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Greed is good? Assessing the relationship between entrepreneurship and subclinical psychopathy

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ABSTRACT

Despite the stereotype of entrepreneurs as corporate psychopaths, there has been little research on the overlap between individual differences in entrepreneurship and subclinical psychopathy. In line with this issue, the current study investigated whether primary and secondary psychopathy are linked to a measure of entrepreneurial tendencies and abilities, as well as entrepreneurial activities and achievements. Participants were 435 working adults. Structural equation models revealed that individual differences in entrepreneurial tendencies and abilities were positively related to primary psychopathy, but unrelated to secondary psychopathy. Secondary psychopathy did not predict entrepreneurial activity; primary psychopathy predicted some entrepreneurial outcomes, albeit modestly, providing partial support for the 'corporate psychopath' stereotype. Implications for entrepreneurship research and practice are discussed.

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1. Introduction

In recent years there has been substantial popular interest in so called "dark-side" personality characteristics, broadly defined as counterproductive, subclinical, and dysfunctional dispositions (Hogan & Hogan, 2001; Hogan & Kaiser, 2005; LeBreton, Binning, & Adorno, 2006; Moscoso & Salgado, 2004; Paulhus & Williams, 2002). The most widely discussed trait in this area is psychopathy, a personality disorder characterized by a lack of empathy, manipulation and callousness (Hare & Neumann, 2006). Psychopathy can be found in subclinical populations, ranging from clinically diagnosable symptoms (e.g., criminal behavior) to everyday manifestations of antisocial behavior in the normal population (Levenson, Kiehl, & Fitzpatrick, 1995). Correspondingly, psychopathy has been found to have negative correlations with the five factor model trait of Agreeableness ($r = -.39$; Lee & Ashton, 2005).

Perhaps as a reaction to several high-profile cases of counter-productive work behavior and corporate corruption, the idea that psychopathy levels are significantly higher than average among corporate managers and entrepreneurs has become commonplace (Babiak & Hare, 2007). Psychological traits have been studied in connection with entrepreneurship for many decades (Baron & Henry, 2010; McClelland, 1961), though it was only in recent years that researchers started focusing on 'dark-side' traits. CEO's and individuals achieving high levels of entrepreneurial suc-

cess have been portrayed as driven and focused, but also as people who will show little regard to another's feelings or emotions (Jones & Paulhus, 2009) – thus they would prioritise *getting ahead* over *getting along*. Some authors have even hypothesised that dark-side traits (such as those characterised by psychopathic traits), such as lack of empathy, manipulation, and callousness, which are trademarks of psychopathy, may be desirable and even necessary for entrepreneurial success (Kets de Vries, 1985). On the other hand, Hogan and Hogan (2001) argued that although dark-side traits may promote an individual to the top and encourage *short-term* success, they may be detrimental for performance and well-being of others in the *long-term*.

Although there may be doubts about the direction of the relationship between psychopathy and entrepreneurship (i.e., whether positive or negative correlations are found), there is a lack of empirical evidence on this issue. Beyond popular writings (Gapper, 2012), there seems to be no clear source of evidence to inform our understanding of the potential role of psychopathy in entrepreneurial success. Yet, given that psychopathic behaviors may have substantial consequences on individuals engaging in entrepreneurial activity, it would be important to explore this link. Accordingly, the current study aims to fill what appears to be an important gap in the literature by examining the link between psychopathy and entrepreneurship.

1.1. Defining subclinical psychopathy

Although studies on psychopathy have generally been conducted in clinical psychology, the construct has increasingly been

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adapted in subclinical spheres, where it is viewed simply as a variation of normal personality traits (Paulhus & Williams, 2002). People with elevated psychopathic tendencies may be described as having a deceitful interpersonal style, deficient affective experiences, and an impulsive and irresponsible behavioural style. However, despite the negative connotation, these individuals are perfectly able to function normally and successfully in everyday life; in fact, they may often even achieve high social status. This is because manifestations of psychopathic traits may often be related to positive attributions, such as a person being perceived as intelligent, charming, ingenious, and entertaining. Indeed researchers note that psychopaths can become very proficient in acting emotions, and use this ability to their advantage (Hare, 1999).

Psychopathy comprises four personality facets: *interpersonal relationships* (manipulating others, narcissism and being very superficial), *shallow affect* (callousness, failure to accept responsibility and lack of empathy or guilt), *lifestyle* (impulsivity, stimulation seeking and parasitic dependence on others) and *antisocial tendencies* (criminal versatility, juvenile delinquency and increased likelihood to reoffend; Hare & Neumann, 2006). It is common to organise the four facets into two constructs: 'primary psychopathy' and 'secondary psychopathy' (Levenson et al., 1995). Primary psychopathy consists of the *interpersonal relationships* and *shallow affect* facets, whereas secondary psychopathy consumes the latter two. The existence of two constructs is due to the nature of the antisocial behavior produced by each type of psychopathy: secondary psychopathy is associated with emotionally charged antisocial behavior (likening itself to antisocial personality disorder; Hare, 1991), whereas primary psychopathy is characterised by emotional bluntness and callousness that is largely absent from secondary psychopathy (Karpman, 1948).

1.2. Entrepreneurship

Academic interest in entrepreneurship has grown rapidly in recent times, spanning disciplines such as economics, sociology, business, and psychology (Hisrich, Langan-Fox, & Grant, 2007). Although entrepreneurship has commonly been conceptualised as the process of creating a new business venture (Gartner, 1988; Shane, 2008), more recent definitions view entrepreneurship as a broader concept (Kuratko, 2007; Shane, Locke, & Collins, 2003). As Shane et al. (2003) argue, business creation is only one aspect of a broader process of entrepreneurial activity. Although numerous perspectives of entrepreneurial activity have been presented, the only recurrent themes in the literature are recognition and exploitation of opportunities, innovation/change, and value creation (Kuratko, 2007; McKenzie, Ugbah, & Smothers, 2007; Shane & Venkataraman, 2000). Given that individuals will differ in their tendencies and abilities to engage in these activities, the psychological approach to entrepreneurship asserts that entrepreneurial activity is a function of individuals' psychological make-up (McKenzie et al., 2007).

1.3. Entrepreneurship and psychopathy

Many psychological traits have been examined in the entrepreneurship literature. Personal attributes have included personality traits (e.g. Rauch & Frese, 2007), motives (Baum & Locke, 2004), and cognitions (Busenitz, 1996; Kirzner, 1997). Yet, little research has focused on the role of psychopathic traits. There is, however, good reason to believe that such traits may be important predictors of career related outcomes, including entrepreneurship. For instance, Babiak and Hare (2007) suggest that many 'successful' psychopaths, that is, individuals who are able to manipulate, extort, and abuse others – without being found out (Mullins-Swe-

att, Glover, Derefinko, Miller, & Widiger, 2010), can be found in high-level corporate positions. In a recent study Babiak, Neumann, and Hare (2010) investigated the psychological traits of a corporate sample in comparison to a general community sample and found that the former had significantly elevated psychopathy scores compared to the latter. They also found positive correlations between levels of psychopathy and *positive* peer ratings of individuals' communication skills, strategic thinking, and ability to be creative/innovate ($r = .33$, $r = .30$ and $r = .27$ respectively). Given that entrepreneurial activity is characterised by innovation and value creation, a link between psychopathy and entrepreneurial activity seems highly plausible. Nevertheless, Babiak and Hare's study did not explicitly examine this link.

Other authors have formulated the potential link between dark side traits and entrepreneurship more purposely. McClelland (1961), for instance, attributed the dark-side of entrepreneurship to high need for achievement, whilst Kets de Vries (1985) suggested that need for control, a sense of distrust, a desire for applause, and the use of defense mechanisms such as splitting, that is, seeing the world as all good or all bad, may be common among entrepreneurs.

The qualitative nature of such assertions undoubtedly limits their objectivity and generalisability. Nevertheless, it is plausible to assume that the tendency to be callous, fearless, and seemingly charming (i.e. primary psychopathy) will be positively related to success in entrepreneurial endeavours (H1), because such behavior may be competitively adaptive in exploiting opportunities and pursuing innovations. On the other hand, being aggressive and impulsive (i.e. secondary psychopathy) is likely to be detrimental to success (H2), because such behavior may alienate work colleagues and impair access to resources needed to exploit opportunities and innovations (Hogan & Kaiser, 2005). The present study sought to provide empirical evidence for these hypotheses.

Given previous contentions of a relationship between psychopathy and entrepreneurial tendencies (e.g. Kets de Vries, 1985; McClelland, 1961), the current study also attempted to investigate this link directly. Accordingly, we included a measure of entrepreneurial tendencies and abilities (META; Ahmetoglu, Leutner, & Chamorro-Premuzic, 2011), a personality inventory that assesses individual differences in the ability to recognize and exploit opportunities, innovate and create change (Ahmetoglu et al., 2011). We hypothesised that these two constructs would be related, albeit distinct (H3). Finally, it was also of relevance to investigate the incremental validity of psychopathy over entrepreneurial personality, as well as demographic variables, in the prediction of entrepreneurial outcomes. Given that META is specifically designed to predict entrepreneurial success we expected this measure to be related to the outcomes of the study (H4); considering the distinct nature of psychopathy, in addition, we hypothesised that this (i.e. psychopathy) construct would demonstrate incremental validity in predicting entrepreneurship (H5).

2. Method

2.1. Participants

In total, 435 (224 male) participants, mostly from the UK, took part in the study. Their ages ranged from 16 to 72 years ($M = 30.3$, $SD = 12.0$); 80.2% were aged over 18 or under 44. With regard to participants' occupational status: 6.4% indicated that they were unemployed; 38.8% were employed part-time, 49.5% were employed full-time, and 20.0% were self-employed (note that some participants had more than one of these occupational statuses, e.g., they were self-employed and employed by someone else part-time).

2.2. Measures

2.2.1. Levenson's self-report of psychopathy (LSRP; Levenson et al., 1995)

This self-report scale consists of 26 items: 16 items measure primary psychopathy (e.g. "Success is based on the survival of the fittest; I am not concerned about the losers") and 10 items measure secondary psychopathy (e.g. "When I get frustrated, I often "let off steam" by blowing my top"). Participants responded to each of the items by scoring themselves according to a 4-point Likert scale, ranging from extremely disagree (1) to extremely agree (4). The Cronbach's alpha for the current study were .91 for the primary psychopathy scale and .73 for the secondary psychopathy scale. The LSRP has been shown to be both reliable and valid (McHoskey, Worzel, & Szyarto, 1998).

2.2.2. Measure of entrepreneurial tendencies and abilities (META; Ahmetoglu et al., 2011)

META consists of 61 items and assesses four facets of the entrepreneurial personality: Entrepreneurial awareness (EA; e.g. "I am quick to spot profitable opportunities"), Entrepreneurial creativity (EC; "In groups, I usually have the most innovative ideas"), Opportunism (O; "I try to take advantage of every profitable opportunity I see"), and Vision (V; "I want to make a difference in the world"). Participants rate themselves according to a 5-point Likert scale ranging from completely disagree (1) to completely agree (5). Cronbach's alpha for the total scale in the present study was .91.

2.2.3. Entrepreneurial success (Ahmetoglu et al., 2011)

In order to assess individual differences in entrepreneurial success, we included a range of items relating to past (biographical) and current entrepreneurial achievements and activities. The items were generated based on the most common entrepreneurship themes in the literature (e.g. Schumpeter, 1911; Shane, 2008; Shane & Venkataraman, 2000). The scale comprised a total of 22 items developed to measure entrepreneurial achievements and activity both outside and within organisations. Items comprised activities related to (a) entrepreneurial behaviours to generate income outside ones main job (e.g. organising events, selling things), (b) corporate entrepreneurship, (c) social entrepreneurship, and (d) entrepreneurship through innovation/invention. We also included four items relating to the more traditional operationalisation of entrepreneurial achievement in past research, namely, "Number of businesses started", "Number of businesses still operating", "Number of Employees", and "Income". This scale is based on Ahmetoglu et al. (2011). Responses were rated on a multiple choice and participants could select more than one option. A Principal Component Analysis (PCA) revealed five factors with Eigenvalues above 1. Inspection of the screeplot test revealed four independent factors, corresponding to the above-hypothesised factors. The four factors were labeled corporate entrepreneurship, social entrepreneurship, inventive entrepreneurship, and traditional entrepreneurship.

2.3. Procedure

Participants completed the survey online. They first answered biographical information related to entrepreneurial activities and achievements. Next, they completed the subclinical psychopathy inventory (LSRP) and the entrepreneurial personality measure (META).

3. Results

Bivariate correlations are presented in Table 1, together with descriptive statistics and internal consistency reliabilities.

Cronbach's alpha coefficients for all measures and facets were satisfactory (alpha values above .70 are considered appropriate; George & Mallery, 2003).

3.1. Structural equation modeling (SEM)

In order to investigate the concurrent and discriminant validity of primary and secondary psychopathy, as well as META, SEM analysis using AMOS 5.0 (Arbuckle, 2003) was carried out. In light of the inter-correlations between the META facets and the inter-correlations between the outcome measures, we tested a parsimonious model where a latent META factor and a latent "Total Entrepreneurial Activity (TEA)" factor (to which all outcomes loaded on) were specified. The variables included in the model were divided into three subgroups, whereby age and gender were exogenous or covariates, META, primary psychopathy, and secondary psychopathy were mediators, and the various entrepreneurial outcomes were endogenous. The directionality of the model is conceptual rather than causal and can be justified on the basis that personality constructs ('bright' and dark-side) are less affected by situational variables than are entrepreneurial activities, and that age and sex in turn are less affected by environmental factors than are personality constructs.

The model's goodness of fit was assessed via the χ^2 statistic (Bollen, 1989; which tests the hypothesis that an unconstrained model fits the covariance or correlation matrix as well as the given model); the goodness of fit index (GFI; Tanaka & Huba, 1985; values close to 1 are acceptable); the comparative fit index (CFI; Bentler, 1990; values above .96 are acceptable); and the root mean square residual (RMSEA; Browne & Cudeck, 1993; values of .06 or below indicate reasonable fit for the model).

In the saturated model, paths from the covariates to the mediators and the DV, and from the mediators to the DV were added. This model, which included 11 paths between exogenous and endogenous variables, did not fit the data well: χ^2 (46 df) = 307.29, $p < .01$; GFI = .89; CFI = .79; RMSEA = .11 (.10–.13). Accordingly, modifications were made based on the AMOS modification indices, expected parameter change statistics, and standardised residuals. Parameters were added only if they made substantive sense. One observed variable, Social Entrepreneurship, was found to be a poor indicator of the latent TEA factor. This path was subsequently freed. Based on the modification indices and expected parameter change, three direct paths were added to the model; these were from the latent META variable and Primary Psychopathy to Social Entrepreneurship ($\beta = .43$ and $-.21$ respectively), and age to Vision ($\beta = -.15$). In addition, a correlational path between META and primary psychopathy ($r = .43$) was specified. These paths were added one at a time, and all other path coefficients and fit statistics were examined after each addition to determine its effect on these values. In addition, several paths were found to have non-significant values and were subsequently removed from the model one parameter at a time, starting with the lowest t -value. The modified model, shown in Fig. 1, fitted the data well: χ^2 = (46 df, $p < .01$) 93.33, GFI = .97, CFI = .96, RMSEA = .05.

As shown in Fig. 1, although primary and secondary psychopathy displayed significant correlations with all entrepreneurship outcomes, when META and demographic variables were included in the SEM model, only one significant path between psychopathy and Entrepreneurship remained, namely that of primary psychopathy to social entrepreneurship. The results further showed that META was the most consistent predictor of entrepreneurial activity, with significant paths from META to all entrepreneurship outcomes. Age was also a strong, albeit less consistent, predictor of entrepreneurial activity. Finally, some small sex differences (in favor of men) were found in entrepreneurial outcomes.

Table 1
Bivariate correlations, descriptive statistics, and reliabilities of subclinical psychopathy, META and entrepreneurial outcomes.

	1	2	3	4	5	6	7	8	9	10	11	12	M	S.D.	α
1. P. Psychopathy	–												59.65	8.13	.91
2. S. Psychopathy	.39**	–											21.71	4.45	.73
3. E. Awareness	.37**	.06	–										34.68	7.27	.72
4. E. Creativity	.14**	–.04	.56**	–									33.63	5.10	.75
5. Opportunism	.30**	–.10**	.57**	.40**	–								56.05	10.31	.87
6. Vision	.36**	–.04	.53**	.39**	.52**	–							74.19	11.54	.85
7. Corporate E.	–.05	–.09	.24**	.19**	.13**	.10**	–						3.10	1.89	–
8. Inventive E.	.15	–.04	.35**	.32**	.26**	.20**	.44**	–					1.81	1.36	–
9. Traditional E.	.21**	.06	.39**	.24**	.27**	.26**	.23**	.36**	–				0.02	0.16	–
10. Social E.	–.03	–.05	.27**	.26**	.21**	.21**	.10*	.04	.10*	–			1.05	1.26	–
11. Age	–.27**	–.22**	.01	–.00	.06	.16**	.37**	.20**	–.15**	.01	–		30.27	11.98	–
12. Sex	.19*	.14**	.13**	.05	–.00	–.00	.16**	–.10*	.10*	–.05	.06	–	0.54	0.49	–

$N = 1099$. Notes: Correlation is significant at the (**) 0.01 level or (*) 0.05 level (2-tailed). P = Primary, S = Secondary, E = Entrepreneurial/Entrepreneurship, #Business = Number of Businesses created, M = mean, SD = standard deviation, α = Cronbach's alpha. Income was scored 1–15 where 1 = £0, 2 = £0–5000, 3 = £5–20,000, with a £10,000 increase until 12 = £100,000–150,000, 13 = £150,000–200,000, 14 = £200,000–300,000, 15 = over 300,000. # Businesses was scored 1–5 where 1 = 0, 2 = 1–2, 3 = 3–5, 4 = 6–9, 5 = 10+. Sex was coded as a dummy variable, with 1 for male and 0 for not male (i.e. female).

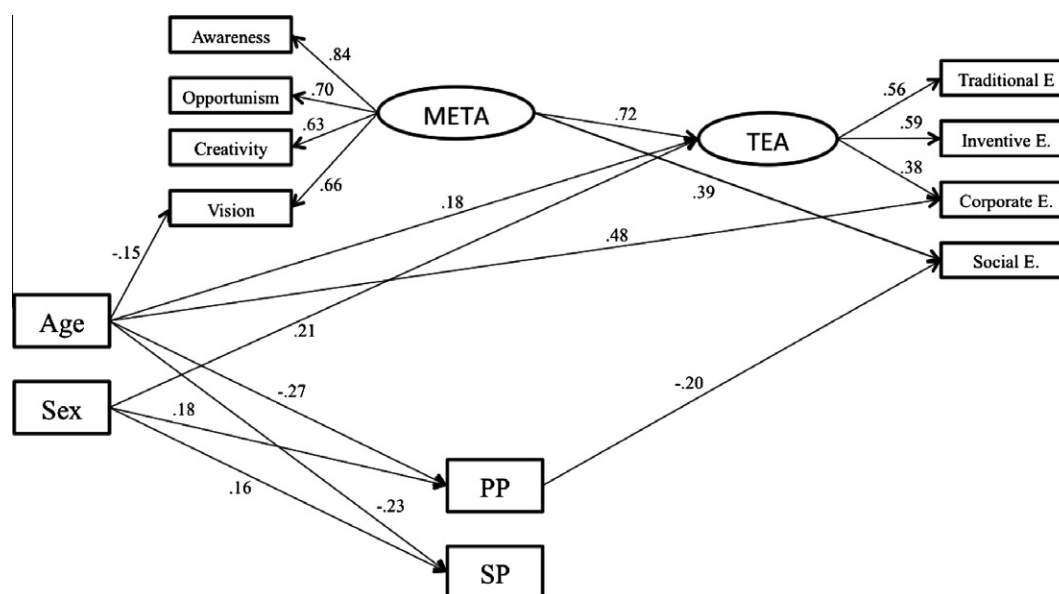


Fig. 1. The modified model. Note: For simplicity, the correlational path from META to primary psychopathy is not shown in the figure. PP = primary psychopathy, SP = secondary psychopathy.

AMOS-squared multiple correlations revealed that the relevant predictors combined accounted for 59% of the variance in the latent entrepreneurship (TEA) factor and 16% of the variance in Social Entrepreneurship.

4. Discussion

The main purpose of this study was to explore the impact of subclinical psychopathic tendencies on individual differences in entrepreneurial activity and success. The results partially supported the hypotheses of our study. First, as expected (H3), a moderate correlation between entrepreneurial tendencies and abilities (i.e. META) and primary psychopathy was found. This finding is in line with the assumption that more entrepreneurial individuals are also more callous, fearless, and glib (e.g. Kets de Vries, 1985) – attributes that are arguably needed when exploiting opportunities and pursuing innovations. However, contrary to expectations, the current results show that primary and secondary psychopathy are only modestly related, or unrelated to entrepreneurial activity and achievements. This undermines the notion that psychopathy,

as a construct, may be very relevant for entrepreneurial success, therefore H1 and H2 are only partially supported.

On the other hand, primary psychopathy does demonstrate incremental validity in the prediction of some entrepreneurial activities, beyond that of other relevant personality and demographic variables. Specifically, the results suggest that primary psychopathy was significantly, and negatively, related to social entrepreneurship, a finding that supports H5. Although a modest relationship, this finding may be important; it indicates that people who have elevated primary psychopathy scores are less likely to initiate activities aimed to improve the community, enhance education, or create student organizations. Given that psychopathy is characterized by callousness and a lack of loyalty (Babiak & Hare, 2007) this association makes substantive sense. These personality facets are likely to be detrimental to the enduring effort required for creating social value and change.

Although primary and secondary psychopathy correlated significantly with several entrepreneurship outcomes, only the association between primary psychopathy and social entrepreneurship remained significant after the variance of other personality and demographic factors was accounted for. Thus, the hypothesised

positive associations between primary psychopathy and entrepreneurship, and negative association between secondary psychopathy and entrepreneurship, were not found.

Overall, these findings reveal some interesting insights. First, they stress the importance of considering other relevant personality variables and specifically, the need to examine incremental validity in addition to concurrent validity in individual differences. Research on personality and entrepreneurship often fails to account for other individual difference variables when examining such associations (see Hisrich et al., 2007). On the other hand, the lack of expected associations indicate that psychopathic tendencies may not be relevant for some entrepreneurship outcomes. For instance, antisocial and callous behaviors may be counterproductive for success in social entrepreneurship, whereas the same behaviors may not be of any consequence in entrepreneurial activities that are more commercial in nature (e.g. finding ways of making money, starting a business, or exploiting opportunities).

In addition to the psychopathy-entrepreneurship association, the current study also showed that META, as expected, significantly predicted entrepreneurship outcomes (H4). In particular, the predictive power of META was more consistent and stronger than both psychopathy and demographic variables. Whilst this association is expected, it adds significant value to the current understanding of the psychology of entrepreneurship, where there still remains substantial knowledge gaps (Hisrich et al., 2007).

4.1. Limitations and future research

The current study inevitably has some limitations. One is the characteristics of the sample. A majority of participants in the sample consisted of young professionals or part-time employees, who had an average salary of £20,000–£30,000 (with the median being between £5000 and £20,000). Thus, it is likely that even those who were employed full-time were in junior positions in their companies. It is possible, however, that psychopathic tendencies are only consequential (be it a positive or negative) in higher-level positions. That is, job status, or occupational rank, may moderate the association between psychopathy and entrepreneurship. Future research should therefore aim to have evenly distributed samples in terms of occupational rank, including more managerial level participants and successful entrepreneurs.

A second limitation is that all the criteria utilised in this study were assessed via self-reports. Although the low-stake setting of this study is arguably sufficient to overcome the problem of faking-good (i.e. participants had no incentive to fake their responses), the inclusion of objective measures of entrepreneurial outcomes would be advisable in future research. It could also be useful to use alternative measures to assess psychopathy. For instance, Babiak et al.'s (2010) 'Psychopathy Checklist-Revised' (PCL-R) is an interview technique that is the standard assessment instrument in clinical populations; it would be interesting for future research to examine the differences and similarities between the interview and the self-report method. Finally, it would be desirable to include a generic measure of personality, such as that of the "Big Five" or five-factor model, to assess the incremental validity of psychopathy and META in the prediction of entrepreneurial activity.

4.2. Implications

The results of our study have several important implications. Empirical studies have shown that dark-side personality traits can be highly problematic in a professional context (e.g. Connelly, Lilienfeld, & Schmeelk, 2006). The current study suggests that this can also be the case within the domain of entrepreneurship. In particular, subclinical psychopathic tendencies may have a detrimental impact on social entrepreneurship. Given the importance of

social entrepreneurship, that involves innovative practices and the pursuit of opportunities aimed at creating social change and meeting social needs (Mair & Martí, 2006), the selection of people into such initiatives may be informed by examining their psychopathic dispositions. Interestingly, our results show that the same negative effects may not be found in entrepreneurial activities that are more commercial in nature (at least at junior levels). Thus organizations and policy makers may not necessarily need to be concerned about such tendencies, as evidence suggests that some dark-side traits may be advantageous in business settings (Robie, Brown, & Bly, 2008).

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