do and that such pattern has been observed on the PCL-R and the PPI. Thus, the present findings are generally consistent with the literature on psychopathy.

An advantage of this study is that it sampled a broad age-range of adults in a community sample. Approximately 20 % of the sample included adults of middle age years (45-64). On the other hand, slightly more than half of the sample was comprised of young adults (ages 25-34). Additionally, the sample was a convenience sample obtained via a particular source, i.e., MTurk.

Another advantage of this study is that it may be the first, or among the first studies to utilize the expanded LSRP as devised by Christian and Sellbom (2016). For the current sample, internal consistency reliability was excellent for the LSRP Total scale and good for each of the LSRP subscales. The reliability coefficients were slightly higher than those reported by Christian and Sellbom. The current study thus supports validation for the internal consistency reliability of the expanded LSRP.

4.1 Limitations

There were several limitations of this study that included sample size with respect to conducting an Exploratory Factor Analysis, albeit, Factor 1 of the CUE can be considered reliable regardless of sample size given there were more than four item loadings greater than .6 (Guadagnoli & Velicer, 1988). Additionally, there is restricted generalization from the current sample based on use of principal axis factoring (Field, 2013). Generalization of the results would require cross-validation. The CUE and the expanded LSRP are both self-report measures that utilized the same response choice format. Shared method variance may have artificially inflated the correlations between these measures. All participants responded first to the LSRP items so there was no control for any potential order effects. There is a certain degree of subjectivity on the part of the researcher in conducting an EFA, albeit EFA decisions were reported in this study. The current study is a pilot study; at this juncture the latent structure of the CUE and its relationship with any meaningful external correlates remain to be further studied. Although initially designed for study of youths, it has been piloted with adults, albeit, a large segment of the current sample were young adults. No statements can be made at this time as to how youth might respond to this measure.

4.2 Future Directions

Future study of the CUE may focus on its relationship with other measures of related constructs and external correlates. It could be posited that the CUE would be strongly associated with the Meanness scale of the TriPM in adults, with the Coldheartedness scale of the PPI-R, with the self-report form of the CAPP, and with the ICU in youths. Previous studies of the ICU found a three-factor bifactor model with the three subscales (Uncaring,

Callousness, and Unemotional) being related to a common general factor of CU traits (Essau, Sasagawa, & Frick, 2006; Fanti, Frick, & Georgiou, 2009; Kimonis et al., 2008; Pihet, Etter, Schmid, & Kimonis, 2015). However, it was recently reported by Ray, Frick, Thornton, Steinberg, and Cauffman (2016) that the factor structure of the ICU may reflect method variance associated with positively and negatively worded items. As noted earlier the ICU also has demonstrated promise as a measure of CU traits with young adults. It is particularly interesting that the CUE was found to have what appear to be three factors similar to those identified with the ICU. The CUE may also be studied in relation to the FFM where its strongest association may be with the Agreeableness dimension of personality. As noted earlier, Miller and Lynam (2015) contend that the FFM domain of disagreeableness/antagonism is most essential to the construct of psychopathy. Therefore, it would be particularly useful to study the CUE in relation to this dimension of the FFM. Future study of the CUE might also benefit from adding one or more items to the second factor which was composed of only three items. This might aid in the understanding of this factor as it relates to psychopathic traits.

In sum, this pilot study of a new measure of affective traits of psychopathy suggests that further study of this scale is warranted. The scale demonstrated high internal consistency, strong convergence with a modified, established self-report measure of psychopathy, and a first factor that appeared to be a robust measure of the trait of callousness.

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