

SHORT REPORTS

Are All Psychopathic Individuals Low-Anxious?

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Theorists commonly assume that true or primary psychopathic individuals experience little anxiety or neurotic conflict. This study examined the relationship between psychopathy and anxiety in 104 Caucasian and 113 African American incarcerated men using the Psychopathy Checklist—Revised (PCL–R; R. D. Hare, 1991) and multiple self-report measures to tap diverse interpretations of the anxiety construct (i.e., neuroticism, traditional definitions of anxiety, and fear). Analyses involving zero-order, semipartial, and point-biserial correlations indicate that PCL–R psychopathy and the anxiety construct are essentially independent. These findings suggest that either (a) the traditional belief that all psychopathic individuals are low-anxious is incorrect or (b) the PCL–R is not an adequate measure of primary psychopathy.

Psychopathic individuals (Ps) are notorious for their callous and remorseless use of others. However, as illustrated by the following quotation, they are no less noted for their lack of anxiety or neurotic conflict: “Within himself he appears almost as incapable of anxiety as of profound remorse” (Cleckley, 1976, p. 340). With regard to the relationship between psychopathy and anxiety or psychoneurosis, Cleckley (1976) went so far as to state that “It is doubtful if in the whole of medicine any other two reactions stand out in clearer contrast” (p. 259).

Despite widespread adoption of Cleckley’s (1976) view regarding the inverse relationship between psychopathy and anxiety, the facts concerning this relationship remain obscure. At least three factors contribute to the existing ambiguity: First, while theorists commonly assume that the true or primary P is one who is also low in anxiety (Fowles, 1980, 1988; Gray, 1982, 1991; Hare, 1978; Karpman, 1961; Schalling, 1978), their concepts and measures of anxiety differ owing, quite likely, to Cleckley’s nonspecific use of the anxiety construct.¹ Second, the most widely cited evidence regarding the relationship between psychopathy and the anxiety construct (i.e., Lykken, 1957) is limited in several respects. Finally, it has been proposed that existing evidence on the psychopathy–anxiety relationship is inadequate owing to the potentially elevated level of negative affect engendered by the P’s

antisocial lifestyle (Fowles, 1987; Frick, 1998; Lilienfeld, 1992, 1994). These three points are elaborated below.

Conceptualization and Measurement of Anxiety

Cleckley (1976) described anxiety as “remorse, uneasy anticipation, apprehensive scrupulousness, the sense of being under stress or strain” (p. 257). In addition, Cleckley used other constructs such as “neuroticism” and “psychoneurotic type” interchangeably with anxiety (p. 339). Cleckley’s nonspecific description and use of the anxiety construct allow for at least three interpretations which have been used by psychopathy theorists and researchers. First, one could interpret anxiety as neuroticism (Hare, 1970), a construct which involves emotional lability and is measured with instruments such as Eysenck and Eysenck’s (1975) Neuroticism scale and Tellegen’s (1982) Negative Emotionality (NE) factor. Second, one could interpret anxiety using traditional definitions of the concept (Fowles, 1980, 1988; Gray, 1991), which relate strongly to but are not identical with neuroticism. According to Gray (1991), for instance, anxiety consists of two parts neuroticism and one part introversion and corresponds to traditional measures of anxiety such as the Taylor Manifest Anxiety Scale (TMAS; Taylor, 1953) and the Welsh Anxiety Scale (WAS; Welsh, 1956; see also Watson & Clark, 1984). Finally, one could interpret anxiety as fear (Lykken, 1957, 1995), a construct which, when assessed using self-report (e.g., Tellegen’s, 1982,

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¹ Throughout this article, we use the term *anxiety construct* to refer to Cleckley’s (1976) nonspecific description and use of anxiety and to subsequent interpretation by others as neuroticism, traditional definitions of anxiety, and fear. Conversely, consistent with the traditional and empirical distinction between the constructs of anxiety and fear (Watson & Clark, 1984), we use the term *anxiety* to refer specifically to neuroticism and traditional accounts of anxiety and *fear* to refer specifically to the fear construct which is measured by the Constraint factor and Harm Avoidance scale from the Multidimensional Personality Questionnaire (Tellegen, 1982).

Harm Avoidance [HA] scale; the Activities Preference Questionnaire [APQ; Lykken, 1957] or Tellegen's, more general, Constraint [CON; Fowles & Missel, 1994; Lynam, 1996] factor), is relatively independent of both neuroticism and traditional anxiety (Watson & Clark, 1984).

Limitations of Past Research

One of the most direct and systematic examinations of Cleckley's (1976) characterization of the relationship between psychopathy and the anxiety construct was conducted approximately 40 years ago by David Lykken. In this study, Lykken (1957) found that two traditional measures of self-report anxiety (TMAS; Taylor, 1953; WAS; Welsh, 1956) failed to differentiate primary Ps from controls. In fact, primary Ps were nonsignificantly higher on these measures than controls. Thus, psychopathy was not associated with low levels of traditional anxiety. Ps did, however, obtain significantly lower scores on a measure of fear (the APQ). Despite the seminal contribution of this research, the conclusions that may be drawn from the study are limited. One limitation pertains to the dated measure of psychopathy that was used (i.e., various institutional psychologists decided whether participants were psychopathic by using 14 of Cleckley's 16 criteria). More recently, investigations of psychopathy have embraced the Psychopathy Checklist—Revised (PCL-R; Hare, 1991), which was designed to replicate classification using Cleckley's (1976) criteria and has been shown to have excellent reliability and validity (see Hare, 1991). Another limitation of Lykken's (1957) study pertains to the heterogeneity of his experimental and control groups; college and high school students constituted the control group, whereas the psychopathic group consisted of incarcerated individuals and psychiatric patients. Further, gender was mixed for both groups and race was not reported. Finally, subsequent investigations have failed to replicate the reported association between fear and psychopathy (Schmawk, 1970; Widom, 1976).

Antisocial Lifestyle and Anxiety

In addition to proposing that Ps are free from *trait* anxiety, Cleckley (1976) also believed that Ps were free from *reactive* anxiety or worry, as evidenced by the following quote:

It is highly typical for him not only to escape the abnormal anxiety and tension fundamentally characteristic to this whole diagnostic [i.e., psychoneurotic] group but also to show a relative immunity from such anxiety and worry as might be judged normal or appropriate in disturbing situations. (pp. 339–340)

Nevertheless, some researchers have proposed that Ps may experience relatively high levels of negative affect and thus obtain high scores on traditional measures of anxiety owing to their antisocial lifestyle and associated consequences (i.e., contacts with the authorities), which are theorized to engender stress, anxiety, and negative affect (Fowles, 1987; Frick, 1998; Lilienfeld, 1992, 1994). According to these researchers, this "acquired" negative affect is not a function of temperament or personality but is rather a function of lifestyle, circumstance, or consequence. Thus, the consequences of Ps' antisocial lifestyles may obscure the relationship between psychopathy and anxiety by producing artificially high levels of negative affect.

According to Frick (1998), if anxiety relates primarily to Ps' antisocial lifestyles and associated consequences, it should be related to Factor 2 of the PCL-R, which assesses antisocial lifestyle, as opposed to Factor 1, which relates more closely to the core personality features of psychopathy (Hare, 1991). Thus, when examining the relationship between PCL-R total score and the anxiety construct, one may find it desirable to partial out the effects of antisocial lifestyle (Factor 2) from this relationship. In this regard, Frick (1998) suggested computing semipartial correlations, which allows for the examination of the *unique* relationship between PCL-R total score and the anxiety construct while controlling for the possible effects of "acquired" negative affect. Thus, when compared with zero-order correlations, Frick's analysis may provide a more refined examination of the relationship between PCL-R psychopathy and the anxiety construct.

Purpose of the Present Study

Given (a) the diverse conceptualization and measurement of the anxiety construct, (b) the paucity of rigorous research examining this issue using current methodology, and (c) the potentially confounding effects of antisocial lifestyle, we believe there is sufficient reason to examine the relationship between psychopathy and the anxiety construct using several procedural refinements. First, we used multiple self-report measures of the anxiety construct to address its diverse interpretations. Second, we assessed psychopathy with the PCL-R (Hare, 1991), the state-of-the-art measure of psychopathy. Third, we examined the relationship between psychopathy and the anxiety construct using zero-order, semipartial, and point-biserial correlations. Finally, we selected only male offenders from one institution and used separate analyses for Caucasian and African American samples to examine the relationship between psychopathy and the anxiety construct within two relatively homogenous samples.

The importance of examining the relationship between psychopathy and the anxiety construct is especially compelling in light of apparent differences in traditional and current methods for assessing psychopathy. Whereas traditional methods of assessing psychopathy that involved Cleckley's (1976) criteria emphasized the lack of anxiety, the PCL-R (Hare, 1991) places no emphasis on assessing the presence (or absence) of anxiety or negative affect. Thus, it is unclear whether the current psychopathy measure identifies only primary (i.e., low-anxious) Ps or a more general class of Ps independent of the anxiety construct.

The purpose of this investigation was to examine the traditional view that Ps are relatively free from anxiety and neurotic conflict (i.e., primary) using current assessment methods. Further, we explored whether the predicted inverse relationship between psychopathy and the anxiety construct emerges more clearly when semipartial correlations are used.

Method

Participants

Participants were 104 Caucasian and 113 African American men incarcerated at a minimum security prison. All participants meeting the inclusion criteria were invited to participate in the study. A prescreening of files provided information for inclusion criteria. Among the criteria were these: age of 40 or younger, reading and math achievement of at least fourth-

grade level, and currently free of psychotropic medication. We presented the elements of consent both verbally and in written form. Before we asked the participants to sign the consent form, we informed all of them that their participation or lack thereof would have no impact on their status within the correctional system.

After conducting a semistructured interview lasting approximately 75 min, interviewers reviewed each participant's file and used the interview and file information to rate him on the PCL-R (Hare, 1991). The PCL-R is a 20-item checklist with items that are scored from 0 (*item does not apply*) to 2 (*item applies*) depending on how well the description of the item matches the behavior and personality of the individual. Interrater reliability (i.e., intraclass correlation) for this study was computed on a subset of 46 participants, was found to be .70 across Caucasian and African American samples, and was comparable between these groups. Though somewhat lower than reliabilities obtained in our lab (Kosson, Smith, & Newman, 1990; Newman, Schmitt, & Voss, 1997) and elsewhere (see Hare, 1991), the interrater reliability was, nonetheless, in the acceptable range.

To date, there has been relatively little research on PCL-R-selected Ps and controls in African American samples. Moreover, some of this evidence suggests that Caucasian and African American groups differ (a) in the distribution of PCL (Hare, 1980) scores, (b) in the factor structure underlying the PCL, and (c) on tasks involving passive-avoidance deficits (Kosson et al., 1990; Newman & Schmitt, 1998; Thornquist & Zuckerman, 1995). Thus, to provide a fair reexamination of Cleckley's (1976) observation, we conducted separate analyses for Caucasian and African American samples.

The PCL-R is commonly used to distinguish discrete groups of Ps (individuals with scores of 30 and above) and controls (individuals with PCL-R scores of 20 and below). There is also increasing interest in examining the individual PCL-R factors. Thus, in addition to computing zero-order correlations using the PCL-R as a continuous variable, we computed supplemental analyses using (a) point-biserial correlations using only the discrete groups of Ps and controls while dropping the "middles" (individuals with scores between 20 and 30) and (b) the PCL-R factor scores using all participants. For Caucasian participants, this procedure resulted in 42 controls, 37 middles, and 25 Ps. The average PCL-R total, Factor 1, and Factor 2 scores were 23.0 ($SD = 7.8$), 8.6 ($SD = 3.9$), and 11.2 ($SD = 3.5$), respectively. For African American participants, this procedure resulted in 36 controls, 48 middles, and 29 Ps. The average PCL-R total, Factor 1, and Factor 2 scores were 24.1 ($SD = 7.2$), 9.9 ($SD = 3.2$), and 10.8 ($SD = 3.5$), respectively.

In our examination of the relationship between psychopathy and the anxiety construct, we used nine self-report, anxiety-related measures, including the Neuroticism scale (N) from the Eysenck Personality Question-

naire (EPQ; Eysenck & Eysenck, 1975), Gray's (1982, 1991) anxiety dimension (GANX) involving a weighted combination of two parts neuroticism and one part introversion from the EPQ, the WAS (Welsh, 1956), and four dimensions of Tellegen's (1982) Multidimensional Personality Questionnaire. We examined the total NE factor score as well as the Stress Reaction (SR) scale, which is a component of the NE factor. We also examined the total CON factor score as well as the HA scale, which is a component of the Constraint factor. Following Lykken's (1995) recommendation, we used the HA and CON as our primary measures of fear. Whereas the instruments described above were used to assess neuroticism, anxiety, and fear, we also used the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988), because it has been described as a relatively pure measure of anxiety, and the anxiety scale from the Symptom Checklist-90—Revised (SCL; Derogatis, 1992), because it measures specific anxiety symptoms. Although we did not administer the Minnesota Multiphasic Personality Inventory from which the WAS was derived, all other measures (e.g., EPQ) were administered in their standard format, and the subscales (e.g., N) were later extracted. In sum, our measures of neuroticism included N and NE; our measures of anxiety included GANX, WAS, SR, BAI, and SCL; and our measures of fear included CON and HA.

Procedure

Participants completed the anxiety-related questionnaires on 3 separate days for approximately 20–35 min per day. We tested participants individually and gave them instruction on how to complete each questionnaire in order to minimize confusion. In addition to completing questionnaires, participants also completed a battery of behavioral tasks that examined information processing and response modulation (e.g., Newman et al., 1997). These results are not reported here. Participants were paid \$5 for completing the interview and questionnaires.

Results

Before evaluating the relationship between psychopathy and the anxiety construct, we examined the relationship among our anxiety-related measures.² As expected on the basis of previous results (e.g., Watson & Clark, 1984), self-report measures of anxiety were highly correlated in both Caucasian and African

² Owing to the number of correlations computed, we used an adjusted alpha ($\alpha = .01$) for evaluating the significance of all correlations.

Table 1
Intercorrelations Between Measures of Self-Report Anxiety and Fear for Caucasian and African American Offenders

Scale	1	2	3	4	5	6	7	8	9
1. N	—	.93**	.54**	.46**	.42**	.50**	.54**	-.10	-.16
2. GANX	.91**	—	.52**	.41**	.38**	.45**	.50**	-.07	-.11
3. WAS	.63**	.59**	—	.40**	.48**	.63**	.67**	-.27*	-.20
4. BAI	.49**	.42**	.57**	—	.62**	.38**	.33**	-.14	-.18
5. SCL	.51**	.43**	.51**	.72**	—	.42**	.43**	-.15	-.17
6. NE	.58**	.53**	.71**	.52**	.46**	—	.81**	-.28*	-.20
7. SR	.76**	.69**	.76**	.61**	.56**	.78**	—	-.25*	-.14
8. CON	.03	.06	-.09	.06	.05	-.12	-.02	—	.73**
9. HA	-.04	-.03	-.10	.13	.05	-.25	-.04	.68**	—

Note. Values on the lower left half of the table represent correlations for Caucasian participants; values on the upper right half represent correlations for African American participants. N = Neuroticism scale; GANX = Gray's anxiety scale; WAS = Welsh Anxiety Scale; BAI = Beck Anxiety Inventory; SCL = Symptom Checklist-90—Revised anxiety scale; NE = Negative Emotionality scale; SR = Stress Reaction scale; CON = Constraint scale; HA = Harm Avoidance scale.

* $p < .01$. ** $p < .001$.

Table 2
Correlations for PCL-R Total Score, Factor Scores, and Discrete Groups With Anxiety and Fear for Caucasian and African American Offenders

Correlation type	N	Scale							
		GANX	WAS	BAI	SCL	NE	SR	CON	HA
Caucasians (<i>n</i> = 104)									
Zero-order	-.02	-.03	.03	-.00	.01	.11	-.06	-.16	-.09
Semipartial	-.07	-.03	-.15	-.11	-.04	.03	-.09	.06	.08
Factor 1	-.01	.02	-.05	-.04	.01	.13	-.06	-.11	-.05
Factor 2	.01	-.02	.11	.05	.02	.11	-.02	-.21	-.14
Discrete ^a	.02	-.01	.06	.11	.04	.21	.00	-.16	-.12
African Americans (<i>n</i> = 113)									
Zero-order	.05	.03	.20	.09	.12	.14	.13	-.10	-.09
Semipartial	-.18	.03	-.08	-.03	.03	-.09	-.17	.04	-.02
Factor 1	-.03	-.03	.16	.02	.07	.09	.07	-.10	-.11
Factor 2	.14	.11	.26*	.12	.12	.20	.23	-.14	-.09
Discrete ^b	.04	.01	.18	.08	.07	.07	.10	-.10	-.08

Note. PCL-R = Psychopathy Checklist—Revised; N = Neuroticism scale; GANX = Gray's anxiety scale; WAS = Welsh Anxiety Scale; BAI = Beck Anxiety Inventory; SCL = Symptom Checklist-90—Revised; NE = Negative Emotionality scale; SR = Stress Reaction scale; CON = Constraint factor; HA = Harm Avoidance scale.

^a For discrete-groups (controls vs. psychopathic individuals [Ps]) analysis, *n* = 67. ^b For discrete-groups (controls vs. Ps) analysis, *n* = 65.

* *p* < .01.

American samples (see Table 1).³ Similarly, self-report measures of fear were highly correlated in both samples, although this was expected in that HA is one component of CON. Also consistent with previous research (e.g., Watson & Clark, 1984), measures of anxiety and fear were roughly independent in Caucasian inmates. Results for African American inmates were less consistent in this regard, as CON was significantly, though inversely, correlated with the WAS, $r(112) = -.27, p < .01$; NA, $r(112) = -.28, p < .01$; and SR, $r(112) = -.25, p < .01$, measures.

Contrary to the traditional view derived from Cleckley's (1976) characterization of psychopathy, the PCL-R total score was essentially independent of all anxiety and fear measures in the Caucasian sample of offenders (see Table 2).⁴ The PCL-R total score was essentially independent of the anxiety and fear measures in African American offenders as well. Only one correlation approached statistical significance (i.e., PCL-R total score was positively correlated with WAS, $r[112] = .20, p < .05$) in African American participants. Surprisingly, this correlation indicated that psychopathy was associated with elevated as opposed to lower levels of anxiety.

In order to examine the unique relationship between psychopathy and the anxiety construct, we used hierarchical regression analyses with self-report anxiety as the dependent measure. The independent variables were Factor 2 (entered first) and PCL-R total score. None of the semipartial correlations between PCL-R total score and anxiety or fear were significant for either Caucasian or African American samples.

Because investigators often use the individual PCL-R factors or focus on discrete groups analyses in examining the relationship between psychopathy and various dependent measures, we conducted supplemental analyses using these strategies. Of these supplemental correlations, only one correlation—involving Fac-

tor 2 and WAS score for African American participants—reached significance, $r(112) = .26, p < .01$ (see Table 2).⁵

Discussion

On the basis of Cleckley's (1976) influential description of the primary P, it is commonly assumed that psychopathy is inversely related to the anxiety construct. We tested this assumption in the current study by examining the correlations between PCL-R (Hare, 1991) scores, the state-of-the-art measure of psychopathy (see Hare, 1996), and nine different self-report measures of the anxiety construct. Zero-order correlations between psychopathy and anxiety for both Caucasian and African American samples provided no support for the traditional view that psychopathy and anxiety are inversely related. Further, Lykken's (1982, 1995) low-fear hypothesis, which is based on the traditional view, was also not supported by the zero-order correlations.

³ In response to reviewers' requests, we computed the same zero-order correlations for Caucasian and African American groups combined. Interestingly, despite a substantial increase in sample size, no previously non-significant correlation became significant for the combined sample. However, the previously significant correlation between CON and SR for the African American group was no longer significant, $r(217) = -.09$, for the combined group.

⁴ In response to reviewers' requests, we computed the same zero-order and semipartial correlations for Caucasian and African American groups combined. Despite a substantial increase in sample size, none of the correlations reached significance.

⁵ In response to reviewers' requests, we computed the same zero-order and point-biserial correlations for Caucasian and African American groups combined. With a substantial increase in sample size, only two correlations, both involving Factor 2, reached significance: one with CON, $r(217) = -.18, p < .01$, and the other with WAS, $r(217) = .18, p < .01$.

Researchers (Fowles, 1987; Frick, 1998; Lilienfeld, 1992, 1994) have suggested that the true relationship between psychopathy and anxiety may be obscured because negative consequences engendered by an antisocial lifestyle may increase negative affect, leading Ps to earn higher scores on self-report measures of the anxiety construct. Thus, we conducted a second group of analyses to examine the unique relationship between psychopathy and the anxiety construct. Even with the variance in anxiety measures resulting from Factor 2 (antisocial lifestyle) removed, the association between PCL-R psychopathy and the anxiety construct was still essentially independent in both Caucasian and African American samples.

Collapsing across race and type of analyses (i.e., zero-order, semipartial, point-biserial correlation), only one of the many correlations computed reached the $\alpha = .01$ level of significance selected for this study. If an uncorrected $\alpha = .05$ level of significance had been used, only five correlations would have achieved statistical significance. Moreover, four of these five correlations indicated a positive relationship between psychopathy (Factor 2 or PCL-R total score) and anxiety in African American participants, and one indicated an inverse relationship between Factor 2 and CON in Caucasian participants.

Much has been made of the distinction between anxiety and fear as they relate to psychopathy (Lilienfeld, 1992, 1994; Lykken, 1957, 1995). In this regard, it is worth noting that these measures were, consistent with past research, essentially independent, at least for Caucasian offenders. Moreover, despite the absence of significant relationships in general, a slightly different pattern appeared to characterize our results for anxiety and fear. Zero-order correlations suggested a positive relationship between psychopathy and anxiety and a negative relationship between psychopathy and fear. Semipartial correlations suggested a negative relationship between psychopathy and anxiety and a positive relationship between psychopathy and fear. In sum, although anxiety and fear may be related to psychopathy in different ways, this conclusion is highly speculative as none of the correlations was statistically significant.

Although the semipartial correlations were nonsignificant, one possible reason for these weak findings is our use of PCL-R Factor 2 as a proxy for antisocial lifestyle. Although Factor 2 is composed of items from the PCL-R that assess antisocial lifestyle, it is possible that Factor 2 is too crude a measure to use in this context. In fact, consistent with previous research (see Hare, 1991), examination of the zero-order correlations between Factor 2 and the anxiety measures yielded weak and generally nonsignificant correlations. It may be that more refined measures of negative life experiences associated with antisocial lifestyle (e.g., Frick, 1998) would yield clearer findings.

An important limitation of this study is that our assessments of the anxiety construct were restricted to self-report measures. Consequently, our data may have been influenced by response bias; controls, Ps, or both may have underreported their fear or anxiety as a result of being immersed in the tough prison subculture. Even assuming the validity of our self-report measures, it is possible that behavioral or physiological measures, which have been related to the anxiety construct both theoretically and empirically (see Fowles, 1980), would be more consistent with the traditional view of Ps as low-anxious. For example, Ps have been found to display less electrodermal activity in anticipation of aversive stimuli

(Hare, 1978) and relatively poor passive-avoidance learning (Lykken, 1957; Newman & Kosson, 1986). However, in light of these self-report data, it may be important to determine whether such observations actually reflect low anxiety, fear, or some other aspect of psychopathy (see Arnett, Smith, & Newman, 1997; Newman et al., 1997).

This study provides no support for the traditional and widely held belief that psychopathy and anxiety are inversely related. A potential explanation for these findings concerns differences between traditional (e.g., Lykken, 1957) and current (e.g., Hare, 1991) measures of psychopathy. Despite the strong correlation ($r = .83$; Hare, 1991) between the PCL-R and Cleckley's (1976) criteria, the constructs defined by these measures may differ in important ways, including their consideration of and relation to the anxiety construct. Unlike Cleckley's criteria, the PCL-R does not use exclusive criteria (i.e., absence of "nervousness" or psychoneurotic manifestations [p. 339]). Consequently, PCL-R-identified Ps may be characterized by high as well as low levels of fear or anxiety. To the extent that investigators want to study primary or low-anxious psychopathy, therefore, it appears that supplementing the PCL-R with measures of the anxiety construct is necessary.

If traditional and current conceptualizations of psychopathy are, in fact, different, one must consider if they differ in important ways. Indeed, without accounting for the anxiety construct (i.e., in its pure form), the PCL-R has proven to be a highly reliable and valid measure of psychopathy (see Hare, 1996). For example, PCL-R-based research has yielded a variety of meaningful physiological and behavioral findings. Thus, Hare (1991) and others could maintain that the PCL-R does not require supplementation. In either case, we believe that it would be beneficial to include measures of the anxiety construct when using the PCL-R to evaluate whether the traditional distinction between high- and low-anxious psychopathy is an essential one.

References

- Arnett, P. A., Smith, S. S., & Newman, J. P. (1997). Approach and avoidance motivation in incarcerated psychopaths during passive avoidance. *Journal of Personality and Social Psychology*, *72*, 1413-1428.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, *56*, 893-897.
- Cleckley, H. M. (1976). *The mask of sanity* (5th ed.). St. Louis, MO: Mosby.
- Derogatis, L. R. (1992). *SCL-90-R: Administration, scoring, and procedures manual-II*. Towson, MD: Clinical Psychometric Research.
- Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire (Adult)*. London: Hodder & Stoughton.
- Fowles, D. C. (1980). The three arousal model: Implications for Gray's two-factor learning theory for heart rate, electrodermal activity, and psychopathy. *Psychophysiology*, *17*, 87-104.
- Fowles, D. C. (1987). Application of a behavioral theory of motivation to the concepts of anxiety and impulsivity. *Journal of Research in Personality*, *21*, 417-435.
- Fowles, D. C. (1988). Psychophysiology and psychopathology: A motivational approach. *Psychophysiology*, *25*, 373-391.
- Fowles, D. C., & Missel, K. (1994). Electrodermal hyporeactivity, motivation, and psychopathy: Theoretical issues. In D. Fowles, P. Sutker, & S. Goodman (Eds.), *Psychopathy and antisocial personality: A developmental perspective: Vol. 17. Progress in experimental personality and psychopathology research* (pp. 263-284). New York: Springer.

- Frick, P. J. (1998). Callous-unemotional traits and conduct problems: Applying the two-factor model of psychopathy to children. In R. D. Hare, D. Cooke, & A. Forth (Eds.), *Psychopathy—Theory, research, and implications for society* (pp. 161–187). Dordrecht, the Netherlands: Kluwer Academic.
- Gray, J. A. (1982). *The neuropsychology of anxiety*. New York: Oxford University Press.
- Gray, J. A. (1991). *The psychology of fear and stress* (2nd ed.). New York: Cambridge University Press.
- Hare, R. D. (1970). *Psychopathy: Theory and research*. New York: Wiley.
- Hare, R. D. (1978). Electrodermal and cardiovascular correlates of psychopathy. In R. D. Hare & D. Schalling (Eds.), *Psychopathic behavior: Approaches to research* (pp. 107–143). Chichester, England: Wiley.
- Hare, R. D. (1980). A research scale for the assessment of psychopathy in criminal populations. *Personality and Individual Differences, 1*, 111–119.
- Hare, R. D. (1991). *The Hare Psychopathy Checklist—Revised*. Toronto, Ontario, Canada: Multi-Health Systems.
- Hare, R. D. (1996). Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior, 23*, 25–54.
- Karpman, B. (1961). The structure of neurosis: With special differentials between neurosis, psychosis, homosexuality, alcoholism, psychopathy, and criminality. *Archives of Criminal Psychodynamics, 4*, 599–646.
- Kosson, D. S., Smith, S. S., & Newman, J. P. (1990). Evaluating the construct validity of psychopathy in Black and White male inmates: Three preliminary studies. *Journal of Abnormal Psychology, 99*, 250–259.
- Lilienfeld, S. O. (1992). The association between antisocial personality and somatization disorders: A review and integration of theoretical models. *Clinical Psychology Review, 12*, 641–662.
- Lilienfeld, S. O. (1994). Conceptual problems in the assessment of psychopathy. *Clinical Psychology Review, 14*, 17–38.
- Lykken, D. T. (1957). A study of anxiety in the sociopathic personality. *Journal of Abnormal and Social Psychology, 55*, 6–10.
- Lykken, D. T. (1982, September). Fearlessness: Its carefree charm and deadly risks. *Psychology Today, 16*, 20–28.
- Lykken, D. T. (1995). *The antisocial personalities*. Hillsdale, NJ: Erlbaum.
- Lynam, D. R. (1996). Early identification of chronic offenders: Who is the fledgling psychopath? *Psychological Bulletin, 120*, 209–234.
- Newman, J. P., & Kosson, D. S. (1986). Passive-avoidance learning in psychopathic and nonpsychopathic offenders. *Journal of Abnormal Psychology, 95*, 257–263.
- Newman, J. P., & Schmitt, W. A. (1998). Passive avoidance in psychopathic offenders: A replication and extension. *Journal of Abnormal Psychology, 107*, 527–532.
- Newman, J. P., Schmitt, W. A., & Voss, W. D. (1997). The impact of motivationally neutral cues on psychopaths: Assessing the generality of the response modulation hypothesis. *Journal of Abnormal Psychology, 106*, 563–575.
- Schalling, D. (1978). Psychopathy-related personality variables: The psychophysiology of socialization. In R. D. Hare & D. Schalling (Eds.), *Psychopathic behavior: Approaches to research* (pp. 85–106). New York: Wiley.
- Schmuck, F. J. (1970). Punishment, arousal, and avoidance learning in sociopaths. *Journal of Abnormal Psychology, 76*, 325–335.
- Taylor, J. A. (1953). A personality scale of manifest anxiety. *Journal of Abnormal Psychology, 48*, 285–290.
- Tellegen, A. (1982). *Brief manual for the Multidimensional Personality Questionnaire*. Minneapolis: University of Minnesota Press.
- Thornquist, M. H., & Zuckerman, M. (1995). Psychopathy, passive-avoidance learning, and basic dimensions of personality. *Personality and Individual Differences, 19*, 525–534.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin, 96*, 465–490.
- Welsh, G. (1956). Factor dimensions A and R. In G. S. Welsh & W. G. Dahlstrom (Eds.), *Basic readings on the MMPI in psychology and medicine* (pp. 264–281). Minneapolis: University of Minnesota Press.
- Widom, C. S. (1976). Interpersonal and personal construct systems in psychopaths. *Journal of Consulting and Clinical Psychology, 44*, 614–623.

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