Corporate Psychopathy: Examining Psychopathy, Empathy and Deception amongst Business Management and Psychology Students.

Rachel Martin
Corporate Psychopathy: Examining Psychopathy, Empathy and Deception amongst Business Management and Psychology Students

ABSTRACT

Corporate psychopathy is a relatively new area of research (Mathieu et al, 2014) and has important implications for organisations and society (Stout, 2005). Previous research has reported a relationship between psychopathy and individuals studying business (Wilson and McCarthy, 2011). Psychopathy has also been related to low empathy (Jonason et al, 2013) and deception (Jonason et al, 2014). Given the potential ramifications, it is an important area to investigate further.

The study comprised of a 2 x 2 between-groups design measuring psychopathy, empathy and deception amongst Business Management and Psychology students (N= 172). Self-report questionnaires were administered to participants and consisted of three scales; the Self-Report Psychopathy-Short Form scale (SRP-SF) (Paulhus et al, 2013), an empathy sub-scale (Barchard, 2001) and a lie sub-scale (Eysenck et al, 1985).

Data was computed into SPSS and a two-way ANOVA was conducted to test the main effects and interaction effects. A significant interaction was reported for empathy, $F = 3.91; df = 1, 168; p < .05$, consistent with previous research. However, no significant interaction was observed for psychopathy.

Based on these findings, it is concluded that future research is imperative to investigate corporate psychopathy further. Limitations and conclusions of the current study are discussed.

KEY WORDS: CORPORATE PSYCHOPATHY PSYCHOPATHY EMPATHY DECEPTION BUSINESS MANAGEMENT
Introduction

The primary focus of the current study was to examine whether Business Management students exhibited psychopathic personality traits and whether the findings supported contemporary literature which argues that psychopathy is common in the corporate world, specifically amongst business executives and individuals in a position of power (Boddy, Ladyshewsky and Galvin, 2010). This study also examined whether Business Management students lacked empathy and if they exhibited deceitfulness, key components of the psychopathic personality (Hare, 1991).

Psychopathy

The concept of psychopathy originates back to the early 19th century where Pinel applied the term ‘insanity without delirium’ to define psychopathy as utter remorselessness and a lack of restraint (Hare, 1993). It was not until 1941 when psychopathy was recognised as having serious repercussions to society. Cleckley (1941) introduced the notion of psychopathy, where he recognised it as a significant issue ignored by society (Hare, 1993). Cleckley (1941) devised 16 criteria as a diagnostic tool in which to classify psychopathy (Blair, Mitchell and Blair, 2005). The criteria consisted of characteristics such as superficial charm, lack of remorse and egocentricity (Blair et al, 2005). The most substantial and significant research to investigate psychopathy to date has been undertaken by Robert Hare. Hare’s research was the basis in which all subsequent psychopathy research emerged and his studies have proposed a vast array of important findings. Hare (1993) defines a psychopath as an individual who displays the following interpersonal characteristics: glibness, superficiality, egocentricity, manipulation, deceitfulness and distinctively lacking in remorse and empathy. Hare described psychopathic individuals as ‘…social predators who charm, manipulate, and ruthlessly plow their way through life…’ (Hare, 1993:xi). Research has suggested that psychopaths are a threat to society and argues careful studies are required to examine psychopathy in context.

The current DSM-V and previous versions of the DSM have not yet included psychopathy as a personality disorder (American Psychiatric Association, 2012). It is instead associated with antisocial personality disorder. Antisocial personality disorder lists some of the criminal behaviours that some psychopaths display. However, it fails to include the personality traits that they exhibit (Hare, 1993). Hare (1993) suggested that this has lead to some confusion between the terms ‘psychopath’ and ‘antisocial personality disorder’ with the two being seen as synonymous by some clinicians.

The term ‘psychopath’ is also confused by society, primarily due to the way in which the media presents this term. This has led to misinformation and misunderstanding of which traits accurately define psychopathy (Babiak, Neumann and Hare, 2010). For example, Helfgott (1997) conducted telephone interviews with members of a community in America and asked them what came to mind when they heard the term ‘psychopath’ (Smith, Edens and Clark, 2014). 59% of the participants believed that it was indicative of a mental illness and 35% related it to criminal behaviour (Smith et al, 2014).

It is suggested that less than 1% of the male population and between 15-20% of the prison population are psychopaths (Tuvblad et al, 2014). Until recently, the focus of
research, which examined the prevalence of psychopathy, was largely confined to prison populations and criminal offenders. However, whilst these samples may be the most easily accessible to researchers, many psychopaths do not commit crimes and manage to function in society without encountering the criminal justice system (Williams, Paulhus and Hare, 2007). This poses problems when extrapolating the prevalence of psychopathy in the general population. It has been estimated that there are 3 million psychopaths in the USA in comparison to a substantially lower figure of 150 serial killers (Holmes, 2010). These types of psychopaths have been referred to as ‘successful psychopaths’ as they successfully avoid contact with legal authorities (Boddy et al, 2010). Since research into the prevalence and existence of psychopathy has primarily focused on criminal samples (Mahmut, Homewood and Stevenson, 2007) this study has examined psychopathy amongst a non-clinical sample.

**Corporate Psychopathy**

The current study sought to examine the literature surrounding psychopathy in the corporate world, which postulates that a significant proportion of corporate managers and entrepreneurs exhibit high levels of psychopathic traits (Babiak and Hare, 2007). The concept of the ‘corporate psychopath’ conjoins the terms ‘corporate’ and ‘psychopath’ to represent a psychopath operating within an organisation (Boddy, 2005). Corporate psychopaths are motivated individuals that work towards gaining domineering positions within organisations (Boddy, 2005), due to their instinctive desire for power and affluence. Maibom (2005) argued the absence of empathy makes them better prepared at achieving this in comparison to other employees. Their charm and networking skills permits them to climb the organisational ladder, which is highly concerning as it implies the majority of corporate psychopaths are in powerful positions within organisations (Boddy 2006). Babiak et al (2010) reported the prevalence of psychopathy amongst managers as 4%, a considerably higher figure than that of the general population. However, this figure has been criticised (Smith and Lilienfeld, 2013), as it was derived from a sample of corporate managers of unknown representativeness (Babiak and Hare, 2007). Consequently, this now commonly cited figure cannot be considered with confidence (Smith and Lilienfeld, 2013). Although this is evidently an important area of study, the implications of this personality disorder within corporations, is an area of research that is relatively new (Mathieu et al, 2014).

Although traditional research has linked psychopathy to maladaptive behaviours, contemporary research has tied it to socially successful behaviours across a variety of occupations including business (Lilienfeld et al, 2012). It has been argued that some of the features of psychopathy lead to adaptive behaviours in these occupations (Lilienfeld et al, 2012). For example, in a study examining psychopathy among corporate professionals, psychopathy scores were associated with superior communication skills, creativity and strategic thinking (Babiak et al, 2010). However, this suggests psychopathy functions as a ‘double-edged sword’ and it is unclear whether psychopathy in its entirety results in both adaptive and maladaptive behaviours, or whether different features of psychopathy are specifically related to one set of behaviours (Smith and Lilienfeld, 2013). Nonetheless, a significant body of research exists that argues the overall ramifications of psychopathy in the corporate world are destructive to organisations and society as a whole. Babiak and Hare (2007) argued that a psychopath’s dishonest and manipulative personality traits are
detrimental to managers and other employees. Boddy (2006) noted that they are not concerned about the welfare of their colleagues and thus will go against these interests in pursuit of their own selfish needs. Furthermore, the rise of corporate psychopaths in senior positions and the idea that they like to work with other peoples’ money in financial organisations, has as a result, led them to be deemed partially responsible for the Global Financial Crisis (Boddy, 2011).

Organisational psychologists have strongly expressed the necessity for further research to be conducted in relation to corporate psychopathy and the implications this presents to society (Babiak et al, 2010). However, carrying out research in this context has posed several methodological problems in previous attempts. It has become increasingly difficult to access corporate personnel and organisations who are willing to participate in this type of research (Babiak et al, 2010). Mathieu et al (2014) further described how businesses are reluctant to take part in research that examines their employees in this way. Moreover, there is also a limited availability of appropriate methodological tools, making it difficult to measure psychopathy in the workplace (Babiak and Hare, 2007).

Mathieu et al (2014) argued that empirical research has primarily focused on the impact of other personality disorders in the corporate world such as narcissism, ignoring the role of psychopathy. Corporate psychopaths who are in a position of power can make decisions that are detrimental to the organisation and society as a whole (Stout, 2005). However, the corporate environment, which is characterised by rapid change and staff turnover, makes it difficult to identify corporate psychopaths because this constant change makes their behaviour invisible (Boddy, 2011). Given the potentially detrimental impacts of corporate psychopaths in organisations and the consequences this has on other employees, makes it an important issue to investigate further (Akhtar, Ahmetoglu and Chamorro-Premuzic, 2013). This denotes the main rationale for investigating psychopathy in the current study.

Due to the barriers of accessing participants within corporations, this research examined university students studying Business Management and compared them to a control group of Psychology students. Wilson and McCarthy (2011) point out that before psychopaths enter into a job they may first attend university to obtain a degree. Furthermore, previous research has found that in comparison to other students, business students report higher levels of psychopathy, which proposes a link between psychopathic tendencies and field of study (Wilson and McCarthy, 2011). However, this research did not assess these traits explicitly and as such the findings require empirical corroboration (Smith and Lilienfeld, 2013). It is noted, however, that few studies have examined psychopathy in this context and this has provided additional rationales for conducting the current study.

This research also examined psychopathy in relation to gender. Psychopathy has been consistently reported to be more common amongst males in comparison to female populations (Strange and Belfrage, 2005). Forth et al (1996) found that male students scored higher on psychopathy compared to female students. However, not all studies report this finding. Wilson and McCarthy (2011) found that students studying commerce scored higher on psychopathy regardless of gender.
Psychopathy and Deception

Deception has been defined as deliberately misleading others by falsifying or concealing information (Ekman, 2001) and is common in everyday interactions (MacNeil and Holden, 2006). Psychopaths participate in deception more persistently and with more flamboyance in comparison to the general population (Hare, Forth and Hart, 1989). Moreover, psychopaths are explicitly more successful in attaining this maladaptive trait (MacNeil and Holden, 2006). However, despite intuition establishing a link between efficacious deception and psychopathy, evidence supporting this is lacking, with particular reference to a psychopath’s ability to opportunely deceive on self-report scales (MacNeil and Holden, 2006). This empirical relationship between psychopathy and the ability to successfully deceive on self-report scales is an important, yet inadequately researched area (MacNeil and Holden, 2006). Given the deceptive nature of psychopaths and their negative social impact, it is crucial to establish how psychopathy influences successful dishonesty on self-report scales (MacNeil and Holden, 2006).

As deceitfulness is a key component of the psychopathic personality (Hare, 1993), it was therefore measured by the current study to investigate whether there was a relationship between psychopathy and deception amongst the participants. Previous studies have examined this relationship, such as Jonason et al (2014), who measured psychopathy and deception and found that psychopathy was linked to telling more lies and also telling lies for no reason. However, given that accounts of psychopaths specify their readiness and ability to be deceitful and manipulative (Hare et al, 1989), this assumption of validity may not be applicable to individuals who score high on measures of psychopathy (MacNeil and Holden, 2006).

Empathy

Seara-Cardoso et al (2012) suggested that little is known about how empathy relates to psychopathic traits in the general population. Vossen, Piotrowski and Valkenburg (2015) defined empathy as the understanding of another person’s emotional state and the compassion for their feelings. This study examined whether there was a relationship between psychopathy and empathy. Blair et al (2002) found that adults with psychopathic personalities had a selective impairment in recognising other peoples’ distress. This would indeed propose a link between these two attributes. Moreover, a quantitative study conducted by Jonason et al (2013) examined the link between empathy and the ‘Dark Triad’ traits (i.e. narcissism, psychopathy and Machiavellianism) and found that psychopathic traits were related to low levels of empathy. However, it should be noted that this was only significant for primary psychopathy (i.e. shallow affect, low empathy, interpersonal coldness) and not secondary psychopathy (i.e. aggression, impulsiveness, neuroticism) (Jonason et al, 2013). Boddy (2006) contended that corporate psychopaths are not driven by the idea of social fairness or social responsibility. Clarke (2005) further postulated that many organisational psychopaths adopt bullying tactics to humiliate subordinate employees. This promotes a link between corporate psychopathy and the absence of empathy amongst corporate individuals.

This personality trait has also been examined amongst students and it was reported that social science students scored higher on empathy in comparison to business students (Myyry and Helkama, 2001). Furthermore, research has identified gender
differences in empathy. Toussaint and Webb (2005) found that women scored higher on empathy than men. In addition to this, Jonason et al (2013) found a negative correlation between low empathy scores and high scores in primary psychopathy, which was stronger amongst men in comparison to women. As such, gender differences in empathy were also examined by the current study.

**Aims and Hypotheses**

Given the dearth of research in this area of psychopathology, the aims of the study were as follows: A1) To examine whether there are differences in psychopathy between Business Management students and Psychology students. A2) To examine whether there are gender differences in psychopathy. A3) To examine whether there are differences in empathy between Business Management students and Psychology students. A4) To examine whether there is an interaction between gender and university degree for i) psychopathy and ii) empathy. A5) To examine whether there is a relationship between i) psychopathy and empathy and ii) psychopathy and deception.

The hypotheses of the current study were as follows: H1) Business Management students will exhibit higher scores for psychopathy compared to Psychology students. H2) Males will exhibit higher psychopathy scores compared to females. H3) Psychology students will exhibit higher scores for empathy compared to Business Management students. H4) Females will exhibit higher empathy scores compared to males. H5i) There will be a significant interaction between gender and university degree for psychopathy. H5ii) There will be a significant interaction between gender and university degree for empathy. H6i) There will be a significant interaction between, gender, university degree and empathy scores for psychopathy. H6ii) There will be a significant interaction between gender, university degree and psychopathy scores for empathy. H7) There will be a negative correlation between psychopathy and empathy scores. H8) There will be a positive correlation between psychopathy and lie scores.

**Method**

**Design**

The current study comprised of a 2 x 2 between-groups design using self-report questionnaires to examine psychopathy and empathy amongst Business Management students and Psychology students. A between-groups variation was used to allow the comparison of the differences between the means of the independent samples (Langdridge and Hagger-Johnson, 2009). The three dependent variables in this study were psychopathy, empathy and deception and the two independent variables were gender and university degree. Within the two independent variables there were two conditions: males and females for gender, and Business Management and Psychology for university degree.

The questionnaires were distributed in lecture theatres and consisted of statements from the following three scales; the Self-Report Psychopathy-Short Form scale (SRP-SF) (Paulhus, Neumann and Hare, 2013) (Appendix 2), an empathy sub-scale from the Barchard Emotional Intelligence scale (Barchard, 2001) (Appendix 3) and a lie sub-scale from the Eysenck Personality Questionnaire-Revised (EPQ-R)
(Eysenck, Eysenck and Barrett, 1985) (Appendix 4). For the first two scales participants scored their answers on a five-point Likert scale based on the extent to which they agreed or disagreed with each statement and for the third scale participants simply answered ‘yes’ or ‘no’.

Participants

Initially the researcher gathered data from $N=200$ undergraduate students, $N=100$ Business Management students and $N=100$ Psychology students, attending the Manchester Metropolitan University, both in their second year of study. A large sample size was examined to increase the probability of finding a statistical difference and thus avoiding the risk of a Type II error (Langdridge and Hagger-Johnson). 28 of the questionnaires were excluded from the final data set due to 10 data sets having incomplete responses and 18 data sets exhibiting scores on the lie sub-scale (Eysenck et al, 1985) above the criterion established by Eysenck and Eysenck (1975). This reduced the sample to $N=172$ participant questionnaires, $N=86$ Business Management students and $N=86$ Psychology students, which were included in the data analysis. From the 172 completed questionnaires, the mean age was $M=20.10$ ($SD=1.49$; range= 19-25 years).

In line with the British Psychological Society Code of Ethics and Conduct (2009) steps were taken to ensure the study remained ethical. Participants were informed that they did not have to take part in the study and that if they wished to withdraw after they completed the questionnaires, they could do so before the data analysis commenced, by contacting the researcher referencing their unique code. Participants were also made aware that although it was not possible for the data collected from this study to be kept entirely confidential, it was kept anonymously and securely on a password protected computer. The possibility that the findings of the study being published at a later date was also explained. Participants were asked to sign a consent form before they took part in the study (Appendix 10). It was carefully considered that although psychopathy scores were being examined, there was no diagnosis of psychopathy made by the researcher.

Materials

Self-Report Psychopathy Scale Short-Form: The SRP-SF scale (Paulhus et al, 2013) was used to measure psychopathy and consisted of 29 items, which participants scored on a five-point Likert scale, where 1 referred to strongly disagree and 5 referred to strongly agree. Participants chose the answer based on how much they agreed or disagreed with each statement. After establishing the PCL-R (Hare, 1991), Hare realised the potential advantages of using a self-report scale to measure psychopathy amongst individuals (Williams and Paulhus, 2004) and so went on to develop the Self-Report Psychopathy (SRP) scale (Hare, 1985). This scale has since been updated, as research has reported previous versions as problematic due to poor internal consistency (Williams et al, 2007), thus the current version was used in this study. The SRP yields a total score for psychopathy and also assesses the two dimensions of psychopathy – interpersonal, affective (AI) and lifestyle, antisocial (LA) (Foulkes et al, 2013). These two dimensions are split into the four facets of psychopathy: interpersonal manipulation, callous affect, erratic lifestyle and criminal tendencies (Dhingra and Boduszek, 2013). A recent study by Hare and Neumann (2008) proposed that psychopathic traits are best viewed as existing on a continuum, which provided an empirical basis for studying the level of psychopathic traits.
amongst individuals, rather than limiting studies to the examination of extreme groups (Seara-Cardoso et al, 2012). Therefore, it was intended that only a total psychopathy score would be calculated for the participants in this study. High scores on the psychopathy scale indicate more psychopathic traits, whereas low scores indicate less psychopathic traits. Cronbach’s Alpha was reported for the reliability of the two dimensions of psychopathy, 0.8 for AI and 0.8 for LA (Foulkes et al, 2013), which provided support as a reliable scale to measure psychopathy. The SRP has been shown to be an effective measure to examine psychopathy in non-clinical populations were time is limited (Lilienfeld and Fowler, 2006). This is due to a number of reasons that support this scale as a reliable and valid measure of psychopathy. Research has provided promising evidence for its convergent and discriminant validity (Neal and Sellbom, 2012). The SRP has good construct validity and is strongly correlated with the Psychopathy Checklist-Revised (PCL-R) (Paulhus et al, 2013) and the Youth Personality Inventory (YPI) (Andershed et al, 2002).

Barchard’s Emotional Intelligence empathy sub-scale: The empathy sub-scale (Barchard, 2001) consisted of 10 items, which participants scored on a five-point Likert scale, giving an answer based on the extent to which they agreed or disagreed with each statement. Five of the items on the sub-scale were worded positively and the other five items were worded negatively. Negative items received a reverse score when the total score was calculated. High scores on the empathy sub-scale indicate a more empathic personality, whereas low scores indicate a less empathic personality. Cronbach’s Alpha coefficients of 0.64 and 0.80, for women and men respectively, were reported for the empathy sub-scale (Barchard, 2001). Although the empathy sub-scale has not yet been used in scientific research (Perez, Petrides and Furnham, 2005), it was easily accessible on IPIP (International Personality Item Pool, no date). Furthermore, it proved to be a reliable method to measure empathy in this study as it exhibited sound alpha coefficients.

Eysenck’s Personality Questionnaire-Revised lie sub-scale: The EPQ-R lie sub-scale (Eysenck et al, 1985) consisted of 12 items which participants answered ‘yes’ or ‘no’ to. One of the key methodological issues of using self-report scales to measure psychopathy in individuals is that psychopaths are both deceptive and lack insight into their psychological problems (Lilienfeld and Fowler, 2006). The lie sub-scale was used to overcome this issue and detected any dishonest responding so that unreliable data sets could be eliminated from the analysis. The total score for this sub-scale was calculated by reverse scoring negative statements that yielded truthful answers and scoring positive statements that yielded dishonest answers. Any scores above the criterion of 6 and 7, for males and females respectively (Eysenck and Eysenck, 1975), indicated dishonest responding by a participant and as such their data was excluded from the analysis. Cronbach’s Alpha coefficients of 0.77 and 0.73 were reported for males and females respectively (Eysenck et al, 1985). High intercorrelations were also reported between the sub-scales of the EPQ and the EPQ-R (Barrett and Eysenck, 1992) further making it a valid scale to use.

Procedure

Time was taken to ensure the appropriate scales were used to investigate the three variables: psychopathy, empathy and deception. Once the questionnaires were created and the method of analysis was justified, the data collection commenced. Before the current study took place a pilot study was conducted with a sample of $N=$
10 participants. This was in order to trial the questionnaires and brought to light any methodological issues that could have occurred, so that these could be rectified before the actual study commenced (Langridge and Hagger-Johnson, 2009). The pilot study proved methodologically consistent, as no issues were accentuated.

An opportunity sample was used to recruit participants to take part in the research. Permission was sought from the appropriate course leaders to allow questionnaires to be handed out at the beginning of lectures. Before participants agreed to take part in the study they received a participant information sheet (Appendix 9), which provided information about the research and what it involved. They were then given a consent form (Appendix 10) to give their permission to participate in the study. After the study took place, participants were given a de-brief sheet (Appendix 11), which provided details of their right to withdraw their data from the study and information about the university counselling service in order to address any psychological harm that may have been caused.

After the data was collected questionnaires were checked thoroughly for incomplete responses and any scores on the lie sub-scale (Eysenck et al, 1985) that were above the criterion proposed by Eysenck and Eysenck (1975), were excluded from the data analysis. The data was then entered into SPSS (IBM Corp, 2012) a statistical computer programme used to analysis quantitative data. A 2 x 2 independent ANOVA was conducted to test H1-H5 and examined whether the two interaction effect hypotheses were significant. The use of a two-way ANOVA proved to be the most appropriate data analysis method to use, as it examined the interaction between the factors, gender and university degree and also for the main effects of each factor in isolation. This allowed all the hypotheses in the study to be tested using the most appropriate statistical calculation. A 2 x 2 x 2 ANOVA was also calculated to test H6i and H6ii and examined whether there were significant three-way interactions for psychopathy and for empathy. This was achieved by calculating the median split for psychopathy scores and empathy scores. Finally, Pearson’s correlation coefficient was performed to test H7 and H8. The use of parametric testing proved to be the most appropriate method of analysis as previous research has used this method to investigate these constructs e.g. Seara-Cardoso et al (2012).

Results

Descriptive Statistics

Descriptive statistics were calculated for the four main variables – psychopathy, empathy, gender and university degree. The results are reported to two decimal places.

Table 1

The means and standard deviations for psychopathy scores.
The descriptive statistics reported in Table 1 show that Business Management students had higher scores for psychopathy ($M = 68.69$, $SD = 15.13$) in comparison to Psychology students ($M = 56.34$, $SD = 14.66$). Overall, males scored higher on psychopathy, ($M = 72.13$, $SD = 14.56$) in comparison to females, ($M = 55.91$, $SD = 13.62$).

Table 2

The means and standard deviations for empathy scores.

<table>
<thead>
<tr>
<th>N= 172</th>
<th>Gender</th>
<th>$M$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Management</td>
<td>Male</td>
<td>33.41</td>
<td>4.36</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>33.06</td>
<td>4.68</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33.27</td>
<td>4.47</td>
</tr>
</tbody>
</table>
The descriptive statistics reported in Table 2 show that Psychology students had higher scores for empathy, \(M = 36.67, sd = 4.86\) in comparison to Business Management students, \(M = 33.27, sd = 4.47\). Overall, females scored higher on empathy, \(M = 35.83, sd = 4.99\) in comparison to males, \(M = 33.71, sd = 4.67\).

**Inferential statistics**

A 2 x 2 independent ANOVA was conducted with university students to investigate the main effects and interaction effects of university degree and gender for the two personality constructs: psychopathy and empathy. Two sets of 2 x 2 x 2 ANOVAs were also conducted to investigate the interaction between i) gender, university degree and empathy scores (median split) for psychopathy and ii) gender, university degree and psychopathy scores (median split) for empathy.

**Psychopathy**

The results of the 2 x 2 independent ANOVA showed a significant main effect for psychopathy and university degree, \(F = 8.45; df = 1, 168; p < .05\), indicating that Business Management students scored significantly higher on psychopathy in comparison to Psychology students. There was also a significant main effect for psychopathy and gender, \(F = 35.56; df = 1, 168; p < .001\), indicating that males scored significantly higher on psychopathy in comparison to females. However, a non-significant interaction effect was observed for psychopathy in relation to gender and university degree, \(F = 1.24; df = 1, 168; p > .05\). The results of the 2 x 2 x 2 ANOVA also showed a non-significant interaction effect for psychopathy in relation to gender, university degree and empathy scores (median split), \(F = 0.53; df = 1,164; p > .05\).

**Empathy**

There was a significant main effect for empathy and university degree, \(F = 11.53; df = 1, 168; p < .001\), indicating that Psychology students scored significantly higher on empathy in comparison to Business Management students. A non-significant main effect was reported for empathy in relation to gender, \(F = 2.33; df = 1, 168; p > .05\). However, a significant interaction effect was observed for empathy in relation to gender and university degree, \(F = 3.91; df = 1, 168; p < .05\). This interaction is displayed in Figure 1, showing that gender differences for empathy scores

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>34.53</td>
<td>37.28</td>
<td>36.67</td>
</tr>
<tr>
<td></td>
<td>5.46</td>
<td>4.54</td>
<td>4.86</td>
</tr>
<tr>
<td>Total</td>
<td>33.71</td>
<td>35.83</td>
<td>34.97</td>
</tr>
<tr>
<td></td>
<td>4.67</td>
<td>4.99</td>
<td>4.96</td>
</tr>
</tbody>
</table>
significantly increase and reverse from Business Management students \((M= 33.27, SD= 4.47)\) to Psychology students \((M= 36.67, SD= 4.86)\).

Figure 1

Line graph showing a significant interaction effect for empathy scores in relation to gender and university degree.

Figure 1 illustrates the significant increase of gender differences for empathy scores from Business Management students to Psychology students.

The results of the \(2 \times 2 \times 2\) ANOVA showed a non-significant interaction effect for empathy in relation to gender, university degree and psychopathy scores (median split), \(F = 1.15; \text{df} = 1,164; p > .05\).

A significant negative correlation was observed between psychopathy scores and empathy scores, \(r(170) = -.43, p <.001\).

Figure 2

Scatterplot showing a significant negative correlation between psychopathy scores and empathy scores.
Figure 2 illustrates that as psychopathy scores increase, empathy scores decrease. A significant positive correlation was observed between psychopathy scores and lie scores, $r(198) = .14, p < .05$.

Figure 3

Scatterplot showing a significant positive correlation between psychopathy scores and lie scores.

Figure 2 illustrates that as psychopathy scores increase, lie scores also increase.

**Discussion**

This study sought to examine whether individuals studying Business Management at university were more psychopathic and less empathic than individuals studying Psychology. Significant main effects were found for psychopathy, indicating that Business Management students and males were more psychopathic, however, as no significant interaction was observed, the main effects can only be understood in relation to this finding. A significant interaction was observed for empathy, indicating that female Psychology students were more empathic individuals. It was noted that no three-way interaction effect was observed for either psychopathy or empathy. Correlational tests indicated that high scores on psychopathy were associated with low empathy scores and high lie scores.

**Psychopathy**

The findings of the present study ascertained that psychopathy was higher amongst Business Management students, in comparison to Psychology students, with males displaying higher psychopathy scores, as hypothesised. These outcomes are consistent with previous research that contended a link between psychopathy and field of study, in particular business studies (Wilson and McCarthy, 2011). However, no overall interaction effect was observed, therefore discrediting these hypotheses. Previous research has reported similar findings that commerce students exhibited higher psychopathy scores irrespective of gender (Wilson and McCarthy, 2011), which was found in the current study, since no interaction was observed. Therefore,
it could be that psychopathy is strongly related to gender and degree, however it is not significantly influenced by an interaction between these two variables.

Furthermore, there is significant debate into whether or not students who have psychopathic tendencies choose a degree in business, or if business degrees encourage students to adopt these traits throughout the course of their study, because these traits are valued and perceived as adaptive in future corporate careers (Wilson and McCarthy, 2011). However, it is noted that research has yet to examine this nature-nurture hypothesis.

Although no significant interaction was observed for psychopathy, it is nonetheless anticipated that the findings of the current study will emphasise the importance of examining psychopathy amongst business students, due to the implications these traits pose in subsequent corporate careers. It is hoped that this research will inspire academic staff to consider how the course content might inadvertently reinforce psychopathic traits in business students. Moreover, the implications of this research can also be applied to corporations, highlighting the necessity for employers to be aware of these potentially deleterious personality traits being manifested amongst employees. Enhancing the understanding of how psychopathy manifests itself in corporations is imperative for both pragmatic and theoretical purposes (Smith and Lilienfeld, 2013). This would provide crucial information for monitoring employees and would help in the understanding of potential differential manifestations of psychopathy (Smith and Lilienfeld, 2013). Moreover, it would shed light on the current contentious and misunderstood construct of successful psychopathy (Hall and Benning, 2006).

Research has postulated that there are practical issues with the prevalence of psychopathy in corporate settings, stating that it is overestimated, particularly in managerial positions (Smith and Lilienfeld, 2013). This proposition should be approached with caution, to prevent the potential for misdiagnosis and stigmatisation, which would cause further problems in situations of maladaptive behaviours (Caponecchia, Sun and Wyatt, 2012). Moreover, this notion provides an opportunity for organisations to ignore the contribution that their policies have in generating a climate in which bullying and other destructive behaviours can occur (Caponecchia et al, 2012). To further develop this research area, greater collaboration is needed to identify how different forms of maladaptive behaviours are associated with one another (Caponecchia et al, 2012).

Although it is evident that psychopathy is prevalent in corporations, since few studies have investigated this construct, it is problematic to make this assumption without additional research being conducted in this context (Smith and Lilienfeld, 2013). Pending this, widespread assertions that psychopathy is extensive in the corporate world are premature (Smith and Lilienfeld, 2013).

**Empathy**

In relation to the second construct, empathy, it was observed that Psychology students were more empathic than Business Management students. This supports the research by Myyry and Helkama (2001), which reported social science students scored higher on empathy in comparison to business students. However, no gender differences were observed and as such, this is not consistent with previous literature that has suggested women are more empathic than men (Toussaint and Webb 2005;
Jonason et al., 2013). As a significant interaction effect was observed, \( F = 11.53; \text{df} = 1, 168; p < .001 \), this suggests a relationship between gender and university degree for empathy. However, the interaction reported was only marginally significant at the 95% confidence level and as such it is not entirely noteworthy. Nonetheless, these findings have implications for university degrees as they may inform teaching staff to value empathic traits. Furthermore, it suggests to corporate executives the importance of promoting the value of empathic traits in the workplace.

**Psychopathy and Empathy**

The findings indicated a relationship between psychopathy and empathy, which indicated that the more psychopathic an individual, the less empathic they were, as hypothesised. These findings support previous research literature, which stated a link between high psychopathy scores and low empathy scores (Jonason et al., 2013). Moreover, these findings emphasise the value of the research conducted by Blair et al. (2002), which noted psychopathic individuals' inability to recognise other people's distress. Despite the consequences of limited empathy to society, it has been conceptualized that this may indeed be favorable for those individuals who engage in antagonistic and exploitive approaches to life (Jonason et al., 2013). Exhibiting a lack of empathy may be instrumental in the successful deployment of the socially aversive strategy found in individuals scoring high on the 'Dark Triad' traits e.g. psychopathy (Jonason et al., 2013).

**Psychopathy and Deception**

A relationship was observed between psychopathy and deception, which indicated that the more psychopathic an individual, the more likely they were to be deceitful, as hypothesised. This is consistent with previous research by Jonason et al. (2014), which reported a link between high psychopathy scores and telling lies. However, it should be noted that this finding was only marginally significant at the 95% confidence level.

These findings are important as they have significant implications for previous research and future research examining this construct using self-report scales. Previous research findings, such as those reported by Wilson and McCarthy (2011), which have not utilised deception scales, could be disputed with regards to the validity and reliability of the results. Moreover, this proposition is not limited to corporate psychopathy research and also extends to the wider archive of psychopathy research. With regards to future research, it is hoped this finding will highlight the necessity of using scales to detect deception and socially desirable responding in order to collect reliable results in which to draw comprehensive conclusions from.

**Limitations**

As this study only examined a student sample, in which participants were sampled from one university within two specific degrees, Psychology and Business Management, it is therefore limited to the student population within those degrees. Although university samples provide important propositions about the manifestation of corporate psychopathy, the generalisability of these findings to corporations cannot be assumed (Smith and Lilienfeld, 2013). Hence, the assessment amongst
corporate samples is crucial for a more precise measurement of corporate psychopathy (Smith and Lilienfeld, 2013).

It should also be noted that within the total sample, 59% of the participants were female. This unequal distribution of gender could have skewed the finding for empathy in relation to gender, since there were predominantly more females in the study.

Furthermore, it is universally accepted that the prevalence of psychopathy in the general population is 1%, a relatively low figure (Tuvblad et al, 2014) and therefore this could provide an explanation into why a non-significant interaction was observed, since only $N=86$ Business Management students were included in the sample. This would suggest that less than 1% of the sample could potentially express psychopathic tendencies.

**Future Research**

Considering the prevalence of psychopathy is relatively low, both amongst the general population, 1% (Tuvblad et al, 2014), and within corporations, 4% (Babiak et al, 2010), it is suggested that future research should examine psychopathy amongst a larger cohort of business students, in order to acquire a more precise examination of psychopathy.

The implementation of longitudinal research is recommended to allow the chronological examination of the ramifications of corporate psychopathy (Smith and Lilienfeld, 2013). Moreover, longitudinal research could examine students before they commence a business degree, then at various points throughout their degree and afterwards, when these individuals enter into business vocations. A follow-up study investigating psychopathy and empathy amongst the same participants in the current study, following the completion of their degree and after they transition into a professional career, could add credibility to the findings of the current study. This would also provide important evidence as to whether studying business degrees influences the expression of psychopathic traits, or if individuals with psychopathic traits are enticed to studying this degree in the first place, or if it is a combination of both personality and environment (Wilson and McCarthy, 2011).

**Conclusion**

Although no significant interaction was found for psychopathy, it was observed that Business Management students scored higher on psychopathy, with important conclusions made in relation to empathy and deception. This research is highly prominent, as it has examined psychopathy in a context, which has yet to receive an extensive exploration by research. As corporate psychopathy is a relatively new area of research, it is anticipated that the findings of the current study will provide valuable insights into this issue and emphasize the importance for future research to be conducted in this area of psychopathology, particularly in corporate settings. Moreover, as aforementioned, it is imperative that the process of recognition and devaluation of psychopathic traits commences within university degrees and corporations, as if this fails to happen, the ramifications to corporations and society will be catastrophic.
References


International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (No Date) [Online] [accessed 2nd November 2014] http://ipip.ori.org/


