Exploring Moderation Effects of Education and the Role of Personality Attribution in a Convergent Model of Successful Psychopathy

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Abstract

In recent years, there has been an increasing focus on the successful psychopath: An individual who manages to achieve occupational success despite exhibiting core psychopathic traits such as callousness. Several studies suggest this phenomenon is underpinned by a specific configuration of adaptive psychopathic traits that may facilitate positive behaviour in combination with protective variables such as education. In addition, research indicates that psychopathic personalities may be further enabled in occupational domains by specific facial cues pertaining to their underlying personality traits. The present study examined these assertions in a two-part cross-sectional design. Part 1 assessed the extent to which self-report psychopathy (as a function of education) predicted professional success in an occupational sample of 161 participants. In part 2, a convenience sample of 131 participants selected their preferred leaders from male- and female-face pairs communicating high and low psychopathy. Regression analyses revealed that psychopathy was negatively (but not significantly) related to professional success when expressed as a function of education. Conversely, a repeated-measures analysis of variance (ANOVA) revealed that low psychopathy was preferred in female, relative to male, target faces. Overall, the results provided little support for psychopathy having positive impacts on professional success.

Key words: successful psychopathy, affective-interpersonal, facially-communicated psychopathy, material success, professional satisfaction

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Psychopathy is a personality construct defined by impulsivity, emotional shallowness, and deviant behaviour (Hare, 1999). It has a longstanding association with criminality (Lilienfeld & Widows, 2005), and due to unresolved controversies on whether it should be regarded as a unitary concept, is considered one of the most contentious issues in personality research (Skeem et al., 2011). This is especially apparent in organisational domains, where psychopathy is most often associated with dysfunctional leadership (Boddy, 2016), counterproductive work behaviour (Palmer et al., 2017), and aggressive interpersonal manipulation (Jonason et al., 2012). At the same time, however, researchers concede that psychopathic personalities exhibit many prosocial characteristics in the absence of extreme antisociality (Hicks et al., 2004); they are fearless (Lykken, 1995; cf. Hare & Neumann, 2008), resilient (Dutton, 2013), and thrill seeking, for example (Patrick et al., 2009), and they often exhibit a domineering interpersonal style that quickly builds rapport with others (Hare, 1999). They are also impervious to feelings of shame and regret (Lilienfeld & Widows, 2005), and demonstrate no misgivings about making hard-hitting decisions from positions of power (Dutton, 2016). These features have led researchers to conceive the notion of a *successful psychopath* (also known as a corporate or industrial psychopath; see Babiak, 1995; Boddy, 2006) who deviates from the typical progression of criminal behaviour (Hall & Benning, 2006) to achieve marked success in their respective occupational field (Smith et al., 2014).

The case for successful psychopathy

The most-widely accepted expression of psychopathy describes a dimensional and superordinate construct (Neumann et al., 2015) across two higher-order factors (e.g., Benning et al., 2003; Harpur et al., 1989; but see also Cooke & Michie, 2001, and Hare & Neumann, 2008, for respective three- and four-factor models, and Lilienfeld & Fowler, 2006, pp. 126–128, for a “compound” psychopathy construct). Factor 1 (F_1) comprises the concept’s core personality features (cf. Hare, 2016), and can be said to include traits measured by the *Affective-Interpersonal* (AI) facets of Hare’s (2003) Revised Psychopathy Checklist (PCL–R) and its derivative instruments (hereafter referred to as the PCL model; viz., Forth et al., 2003; Hart et al., 1995; Paulhus et al., 2016; see also Mathieu et al., 2013); including low empathy and anxiety, grandiosity, guiltlessness, and a propensity to manipulate others (Cleckley, 1955/2016; Harpur et al., 1989; Karpman, 1956); and positive-adjustment attributes examined by the *Fearless Dominance* (FD) factor of the Revised Psychopathic Personality Inventory (PPI–R; Lilienfeld & Widows, 2005), such as those pertaining to fearlessness (Lykken, 1995; cf. Steinert et al., 2017), social poise (Hare, 1999), and mental toughness (Dutton, 2013; see also Patrick et al., 2009, for the analogous *Boldness* dimension of the Triarchic Psychopathy Measure; TriPM; Patrick, 2018). Factor 2 (F_2), by contrast, is largely representative of Antisocial Personality Disorder (American Psychiatric Association, 2013a, pp. 764–265; 2013b, code 301.7) and symptoms of other Cluster B disorders in the *Diagnostic and Statistical Manual of Mental Disorders*, and can be characterised by maladaptive features relating to the respective *Self-Centered Impulsivity* (SCI) and *Disinhibition* dimensions of the PPI–R and TriPM, and the PCL model’s *Lifestyle-Antisocial* (LA) facets, including: irresponsibility and recklessness (Lilienfeld & Widows, 2005); poor long-term planning (Patrick et al., 2009); proneness to boredom and substance abuse (Paulhus et al., 2016); and tendencies towards criminal versatility (Hare & Neumann, 2008).

Although the profile of successful psychopathy is not formally defined within the aforementioned parameters, a systematic review by [Wallace and colleagues \(2020\)](#) suggests that the construct is best described as a *differential-configuration* of F_1 features ([Lilienfeld et al., 2015](#)), whereby the individual encompasses the core psychopathic traits alongside additional traits such as self-discipline and conscientiousness, and an intersecting moderation effect of one or more protective variables known to mitigate tendencies towards patently-antisocial behaviour (i.e., a *moderated-expression* approach; [Hall & Benning, 2006](#)), including: high socioeconomic status (cf. [Zwaanswijk et al., 2018](#)), nurturing relationships in early childhood ([Dargis et al., 2016](#)), and intact or superior executive functioning ([Thompson & Centifanti, 2018](#)). According to the *two-process theory* proposed by [Patrick and Bernat \(2009\)](#), such personalities are aetiologically removed from the genotypic externalising-proneness of F_2 , and can be defined by an inhibited capacity for emotional reactivity ([Carré et al., 2013](#); [Decety et al., 2013](#); [Decety et al., 2014](#); see also [Lykken, 1995, chap. 10](#)) on account of atypical processing in brain structures such as the amygdala ([Walters & Kiehl, 2015](#)) and ventromedial prefrontal cortex (vmPFC; for reviews, see [Blair, 2007b](#); [2013](#); [2017](#)). While such individuals largely relate to descriptions of a prototypal *primary psychopath* ([Levenson et al., 1995](#); [Lykken, 1995](#)), it has been suggested that the profile of successful personalities may be further differentiated from aggressive psychopathic subtypes (see [Hicks et al., 2004](#)) by higher levels of Five-Factor Model (FFM) traits such as conscientiousness ([Mullins-Sweatt et al., 2010](#); [Titze et al., 2017](#)) and enhanced cognitive empathy ([Gao & Raine, 2010](#)). Together, such factors may make these individuals less prone to violent outbursts and more likely to engage in deception, interpersonal manipulation, and deviant behaviour at the level of white-collar crime ([Gao & Raine, 2010](#)).

Support for the aetiological distinction of successful psychopathic subtypes can be inferred from research which highlights the positive-adjustment aspects of F_1 by controlling for F_2 's association with invariably poor life outcomes (Blickle & Schütte, 2017; Blonigen et al., 2005; Eisenbarth et al., 2018; Hicks & Patrick, 2006; Lilienfeld, Waldman et al., 2012). Much of this research pertains to the PPI-R factor of FD, which is weakly correlated with its F_2 -referent counterpart (SCI; $r = .19$; Lilienfeld & Widows, 2005) and positively associated with greater household income (Benning et al., 2018), increased occupational performance (Titze et al., 2017), transformational leadership (Patton et al., 2018; see also Dutton, 2016; Lilienfeld, Waldman et al., 2012), and an increased probability of holding leadership and management positions (Lilienfeld et al., 2014). Moreover, it has been shown to predict positive occupational functioning within the parameters of the moderated-expression model (Schütte et al., 2016), with recent findings indicating that *Educational Level* (EL) may be a particularly promising protective variable due to its associations with executive functioning (Baars et al., 2015) and overall intelligence (Ritchie & Tucker-Drob, 2018). Hierarchical regression analyses by Blickle and Schütte (2017), for example, found that high $FD \times EL$ moderation effects significantly predicted greater task performance and lower counterproductive work behaviour in a diverse occupational sample ($N = 161$). Blickle and Genau (2019) also reported a positive $FD \times EL$ moderation effect on participants' monthly income in a large occupational sample over a five-year period ($N = 4012$), with the lattermost variable demonstrating a significant mediation effect of increased job satisfaction. Taken together, these findings suggest that the adaptive aspects of psychopathy can be sustainably applied within a wide range of work domains (cf. Lilienfeld et al., 2014) to produce positive individual outcomes.

While the aforementioned research presents important implications for psychopathy, it appears heavily contrasted with the PCL-characterisation of the successful psychopath as an unscrupulous schemer (Babiak, 1995; Babiak et al., 2010) who manages to persevere in organisational leadership despite inexorably poor performance outcomes (Boddy, 2006; see also Boddy et al., 2015). This was demonstrated in a landmark study by Lilienfeld, Waldman et al. (2012) which found FFM-derived factor-estimates of 42 U.S. presidents' respective AI and FD measures to be differentially related to historians' assessments of their presidential tenures; with the latter positively predicting performance ratings in areas such as crisis-management, leadership ability, and public persuasion; and the former demonstrating positive associations with having an overall negative character and tolerating unethical behaviour from subordinates. This discrepancy may be due to FD's separation from the PPI-R's *Coldheartedness* (CH) facet, which captures aspects of TriPM *Meanness* and primarily represents core psychopathic traits such as callousness (Lilienfeld & Widows, 2005; cf. Benning et al., 2003). It may also suggest that FD typifies a rare *prosocial* psychopathic variant (Hicks et al., 2004) that is difficult to distinguish beyond normal dimensions of personality (cf. Lilienfeld et al., 2016). For example, Eisenbarth and colleagues (2018) found that significant associations between FD and professional success could be explained by controlling for FFM traits such as extraversion (see also Miller & Lynam, 2012). Thus, as the rate of psychopathy in organisational domains is thought to be around 3.5% (Babiak & Hare, 2006) and significantly higher than the 1% rate in the general population (Hare, 1999), it seems that other extraneous factors may play a role in enabling more malignant personalities (such as those characterised by AI traits; Hare, 2016) to attain professional success within occupational domains.

One possible explanation to emerge from novel findings in personality research is that psychopathic individuals may be afforded competitive advantages in occupational settings by subtle facial cues that pertain to the underpinning facets of their personalities (cf. [Kosinski, 2017](#)). This theory derives from the empirically validated associations between one's general appearance and externally attributed ratings of intelligence ([Lee et al., 2017](#)), FFM measures ([Kramer & Ward, 2010](#)), willingness to collaborate ([Little et al., 2013](#)), and suitability for political leadership ([Spisak et al., 2012](#)). Experimental findings by [Alrajih and Ward \(2014\)](#), for example, showed that the facial width-to-height ratios (fWHR; i.e., bizygomatic width divided by upper facial height; see [Weston et al., 2007](#)) of FTSE-100 business leaders were significantly higher than those of ordinary citizens' (see [Stoker et al., 2016](#), for similar findings relating to a large sample of Fortune-500 executives), and positively correlated with externally-attributed ratings of interpersonal dominance and professional success. Other research by [Geniole and colleagues \(2014\)](#) found fWHR to be a significant predictor of male participants' willingness to cheat in a dice-rolling task, with a subsequent logistic regression highlighting a significant mediation effect of participants' FD measures.

These findings strongly suggest that the tenets of personality attribution may extend to the successful-psychopathy construct, especially as there is compelling evidence for psychopathy having distinct physical signatures. For example, [Holtzman \(2011\)](#) found that undergraduate participants were able to independently identify prototypical representations of psychopathy (Cohen's $d = .56$) in both male and female targets (cf. [Shiramizu et al., 2019](#)). Research using a variation of [Holtzman's](#) stimulus set also suggests that high-psychopathy male faces are regarded as being more aggressive than their low-psychopathy counterparts ([Lyons & Blanchard, 2016](#)) and less desirable for both short- and long-term romantic relationships ([Lyons et al., 2015](#)).

Clarification for these results may be offered by research demonstrating significant associations between psychopathic traits and covarying levels of steroid hormones such as cortisol and testosterone (Carré et al., 2015; Welker et al., 2014; cf. Pfattheicher, 2016). Although functional magnetic resonance imaging (fMRI) analysis refutes claims of the former's moderation effect on emotion-processing functions in males (Ma et al., 2017), the latter has been shown to inhibit affective empathy (Crespi, 2016; Nitschke & Bartz, 2020) and cognitive appraisal processing (Carré et al., 2015; Herbert, 2018) in both males and females by modulating information flows between the amygdala and forebrain structures such as the vmPFC (Chen et al., 2016). Additionally, genetics research demonstrates a significant mediation effect of testosterone on sexually-dimorphic arrangements of various craniofacial structures (Roosenboom et al., 2018), including fWHR (Weinberg et al., 2015). Ergo, it is not without precedent to suggest that increased levels of testosterone may account for the higher externally-attributed ratings of masculinity and malevolent aggression in high-psychopathy facial composites (e.g., Lyons et al., 2015; cf. Yildirim & Derksen, 2012).

The subtext of this assertion was explored by Brown and colleagues (2017) in an extension of Holtzman's original experiment to examine male and female participants' aversion to facially-communicated psychopathy in a community sample ($N = 155$). While high-low psychopathy preferences were highly predicated upon the extent to which individuals indicated dangerous-world beliefs (see Altemeyer, 1988), the researchers found males to be significantly more tolerant of high-psychopathy faces than females. Proponents of the evolutionary-contingency hypothesis (Van Vugt & Grabo, 2015) and life history theories of dark personality (Jonason et al., 2010) suggest that such discrepancies may stem from a heuristic and male-specific affordance-management strategy whose underpinning functions are to initiate intergroup

aggression and mitigate coalitional outgroup threats (Neuberg & Schaller, 2016). As the life history strategies of psychopathic personalities are often characterised by aggressive and status-driven risk taking, for example (McDonald, Donnellan, & Navarrete, 2012), it may be more practically advantageous for ingroup members to condone adaptive traits such as FD (Van Vugt & Grabo, 2015) and utilise their capacity to facilitate exploitation, resource acquisition, and ingroup advantages for intergroup conflict (McDonald, Navarrete, & Van Vugt, 2012).

The current study

The logic of the aforementioned research presents several implications for successful psychopathy. From one viewpoint, it is reasonable to suggest that the concept may be a top-down process by which contemporary organisational-leadership structures with a predominantly male character (Gupta et al., 2018) are informed by an interaction effect of facial attribution and shifting situation requirements to enable aggressive, dominant, and possibly antisocial personalities (Grabo & Van Vugt, 2018; Spisak et al., 2012). At the same time, however, it may be that the superior cognitive empathy of successful psychopaths (Gao & Raine, 2010) makes them more able to perceive the affective states of others, and increases their sensitivity towards non-verbal cues of individuals' susceptibility to bullying or coercion (Book et al., 2013; Muñoz et al., 2011; Uzieblo et al., 2010). Were such personalities able to conceal their maladaptive traits via protective factors such as high EL, superior social functioning, low impulsivity, and a profile dominated largely by F₁ traits, it may enable them to attain leadership positions from which they could act as role models for their subordinates (Boddy et al., 2015), and establish a toxic organisational culture by enticing other antisocial individuals to collude in their self-serving behaviours (Barelds et al., 2018; Boddy & Taplin, 2016; cf. Hare, 1999). As such, the current

research tests an elaborated version of the moderated-expression model (Steinert et al., 2017), and explores the extent to which AI traits may positively predict professional success beyond FFM and other psychopathy-related traits such as narcissism and Machiavellianism (Paulhus & Williams, 2002) when expressed as a function of EL (H_1). In addition, the study presents the first examination of facially-communicated psychopathy as a novel contextual variable within the parameters of the successful-psychopathy concept and expects to confirm that males indicate greater preferences for high-psychopathy faces than females (H_2). Regarding psychopathy's association with preferences for high-low psychopathy faces, the research examines a dual hypothesis (i.e., that psychopathy may positively or negatively predict preferences for high-low psychopathy; H_3) based on psychopathic individuals' tendencies towards like-minded personalities (Jonason, Lyons, & Blanchard, 2015; cf. Hare, 1999), and their actively targeting individuals whom they perceive as weak or vulnerable (Book et al., 2013).

Method

Participants

A priori G*Power (Faul et al., 2009) analyses for the planned analyses of a linear multiple regression and an analysis of covariance (ANCOVA) indicated that the research required correspondent samples of 128 and 135 participants to detect medium effects with 80% power. This is consistent with past research (e.g., Brown & Sacco, 2017).

Recruitment began with a convenience sample of the researcher's colleagues and acquaintances to conduct a pilot study. Thereafter, recruitment was facilitated through the University of Derby's Research Participation Scheme and by posting invitation notices on social media websites such as Facebook and Reddit. Criteria for participation stipulated that

participants be at least 18 years of age, identify as male or female, and indicate full- or part-time employment. As AI traits have been shown not to diminish after young adulthood (Harpur & Hare, 1994), no upper age limit was specified to potential participants.

In total, 245 individual data sets were collected throughout the duration of the survey, of which 12 were omitted due to missing values for critical items such as sex. The remaining data sets were alternated between two samples to address the hypotheses, with sample 1 being limited to 161 British and Irish participants (52% female; $M_{\text{Age}} = 34.39$, $SD = 11.44$) to control for differing cultural expressions of psychopathy in the examination of H_1 (Cooke & Michie, 1999), and sample 2 comprising 131 participants (56% female; $M_{\text{Age}} = 34.22$, $SD = 12.31$) who fully completed the measures required for assessing H_2 and H_3 (see Materials section). Occupations for the former sample were grouped into eight major categories (see Table 1; see also Eisenbarth et al., 2018), and the latter sample represented a diverse range of nationalities, including: the UK (63%), U.S.A. (13%), Ireland (8%), Canada (5%), Japan (2%), and various other countries in Europe (7%) and South America (2%).

Materials

Demographics. Participants were asked to report their age, sex, and occupational tenure (OT) to control for confounding effects (Schütte et al., 2016).

Self-Report Psychopathy Scale v.4: Short Form (SRP.; Paulhus et al., 2016). The SRP comprises 29 items and was used to measure psychopathy across subscales of affective (e.g., “I never feel guilty over hurting others”), interpersonal (e.g., “You can get what you want by telling other people what they want to hear”), lifestyle (e.g., “I’m a rebellious person”), and antisocial

(e.g., “I have threatened people into giving me money, clothes, or makeup”) facets. All items were rated using a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*) and responses were summed to produce total and subscale scores. All scores were converted to community-sample *T*-Scores to facilitate data analysis (see [Paulhus et al., 2016, p. 65](#)), and Cronbach’s alpha statistics were acceptable for all subscales ($\geq .73$).

Educational Level (EL). Participants EL was measured using an 8-point ordinal scale (1 = *left school without qualification* to 8 = *doctoral degree*). The scale was adapted from other research ([Blickle & Schütte, 2017](#)) to accommodate British, Irish and U.S. populations and scores were converted to a metric scoring system ([Blickle & Genau, 2019](#)) that represented the normative timeframe for attaining respective EL categories (see [Table 2](#)).

Professional success measures (Eisenbarth et al., 2018). The research used two employment variables developed by [Eisenbarth et al. \(2018\)](#) to measure professional success; viz., material success (MS) and professional satisfaction (PS). The latter was expressed by averaging ratings of participants’ self-reported satisfaction with their (1) salary, (2) promotion frequency, and (3) overall professional career (as measured using a 9-point scale; 1 = *not at all* to 9 = *very much*). This scale showed good internal consistency (Cronbach’s $\alpha = .83$).

MS was calculated by summing several self-reported indicators of participants’ professional standing, with higher scores indicating greater occupational success. Specifically, (1) participants reported their salary using an 8-point interval scale (1 = £0-£20,000 to 8 = >£140,000) and (2) disclosed how many times they had received an occupational promotion (0 = *never* to 6 = >5 times). Participants then used ordinal scales to indicate, if applicable, (3) the size

of their personal office (0 = *I don't have my own office* to 5 = *>400 square inches*), (4) whether they used a company vehicle (0 = *no car* to 8 = *sports car*), (5) their budget responsibility (0 = *none* to 6 = *>£1,000,000*), and (6) the number of employees for which they were responsible (0 = *none* to 6 = *>250*). Confirmatory factor analyses by [Eisenbarth and colleagues \(2018\)](#) indicated these measures to be a good model fit for MS (see p. 134), and the scale demonstrated acceptable reliability during screening (Cronbach's $\alpha = .70$).

High-low psychopathy preferences (PP). [Brown and colleagues' \(2017\)](#) stimulus set was used to examine participants' preferences for high and low psychopathy. The set utilised the correspondent male- and female-face pairs from [Holtzman's \(2011\)](#) study, which were generated by averaging facial nodes from portraits of individuals who demonstrated high or low psychopathy according to self ([Paulhus et al., 2016](#)) and peer ([Neumann & Hare, 2008](#)) reports. These were morphed using a 50/50 blend ([Brown et al., 2017](#)) with matched-sex standardised photographs of White American faces ([Ma et al., 2015](#); [Minear & Park, 2004](#)) to generate a total of 40 (20 male and 20 female) high-low psychopathy face-pairs (see Figure 1 for examples). Face-pairs were individually presented to participants, and all stimuli were used in the PP task.

In a variation of [Brown and colleagues' \(2017\)](#) method, participants were instructed to select the target from each face-pair whom they would most prefer as an occupational superior (such as a boss, manager, or supervisor; 0 = *low-psychopathy target*, 1 = *high-psychopathy target*). Individual PP measures were scored on a standardised 0–1 scale (with higher scores indicating greater preferences for high psychopathy stimuli) and calculated by dividing each participant's number of high-psychopathy choices by the total number of face pairs.

Figure 1

Example Male and Female Face-Pairs Communicating High and Low Psychopathy.

Note. High-psychopathy stimuli are positioned left in each face-pair. Produced with permission from Dr Mitch Brown, University of Arkansas (<https://mitchbrownpsych.weebly.com/>).

Big Five Inventory – Short Form (BFI-10; Rammstedt & John, 2007). The 10-item BFI was used to control for the well-established effects of the FFM on career success (Bui, 2017). Items were rated using a 5-point scale (1 = *disagree strongly* to 5 = *agree strongly*) to provide averaged measures of agreeableness, conscientiousness, extraversion, neuroticism, and openness. Although Cronbach’s alpha statistics were low ($\geq .23$; see Table 3), the BFI-10

demonstrates acceptable convergent validity with other FFM scales (see Rammstedt & John, 2007, pp. 207–209), and its properties may be acceptable when combined with other personality measures (Balgiu, 2018).

Short Dark Triad (SD3; Jones & Paulhus, 2014). The 27-item SD3 was used to control for the covariate effects of other dark personality traits on leadership attainment, job satisfaction, and professional success (Jonason, Wee, & Li, 2015). All items were rated using a 5-point scale (1 = *disagree strongly* to 5 = *agree strongly*) and responses were averaged into separate measures of Machiavellianism, narcissism, and psychopathy. The latter measure provided an element of convergent validity with the SRP-total *T*-scores for both samples (Egan et al., 2014; $r_s \sim .79$) and internal consistencies were acceptable for all subscales (Cronbach's $\alpha s \geq .72$).

Procedure

Participants provided informed consent on a Qualtrics online survey before inserting their demographic information (survey can be imported from the Open Science Framework here: https://osf.io/qjs23/?view_only=220311a669344ac3b613e7da68166aa8). Next, participants completed the professional success measures before selecting their preferred leader from each individual face-pair. Face-pairs were presented randomly to minimise order effects (Grabo & Van Vugt, 2018) and each pair showed one unique identity with a counterbalanced and randomised left-right display of high-low psychopathy (Brown et al., 2017). Thereafter, participants completed the SRP and a random-ordered sequence of the BFI–10 and SD3 scales. Finally, participants were debriefed.

Results

For Sample 1, standardised residuals of the predictor variables (age, sex, EL, OT, SRP factors, DT measures, and FFM traits) and PS were normally distributed ($W = .99, p = .11$). However, the residuals of the predictors and MS demonstrated significant heteroscedasticity ($W = .94, p < .001$) on account of the latter variable's non-parametric properties ($Z_{\text{Skew}} = 9.22, Z_{\text{Kurtosis}} = 12.67; W = .84, p < .001$). As a rank-order conversion of the MS scores substantially improved the variable's distribution ($Z_{\text{Skew}} = .15, Z_{\text{Kurtosis}} = -3.26; W = .93, p < .001$), it was determined that the data's extreme asymmetry was indicative of a poor underlying scoring metric (Cohen et al., 2003), and the raw MS values were subsequently $\log_{10}$ transformed ($Z_{\text{Skew}} = .69, Z_{\text{Kurtosis}} = -2.38; W = .95, p < .001$). While the residuals still exhibited a marginal kurtotic distribution ($Z_{\text{Skew}} = -1.40, Z_{\text{Kurtosis}} = -1.99; W = .98, p < .008$), the transformed data provided a better overall fit for a regression analysis (Coolican, 2014; cf. Feng et al., 2014).

Similarly, while all Sample-2 distributions for the PP task showed good parametric properties (all Z_{Skews} and $Z_{\text{Kurtoses}} < \pm 1.96; Ws \geq .96, ps \geq .07$), the female SRP T -Scores demonstrated a significant positive skew ($Z_{\text{Skew}} = 2.79; W = .93, p = .001$) that could not be fully rectified by square root transformations of the study's raw- and T -Score-total data sets (all $Z_{\text{Skews}} > \pm 2.04$; Coolican, 2014). In addition, a priori Spearman coefficients revealed a poor relationship between the SRP-total T -Scores and PP outcomes ($r_s = .05, ns$), thereby suggesting that the unaltered data would inhibit meaningful inferences on effects of linear analyses (Freund et al., 2006). As positively skewed data is commonplace in variables reflecting overt antisociality (Paulhus et al., 2016), and case examinations of two Median-Rule outliers in the sample's raw SRP scores (based on an upper cut-off value of 92, $Mdn = 48$; see Carling, 2000) revealed no

indications of participant-response error, it was determined that the non-transformed SRP data was most appropriate for addressing the research hypotheses (Feng et al., 2014).

Descriptive statistics. Table 3 shows descriptive statistics for sample 1 (see also Table 4, for descriptive statistics as a function of sex). In the tradition of past findings (e.g., Paulhus et al., 2016), the SRP-total *T*-Scores were higher for male participants in sample 1 (58.72, vs. 50.08 for females, *SD* = 11.59, 9.86, respectively) and sample 2 (57.63, vs. 50.14 for females, *SD* = 11.62, 10.84, respectively). Results of Mann-Whitney *U* tests indicated these differences to be significant (see Table 5). A breakdown of the SRP *T*-scores for sample 2 is shown in Table 6 (see Appendix C), and descriptive statistics for sample's PP outcomes are shown in Figure 2.

Zero-order correlations. As expected, the SRP factors were highly correlated in both samples ($r_s \sim .70$, $ps < .01$). For sample 1, the SRP-total *T*-Scores were negatively related to age, agreeableness, and conscientiousness ($r_s = -.20, -.38, -.28$, respectively, $ps < .05$), and positively associated with Machiavellianism and narcissism ($r_s = .59, .32$, respectively, $ps < .01$). All SRP measures were unrelated to EL ($r_s \sim \pm .10$, all $ps > .05$). Surprisingly, the AI factor was unrelated to extraversion ($r_s = -.04$, *ns*; vs. .23 for LA, $p < .01$), and the SRP-interpersonal, -lifestyle, and -antisocial facets were positively associated with MS ($r_s = .18, .17, .19$, respectively, $ps < .05$). While MS demonstrated significant correlations with the SRP-total *T*-Scores ($r_s = .23$), age ($r_s = .26$), OT ($r_s = .22$), narcissism ($r_s = .25$), conscientiousness ($r_s = .23$), neuroticism ($r_s = -.17$), and PS ($r_s = .48$; all $ps < .05$), the lattermost variable was only significantly associated with conscientiousness, extraversion, and narcissism ($r_s = .23, .17, .19$, respectively, $ps < .05$). A full

breakdown of the overall study-variable correlations and Cronbach's alpha statistics can be viewed in Table 3 (see also Table 4, for correlations as a function of sex).

Figure 2

Means (and Standard Deviations) for Male and Female Participants' High-Low Psychopathy Preferences (PP) as a Function of Target Sex.

Note. $N = 131$ (female $n = 74$). Error bars display 95% confidence intervals.

Moderation analyses between psychopathy and professional success. To address H_1 , the researcher conducted two moderated multiple regression analyses using the PROCESS macro modelling tool (<http://www.processmacro.org/>). MS and PS were entered as dependent variables in models 1 and 2 respectively. EL and AI were entered as the corresponding moderator and predictor variables in both analyses, and each model also controlled for the following covariates: age, sex, OT, LA, Machiavellianism, narcissism, and FFM traits. All continuous predictor

variables were mean-centred to reduce nonessential multicollinearity and aid interpretation of the effects at the mean of the sample (Cohen et al., 2003).

Model 1 was statistically significant, $F(14, 143) = 3.96, p < .001$, and the predictors accounted for 27.9% of the variance. Among the covariates, age ($B = .01, SE = .003$), sex ($B = .13, SE = .06$), and conscientiousness ($B = .10, SE = .04$) were the only significant positive predictors of MS, $t = 2.32, 2.13, 2.83$, respectively, $ps \leq .04$). A significant AI $\times$ EL interactive effect also emerged, $\Delta R^2 = .03, F(1, 143) = 5.09, p = .03$; with high AI predicting (but not significantly) greater MS when EL was low, $B (SE) = .002 (.004), t = .68, p = .50, CI_{95} [-.005, .011]$, and lower MS when EL was high, $B (SE) = -.01 (.004), t = -1.83, p = .069, CI_{95} [-.016, .001]$.

Model 2 was also significant, $R^2 = .17, F(14, 143) = 3.96, p < .001$, with only narcissism, $B (SE) = .64 (.29)$, and conscientiousness, $B (SE) = .45 (.19)$, emerging as significant predictors of PS, $t = 2.20, 2.39$, respectively, $ps \leq .03$. The model produced no significant AI $\times$ EL interaction effect, $\Delta R^2 = .003, F(1, 143) = .55, p = .46$ (see Table 7; see also Appendix E).

Analyses of high-low psychopathy preferences (PP). To address the other hypotheses, the researcher first determined an overall preference for low-psychopathy faces using a one-sample t test with a population mean of .50 (Brown & Sacco, 2017), $M = .45, SD = .10; t(129) = -5.46, p < .001$, Cohen's $d = .48$. Subsequently, the extent to which PP outcomes differed as a function of Participant Sex (H_2) and psychopathy (H_3) was examined using a custom 2×2 repeated-measures mixed-model ANCOVA (Brown et al., 2017) with target sex (male vs. female) entered as a within-subjects factor over participant sex (male vs. female) as a between-subjects variable. As the AI and LA factors were highly correlated, only the SRP-total T -Scores

were entered as a covariate to preserve statistical power. To control for the heteroscedasticity between the SRP and PP variables (Cohen et al., 2003), and the positively-skewed SRP *T*-Scores of the female-participant group, a conservative alpha level of .01 was used to interpret main effects and interactions (Russo, 2003). As expected, the results revealed no significant between- or within-subjects effects for main and interaction variables, $F_s \leq 1.06$, $ps \geq .31$, (see Table 8), with the lack of power indicating a possible model misspecification on account of poor group-covariate interaction in relation to participants' PP outcomes (Cohen et al., 2003).

To address the model's poor fit, the researcher removed the SRP variable and conducted a separate 2 (participant sex: male vs. female) $\times$ 2 (target sex: male vs. female) repeated-measures analysis of variance (ANOVA; Urdan, 2017) to test H_2 . This produced a significant within-subjects effect of target sex which indicated a greater overall preference for low psychopathy in female ($M = .43$, $SD = .13$), relative to male ($M = .47$, $SD = .14$), target faces, $F(1, 128) = 5.00$, $p = .03$, $\eta_p^2 = .04$. There was no significant between-subjects effect of participant sex, $F(1, 128) = .31$, $p = .58$ (see Table 9).

Separate Spearman correlation tests were used to test H_3 . These further confirmed that the SRP-total *T*-Scores were unrelated to participants' PP measures for both male and female targets, $r_s = .01$, $.03$, respectively, $ps \geq .70$.

Discussion

The current study tested an elaborated version of the moderated-expression approach to successful psychopathy (Steinert et al., 2017). Specifically, it explored whether core AI psychopathic traits would positively predict MS and PS when expressed as a function of EL (H_1). It also addressed the speculative role of facially-communicated psychopathy to assess whether

males would demonstrate greater preferences towards high-psychopathy stimuli than females (H_2), and whether self-reported psychopathy would predict preferences for high-low psychopathy stimuli (H_3). Overall, the hypotheses were not supported: Elevated AI measures were inversely related, albeit not significantly, to MS and PS when EL was high, and the only significant findings to emerge in relation to facially-communicated psychopathy was an above-chance (and unexpected) preference for low psychopathy in female faces.

The research made a number of contributions. Firstly, it expanded the SRP's relatively sparse portfolio in successful-psychopathy research ([Wallace et al., 2020](#)), and tested a comprehensive model of the concept that adheres to clinical and empirical traditions of the PCL model ([Paulhus et al., 2016](#)) while controlling for FFM and other dark personality traits. Moreover, while the hypotheses were not supported, it is notable that Model 1 revealed a significant unconditional interaction and a conditional ($\text{high AI} \times \text{EL}$) effect that was almost within the range of significance (i.e., CIs were only marginally inclusive of zero; [Preacher et al., 2007](#)). This may indicate that the MS-outcome is the result of a type II error on account of low power ([Coolican, 2014](#)), which would suggest that the findings represent a stark contrast to PPI-R research demonstrating positive $\text{FD} \times \text{EL}$ moderation effects in predicting professional success (e.g., [Blickle & Genau, 2019](#)).

One explanation for this discrepancy may be the disconnect between the FD and AI factors. While the former is a clear indicator of primary psychopathy ([Lilienfeld, Patrick et al., 2012](#); [Skeem et al., 2011](#)), it has been suggested that psychopathic personalities should be differentiated by emotional callousness (e.g., high CH) rather than explicit fearlessness ([Hare & Neumann, 2008](#)), and that FD may be regarded as a structural moderator ([Steinert et al., 2017](#)) of prosocial-psychopathic behaviour in conjunction with low CH and preserved grey matter volume

in the amygdala ([Gao & Raine, 2010](#)). For example, [Dutton \(2016\)](#) found that popular and socially-influential historical figures such as Saint Paul, Jesus Christ, and Winston Churchill exhibited low measures of CH despite being ranked by biographers to be in the top population-quintiles for measures of FD and SCI. Similarly, while [Lilienfeld, Waldman et al. \(2012\)](#) did not account for CH in their study of presidential leadership, their data indicated that several of the lowest FD-scoring presidents (e.g., John Adams, Richard Nixon, and William Howard Taft) ranked well within the upper quintile for FFM measures of AI, and far above most of the top FD scorers (S. O. Lilienfeld, personal communication, February 17, 2020). This suggests that FD captures aspects of adaptive functioning that are somewhat removed from traditional conceptions of psychopathy ([Lynam & Miller, 2012](#); [Miller & Lynam, 2012](#); [Vize et al., 2016](#); cf. [Lilienfeld, Patrick et al., 2012](#)), and that FD and AI tap distinct neurological underpinnings of psychopathy's behavioural-inhibition deficits (see [McNaughton & Gray, 2000](#)); with the former representing a natural restriction of fight-flight response that can be positively channelled by healthy parental relationships ([Lykken, 1995](#); [Karpman, 1956](#)), and the latter capturing the general affective poverty described by [Hare \(1999\)](#) and [Cleckley \(1955/2016\)](#).

The logic of this assertion carries several implications for the current findings. With regard to MS, for example, the negative moderation effect of EL may reflect other research which suggests that better cognitive functioning (as indicated by high intelligence) does not diminish antisocial or dysfunctional tendencies in high-AI personalities ([Hampton et al., 2014](#); [Jambroes et al., 2018](#)). As such, although these individuals may be better able to attain managerial positions by accruing greater EL and projecting a socially-adapted façade of successful behaviour ([Cleckley, 1955/2016](#)), they may have no desire to maintain positive social impressions upon reaching their short-term goals ([Freeman & Samson, 2012](#)), and their

occupational tenures may be short-lived on account of laissez-faire leadership (Mathieu & Babiak, 2015) and organisational mismanagement (Boddy, 2016). Also, they may be more inclined to exert workplace influence using proactive aggression (Jambroes et al., 2018) and hard manipulation tactics such as threats (Jonason et al., 2012), which may further limit the sustainability of their success due to high staff turnover (Boddy et al., 2015) and poor performance appraisals from their superiors (Babiak et al., 2010). Moreover, while the effects should not be overinterpreted, the findings may also be indicative of high-AI personalities' tendencies towards exam-cheating and plagiarism (Paulhus et al., 2016), which could theoretically allow them to attain higher EL despite their sustained lack of interest in pursuing education or long-term career goals (Hare, 1999).

At the same time, however, the MS outcomes may reflect the null findings regarding PS, which indicated no effect or moderation effect of any psychopathy factors. This may suggest that, in general, high-psychopathy individuals are no more likely to pursue and attain senior management positions than low-psychopathy counterparts (cf. Boddy et al., 2010). Dark triad research supports this assertion, and suggests that psychopathic personalities may be more likely to prefer jobs with low levels of interpersonal interaction and occupational supervision (Jonason et al., 2014), such as practical, blue-collar vocations that offer little in the way of occupational prestige or above-average success (Jonason, Wee, & Li, 2015). Additionally, it is notable that MS was predicted by conscientiousness rather than extraversion (cf. Eisenbarth et al., 2018), and that PS was predicted by both conscientiousness and narcissism, especially as all SRP facets exhibited significant negative relationships with conscientiousness. This further distinguishes psychopathy as a separate construct within the dark triad (Paulhus & Williams, 2002), and implies that the conscientious and successful psychopath described by Mullins-Sweatt et al.

(2010) may be a statistical anomaly rather than a pervasive personality type (but see also [Hicks et al., 2004](#), who found a 2:1 ratio of aggressive-prosocial subtypes). Moreover, it also lends support to [Eisenbarth et al. \(2018\)](#) by demonstrating that psychopathy's core affective features are unrelated to PS, and that higher measures of these traits are unlikely to facilitate greater professional success ([Cleckley, 1955/2016](#)).

In addition to the aforementioned findings, the study also revealed novel implications for successful psychopathy within the parameters of the evolutionary-contingency approach to leadership ([Van Vugt & Grabo, 2015](#)), with specific reference to the role of facially-communicated psychopathy. Overall, the research found that participants demonstrated a significant overall preference for low-psychopathy faces that was unrelated to participant sex. This partially replicates the results obtained by [Brown et al. \(2017\)](#) and extends other dark personality research showing individuals' aversion towards high-psychopathy stimuli as potential short- ([Lyons et al., 2015](#)) and long-term ([Lyons & Blanchard, 2016](#)) romantic suitors. It also supports the assertion that leadership selection is somewhat driven by facial appearance ([Stoker et al., 2016](#)), and that facially-communicated psychopathy may be indicative of personality correlates underlying especially toxic behaviour ([Geniole et al., 2014](#)). For example, while facial cues of dominance and masculinity (e.g., squared jawline, thinner eyes, and high fWHR) are positively associated with leadership attainment in political and organisational contexts ([Alrajih & Ward, 2014](#); [Spisak et al., 2012](#)), it may be that the features of high-psychopathy faces specifically infer a potential for exploitative and violent aggression ([Brown et al., 2017](#)) rather than a general tendency towards social dominance and assertiveness. In addition, as the high-psychopathy stimuli represent extreme versions of personality ([Holtzman, 2011](#)), it is likely that their hyper-masculinised features lack underlying cues of trustworthiness

([Little et al., 2007](#)), which are distinctly associated with feminised facial characteristics such as roundness, small eyebrows, and fuller lips ([Van Vugt & Grabo, 2015](#)). As such, it can be deduced that high-psychopathy faces may be differentiated from the masculinised facial traits of extraversion ([Brown & Sacco, 2017](#)) and other dark triad constructs ([Lyons et al., 2015](#)) by cues pertaining to an especially hostile form of dominance that represents a substantial threat towards the ingroup.

The logic of this assertion may extend to the study's revelation of a significant (and unexpected) main effect pertaining to greater preferences for low psychopathy in female faces, relative to male. This outcome is difficult to interpret, especially as [Geniole and colleagues \(2014\)](#) found that higher FD and fWHRs marginally protected against female participants' willingness to cheat in a dice-rolling task. One possible explanation may be that the underlying personality traits are more extreme in the female-target stimuli due to the larger sub-sample of female participants in [Holtzman's \(2011\)](#) original study ($n = 48$, vs. 33 for males). However, descriptive statistics for the highest- and lowest-scoring individuals whose photographs were used in creation of the prototypes do not indicate a potential for artifacts ([Urdan, 2017](#)), as males exhibited higher peer- and self-report-psychopathy means in all conditions (see [Holtzman, 2011, Table 1](#)). Accordingly, a more likely explanation may be that the results are reflective of sex-specific intergroup roles which are mediated by testosterone responses to social stress ([Byrd-Craven et al., 2016](#)); with women demonstrating tendencies towards prosocial behaviours characterised by cooperation, high empathy, and low risk taking ([Nickels et al., 2017](#)), and men being inclined to engage in coalitional aggression towards outgroup threat for the purpose of acquiring increased status and access to resources ([McDonald, Navarrete, & Van Vugt, 2012; Spisak et al., 2016](#)). Thus, the current results imply that although individuals do not prefer

leaders whose traits are indicative of underlying psychopathy, cues of low psychopathy are specifically preferred in female faces due to their conveying a capacity for warmth, trustworthiness, and cooperative management (cf. [Grabo & Van Vugt, 2018](#)). This may explain the higher prevalence of psychopathy in male populations (e.g., [Eisenbarth et al., 2018](#); see also [Skeem et al., 2011](#)), as well as women being subject to greater social sanctions for displaying psychopathic behaviour in work domains ([Landay et al., 2019](#)).

Regarding H₃, the research found a null effect of psychopathy's affiliation with individual preferences for high-low psychopathy faces, and participants' SRP *T*-Scores were wholly unrelated to PP outcomes pertaining to both male and female targets. While these results were not significant, they carry several implications. Firstly, they may reflect other findings which suggest that psychopathy's hallmark emotional-reactivity deficits underpin attentional impairments in face processing and reduced tendencies towards the visual exploration of facial expressions ([Boll & Gamer, 2016](#)). High-psychopathy individuals demonstrate reduced amygdala responses to facially-communicated emotions ([Blair, 2007a](#); [Decety et al., 2014](#)), and so it may suggest that such personalities are unable to infer useful information from facial cues, and instead focus on other physical aspects which may provide insight on individual character, such as body language, clothing, or hairstyles ([Book et al., 2013](#); [Holtzman & Strube, 2012](#)). Secondly, fMRI research indicates that the aforementioned facial-processing abnormalities are especially salient in response to dynamic, rather than static, stimuli ([Decety et al., 2014](#)). This may suggest that the current study's null findings are more revealing of an impulsive and opportunistic pattern of deception rather than a specific inability to detect high-low psychopathy facial cues. However, other fMRI research disputes this, and suggests that psychopathy's associated facial-processing abnormalities are differentially related to specific dimensions of the

construct, as demonstrated by the SRP-interpersonal facet being positively associated with reduced amygdala reactivity to fearful expressions, and SRP-lifestyle being positively correlated with heightened amygdala reactivity to angry expressions (Carré et al., 2013). This suggests that the current findings may be attributable to a suppressor effect (see also Book et al., 2013), such that one psychopathy factor may be inversely related to the other when expressed as a function of PP outcomes. As such, this aspect should be addressed in future research.

Although the study presents several implications for successful psychopathy, there are a number of factors that may limit the generalisability of the overall findings. Firstly, both samples comprised large numbers of participants who worked in fields which are known not to attract psychopathic personalities (e.g., teaching; see Dutton, 2013, chap. 7). As the study lacked power to control for individual occupations, this may have significantly influenced the ambiguous results in the study's regression analyses, as psychopathy may be particularly detrimental to professional outcomes in occupations requiring prosocial functioning (Jonason et al., 2014). It may also have impacted the PP findings, especially regarding H₃, as the prevalence of psychopathy is likely to be low in such fields. Accordingly, future research should focus on domains which may be more accommodating of extreme behaviour, such as police work (Lilienfeld et al., 2014), or white-collar occupations requiring short-term impression management and a willingness to take risks (e.g., Babiak, 1995).

Secondly, although the design attempted to match the power estimates of similar studies (viz., Blickle & Schütte, 2017; Brown et al., 2017), the regression analyses demonstrated low power due to the large number of covariates and the use of two statistical tests (Urdan, 2017). While this methodology has been applied in similar research (e.g., Blickle & Schütte, 2017), a more robust analysis (e.g., structural equation modelling, as used in Eisenbarth et al., 2018)

would be appropriate for future studies with access to larger participant pools. Moreover, it may also be prudent to explore alternative successful-psychopathy models such as the differential-severity approach ([Lilienfeld et al., 2015](#)), as research indicates that the relationship between psychopathy and professional success may be curvilinear (e.g., [Titze et al., 2017](#)).

Lastly, the overall findings of the research pertain to the PCL model of psychopathy, which is less-frequently applied in successful-psychopathy research, and should not be equated with other popular self-report-based frameworks such as the PPI-R ([Blickle & Genau, 2019](#)). As a suitable PPI-R Short Form was not available for the current study (e.g., [Eisenbarth et al., 2015](#)), future research should examine the relations between these measures in professional domains, especially as the factors of the latter have been shown to be differentially correlated in general- and offender-populations ([Neumann et al., 2008](#)). This will help to facilitate a universally-accepted description of a core psychopathic trait set and rectify common misconceptions of psychopathy in popular media and wider society ([Blickle & Schütte, 2017](#)).

Overall, the present research strongly supports assertions that the successful-psychopathy concept represents something of a misnomer ([Hare, 1999](#)). Although the construct facilitates aspects of adaptive functioning that may enable positive individual outcomes, the current findings question the extent to which they can be removed from maladaptive features such as impulsivity. Moreover, existing measures of psychopathic personalities focus on the prototypical dysfunctional impulsivity behaviours, whereas successful psychopaths would be better measured by functional impulsivity instruments such as that of [Dickman's \(1990\)](#) Functional and Dysfunctional impulsivity scale. Consequently, it seems unlikely that the contemporary empirical conceptualisation of psychopathy can facilitate superior occupational functioning, even in the presence of buffering factors such as education. Nevertheless, the present study contributes

to a growing body of successful-psychopathy literature to provide much-needed empirical insight on the concept and its implications for everyday functioning.

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Appendix A: SRP T-Scores for Sample 2 and Educational Level (EL) Conversion Scale

Table 1*Sample 2 Mean SRP-Factor T-scores and Standard Deviations as a Function of Occupation.*

	<i>n</i>	Self-Report Psychopathy Means ^a (and Standard Deviations)		
		AI	LA	Total
Education	37	56.08 (2.00)	50.19 (1.59)	53.19 (1.82)
Services / manufacturing	51	55.76 (1.94)	51.73 (1.47)	53.90 (1.78)
Finance	23	62.52 (3.00)	53.13 (1.95)	58.13 (2.58)
IT / telecommunications	16	60.00 (2.93)	51.81 (2.18)	56.00 (2.71)
Health & social care	14	55.21 (4.00)	50.29 (2.60)	52.42 (2.96)
Government / legal	8	50.00 (2.92)	53.13 (2.22)	51.88 (2.18)
Science	3	65.67 (7.45)	61.33 (4.10)	66.00 (7.00)
Miscellaneous / unspecified ^b	9	52.22 (2.82)	46.56 (2.01)	48.89 (2.08)

Note. *N* = 161^a Reported as SRP *T*-Scores^b Category comprised unspecified consultants and administration workers**Table 2***Educational Level Conversion Scale.*

1. Left school without graduation	7 years
2. Primary education	8 years
3. GCSE / Junior Certificate / Middle school	13 years
4. A Level / Leaving Certificate / High school	15 years
5. Technical college	17 years
6. Bachelor's degree	18 years
7. Master's degree	19 years
8. Doctoral degree	22 years

Appendix B: Means, Standard Deviations, Cronbach's Alpha Statistics, and Study Variable Correlations for Sample 2

Table 3*Means, Standard Deviations, Cronbach's Alpha Statistics, and Study Variable Correlations for Sample 2.*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 Age	34.70	11.32																				
2 Sex	.48	.50	-.08																			
3 OccTen	7.54	8.08	.52**	-.03																		
4 EL	17.32	1.71	.09	.04	-.02																	
5 SRPInt	54.81	12.24	-.12	.31**	-.04	.10	(.73)															
6 SRPAff	57.16	12.20	-.23**	.29**	-.11	.00	.72**	(.74)														
7 SRPLif	52.42	10.25	-.13	.36**	-.11	-.06	.63**	.64**	(.81)													
8 SRPAnt	49.50	8.34	-.15	.28**	-.03	-.11	.45**	.46**	.47**	(.76)												
9 SRPAI	56.87	13.15	-.18*	.32**	-.08	.06	.93**	.92**	.67**	.48**	(.85)											
10 SRPLA	51.41	9.52	-.16*	.39**	-.10	-.10	.65**	.65**	.95**	.71**	.69**	(.84)										
11 SRPtot	54.27	11.54	-.20*	.38**	-.10	-.02	.86**	.86**	.87**	.63**	.93**	.90**	(.91)									
12 SD3Mac	2.90	.63	-.16*	.19*	-.03	-.01	.63**	.55**	.41**	.35**	.63**	.43**	.59**	(.81)								
13 SD3Nar	2.56	.58	.02	.11	-.04	-.03	.27**	.24**	.32**	.20*	.28**	.33**	.32**	.24**	(.74)							
14 BFIAg	3.57	.83	.06	-.03	.01	-.16*	-.35**	-.40**	-.27**	-.26**	-.41**	-.29**	-.38**	-.40**	-.06	(.45)						
15 BFICo	3.79	.85	.19*	-.11	.16*	.03	-.22**	-.28**	-.26**	-.20*	-.26**	-.27**	-.28**	-.23**	.06	.16*	(.45)					
16 BFIEEx	3.02	1.01	.01	-.12	.00	-.11	-.08	-.01	.24**	.12	-.04	.23**	.10	-.09	.43**	.01	.24**	(.61)				
17 BFINE	3.11	1.00	-.15	-.13	-.04	.04	.02	.06	-.12	.11	.04	-.07	-.03	.09	-.30**	-.08	-.27**	-.33**	(.65)			
18 BFIOp	3.58	.90	.02	-.02	-.11	.02	-.16*	-.07	.10	-.02	-.11	.06	-.03	-.12	-.04	.08	.08	.17*	.00	(.23)		
19 MSuc	5.66	4.79	.26**	.23**	.22**	.17*	.18*	.06	.17*	.19*	.13	.20*	.16*	.14	.25**	-.11	.23**	.13	-.17*	.04	(.70)	
20 PrSat	5.32	1.84	.11	.10	.04	.15	-.08	-.13	-.10	-.04	-.11	-.10	-.12	-.10	.19*	.00	.23**	.17*	-.10	-.06	.48**	(.80)

Note. $N = 161$. Sex (0 = female; 1 = male); OccTen = Occupational Tenure (in years); EL = Educational Level (in years); SRPInt = Self-Report Psychopathy Scale–Short Form Interpersonal T -Score; SRPAff = Self-Report Psychopathy Scale–Short Form Affective T -Score; SRPLif = Self-Report Psychopathy Scale–Short Form Lifestyle T -Score; SRPAnt = Self-Report Psychopathy Scale–Short Form Antisocial T -Score; SRPAI = Self-Report Psychopathy Scale–Short Form Affective-Interpersonal T -Score; SRPLA = Self-Report Psychopathy Scale–Short Form Lifestyle-Antisocial T -Score; SRPtot = Self-Report Psychopathy Scale–Short Form Total T -Score; SD3Mac = Short Dark Triad Machiavellianism; SD3Nar = Short Dark Triad Narcissism; BFIAg = Big Five Inventory–10 Agreeableness; BFICo = Big Five Inventory–10 Conscientiousness; BFIEEx = Big Five Inventory–10 Extraversion; BFINE = Big Five Inventory–10 Neuroticism; BFIOp = Big Five Inventory–10 Openness; PrSat = Professional Satisfaction; MSuc = Material Success. Age, OT, EL, SRPInt, SRPAff, SRPLif, SRPAnt, SRPAI, SRPLA, SRPtot, BFIOp, and MSuc reported as Spearman coefficients. Cronbach's alpha statistics are in parentheses.

* $p < .05$. ** $p < .01$.

Table 4*Sample 2 Descriptive Statistics and Study Variable Correlations as a Function of Sex.*

	<i>M^a</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	<i>M^b</i>	<i>SD</i>
1 Age	35.28	11.80	-	.62**	-.01	-.05	-.23*	-.25*	-.15	-.13	-.25*	-.22	-.15	.15	.06	.20	-.05	-.16	-.09	.33**	.22	33.45	11.04
2 OccTen	8.15	9.20	.43**	-	-.03	-.15	-.23	-.30**	-.01	-.20	-.24*	-.26*	-.04	.02	.03	.16	-.11	.06	-.19	.29*	.18	6.87	6.66
3 EL	17.28	1.56	.17	.09	-	.04	-.09	-.16	-.32**	-.01	-.26*	-.15	-.05	.08	-.17	.03	-.19	.13	-.04	-.13	.13	17.32	1.86
4 SRPInt	51.24	11.47	-.19	.06	.13	-	.74**	.63**	.38**	.94**	.62**	.85**	.68**	.29*	-.29*	-.22	-.10	.21	-.17	.22	-.03	58.62	11.95
5 SRPAff	53.90	11.94	-.20	-.01	.03	.68**	-	.70**	.41**	.92**	.70**	.88**	.64**	.25*	-.36**	-.21	.02	.11	-.09	.12	-.06	60.63	11.58
6 SRPLif	48.89	8.90	-.00	.06	-.01	.52**	.46**	-	.48**	.70**	.92**	.87**	.51**	.37**	-.34**	-.21	.02	.11	-.09	.06	-.11	56.17	10.30
7 SRPAnt	47.07	5.03	-.13	-.04	.09	.44**	.42**	.33**	-	.40**	.75**	.62**	.39**	.15	-.23*	-.22	.21	.22	-.00	.16	-.14	52.09	10.22
8 SRPAI	52.93	12.36	-.21	.03	.09	.93**	.90**	.54**	.46**	-	.68**	.91**	.68**	.23*	-.35**	-.23*	-.03	.15	-.14	.18	-.07	61.08	12.72
9 SRPLA	47.89	7.35	-.10	.04	.01	.56**	.49**	.93**	.61**	.57**	-	.91**	.50**	.29*	-.32**	-.33**	.28*	.13	.06	.11	-.19	55.17	10.16
10 SRPtot	50.08	9.86	-.19	.03	.05	.87**	.82**	.77**	.56**	.92**	.82**	-	.66**	.33**	-.35**	-.28*	.14	.17	-.02	.12	-.11	58.72	11.59
11 SD3Mac	2.79	.64	-.15	.00	.05	.53**	.50**	.27*	.27*	.56**	.30**	.51**	-	.32**	-.32**	-.24*	-.11	.20	-.07	.16	-.04	3.02	.61
12 SD3Nar	2.50	.64	-.05	.02	-.15	.25*	.21	.28*	.18	.27*	.31**	.34**	.16	-	-.15	-.02	.29*	-.07	.10	.28*	.17	2.62	.51
13 BFIAg	3.59	.83	.07	.02	-.17	-.41**	-.47**	-.26*	-.30**	-.47**	-.30**	-.44**	-.42**	.01	-	.12	.06	-.14	-.03	-.15	-.05	3.54	.84
14 BFICo	3.89	.85	.16	.22*	-.01	-.20	-.30**	-.21	-.13	-.26*	-.19	-.24*	-.20	.15	.23*	-	.10	-.30**	.16	.25*	.35**	3.69	.84
15 BFIEEx	3.14	1.09	.04	.13	-.03	.01	.01	.31**	.11	.02	.33**	.17	-.04	.55**	.01	.33**	-	-.22	.27*	.06	.18	2.90	.90
16 BFINE	3.23	.96	-.16	-.31**	.06	-.05	.09	-.25*	.11	.01	-.17	-.08	.04	-.47**	-.05	-.28*	-.47**	-	-.06	-.15	-.23*	2.98	1.04
17 BFIOp	3.60	.89	.14	-.01	.11	-.13	-.01	.10	-.01	-.08	.04	-.00	-.19	-.15	.18	.02	.12	.05	-	-.07	.03	3.56	.91
18 MSuc	4.77	4.39	.23*	.18	.47**	.06	-.12	.12	.13	-.02	.15	.06	.05	.17	-.06	.27*	.22*	-.09	.19	-	.51**	6.62	5.03
19 PrSat	15.45	5.70	.02	-.15	.12	-.18	-.23*	-.12	-.00	-.22*	-.08	-.19	-.18	.19	.04	.16	.18	.03	-.10	.47**	-	16.53	5.28

Note. $N = 161$. Sex (0 = female; 1 = male); OccTen = Occupational Tenure (in years); EL = Educational Level (in years); SRPInt = Self-Report Psychopathy Scale–Short Form Interpersonal T -Score; SRPAff = Self-Report Psychopathy Scale–Short Form Affective T -Score; SRPLif = Self-Report Psychopathy Scale–Short Form Lifestyle T -Score; SRPAnt = Self-Report Psychopathy Scale–Short Form Antisocial T -Score; SRPAI = Self-Report Psychopathy Scale–Short Form Affective-Interpersonal T -Score; SRPLA = Self-Report Psychopathy Scale–Short Form Lifestyle-Antisocial T -Score; SRPtot = Self-Report Psychopathy Scale–Short Form Total T -Score; SD3Mac = Short Dark Triad Machiavellianism; SD3Nar = Short Dark Triad Narcissism; BFIAg = Big Five Inventory–10 Agreeableness; BFICo = Big Five Inventory–10 Conscientiousness; BFIEEx = Big Five Inventory–10 Extraversion; BFINE = Big Five Inventory–10 Neuroticism; BFIOp = Big Five Inventory–10 Openness; MSuc = Material Success; PrSat = Professional Satisfaction. Correlations for the male sample are above the diagonal (Age, OT, EL, SRPAnt, SRPAI, SRPLA, BFIAg, and MSuc reported as Spearman coefficients.), correlations for the female sample are below the diagonal (Age, OT, SRPInt, SRPAff, SRPLif, SRPAnt, SRPAI, SRPLA, SRPtot, and MSuc reported as Spearman coefficients).

^a Female $n = 83$. ^b Male $n = 78$.

* $p < .05$. ** $p < .01$.

Appendix C: Mann-Whitney U Tests for SRP T-Scores and Descriptive Statistics for Sample 2

Table 5*Mann-Whitney U Tests for SRP-Total T-Score Means as a Function of Sex.*

	Sample 1			Sample 2		
	<i>N</i>	Mean Rank	Sum of Ranks	<i>N</i>	Mean Rank	Sum of Ranks
Female	83	63.77	5293.00	74	55.56	4111.50
Male	78	99.33	7748.00	57	79.55	4534.50
Mann-Whitney U	1807.00			1336.50		
Wilcoxon W	5293.00			4111.50		
Z	−4.84**			−3.59**		

* $p < .05$. ** $p < .01$.**Table 6***Sample 2 Mean SRP-SF-Factor T-scores and Standard Deviations as a Function of Sex.*

SRP Factor	Female <i>T</i> -Score Mean (<i>SD</i>)	Male <i>T</i> -Score Mean (<i>SD</i>)
Interpersonal	51.34 (13.23)	58.21 (12.68)
Affective	53.01 (10.91)	60.75 (11.16)
Lifestyle	49.04 (9.42)	54.72 (10.40)
Antisocial	47.38 (5.15)	50.93 (9.54)
Affective-Interpersonal (AI)	52.51 (12.92)	60.82 (12.59)
Lifestyle-Antisocial (LA)	48.14 (7.62)	53.63 (10.30)

Note. $N = 131$; Female $n = 74$, Male $n = 57$

Appendix D: Moderated Multiple Regression Analyses Predicting Material Success and Professional Satisfaction

Table 7*Moderated Multiple Regression Analyses Predicting Material Success and Professional Satisfaction.*

	Model 1				Model 2			
	DV = Material Success (MS)				DV = Professional Satisfaction (PS)			
	<i>B (SE)</i>	<i>t</i>	LLCI	ULCI	<i>B (SE)</i>	<i>t</i>	LLCI	ULCI
Constant	.54 (.04)	13.63**	.46	.62	5.06 (.21)	24.45**	4.65	5.47
Age	.01 (.00)	2.32*	.00	.01	.02 (.02)	1.13	-.01	.05
Sex	.13 (.06)	2.13	.01	.26	.57 (.32)	1.75	-.07	1.20
OccTen	-.00 (.00)	-.16	-.01	.01	-.02 (.02)	-1.06	-.07	.02
SD3Mac	.08 (.06)	1.43	-.03	.20	-.04 (.30)	-.15	-.65	.56
SD3Nar	.10 (.06)	1.80	-.01	.21	.64 (.29)	2.20*	.07	1.21
BFI _{Ag}	-.02 (.04)	-.47	-.09	.06	-.16 (.19)	-.84	-.54	.22
BFI _{Co}	.10 (.04)	2.83**	.03	.17	.45 (.19)	2.39*	.08	.81
BFI _{Ex}	.01 (.03)	.30	-.06	.08	.24 (.18)	1.32	-.12	.60
BFI _{Ne}	-.00 (.03)	-.07	-.06	.06	.15 (.16)	.96	-.16	.46
BFI _{Op}	.00 (.03)	.09	-.06	.07	-.20 (.16)	-1.24	-.53	.12
SRPLA	.01 (.00)	1.66	-.00	.02	-.01 (.02)	-.45	-.06	.04
SRPAI	-.00 (.00)	-.95	-.01	.00	-.02 (.02)	-.88	-.05	.02
EL	.05 (.02)	2.72**	.01	.08	.13 (.09)	1.54	-.04	.30
SRPAI × EL	-.00 (.00)	-2.26	-.00	-.00	-.00 (.01)	-.74	-.02	.01
<i>R</i> ²	.28				.17			
<i>F</i> (<i>R</i> ²) (<i>df</i> 1, <i>df</i> 2)	3.96 (14, 143)**				2.06 (14, 143)*			
ΔR^2	.03				.00			
<i>F</i> (ΔR^2) (<i>df</i> 1, <i>df</i> 2)	5.09 (1, 143)*				.55 (1, 143)			

Note. *N* = 161. Sex (0 = female; 1 = male); OccTen = Occupational Tenure (in years); EL = Educational Level (in years); SRPAI = Self-Report Psychopathy Scale–Short Form Affective-Interpersonal *T*-Score; SRPLA = Self-Report Psychopathy Scale–Short Form Lifestyle-Antisocial *T*-Score; SD3Mac = Short Dark Triad Machiavellianism; SD3Nar = Short Dark Triad Narcissism; BFI_{Ag} = Big Five Inventory–10 Agreeableness; BFI_{Co} = Big Five Inventory–10 Conscientiousness; BFI_{Ex} = Big Five Inventory–10 Extraversion; BFI_{Ne} = Big Five Inventory–10 Neuroticism; BFI_{Op} = Big Five Inventory–10 Openness.

*p < .05. **p < .01.

Appendix E: Figures for Moderated Multiple Regression Analyses

Figure 3

Moderated Multiple Regression Predicting Material Success (MS).

Figure 4

Moderated Multiple Regression Predicting Professional Satisfaction (PS).

Appendix F: Summary Outputs for Custom-Model ANCOVA and Repeated-Measures ANOVA

Table 8

Summary Output of Custom-Model ANCOVA Results Comparing Preferences for High-Low Psychopathy Targets by Participant Sex, Controlling for Psychopathy.

Descriptive Statistics						
	Sex	Mean ^a	Std. Deviation	N		
Female Targets ^b	Female	.43	.13	74		
	Male	.43	.14	56		
	Total	.43	.13	130		
Male Targets ^b	Female	.46	.14	74		
	Male	.48	.15	56		
	Total	.47	.14	130		
Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Squares	F Value	Sig.	Partial Eta Squared
Intercept	2.03	1	2.03	92.48	<.001	.42
Participant Sex	.00	1	.00	.06	.80	.00
Psychopathy ^c	.00	1	.00	.06	.82	.00
Participant Sex * Psychopathy ^c	.00	1	.00	.03	.87	.00
Error	2.76	126	.02			
Tests of Within-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Squares	F Value	Sig.	Partial Eta Squared
Target Sex	.02	1	.02	1.06	.31	.01
Target Sex * Participant Sex	.00	1	.00	.03	.86	.00
Target Sex * Psychopathy ^c	.01	1	.01	.35	.55	.00
Target Sex * Participant Sex * Psychopathy ^c	1.541E-5	1	1.541E-5	.00	.98	.00
Error (Target Sex)	2.11	126	.02			

^a >.50 indicates greater preferences for high-psychopathy targets   ^b Levene's Test of Equality of Error Variances Sig. >.05   ^c SRP-total T-Score

Table 9

Summary Output of Repeated-Measures ANOVA Results Comparing Preferences for High-Low Psychopathy Targets by Participant Sex.

Descriptive Statistics				
	Sex	Mean ^a	Std. Deviation	N
Female Targets ^b	Female	.43	.13	74
	Male	.43	.14	56
	Total	.43	.13	130
Male Targets ^b	Female	.46	.14	74
	Male	.48	.15	56
	Total	.47	.14	130

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Squares	F Value	Sig.	Partial Eta Squared
Intercept	51.90	1	51.90	2406.21	<.001	.95
Participant Sex	.01	1	.01	.31	.58	.00
Error	2.76	128	.02			

Tests of Within-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Squares	F Value	Sig.	Partial Eta Squared
Target Sex	.08	1	.08	5.00	.03	.04
Target Sex * Participant Sex	.01	1	.01	.29	.59	.00
Error (Target Sex)	2.12	128	.02			

^a >.50 indicates greater preferences for high-psychopathy targets. ^b Levene's Test of Equality of Error Variances Sig. >.05