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Empathy Faking in Psychopathic Offenders: The Vulnerability of Empathy Measures

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Abstract The incapacity of individuals to experience empathy has long been linked to heightened risks of antisocial acts being perpetrated without remorse. Psychologists frequently consider deficits in empathy in the context of risk assessments and other clinical appraisals, such as the amenability to treatment. When evaluated, offenders—especially those with substantial psychopathic traits—may be motivated to mask their empathic deficits to avoid being characterized as callous and cold-blooded toward the victims of their crimes. The current study is the first known investigation with an offender population to simulate empathy via positive impression management (PIM). Using a mixed between- and within-subjects design, 81 male detainees were categorized into a Low, Moderate, or High Psychopathy group, based on the Psychopathy Checklist-Revised (PCL-R). For the within-subjects component, all offenders answered empathy questionnaires under genuine and PIM conditions. In the genuine condition, results indicate that offenders—irrespective of psychopathy—possessed cognitive empathy, but not affective empathy. In the PIM condition, offenders easily simulated high levels of empathy. Potential approaches to the assessment of simulated empathy in offender populations are explored, including a possible indicator for simulated affective empathy.

Keywords Empathy · Psychopathy · Positive impression management · Simulation · Offenders

Aggression, criminality, and callous behavior have all been linked to an absence of empathy (Blair, Mitchell, & Blair, 2005). In a meta-analysis by Miller and Eisenberg (1988), empathic responding served as a protective factor diminishing antisocial behaviors and aggression. In understanding this finding, Jolliffe and Farrington (2006) argued that the acquisition of empathy is required for adequate moral development. Therefore, individuals with empathy deficiencies may fail to develop sufficient morals, resulting in the ability for these individuals to engage in antisocial behaviors, specifically to manipulate and harm others, without feeling remorse (Woodworth & Porter, 2002). Elaborating on this point, Woodworth and Porter argue the absence of empathy is responsible for a large proportion of instrumental homicides. As a protective factor, empathy may inhibit antisocial behaviors and aggression toward others (Eisenberg, 2000; Jolliffe & Farrington, 2004; Spinella, 2005).

Besides violent behavior and underdeveloped morals, a lack of empathy has also long been considered a key deficit in individuals with psychopathy (Cleckley, 1941). Psychopathy is a syndrome consisting of emotional, interpersonal, and behavioral difficulties, including antisocial acts (Blair et al., 2005). Although conceptualizations of psychopathy have differed over the years, affective deficits—specifically a lack of empathy—have consistently been considered defining and necessary psychopathic characteristics (Lykken, 1995). The Psychopathy Checklist—Revised (PCL-R; Hare, 1991, 2003), the most widely used instrument in the assessment of psychopathy, includes four items that capture specific emotional deficiencies. These include: (a) lack of remorse or guilt, (b) shallow affect, (c) an emotional and cognitive failure to accept responsibility for one's actions, and (d) callousness/lack of empathy.

Examinees lacking empathy may be strongly motivated to simulate empathy. This motivation to simulate empathy has been observed across diverse groups, even including health care providers (Hemmerdinger, Stoddart, & Lilford, 2007). Offenders with psychopathic traits may be skilled at

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simulating empathy because of their abilities to appear superficially charming as well as their proficiency at manipulating others (Mullins-Nelson, Salekin, & Leistico, 2006). While shallow affect and superficial charm are two PCL-R items that may capture some components of simulated empathy, they are more broad in nature and do not directly assess one's ability to fake empathy. More research regarding empathic responding in psychopathic individuals could assist in determining the specific role of empathy in the expression and assessment of psychopathy.

The current concept of empathy has evolved from a general construct to a contemporary model that identifies the distinct components of cognitive and affective empathy (Decety & Jackson, 2006; Jolliffe & Farrington, 2006). Cognitive empathy represents the *recognition* of emotion, whereas affective empathy embodies the *emotional experience* as felt by an individual (Reniers, Corcoran, Drake, Shryane, & Völlm, 2011).

This dual model of empathy has recently been applied to psychopathic individuals with differing results. Several studies (Glass & Newman, 2006; Book, Quinsey, & Langford, 2007) have concluded that psychopaths are capable of cognitive empathy, a prerequisite to affective empathy. For example, Glass and Newman (2006) found adequate processing of facial emotions (i.e., cognitive empathy) in a sample of psychopathic offenders. These studies primarily focused on cognitive empathy, and therefore, did not yield information regarding affective empathy of these individuals. In contrast, other studies suggest psychopathic individuals show a cognitive empathic deficit (Blair & Coles, 2000; Stevens, Charman, & Blair, 2001). Without the ability to recognize another individual's distress (cognitive empathy), it would be impossible to experience a similar emotion (affective empathy). Thus, these latter studies indicate psychopathic individuals lack both cognitive and affect empathy.

The accurate assessment of empathy constitutes a critical component of risk assessments with offenders. As summarized by Marshall, Marshall, and Serran (2009, p. 229), "The issue of empathy, or lack thereof, should be a central feature in the assessment and treatment of those who commit criminal offenses." Due to the relation between empathy and offending, the evaluation of empathy is essential in determining offenders' risk levels and potential for harm. Clinical psychologists conduct risk assessments to protect the public against criminal victimization (Lyon, Hart, & Webster, 2001), and they must consider empathy as a key determinant in these assessments. Risk evaluations aid in forensic decisions made about offenders, such as sentencing, institutional and community placement, treatment amenability, and parole recommendations.

Offenders are often highly motivated in forensic assessments to minimize the restrictions placed on their freedom in terms of incarceration (e.g., length and security level) and conditions of probation (Blasingame, 1998; Jensen & Jewell, 1988). Simulating empathy may further their goals in appearing remorseful for their offenses and empathetic towards their victims. Offenders—especially those with psychopathic traits—frequently engage in deception, and are often skilled in manipulation (Hare, 2003). In distinguishing between genuine and simulated empathy, psychologists must choose between their own unstandardized observations or self-report empathy measures. However, both approaches lack systematic indicators of simulated empathy. Simulated presentations, especially by "likeable" offenders, may be mistaken as genuine empathy. Similarly, existing self-report empathy measures with transparent content could potentially be faked.

The current study is the first known research to empirically test offenders' abilities to simulate empathy. In keeping with recent research, as noted previously, simulation research should be investigated for both cognitive and affective empathy. Fortunately, several empathy measures assess both components (e.g., Interpersonal Reactivity Index, Davis, 1980; Basic Empathy Scale, Jolliffe & Farrington, 2006). More recently, Reniers and colleagues (2011) developed the Questionnaire of Cognitive and Affective Empathy (QCAE), which includes five subscales measuring both components of empathy.

The current study examined two closely related objectives of empathy measures in relation to positive impression management (PIM) in detained offenders. First, we assessed the vulnerability of empathy measures (cognitive and affective) to PIM, and how success at simulating empathy might differ by the level of psychopathic traits. Second, we explored the possibility of developing a PIM scale for identifying cases of simulated empathy in psychological assessments.

Recent research (Decety & Jackson, 2006) has demonstrated important clinical differences between cognitive and affective empathy in appraisals of risk. Therefore, an ancillary goal involved the assessment of both types of empathy for offenders with different levels of psychopathic traits.

Methods

Participants

The sample originally consisted of 86 detainees between the ages of 18 and 59 (M=34.01, SD=11.89) from a county jail in the Dallas-Fort Worth area. Self-identified ethnicity was distributed equally between African and European Americans (39.5 % each); other ethnicities reported included 18.5 % Hispanic Americans and 2.5 % biracial participants. More than one-third of the sample (38.3 %) had completed high school, with overall years of education averaging just below an eleventh grade level (M=10.86, SD=1.86).

Participants were recruited from a broad spectrum of male units including general population, sex offender, and management problem units. As an inclusion criterion, all participants had received a conviction of at least one felony or were currently being charged with a capital offense. The detainees generally had extensive correctional histories in terms of overall arrests (M=15.89, SD=18.69) and years spent incarcerated (M=7.24 years or about 21.3 % of their lives).

Measures

The current study is an entirely original investigation. However, about one-third (34.6 %) of the PCL-R data collected under standard instructions was subsequently utilized for participants who volunteered for a second study. Beyond the scope of the current investigation, all participants were also administered the Trait Empathic Anger Scale (TEA; Viaglione & Barnett 1999) and Empathy Quotient (EQ; Baron-Cohen & Wheelwright, 2004).

PCL-R The PCL-R (Hare, 1991, 2003) is a semi-structured interview that measures traits and behaviors related to psychopathy (Cleckley, 1941). The PCL-R yields dimensional scores but can also be used to classify participants for research purposes. The PCL-R has excellent reliability and construct validity (Hare, 2003).

QCAE The QCAE (Reniers et al., 2011) is comprised of 31 items rated on a 4-point Likert-type scale. Two QCAE subscales measure cognitive empathy: Perspective Taking (i.e., the ability to understand what another person might be thinking) and Online Simulation (i.e., the ability to imagine one's self in another person's situation). Three scales measure affective empathy: Emotion Contagion (i.e., the emotional reaction to another person's emotions), Proximal Responsivity (i.e., affective response to others' moods in a close social context), and Peripheral Responsivity (i.e., affective response to others' moods in a detached context, such as watching a movie). Reniers et al. (2011) identified the five highly internally consistent subscales that were tested via a confirmatory factor analysis and found to have an acceptable fit (e.g., Comparative Fit Index=.93). Cronbach's (1951) alphas for the scales range from .65 for Peripheral Responsivity to .85 for Perspective Taking.

IRI The Interpersonal Reactivity Index (IRI; Davis, 1980) consists of 28 items rated on a 5-point Likert-type scale. The IRI is one of the most commonly used measures of general empathy (Jolliffe & Farrington, 2004). While it consists of four subscales (Empathic Concern, Perspective Taking, Personal Distress, and Fantasy) each designed to reflect a separate facet of empathy, two were of particular interest in the current study and therefore chosen to be highlighted. To assess affective empathy, the Empathic Concern subscale was utilized, as it is most reflective of this construct (e.g., "I often have tender, concerned feelings for people less fortunate than me."). Cognitive empathy was measured using the Perspective Taking subscale, again because of its specific relevance to understanding others' views in particular circumstances (e.g., "I try to look at everybody's side of a disagreement before I make a decision."). This measure was administered under standard instructions; however, only the two most relevant subscales are reported. The IRI has demonstrated satisfactory internal consistency (ranging from .68 for Empathic Concern to .71 for Perspective Taking) and adequate test-retest reliability estimates for the total score (ranging from .62 to .71) in a sample of undergraduate students (Davis, 1980).

BES The Basic Empathy Scale (BES; Jolliffe & Farrington, 2006) has 20 items rated on a 5-point Likert-type scale that assesses cognitive and affective empathy. The BES has convergent validity with measures of perspective taking, alexithymia, and openness (Jolliffe & Farrington, 2006). The BES is divided into two factors: (a) cognitive empathy measuring comprehension of another's emotional state (e.g., "I find it hard to know when my friends are frightened."), and (b) affective empathy assessing the extent of an individual's experience of others' emotional states (e.g., "My friends' emotions don't affect me much."). For reliability, its internal consistency estimates range from .79 for BES Cognitive empathy to .85 for Affective empathy (Jolliffe & Farrington, 2006).

PDS The Paulhus Deception Scales (PDS; Paulhus, 1998) is a 40-item measure assessing favorable self-presentation in responding via (a) Impression Management (IM) and (b) Self-Deceptive Enhancement (SDE) scales. Each scale is comprised of 20 items, and all responses are made on a 5-point Likert-type scale. Only extreme responses (e.g., 4 or 5 for reverse scored items) are scored on the IM scale. Similarly, only very extreme responses (1 or 5) are scored for the SDE scale. The IM scale provides information on the tendency of some respondents to consciously respond overly positive. It has good reliability and adequate validity (see Lanyon & Carle, 2007).

Procedures

The jail database was scanned for detainees who met the inclusion criteria of being convicted of a felony or charged with a capital offense. Participants were initially contacted by staff and correctional officers at the jail. Those detainees expressing an interest in the study were provided with information about the study privately by a researcher on an individual basis. In accordance with Institutional Review Board requirements,

written informed consent was obtained from all participants prior to the administration of any measures.

The administration consisted of two same-day sessions: (a) genuine session and (b) simulation (PIM) session, allowing the participants to take a short break (10 to 15 minutes) between sessions. The following instructions were provided:

> *Genuine Instructions*: Please respond to all of the following questions openly and honestly. Remember, this information will not have your name on it and will not be seen by correctional officers. It is only used for this research study. It is important that you present yourself as you really are.

In accordance with Rogers and Cruise's (1998) recommendations, instructions were straightforward and written at a moderately low reading level (Flesch-Kincaid=7.2). The genuine instructions reassured participants of their confidentiality and encouraged them to provide accurate responses.[1] Researchers asked participants to paraphrase the instructions so that any misunderstandings could be clarified.

Participants were asked to complete the QCAE, PDS, IRI, and the BES. Because the QCAE contains some items from the BES and the IRI, the PDS was administered between those measures to allow more time between exposures to identical items. Following these self-report measures, clinical researchers administered the PCL-R semi-structured interview.[2] To minimize the potential for researcher bias, no self-report measures were scored prior to the administration of the PCL-R.[3]

After approximately a 10 minute break, the second session presented participants with the experimental condition. Participants were given the following simulation instructions:

> *Simulation Instructions*: Imagine that you hurt someone badly in a fight. You have already been found guilty of aggravated assault. Now the court will decide your sentence. A presentence investigation report will be written to help decide how long your sentence will be. If the report says you are a dangerous person who may be violent again, you will receive a prison sentence of 5–10 years. You want to appear to be a safe, caring person, who is sorry. That way you can get a short sentence or even probation.
>
> Please pretend the rest of the questions in this study are for your presentence investigation report. Think about what you should say about yourself. How can you make yourself seem like a peaceful, calm person? Can you only show your very best side? You want to make others think you are not a risk for future crime.
>
> Are you smart enough to convince the psychologist that you deserve a short sentence, even though you are guilty of a violent crime? Can you beat the tests? Keep in mind that if you seem "too good to be true" you will look like you are lying. Please try to be believable when answering the questions, even though you will have to bend the truth.

Like the first session, participants were asked to paraphrase the simulation instructions. Any misunderstandings were clarified. The self-report measures were administered in the same order as described above. Participants then received a manipulation check consisting of six questions about the instructions for both sessions, including their level of effort, and memory of incentives. Finally, participants were debriefed with a general description of the aims of the study.

Prior to any analyses, participants were combined into three groups based on Hare's (2003, p. 31) five dimensional categories. The categories were Low Psychopathy (i.e., < 17), Moderate Psychopathy (i.e., from 17 to 24), and High Psychopathy (i.e., > 24).[4]

Results and Discussion

As an initial step, participants were removed from further data analysis if they were classified as engaging in PIM under genuine instructions by the PDS IM scale (n=3) or failed to pass the manipulation check (n=2). Thus, the final sample consisted of 81 offenders.

Beginning with the ancillary goal, we examined the types of empathic deficits exhibited by jail detainees with different levels of psychopathic traits. The results varied substantially by measure (see Table 1). The IRI PT was the only measure to statistically discriminate between the three psychopathic groups (p=.03); however, moderate effect sizes were observed between groups on the QCAE OS, with the High Psychopathy group displaying less cognitive empathy than the other groups. In striking contrast, the other two cognitive scales yielded either very little variation (BES Cog) or a slight counter trend (QCAE PT). A possible explanation to these seemingly disparate results is that both the IRI PT and QCAE OS involve *active* efforts to put oneself in another's shoes via their imagination rather than adopting a more analytic perspective

[1] As subsequently noted, the IM scale of the PDS was used as a partial manipulation check for PIM response pattern in the genuine condition.

[2] The researchers were clinical doctoral students who had received at minimum 10 hours of specialized PCL-R administration and scoring training.

[3] At times, the researcher administering the PCL-R was not the same researcher administering the other measures to a single participant. However, there were no differences based on PCL-R administrator and reliability among the three PCL-R administrators was high (ICC=0.89).

[4] The Moderate group is identical to Hare's (2003). Low combines his Low and Very Low groups; High combines his High and Very High groups.

involving one's self assessment of their ability to take others' perspectives.[5]

Surprisingly, no significant differences were observed between groups on any measures of affective empathy. However, there is variability between group scores, which is demonstrated by effect sizes. Although they are not statistically different, the effect sizes convey a slight trend for the High Psychopathy group as having mostly lower scores (ds≤−0.30) than the Low Psychopathy group. While effect sizes cannot be used as direct support for higher levels of psychopathy being related to lower levels of affective empathy in individuals, this pattern should not be ignored and should serve to encourage future research with more statistical power to detect statistically significant differences.

As the primary objective, we examined offenders' abilities to simulate empathy. With respect to cognitive empathy measures, the overall sample of offenders increased their scores significantly from the genuine to PIM condition ($M\,d$=0.81).[6] This finding suggests offenders as a whole are able to simulate cognitive empathy with ease. The affective empathy scales yielded similar results, with the overall sample greatly increasing their empathy scores (d=0.72). All five affective empathy measures showed marked increases across conditions, suggesting offenders do not find increasing their affective empathy scores challenging in the least.

Next, we examined increases in empathy scores with respect to the psychopathic groups (see Table 2). As expected, two scales for cognitive empathy demonstrated progressively greater increases for Moderate and High Psychopathy groups (IRI PT and the QCAE OS). Inexplicably, High Psychopathy showed less change than the Moderate Psychopathy (d= −0.31) on the QCAE PT. Interestingly, the BES Cognitive scale appeared the least vulnerable to PIM (ds≤.10). With mean differences of less than 2.50, we recommend its use in assessing cognitive empathy with offender populations.

The results for affective empathy suggest that the High Psychopathy group significantly outperforms the Low group on three of the five scales and the Moderate group on the QCAE EC. The BES Aff scale approached significance (p=.06), potentially suggesting it is resistant to simulated empathy. However, we caution that although groups were not significantly different, the mean differences were large and the effect sizes were much larger than the BES Cog, which appears truly resistant to simulation. In stark contrast to these significant and near significant findings, the QCAE PeR remained virtually unchanged across the three groups. Two points are worthy of comment. First, the mean PeR differences are consistently smaller than any other scales (<1.50). Second, there is a very slight negative trend that is opposite of the predicted direction. Clearly, greater levels of psychopathy offer no advantage in simulating empathy on this scale. We surmise that the PeR, which does not focus on personal relationships and reactions, was not seen by detainees as relevant to faking empathy for one's own victims.

This finding raised the following question: Could PeR be used as an indirect measure of more immediate affective empathy (e.g., PrP)? In the honest condition, however, the correlation was only modest (r=.37) indicating the PeR scores cannot be used as a proxy measure to inform psychologists about PrP.

An important observation is that the mean differences for scales evaluating affective empathy tended to relatively small (<4 points) as compared to the scales assessing cognitive empathy, with sole exception of the BES Aff scale. Most detainees did not increase their QCAE affective scores by more than five points: PrP (85.2 %), PeR (87.6 %), and EC (88.9 %). From an assessment perspective, psychologists could think of QCAE scores as representing not a single point, but a 5-point band (i.e., the observed score minus possibly five points for PIM). The range of scores may prove very useful (a) at the low end in documenting the lack of affective empathy with or without PIM, and (b) at the high end to similarly demonstrate the presence of affective empathy.

Detainees with different levels of psychopathy are frequently evaluated on issues where simulated empathy would appear to be in their best interests. In addition to using the QCAE with a 5-point band, we explored the usefulness of the BES in evaluating simulated empathy. As previously mentioned, the BES Cog scale does not appear to be influenced by PIM; therefore, no PIM scale is necessary. However, examinees in the PIM condition often appeared to be "too-good-to-be-true" on the BES Aff scale, with much higher scores than are typically found under standard genuine instructions. Using the detection strategy of affirming virtuous behavior (Rogers, 2008), we examined the distribution of cut scores for genuine and PIM conditions (see Table 3). With the goal of minimizing false-positives, a high level (≥ .90) of specificity was sought. For the total sample, two cut scores were identified and reported at different base rates (see Table 3).[7] Overall, PIM-Aff cut score>40 appeared the most effective with a sensitivity of .56 and specificity of .91. At a 25 % base rate, approximately two-thirds (.68) of examinees with simulated empathy were identified. To decrease false-positives to 5.0 %, a higher cut score of PIM-Aff>42 could be implemented.

An important consideration is whether these cut scores are equally effective across levels of psychopathy. As

[5] It is interesting to note that QCAE retains four IRI PT items; however, all appear on the QCAE OS and none on the QCAE PT scales.

[6] Specific d's for each of the cognitive and affective subscales are available from the authors upon request.

[7] The PIM base rates for simulated empathy are not known. However, studies (see Ballenger et al. 2001) of defensiveness have suggested varying levels of PIM, and therefore, the cut score has been evaluated at 20 and 25 % base rates; the actual base rate (50 %) was also included (see Table 3).

Table 1 Differences under genuine instructions between psychopathy groups for cognitive and affective empathy scores

Psychopathy groups	Low		Moderate		High						
	M	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*	d_1	d_2	d_3
Cognitive empathy											
IRI PT	18.67_a	4.05	17.81_{ab}	4.87	14.88_c	6.03	3.78	.03	−0.19	−0.69	−0.53
BES Cog	34.53	4.45	34.22	3.25	33.94	4.40	0.12	.89	−0.09	−0.13	−0.07
QCAE OS	26.53	4.63	26.72	4.67	23.97	5.81	2.70	.08	0.04	−0.47	−0.52
QCAE PT	31.73	4.23	29.91	5.27	32.03	4.46	1.78	.18	−0.37	0.07	0.44
Affective empathy											
IRI EmC	19.13	2.59	18.66	3.78	17.18	3.69	2.17	.12	−0.14	−0.57	−0.40
BES Aff	34.00	4.65	35.50	5.26	32.12	6.02	3.13	.06	0.30	−0.33	−0.60
QCAE PrR	11.67	1.84	10.97	2.58	10.44	2.43	1.40	.26	−0.30	−0.54	−0.21
QCAE PeR	10.20	2.15	9.69	2.58	9.85	2.40	0.23	.80	−0.21	−0.15	0.06
QCAE EC	10.53	2.75	9.84	2.78	9.41	2.44	0.95	.40	−0.25	−0.44	−0.17

IRI interpersonal reactivity index, *BES* basic empathy scale, *QCAE* questionnaire of cognitive and affective empathy. For cognitive subscales, *IRI PT* perspective taking, *BES-Cog* cognitive, *QCAE OS* online simulation, *QCAE PT* perspective taking. For affective subscales, *IRI EmC* empathic concern, *BES Aff* affective subscale, *QCAE PrR* proximal responsivity, *QCAE PeR* peripheral responsivity, *QCAE EC* emotion contagion. For effect sizes, d_1 compares Low to Moderate; d_2 compares Low to High; and d_3 compares Moderate to High. Negative (−) *d* values indicate higher scores for the lower psychopathy group. The least significant difference test (LSD) was used for post hoc comparisons. Identical subscripts indicate no significant differences between these groups

summarized in Table 3, a PIM-Aff>40 cut score proved effective with the Low and High Psychopathy groups, but allowed for a 16.0 % false-positive rate with the Moderate group. However, using the more stringent PIM-Aff>42 cut score, higher specificity rates were achieved (.91 to 1.00), maintaining less than 10.0 % false-positives in all groups. It

Table 2 Group differences on empathy measures between genuine and simulated conditions of detainees

Psychopathy groups	Low *M* Diff	Moderate *M* Diff	High *M* Diff	*F*	*p*	d_1	d_2	d_3
Cognitive empathy								
IRI PT	2.00_a	4.47_{ab}	7.71_c	4.93	.01	0.46	0.85	0.51
BES Cog	1.80	1.81	2.38	0.10	.45	0.00	0.09	0.10
QCAE OS	2.60_a	4.44_{ab}	7.18_b	3.89	.01	0.37	0.75	0.47
QCAE PT	0.07	2.63	0.74	1.13	.16	0.45	0.10	−0.31
Affective empathy								
IRI EmC	-0.07_a	1.06_{ab}	3.44_b	3.28	.02	0.22	0.74	0.48
BES Aff	5.73	4.63	9.00	2.24	.06	−0.13	0.39	0.49
QCAE PrR	0.27_a	1.56_{ab}	2.59_b	2.73	.04	0.39	0.71	0.32
QCAE PeR	1.27	1.13	0.88	0.10	.45	−0.05	−0.13	−0.08
QCAE EC	-0.20_a	0.47_{ab}	1.97_c	2.70	.04	0.20	0.59	0.46

For PCL-R groups, Low=PCL-R<17 (n=15); Moderate=PCL-R 17–24 (n=32); High=PCL-R >24 (n=34)

IRI interpersonal reactivity index, *BES* basic empathy scale, *QCAE* questionnaire of cognitive and affective empathy. For cognitive subscales, *IRI PT* perspective taking, *BES-Cog* cognitive, *QCAE OS* online simulation, *QCAE PT* perspective taking. For affective subscales, *IRI EmC* empathic concern, *BES Aff* affective subscale, *QCAE PrR* proximal responsivity, *QCAE PeR* peripheral responsivity, *QCAE EC* emotion contagion. For effect sizes, d_1 compares Low to Moderate; d_2 compares Low to High; and d_3 compares Moderate to High. Negative (−) *d* values indicate higher scores for the lower psychopathy group. The least significant difference test (LSD) was used for post hoc comparisons. Identical subscripts indicate no significant differences between these groups

One-tailed approach was utilized due to the directional nature of this hypothesis

Table 3 Cut scores for BES PIM-Aff as a potential indictor for simulated empathy in the overall sample and psychopathy groups

	Sensitivity	Specificity	OCC[a]	Base rates					
				20 %		25 %		50 %	
				PPP	NPP	PPP	NPP	PPP	NPP
PIM-Aff>40									
Overall	.56	.91	.82	.62	.89	.68	.86	.87	.67
Low	.40	1.00	.85	1.00	.87	1.00	.83	1.00	.63
Moderate	.63	.84	.79	.50	.90	.57	.87	.80	.69
High	.56	.94	.85	.70	.90	.76	.86	.68	.75
PIM-Aff>42									
Overall	.42	.95	.82	.68	.87	.74	.83	.89	.62
Low	.27	1.00	.82	1.00	.85	1.00	.80	1.00	.58
Moderate	.44	.91	.79	.54	.87	.61	.83	.82	.62
High	.47	.97	.85	.80	.88	.84	.85	.94	.65

For utility estimates, *OCC* overall correct classification, *PPP* positive predictive power, *NPP* negative predictive power. *PCL-R* psychopathy checklist. Revised. For PCL-R groups, Low=PCL-R<17 (n=15); Moderate=PCL-R 17–24 (n=32); High=PCL-R>24 (n=34)

[a] Calculated at 25 % base rate

appears in using the BES PIM-Aff>42 cut score in conjunction with the QCAE 5-point band strategy, clinicians may be able to identify simulated empathy.

In summary, many psychologists rely on their own unstandardized observations of offenders to gauge their affective empathy and feelings of guilt and remorse for their criminal actions. This study examined the feasibility of using empathy measures to augment these observations. Our current findings—consistent with Glass and Newman (2006) and Book et al. (2007)—emphasize the importance of assessing affective empathy, especially among examinees with higher levels of psychopathic traits. The current results clearly indicate the vulnerability of empathy scales to positive impression management. Although much more time-intensive, similar research is needed to evaluate psychologists' abilities to ascertain simulated empathy via clinical interviews. One limitation of the current study is its use of highly specific instructions for offenders to simulate empathy. While it provides a valuable standardization of the PIM condition, future studies may wish to be less explicit and directive, allowing detainees greater opportunity to determine how best to answer the questions under the given scenario.

We are fully aware that simulated empathy in psychological assessments is an important, yet unexplored, issue. Focusing on affective empathy, one possibility is to supplement clinical interviews with the use of either the QCAE or the BES. With the QCAE, psychologists may wish to consider a narrow band of scores (i.e., the observed score minus five points to take into account possible PIM) as potentially corroborative data for their own clinical conclusions. When a disparity is noted, the QCAE could be used to trigger a more in-depth assessment regarding genuineness of observed empathy.

The BES could also be considered as a clinically useful measure for evaluating empathy. For cognitive empathy, the current data indicate that PIM appears to have very little influence on scores. For affective empathy, idealized expressions (i.e., very high scores) of empathy can be indicative of simulated empathy. High cut scores (BES PIM-Aff>40 or>42) may alert psychologists to unrealistically positive portrayals of affective empathy within an offender population.

Looking forward, many scales currently used—even in adjudicative contexts, such as forensic assessments—do not include standardized methods for assessing response styles.[8] Implicitly, this approach embraces the untenable assumption that examinees are always forthright in their responding. Our current effort to develop retrospectively the BES PIM-Aff cut scores may, with replication, provide useful clinical data that alerts psychologists to the possibility of simulated empathy. However, the next generation of empathy measures should systematically take into account that response styles can profoundly influence clinical findings and interpretation. Especially in clinical forensic settings, embedded scales to assess PIM are as important to specialized scales as they are to multiscale inventories.

[8] It is very concerning, for example, that all self-report measures of psychopathy—with the sole exception of the Psychopathic Personality Inventory-Revised (Lilienfeld & Widows, 2005)—make not effort whatsoever to evaluate PIM.

Conflict of Interest Emily V. Robinson, Richard Rogers and their institution do not believe they have any conflicts of interest to declare concerning any financial, academic, personal, political, employment, or funding that could have influenced this work.

Experiment Participants All of the current study's protocols, materials, and procedures were approved by the Institutional Review Board at the University of North Texas. In accordance with the UNT IRB, all experiment participants received informed consent prior to the administration of any measures.

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