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Psychopathic Traits of Business and Psychology Students and their Relationship to Academic Success

Jonathan Hassall, Daniel Boduszek, & Katie Dhingra

University of Huddersfield, Huddersfield, United Kingdom

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Correspondence to:

Dr Daniel Boduszek
Department of Behavioural and Social Sciences
University of Huddersfield
Huddersfield, HD1 3DH
United Kingdom

Tel: +44 (0)1484-47-1887 Email: d.boduszek@hud.ac.uk PSYCHOPATHY DISCIPLINE CHOICE SUCCESS

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Abstract

The notion that high levels of psychopathic trait leads to career success in the business sector

has become a popular point of theorising in recent years, with research providing support for

the alleged overrepresentation of psychopathy in the financial sector, and the existence of a

relationship between psychopathy and professional success. A cross-sectional design was

employed to compare psychopathy scores of business and psychology students, as well as to

examine the psychopathy-academic success relationship. Participates were 263 participants

recruited from a UK university. Results revealed greater psychopathic traits in business

students relative to psychology students on all four factors of psychopathy. Furthermore,

hierarchical multiple regression indicated that the four psychopathy factors, gender, age,

study hours, and course explain 14% of variance in grade outcome. Two variables made

unique statistic contributions to the model with Antisocial Behaviour and gender (male)

negatively related to grade outcome. Theoretical and practical implications of our findings

are discussed.

Keywords: Psychopathy; Students; Academic Success, The Self-Report Psychopathy Scale

(SRP-III).

1. Introduction

Despite the popular public perception that high levels of psychopathy are inextricably linked to extreme violence and criminality, there are many researchers (Cleckley, 1941; Hare, 1995; Boddy, 2005; Stevens, Dueling, & Armenakis, 2012) who contend that psychopaths exist among us, seldom crossing paths with psychiatric institutions or the criminal justice system. Some (Boddy, 2005; Stevens, Deuling & Armenakis, 2012) go on to suggest that psychopathy may even be adaptive in certain environments; when 'success' is contingent upon distancing oneself from competitors emotionally. One such environment may be the business sector, in which empathising with rival companies may hamper one's ultimate goal of dominating the market, which often involves bankrupting opponents (Ouimet, 2010). It is the link between psychopathy and the potential for success in business that the current study seeks to explore; it represents a sizeable gap in the literature, which only a couple of studies have attempted to empirically explore (Ullrich, Farrington & Coid, 2008; Babiak, Neumann & Hare, 2010).

It has been proposed by theorists that business is one of the sectors most prone to attracting 'successful' psychopathic individuals, often dubbing them 'corporate psychopaths' (Hare, 1995; Boddy, 2005; Babiak, Neumann, & Hare, 2010). While speculation by media and scholars alike (e.g. Boddy, 2011) concerning the role of psychopathic individuals in large scale economic collapse is larger than evidence would substantiate, there is nothing illogical concerning the connection of psychopathic traits with crimes of fraud. Due to the dishonesty, intrinsic self-preservation and callousness featured in many models of psychopathy (Cleckley, 1941; Hare, 2003; Lilienfeld & Andrews, 1996), crimes such as fraud, which offer a large potential reward for minimal effort, may be the 'logical choice' (Hare, 1995).

Measures of psychopathy have been demonstrated to be predictive of various offences

(Walters, 2003), including fraud (Hare, Clark, Grann & Thornton, 2000; Kroner & Mills, 2001), lending this theoretical link some strength.

According to a survey by PriceWaterhouseCoopers (2014), 37% of 5,429 organisations in 40 countries report significant fraud, with the financial services industry being at a 49% overall risk of economic crime. The report found the profile of a 'typical internal fraudster' to be a male, aged 31-40 with a 1st class undergraduate degree plus graduate education. This is interesting because of its parallel with incidence of psychopathy; being male increases the likelihood of having high psychopathic traits significantly (Meloy, 1997; Weizmann-Henelius, Viemero & Eronen, 2004) as does choosing business/commerce as one's discipline at undergraduate level (Wilson & McCarthy, 2011), and committing fraud (Kroner & Mills, 2001).

Ulrich et al. (2008) investigated the relationship between psychopathy factors (Interpersonal, Affective, Impulsivity/lifestyle, and Antisocial) and 'life-success' in both a professional/monetary sense (operationalised as various wealth/status indicators; social class, income, number of rooms in home, etc.) and a romantic sense (e.g. stability and quality relationship), in a community sample of 304 men. Their findings revealed no significant relationship between the interpersonal factor (e.g., deceitfulness and manipulation) and any form of 'life-success' (professional or romantic), and that the lifestyle (e.g., impulsivity, irresponsibility) and antisociality factors (e.g., social deviance, criminality) of psychopathy negatively predicted professional/monetary success. The affective factor (e.g., lack of empathy, remorse, or guilt) was negatively associated with both aspects of a successful life. These findings may, however, be explained by the low prevalence of individuals with notably high psychopathy levels among the general population (estimated to be about 1%; Boddy, Ladyshewsky, & Galvin, 2010), thus relationships between psychopathy and 'life success' may be less visible at population level. Furthermore, factors such as age and gender,

potentially important confounding factors of the psychopathy- life-success relationship were not controlled for.

Babiak et al. (2010) achieved more success in the search for 'successful psychopathy'. Using the Psychopathy Checklist-Revised (PCL-R, Hare, 2003) and '360° assessment' (a popular performance assessment in business contexts), the authors aimed to establish prevalence of psychopathy in their sample of 203 corporate professionals and assess the relationships between psychopathy factors and performance assessments. Results indicated the prevalence of psychopathy was markedly higher in their sample than in community samples. Moreover, individuals with higher psychopathic traits were considered 'high potential' candidates, and occupied positions of greater seniority. A positive correlation was also found between psychopathy scores and *charisma/presentation style*, which is a superordinate category for skills such as good communication, strategic thinking and creativity (Neumann, Hare, & Newman, 2007). Psychopathy was also negatively correlated to *responsibility/performance* ratings, which covers mindfulness of others and managerial skills. Based on their findings, the authors concluded that high psychopathy levels appear to compensate for poor performance, allowing individuals to continue progressing in the business world on merit of their 'style' and interpersonal skills.

Though the dependent variables measuring 'success' in Babiak et al. (2010) study and Ulrich et al. (2008) study differ, the incongruence between the research groups' results and conclusions may be due to the increase in general psychopathy prevalence among business sector workers, estimated to be 3% (Babiak et al., 2010), versus the 1% at general population level (Boddy et al., 2010). This exemplifies the importance of sample selection in studies aiming to uncover a latent interaction, particularly in the context of psychopathy and success. Although gaining access to corporate professionals may be an efficacious way of investigating corporate psychopathy, it is not the only way. Wilson and McCarthy (2013)

found that the higher levels of psychopathy associated with the business world (Boddy et al., 2010) were observable at undergraduate level, using a sample of 903 Psychology students, with majors in Commerce, Arts, Law and Science students. A weak yet statistically significant relationship was found between 'primary' psychopathy (manipulative and selfish traits) and choosing Commerce as one's degree.

The present research has two aims. The first is to compare levels of psychopathy between business and psychology students. Based on previous findings of a generally higher prevalence of psychopathy in the financial sector (Boddy et al., 2010; Wilson & McCarthy, 2011; Smith & Lilienfeld, 2013), it was predicted that business students would report significantly higher levels of psychopathic traits than psychology students. Given the conflicting findings in the existing literature (Babiak et al., 2010; PriceWaterhouseCoopers, 2014), the second aim is to clarify the relationship between the four factors of psychopathy and undergraduate academic success while controlling for covariates.

2. Method

2.1 Participants

Participants were 263 third year university students, 148 of whom were Psychology undergraduates, and 115 Business undergraduates. The sample consisted of 104 males and 158 females. Participants ranged in age from 17-42 years (M = 21.66, SD = 3.61). The ethnic composition of the sample was as follows: 34.2% White (British), 9.5%, White (other), 5.3% Black/Black British, 0.8% British mixed, 6.8% Chinese, 4.2% Indian, 3.4% Pakistani, 1.9% Bangladeshi, 4.2% Asian/Asian British 'other', and 29.7% undisclosed. In addition, 38% of participants indicated their marital status as single, 26.3% in a relationship, 4.6% Married, 0.4% divorced, and 30.8% of participants did not disclose this information.

2.2 Materials

The Self-Report Psychopathy Scale (SRP-III; Paulhus, Neumann & Hare, 2012) was used to measure Psychopathic traits. The SRP-III is a 64-item measure that yields a total score as well as four sub-scale scores:

- (1) Interpersonal Manipulation (IPM), 16 items, (e.g. "I think I could "beat" a lie detector"; "I purposely flatter people to get them on my side");
- (2) Callous Affect (CA), 16 items, (e.g. "I'm more tough-minded than other people"; "It tortures me to see an injured animal");
- (3) Erratic Lifestyle (ELS), 16 items, (e.g. "I always plan out my weekly activities"; "I'd be good at a dangerous job because I make fast decisions";
- (4) Antisocial Behaviour (ASB), 16 items, (e.g. "I never shoplifted from a store"; "I was convicted of a serious crime").

Items are scored on a five-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). In the present sample, Cronbach's alphas were all acceptable: .82 for IPM; .77 for CA; .78 for ELS; .73 for ASB.

Demographic factors. Age, gender, ethnicity, marital status, estimated independent study time per week (in hours), and average mark achieved last year were assessed.

2.3 Procedure

Paper copies of the questionnaire were distributed after approval of relevant tutors in 8 separate classes, along with an oral introduction. The introduction included briefly outlining the primary research aim, what the participant can expect from the questionnaire, and emphasised their anonymity, among other ethical considerations. Participation was voluntary without any form of reward. Participants were debriefed upon completion of the questionnaire.

3. Results

3.1 Descriptive statistics and Group Differences

Descriptive statistics for the four factors of psychopathy, age, and average weekly independent study time, including means (M) and standard deviations (SD), are presented in Table 1.

Table 1. Descriptive statistics for the four factors of psychopathy, age, and study time

| Factor | М | SD | Minimum | Maximum |
|---------------|-------|------|---------|---------|
| Interpersonal | 41.88 | 8.73 | 20 | 64 |
| Manipulation | | | | |
| Callous | 38.13 | 8.10 | 19 | 65 |
| Affect | | | | |
| Erratic | 43.55 | 8.85 | 19 | 68 |
| Lifestyle | | | | |
| Antisocial | 28.55 | 8.40 | 16 | 70 |
| Behaviour | | | | |
| Study time | 12.28 | 9.33 | 0 | 60 |
| Age | 21.66 | 3.61 | 17 | 42 |
| | | | | |

Independent samples *t*-tests were employed to explore potential between-group differences in the four factors of psychopathy (IPM, CA, ELS, and ASB) scores between business and psychology students. Results in Table 2 indicate that business students scored significantly higher than psychology students on each of the four psychopathy factors.

Table 2. Descriptive statistics and group differences (subject) for the four factors of psychopathy

| Factor | Subject | N | M | SD | t-value | Cohen's d |
|---------------|------------|-----|-------|------|---------|-----------|
| Interpersonal | Business | 115 | 45.17 | 7.95 | 5.97*** | .65 |
| Manipulation | Psychology | 148 | 38.60 | 9.51 | | |
| Callous | Business | 115 | 40.71 | 8.05 | 5.13*** | .64 |
| Affect | Psychology | 148 | 35.55 | 8.15 | | |
| Erratic | Business | 115 | 45.19 | 8.35 | 2.97*** | .37 |
| Lifestyle | Psychology | 148 | 41.90 | 9.35 | | |
| Antisocial | Business | 115 | 29.92 | 9.79 | 2.55** | .32 |
| Behaviour | Psychology | 148 | 27.17 | 7.00 | | |

Note: *** *p* < .001

3.2 Psychopathy and academic success

Bivariate correlations among all variables were investigated using Pearson product-moment correlation coefficients (Table 3).

Table 3. Correlations between Average Mark, Gender, Study time, Age, Course, and the four factors of Psychopathy

| Variables | Mark | IPM | CA | ELS | ASB | Gender | ST | Age | Course |
|-----------|-------|--------|--------|--------|------|--------|--------|-----|--------|
| Mark | 1 | | | | | | | | |
| IPM | 16* | 1 | | | | | | | |
| CA | 25** | .68*** | 1 | | | | | | |
| ELS | 21** | .51*** | .51*** | 1 | | | | | |
| ASB | 34*** | .37*** | .46*** | .48*** | 1 | | | | |
| Gender | 30*** | .39*** | .47*** | .28*** | .26 | 1 | | | |
| ST | .087 | 04 | .01 | 13* | .13* | 13* | 1 | | |
| Age | .091 | 13* | 06 | 10 | 07 | .07 | .25** | 1 | |
| Course | 10 | .25** | .23** | .06 | .07 | .31*** | .35*** | .11 | 1 |

Note: IPM = Interpersonal Manipulation, CA = Callous Affect, ELS = Erratic Lifestyle, ASB = Antisocial Behaviour, ST = Study Time, *p <.05, **p <.001

Hierarchical multiple regression was performed to assess the effect of the predictive variables (the four psychopathy factors) on academic success (average mark last academic year).

Preliminary analysis revealed no violation of the assumptions of normality, linearity or homoscedasticity.

Table 4. Hierarchical Multiple Regression Models of Academic Success

| | R | Adj R ² | R ² Change | В | SE | β |
|-------------|-----|--------------------|--------------------------|-------|------|-------|
| Model 1 | .36 | .11 | | | | |
| IPM | | | | .05 | .09 | .06 |
| CA | | | | 14 | .10 | 14 |
| ELS | | | | 03 | .09 | 03 |
| ASB | | | | 28 | .09 | 28* |
| Model 2 | .43 | .14 | .03* | | | |
| IPM | | | | .10 | .95 | .11 |
| CA | | | | 07 | 11 | 07 |
| ELS | | | | 01 | .09 | 01 |
| ASB | | | | 30 | .09 | 30*** |
| Gender | | | | -3.30 | 1.50 | 20* |
| Age | | | | .17 | .18 | .07 |
| Study hours | | | | .10 | .08 | .11 |
| Course | | | | -1.19 | 1.45 | 07 |

Note: IPM = Interpersonal Manipulation, CA = Callous Affect, ELS = Erratic Lifestyle, ASB = Antisocial Behaviour, ST = Study Time. *p < .05, **p < .01, ***p < .001

In the first hierarchical multiple regression (Table 4), four predictors were entered: Interpersonal Manipulation (IPM), Callous Affect (CA), Erratic Lifestyle (ELS) and Antisocial Behaviour (ASB). The model was statistically significant F (4,157) = 5.84, p < .001 and explained 11% of variance in grade outcome (average mark). The addition of covariates (gender, age, study hours and course) made a significant contribution to the model, increasing the total variance explained by the model to 14%, F (8, 153) = 4.38, p < .001); an addition 3% of total variance in grade outcome (R^2 Change =.03; F (1, 153) = 2.67, p < .05). In the final adjusted model, only two factors made a unique statistical contribution to the model. Specifically, Antisocial Behaviour and gender negatively predicting grade outcome (β = -.30, p < .00 and β = -.20). This indicates that individuals scoring highly on the Antisocial Behaviour factor and males were more likely to attain a poor grade.

4. Discussion

The present research aimed to compare levels of psychopathy (four factors) between business and psychology students, as well as to examine the psychopathy-academic success relationship while controlling for confounding factors. In line with Wilson and McCarty (2013), results indicated that business students scored significantly higher on all psychopathy factors than psychology students. Consequently, the results lend some cross-cultural reliability by virtue of the studies being based in different countries (U.S. and U.K.). However, it should be noted that British and American populations, despite being geographically distant, are very culturally close, and so the cross-cultural generalisations may only extend within these boundaries.

When interpreting the present findings, it is important to note that Wilson and McCarthy (2013) used a measure of psychopathy, which comprises of two psychopathy factors (primary and secondary psychopathy). Theoretically, the use of this measure is not

problematic, as it derives from and correlates to, the measure used in the current study. However, methodologically, there are some issues: primary psychopathy was the only psychopathy factor significantly associated with discipline choice. If the researchers had adopted the four-factor model, which was used in the present research, they may have found that one particular factor within secondary psychopathy (e.g. erratic lifestyle) was significantly higher, but due to the other factor being low (e.g. antisocial behaviour), a relatively normal mean was produced.

The effect sizes found in the present study were greater than those reported by Wilson and McCarthy (2013). This inconsistency may be explained by the method of sampling used by the researchers, and the 'major'/'minor' system of U.S. colleges: all participants were essentially undergraduate psychology students who identified their majors as either 'arts', 'science', 'commerce', 'law' or 'other', thus the sampling process ensured a degree of commonality between all participants – they all chose to study psychology. In the current study, there was no such commonality because participants were sampled by their enrolment on either a business or psychology course. Thus, the most plausible explanation is that the effect sizes of the findings scaled with the homogeneity of the samples, and Wilson and McCarthy's study utilised a sampling method which produced two slightly more homogenous samples than the sampling method of the current study did.

There is a degree of inconsistency between the current results and those of Babiak et al. (2010), in that the authors found no significant difference in the mean psychopathy levels of business sector workers when compared with controls, though they reported a higher incidence of individuals with scores meeting the criteria for the 'psychopath' label in the business sample. This inconsistency may be explained by the construct not being normally distributed in senior business samples. The selection processes individuals undergo after leaving university may be the cause of this polarisation of psychopathy levels.

The results of the hierarchical multiple regression indicated that the four psychopathy factors, gender, age, study hours, and course explained 14% of variance in grade outcome. However, of the variables entered into the model, only two made unique statistic contributions namely, Antisocial Behaviour and gender. Specifically, males and individuals scoring high on the antisocial behaviour (ASB) factor of psychopathy were more likely to achieve a poorer grade. In terms of ASB, the results are consistent with the notion that the success may require the inhibition of behavioural deviance (Cleckly, 1941), while the gender result is consistent with the noted gender gap in academic performance (Richardson, Abraham, & Bond, 2012). However, it is not possible to determine whether the later finding is a result of course selection, assessment methods, or psychological characteristics.

Although much theoretical and/or anecdotal work (Boddy, 2005; Babiak & Hare, 2009) has suggested that a disproportionate amount of psychopathic individuals exist in occupations of high prestige and power, implying that psychopathy trait may confer advantage in achieving these positions, in the current study no significant positive relationship between psychopathy factors and academic success was found. Instead, a significant negative relationship of medium effect size between Antisocial Behaviour and academic success was observed. It is important to note that, because of the non-significant influence of course (business/psychology) as a covariate on grade outcome in the regression analysis, the notion of academic success discussed is not specific to either course, but a more general collection of necessary skills for undergraduate success. It is also important to note that academic success is likely to be influenced by a broad range of factors including engagement, attendance, method of assessment, and interest and so on. Differential methods of assessment between business and psychology may also have influenced performance.

The results of the regression analysis are consistent with Ulrich et al. (2008) who found no significant relationship between the interpersonal factor of psychopathy as indexed by the PCL: R (equivalent to the IPM factor of the SRP-III) and various measures of 'life-success', but identified significant negative associations between the impulsivity/lifestyle and antisociality factors (equivalent to the SRP-III's ELS and ASB factors, respectively) and professional/monetary success. The only inconsistency between these findings and those of the present research is that we found no significant relationship between the ELS factor and academic success. This inconsistency may be a consequence of different operationalizations of 'success' between the studies.

The negative impact of antisocial behaviour on success helps to advance our understanding of 'successful' psychopathy given that no other psychopathy factors were negatively implicated in life-success (Ulrich et al., 2008) or in academic success (current study). Consequently, it is reasonable to conclude that the only dimension of the psychopathic individual which requires suppression is the antisocial (and, to a lesser extent, impulsive/lifestyle factors; Ulrich et al., 2008) for a relatively normal life and academic success. This conclusion is consistent with certain portions of the theoretical work on the topic (Hare, 1995; Boddy, 2011). However, the current findings fail to offer support to the way some of the same theorists extend this conclusion to imply psychopathic traits offer an advantage for successful careers.

Conceptualising successful psychopathy as typical psychopathic traits, but with low antisocial-behavioural expression may be useful as a description of phenomena, but unfortunately offers little in the way of explaining it; it is circular to argue psychopathic individuals who function (relatively) normally in society do so because they are less likely to break its rules (which is part of the definition of 'normal functioning'). Thus, it may be more appropriate to talk of where the better behavioural controls of the successful psychopath

come from. It was not within the scope of this study to explore this, but future research could focus on methods of socialisation which do not depend so strongly on emotional response, as it has been suggested that the prototypical 'psychopath' intrinsically lacks such a response, and that socialisation is central to one's development of internal controls (Hare, 1995).

The current research findings are somewhat inconsistent with previous research by Babiak et al. (2010) which demonstrated psychopathy to be positively correlated to 'charisma/presentation style' ratings, yet negatively correlated to 'responsibility/performance'. Due to the current study finding no positive link between any psychopathy factor and academic success, it may be that the skills encompassed by the 'charisma/presentational style' rating are not characteristic of academic success. The finding that antisocial behaviour was negatively predictive of academic success is somewhat consistent with Babiak and colleagues' second finding (psychopathy negatively correlated to 'responsibility/performance'). However, as the authors used overall psychopathy scores, it is difficult to know the extent to which each particular factor was responsible for this finding. Consequently, we cannot be certain the Babiak and colleagues' results were similar to the current study's (i.e. whether the antisocial behaviour factor was the most powerful predictor of a negative performance outcome), but it is possible.

As Babiak et al. (2010) used the PCL-R, the measure upon which the SRP-III is based, one can have reasonable confidence that the same construct is being investigated. Thus, it is legitimate to consider how the two studies results might inform theory of 'successful' psychopathy. The coupling of both studies' findings offers a more coherent theoretical explanation for how individuals with high psychopathy come to be overrepresented in the business sector. The current findings indicate that psychopathic traits offer no overt benefit at the undergraduate-academic level, yet in the absence of antisocial behaviour, they pose no barrier either. Once this career stage is passed, psychopathic traits

may begin to offer an advantage; the field of business clearly values 'charisma/presentation style' (Babiak et al., 2010). Thus, interpersonal-manipulation traits may offer an advantage in selling one's strengths, and playing down one's weaknesses (e.g. during interviews/informal review). At this stage, the business environment may essentially be selecting individuals with higher psychopathy levels, yet normal levels of antisocial behaviour. Thus, further research may wish to explore this with longitudinal research following the post-graduation success of business students with high psychopathy levels and either utilise a control group (with normal psychopathy scores).

The notion that psychopathic individuals may lead relatively normal/successful lives if antisocial behaviour levels are average poses a problem for contemporary conceptualisations psychopathy. This is because antisocial behaviours have become viewed as a component in identifying psychopathy in the most widely used measurement tool, i.e., the PCL-R (Hare, 2003). Thus, to avoid necessarily equating psychopathy with violent and antisocial behaviour, it may be necessary to develop two definitions; a clinical/legal and an empirical definition. This way, there is no contradiction when one talks of 'successful' psychopathy, yet defines psychopathy as partly dependent on failure (to abide the rules of society).

The results of the present study should be interpreted in light of several important limitations. First, the sample consisted of students from only one university. Therefore, it cannot be certain that the findings can be generalised to other populations. Research with more diverse samples (i.e., participants from other cultural and linguistic backgrounds, and more diverse and extensive student samples) is, therefore. Second, although the measure of psychopathy used has been demonstrated to be a reliable instrument, the use of self-report may have introduced several well-known limitations, such as response bias. Further research using the PCL-R (Hare, 2003) should be considered as this would allow conclusions about

the nature of psychopathy and 'successful' psychopathy to be made with greater confidence. Other factors, such as having to work outside University and having family/children may also have contributed to the observed results, but were not included in the present study. Thus, further research, controlling for additional potential confounding factors is warranted. Finally, the measure used in the present study to index success may not correspond well with traditional measures of successful business performance, which include rank or level within an organisational hierarchy, performance ratings by supervisors, and inclusion in corporate succession plans, thus further examining a broader range of performance/achievement is needed.

The results of the current study and previous work (Babiak et al., 2010) suggest that choosing to study/work in a business environment increases one's likelihood of having an above average psychopathy level. With an evidence-based estimate of psychopathy prevalence in business courses, comes the opportunity to curb some of the damage highly psychopathic individuals may cause to society later in life (Hare, 1995; PriceWaterhouseCoopers, 2014). Thus, institutions could decide to structure their course in a manner which selects against such individuals (i.e. employ a screening procedure of some kind) to diminish the potential for psychopathic individuals to commit economic crimes. The finding that no psychopathy factors were significantly predictive of positive grade outcome means that the increased levels of psychopathy within business students cannot be explained by some increased aptitude for the discipline positively linked to psychopathy levels. Thus, psychopathy levels may be positively linked to an increased attraction to the area of business, perhaps stemming from the intimate relationship the discipline has with mundane notions of success.

This study aimed to compare psychopathic traits between business and psychology students and found all factors of psychopathy (interpersonal manipulation, callous affect,

erratic lifestyle and antisocial behaviour) to be significantly higher in business students when compared with psychology students, with small to medium effect sizes. This suggests the business discipline is more attractive to individuals with higher psychopathy levels. No significant relationship between interpersonal manipulation, callous affect, and erratic lifestyle factors and academic success was found in the regression, but antisocial behaviour was significantly predictive of poor overall grade. This suggests that, while psychopathic personality traits (IPM and CA) do not offer any significant advantage on business courses, they also do not act as barriers to normal achievement.

5. References

- Babiak, P., & Hare, R. D. (2009). *Snakes in suits: When psychopaths go to work*. New York, NY: HarperCollins.
- Babiak, P., Neumann, C. S., & Hare, R. D. (2010). Corporate psychopathy: Talking the walk. *Behavioral Sciences & the Law*, 28(2), 174-193. doi: 10.1002/bsl.925
- Boddy, C. R. (2005). The implications of corporate psychopaths for business and society: An initial examination and a call to arms. *Australasian Journal of Business and Behavioural Sciences*, 1(2), 30-40.
- Boddy, C. R. (2011). The corporate psychopaths theory of the global financial crisis. *Journal of Business Ethics*, 102(2), 255-259. doi: 10.1007/s10551-011-0810-4
- Boddy, C. R. P., Ladyshewsky, R., & Galvin, P. (2010). Leaders without ethics in global business: Corporate psychopaths. *Journal of Public Affairs*, 10(3), 121-138. doi: 10.1002/pa.352
- Cleckley, H. (1941). The Mask of Sanity; an attempt to reinterpret the so-called psychopathic personality. St. Louis, MO: Mosby Co.
- Hare, R. D. (1995). Without conscience: The disturbing world of the psychopaths among us. New York, NY: Guilford Press.
- Hare, R. D. (2003). *The Hare Psychopathy Checklist-Revised (2nd ed.)*. Toronto, ON: Multi-Health Systems.

- Hare, R. D., Clark, D., Grann, M., & Thornton, D. (2000). Psychopathy and the predictive validity of the PCL-R: An international perspective. *Behavioral Sciences & the Law*, 18(5), 623-645.
- Kroner, D. G., & Mills, J. F. (2001). The Accuracy of Five Risk Appraisal
 Instruments in Predicting Institutional Misconduct and New Convictions.
 Criminal Justice and Behavior, 28(4), 471-489. doi:
 10.1177/009385480102800405
- Lilienfeld, S. O., & Andrews, B. P. (1996). Development and preliminary validation of a self-report measure of psychopathic personality traits in noncriminal populations. *Journal of Personality Assessment*, 66(3), 488-524. doi: 10.1207/s15327752jpa6603_3
- Meloy, J. R. (1997). Violent Attachments. Northvale, NJ: Aronson.
- Neumann, C. S., Hare, R. D., & Newman, J. P. (2007). The super-ordinate nature of the Psychopathy Checklist—Revised. Journal of Personality Disorders, 21(2), 102–107. doi: 10.1521/pedi.2007.21.2.102
- Ouimet, G. (2010). Dynamics of narcissistic leadership in organizations: Towards an integrated research model. *Journal of Managerial Psychology*, 25(7), 713-726. doi: 10.1108/02683941011075265
- Paulhus, D. L., Neumann, C. S., & Hare, R. D. (in press). *Manual for the Self-Report Psychopathy scale*. Toronto, CA: Multi-Health Systems.
- PriceWaterhouseCoopers. (2014). The 7th Biennial Global Economic Crime Survey.

 Retrieved from http://www.pwc.com/crimesurvey

- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: a systematic review and meta-analysis. *Psychological bulletin*, *138*(2), 353-387.
- Smith, S. F., & Lilienfeld, S. O. (2013). Psychopathy in the workplace: The knowns and unknowns. *Aggression and Violent Behavior*, 18(1), 204-218.
- Stevens, G. W., Deuling, J. K., & Armenakis, A. A. (2012). Successful psychopaths:

 Are they unethical decision-makers and why? *Journal of Business Ethics*,

 105(2), 139-149.
- Ullrich, S., Farrington, D. P., & Coid, J. W. (2008). Psychopathic personality traits and life-success. *Personality and Individual Differences*, 44(5), 1162-1171. doi: 10.1016/j.paid.2007.11.008
- Walters, G. D. (2003). Predicting Institutional adjustment and recidivism with the psychopathy checklist factor scores: A meta-analysis. *Law and Human Behavior*, 27(5), 541-558.
- Weizmann-Henelius, G., Viemero, V., & Eronen, M. (2004). Psychopathy in violent female offenders in Finland. *Psychopathology*, *37*(5), 213-221. doi: 10.1159/000080716
- Wilson, M. S., & McCarthy, K. (2011). Greed is good? Student disciplinary choice and self-reported psychopathy. *Personality and Individual Differences*, *51*(7), 873-876. doi: 10.1016/j.paid.2011.07.028