Brief Report

A pawn by any other name? Social information processing as a function of psychopathic traits

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A R T I C L E   I N F O

Article history:
Available online 29 July 2008

Keywords:
Psychopathy
Memory
Victimization
Victim selection
Social information
Emotion

A B S T R A C T

Past research has linked psychopathic traits with the ability to manipulate others, either through deception or violence. Recent observations in corporate settings suggest that enhanced interpersonal assessments might underlie this process, giving psychopathic individuals the ability to detect useful and/or vulnerable victims. To test this hypothesis, a non-forensic sample of males participated in a social memory experiment involving the recognition of faces and recalling the biographical details of artificially created characters differing in their relative career success and emotional vulnerability. High-psychopathy participants had near-perfect recognition for sad, unsuccessful female characters, but impaired memory for other characters. The findings suggest that psychopathic personality is associated with “predatory memory” even in the absence of overt criminality.

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1. Introduction

Psychopathic individuals have a constellation of traits that centre on dysfunctional affective and interpersonal processing (Hare, 2003). In offender populations, high levels of psychopathy are associated with the commission of a greater number of both violent and non-violent crimes, as well as increased recidivism rates when released to the community (e.g., Laurell & Daderman, 2005). Concerning treatment, several studies suggest that psychopathic traits are resistant to traditional approaches aimed at curbing antisocial behaviors (e.g., Seto & Barbaree, 1999; for a review, see Harris & Rice, 2006).

Offenders with a psychopathic personality also differ qualitatively from others; their aggression is more often predatory and instrumental in nature. For example, whereas the homicides of non-psychopathic offenders are about equally likely to be reactive or instrumental, over 90% of homicides committed by offenders with a psychopathic personality profile are premeditated or serve some immediate goal (Woodworth & Porter, 2002). This trend toward the instrumental use of antisocial behavior generalizes to community samples as well (Reidy, Zeichner, Miller, & Martinez, 2007).

While physical aggression is common in psychopathic offenders, they also frequently rely upon interpersonal manipulation to achieve their goals. Seto and Barbaree (1999) found that sex offenders scoring high on psychopathy received the highest treatment scores but were the most likely to re-offend upon release, leading the authors to conclude that the psychopathic offenders had simply “used” the treatment program to “look good” and hasten their freedom. Similarly, Porter, ten Brinke, and Wilson (in press) found that offenders diagnosed with psychopathy were 2.5 times more likely to be granted conditional release, despite having many more prior offenses than undiagnosed offenders. Such findings suggest that psychopathy is related to the ability to skillfully deceive and manipulate others.
Stemming from such research, it has been proposed that characteristics of the psychopathic personality not only enhance the ability to lie, but also allow for the careful selection of victims, targeting the most useful or most easily controlled individuals. In their book on psychopathic personalities in the corporate world, *Snakes in Suits*, Babiak and Hare (2006) state that, "Besides assessing the potential gain from others, psychopaths assess their emotional weak points and psychological defenses in order to work out a plan of attack" (p. 44). This suggests that when initially meeting others, individuals with a psychopathic personality might “size up” prospective victims for signals of success (and potential resources) or emotional vulnerability. In support of this position, a recent study by Book, Quinsey, and Langford (2007) demonstrated that psychopathic traits (across both correctional and community samples) were associated with an increased ability to judge others’ assertiveness based on seeing only a two-minute video of a conversation between the target and a confederate.

Based on these findings, the current study sought to elucidate the relationship between psychopathic personality and assessments of others’ vulnerability and success. To accomplish this, a community sample of men was examined for psychopathic traits and their ability to remember biographical details of individuals differing in their relative success and emotional characteristics. Previous research using facial memory paradigms has shown that clinical symptoms are associated with abnormal recognition of faces; for example, D’Argembeau, Van der Linden, Etienne, and Comblain, 2003 demonstrated that individuals with high levels of social anxiety lacked a memory enhancement for happy faces seen in low-anxiety controls. Within our study, we predicted that high levels of psychopathic traits would be associated with superior memory for successful individuals (i.e., potentially useful targets), sad individuals (i.e., easy targets), or some combination therein (e.g., a potentially vulnerable but successful individual).

2. Methods

2.1. Participants

Forty-four male undergraduate students attending a large university in eastern Canada participated in the current study as part of a larger experiment examining emotional processing. The sample had a mean age of 19.25 years (SD = 1.47, range: 17–23 years), and participants had spent an average of 1.95 years in post-secondary education. Ninety-one percent of participants reported being of Caucasian ethnicity, 5% African-Canadian and 4% reported their ethnicity as “other”. Participants were awarded extra course credit for participating in this study.

2.2. Materials

The eight stimulus characters were created by selecting faces from the Pictures of Facial Affect series (POFA; Ekman & Friesen, 1976). The POFA consists of 110 images of Caucasian human faces portraying six basic emotions (i.e., happiness, sadness, disgust, fear, surprise, and anger), as well as neutral-expression examples of each of 14 individuals. In the current study, half (four) of the characters were smiling and half were presented with a sad facial expression; as well, half were male and half were female. Each face was associated with a brief biographical description, which included a name, an occupation, a

![Fig. 1. Examples of the characters (happy successful male on top, unhappy unsuccessful female on bottom) used in the current study.](image)
like, and a dislike. Names were chosen from the top four of each gender from the www.onceuponaname.com/whattodoes-
your.html website (i.e., Mike, Jacob, Matt, Nick, Hannah, Emily, Sarah, and Madison). Occupations were taken from a list of
the most and least lucrative positions of employment (from www.usatoday.com/news/opinion/columnists/neuharth/
neu060.htm). The final list of occupations was as follows: financial planner, web designer, doctor, lawyer, ironworker, lumberjack, janitor, and fisher. This allowed for the creation of eight unique characters, each of which was represented in one of
the experimental groups; happy and successful people, happy but unsuccessful people, sad but successful people, or sad and
unsuccessful people. Hypothetical “likes and dislikes” were generated, including colors, sports, animals, and activities. All
character information (i.e., names, occupations, likes, and dislikes) were randomly assigned to one of the faces, creating eight
unique character profiles (for examples, see Fig. 1).

The eight profiles were used to create four separate, randomly ordered slideshows (i.e., the profiles remained the same
across slideshows but the order of profile presentation changed randomly across each slideshow). A second set of faces fol-
lowed the profiles, and contained a series of 14 neutral-expression photographs from the POFA series (i.e., participants had
previously seen eight of the faces, and the remaining six served as distracters). This second slide show presented all neutral-
expression models in a randomized sequence. Slideshows were viewed on a 19 in. flat screen monitor.

2.2.1. Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996)

The PPI is a 187 item self-report scale of psychopathy that has been found to have acceptable reliability and validity in
undergraduate samples (Lilienfeld & Andrews, 1996). Participants indicate to what extent each item is true or false as ap-
plied to their experiences (i.e., 1 = “False”, 2 = “Mostly False”, 3 = “Mostly True”, 4 = “True”). The PPI has been used numerous
times in recent years to assess psychopathy in community samples (e.g., Gordon, Baird, & End, 2004).

2.3. Procedure

The experiment was conducted on an individual basis in a quiet area of the Department of Psychology. Participants were
advised that they were about to see an automated slideshow containing a series of characters. They were asked to recall as
much about each character as possible. The experimenter left the room while each participant viewed the automated section
of the slideshow. This first section lasted 4 min (each character was on-screen for 30 s before automatically cycling to the
next character), and was followed by a screen instructing the participant to retrieve the experimenter before continuing.
At this point, the participants were advised that they would view another set of faces, some of which they had seen before.
For each face, participants were asked to first state whether they recognized the character, and then to recall that character's
details. The experimenter recorded participants' responses. Participants were not given feedback during the trials, but were
able to ask the experimenter about their accuracy at the conclusion of the experiment.

Following the completion of this task, participants were asked to complete a series of questionnaires before participating
in a larger experiment examining emotional processing. As the components of the larger experiment followed both the
memory task and the questionnaires, they will not be discussed here.

3. Results

3.1. Preliminary analyses

Participants were divided into high- and low-psychopathy groups via a median split of PPI scores. This technique has been
used in earlier studies to produce dichotomous groups of high- and low-psychopathy participants for complex experimental
designs (e.g., Dadds et al., 2006; Gordon et al., 2004). This created two groups of 22 participants with relatively low
($M = 346.91, SD = 28.10$) and high ($M = 415.32, SD = 24.27$) levels of psychopathic traits ($p < .001$). PPI scores in our sample
ranged from 274 to 479 (the possible range of scores is from 163 to 652), with a mean of 381.11 ($SD = 43.25$)\(^2\). Ultimately,
four participants were excluded from all analyses; two missed more than 10% of the questions on the PPI, one was excluded on
the grounds that he reported consuming illicit, psychoactive drugs before participating, and one participant was excluded be-
cause of extremely slow and labored responding across the larger experiment.

3.2. Recognition of characters

In order to examine the relationship between psychopathic traits and the ability to recognize character faces, a 2 (Psy-
chopathic Traits; High, Low) × 2 (Character Successfulness; Successful, Unsuccessful) × 2 (Character Emotional State;
Happy, Sad) × 2 (Character Gender; Male, Female) analysis of variance (ANOVA) was conducted with the proportion of
faces recognized as the dependent variable. There was a significant four-way interaction between psychopathy group,
success, emotional state, and character gender, $F(1,38) = 7.38, p = .01, \eta_p^2 = .16$. Due to the complexity of the interaction

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\(^1\) Because of space constraints, only the results pertaining to psychopathy are discussed here. A full accounting of the results of this study can be obtained
from the first author.

\(^2\) These scores are generally similar to those obtained by other community samples using this measure of psychopathy.
and difficulty in clearly presenting such intricate group differences, it was decided that deviation contrasts, which test whether any group deviates significantly from the grand mean recognition rate (73.18%), would be used. Thus, groups scoring below this level of performance would be marked by impaired recognition, whereas groups scoring above would show enhanced recognition. The contrasts revealed that both the low- \((M = 94.74\%, SD = 22.94\%\)) and high-psychopathy participants \((M = 90.48\%, SD = 27.04\%\)) recognized the happy, successful male character at a better-than-average rates \((p < .05\)). High-psychopathy participants recognized both the sad, successful female \((M = 42.86\%, SD = 50.76\%\)) and happy, unsuccessful female \((M = 38.10\%, SD = 49.76\%\)) characters at less-than-average rates \((p < .05\)). Finally, high-psychopathic trait participants recognized sad unsuccessful women at a rate significantly higher than the average rate \((M = 90.48\%, SD = 39.41\%\); \(p < .05\)).

To present these findings continuously, we calculated correlation coefficients for the relationship between PPI scores and recognition rates across experimental conditions (collapsed across gender), see Fig. 2. Note that the correlation between psychopathy and recognition scores for unhappy, unsuccessful characters becomes marginally significant \((p = .06, \text{ one tailed})\).

3.3. Retention of character information

In order to investigate the relationship between psychopathic traits and the ability to recall details about characters, a four-way MANOVA (same independent variables as above) was conducted with the proportion of recalled names, jobs, likes, and dislikes as the dependent variables. This test revealed a multivariate main effect of psychopathy, \(F(4,35) = 5.00, p < .005, \eta^2_g = .36\). At the univariate level, the effect of psychopathy was significant only for the recall of names, \(F(1,38) = 12.07, p = .001, \eta^2_p = .24\); low-psychopathy participants \((M = 32.24\%, SD = 15.00\%\)) recalled significantly more character names than high-psychopathy participants \((M = 15.48\%, SD = 15.23\%)\).

4. Discussion

Psychopathic traits have been linked with both physical aggression and the “use” of others (Porter et al., in press; Woodworth & Porter, 2002). Recently, Babiak and Hare (2006) offered that psychopathic individuals in corporate contexts might assess others for their usefulness and vulnerability, enhancing their ability to manipulate those around them. The current study tested this relationship using a novel social psychology paradigm; participants were asked to “meet” a series of artificially created characters who differed in their relative successfulness and emotionality, and remember as much about them as possible. We hypothesized, based on the observations reported by Babiak and Hare (2006), that elevated levels of psychopathic personality traits would be associated with increased memory for useful or vulnerable individuals. Partially confirming our hypothesis, participants with high levels of psychopathic traits demonstrated enhanced recognition for the unhappy, unsuccessful female character; arguably the most vulnerable individual presented in our study. In fact, the high-psychopathy participants demonstrated near-perfect recognition for this character.
Interestingly, the presence of psychopathic traits did not appear to enhance memory per se; rather, it shifted existing memory resources away from some characters in favor of enhancing recognition for the sad, unsuccessful female character. This trend is apparent when examining the recognition rates across groups and characters. Overall, high- and low-psychopathy participants showed a similar ability to recognize characters’ faces (72% and 74%, respectively); however, participants with high levels of psychopathic personality traits were enhanced in the ability to recognize the unhappy, unsuccessful female character compared to low-psychopathy participants (90% and 68%, respectively). Conversely, high-psychopathy participants appeared to be impaired in the recognition of unhappy but successful (43% and 52%, high- and low-psychopathy participants, respectively), and happy but unsuccessful female characters (38% and 68%, respectively). That is, both groups have the same basic memory resources, but the resources of the high-psychopathy participants were directed at recognizing the most vulnerable character, apparently at the cost of recognizing others.

Regarding the recognition of the happy, successful male character, elevated levels of psychopathic traits did not appear to influence memory for what was, arguably, the most useful but least vulnerable character in our study. This finding contradicts the supposition of Babiak and Hare (2006) that, “People who have power, celebrity, or high social status are particularly attractive” (p. 44), which would suggest that the high-psychopathic trait participants should have remembered the successful characters, regardless of other factors. Instead, we found that all participants, regardless of personality traits, were most likely to have recognized the successful, happy man and, to a lesser extent, woman. Although not possible to confirm with our current design, it might be argued that enhanced recognition of the happy, successful male character was not necessary for the high-psychopathy participants, as existing cognitive resources were already allocated toward remembering this character. Were this the case, the assertion that individuals with psychopathic personalities show a preference for both useful and easy targets would be confirmed; both such characters were recognized at above average rates by high-psychopathy participants, though not uniquely so. Alternatively, the universal good memory for this character may be an artifact of our undergraduate male sample, which might have identified with the happy, successful male more so than with other characters.

Turning to the types of personal information recalled by participants, elevated levels of psychopathic personality characteristics were not associated with enhanced recall for any kind of information for any of the characters. Instead, there was a global impairment in the ability to recall characters’ names, regardless of their vulnerability or occupational status. One interpretation of this finding might be that an individual’s name is the least “useful” piece of information when attempting to deceive them. Instead, a skillful manipulator might tailor his/her interpersonal style to an intended victim’s personal interests, using their likes and dislikes as guides. However, we found no evidence of enhanced recall for biographical details in relation to psychopathy. An alternative explanation for the poor recall of names in relation to psychopathy might be that this process further dehumanizes potential victims (i.e., thinking of others as objects with properties, not people with names).

There are limitations to the current study that should be considered when interpreting our findings. First, we recruited an undergraduate sample for this study. Arguably, it was beneficial to have used a non-forensic/clinical population in the current study as this allowed for the separation of the effects of psychopathic personality traits from overt criminality. Further, our hypotheses were based on work done in community contexts, not clinical or forensic settings. Nonetheless, we believe we were able to capture a distribution of psychopathic personality traits in a community setting and relate it to social cognitive processes. Further, future research should adopt larger and more varied stimulus sets. The Pictures of Facial Affect set contains only 14 models with which to derive characters’ faces. A larger database of emotional faces would allow for the creation of more characters and distractors, possibly creating a wider range of performance scores. A consequence of our limited stimulus set is apparent in examining the low-status occupations, many of which are male-dominated fields. With modification, this task could represent a major advance in the study of the social psychology of psychopathy. For years, the facial affect recognition paradigm has been used to investigate abnormal social and emotional processing in relation to psychopathic personality traits (e.g., Blair & Coles, 2000; for a review, see Wilson, Juodis, & Porter, accepted for publication). The paradigm used in the current study allows for the integration of the many factors that likely underlie psychopathy-specific manipulation tactics (e.g., abnormal emotional processing, external motives), and allows for extensive modification as the field’s interests evolve.

In conclusion, the results of the current study suggest that psychopathic traits, even in the absence of overt criminality, are associated with a cognitive style that is predatory in nature. In extreme cases, this may allow individuals with clinically diagnosable levels of psychopathy to spot vulnerable individuals for future exploitation. The combination of diminished empathy and an enhanced ability to remember vulnerable individuals may underlie cases of psychopathic predatory aggression. Our findings, while preliminary, suggest that future research should examine psychopathic individuals, but also the unfortunate individuals with whom they choose to interact and eventually prey upon.

Acknowledgment

This research was supported by a National Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant awarded to Dr. Stephen Porter and a Social Sciences and Human Research Council (SSHRC) doctoral scholarship awarded to Sabrina Demetrioff.
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