

**Examining the Effects of Rater Characteristics and Gender Biases on Ratings of
Psychopathic Traits for Women**

by

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Abstract

The construct of psychopathy among women is not fully understood though research suggests females differ from males in prevalence and manifestation. The etiology of these differences is unknown. The current study aimed to establish if varying client presentation is responsible for differences observed. A sample of 1,054 participants completed prototypicality ratings of psychopathy symptoms using the Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke, Hart, Logan, & Michie, 2012). The participants then rated symptom severity in one of six randomly assigned conditions with vignettes varying by client gender and gender role typical/atypical behaviour. Most of the CAPP items and domains were rated more prototypical of male than female psychopathy. However, there were no differences found for symptom severity ratings between the six vignettes. Gender and behavioural presentation of the client did not affect symptom ratings. The current results suggest that gender biases do not have an influence on ratings of psychopathy.

Keywords: psychopathy, female offenders, gender differences, gender biases, prototypicality, symptom severity

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Table of Contents

Abstract ii

Acknowledgements iii

List of Tables vi

List of Appendices vii

Introduction 1

 Psychopathy 2

 Psychopathy and Crime 5

 Female Offenders and Feminist Theory 6

 Psychopathy in Females 6

 Base Rate and Prevalence Issues. 7

 Psychopathy Checklist-Revised Cut-off Scores Among Females 7

 Psychopathy, Gender and Factor Structure. 9

 Gender and the Presentation of Psychopathy. 10

 The Predictive Utility of Psychopathy Scores Among Women 18

 Summary 19

 Diagnostic Accuracy and the Role of Gender Bias 20

 Theories Guiding the Role of Gender Biases in Diagnoses 23

 Methodological Approaches for Assessing Potential Gender Biases in the Diagnosis of
 Personality Disorders 23

 Vignette-based Research for Assessing Gender Bias 24

 Symptom Rating Gender Bias Research Findings. 26

 Combined Vignette and Symptom Rating Research Findings 27

 Rater Characteristics 28

 Summary and Current Study Rationale 29

 Hypotheses 30

Method 31

 Participants 31

 Total 31

 Prototypicality Ratings 32

 Symptom Severity Ratings 34

GENDER BIASES ON RATINGS OF PSYCHOPATHY FOR WOMEN

Measures.....	36
Demographics.....	36
Traditional Masculinity-Femininity Scale.....	37
Gender Role Stereotypes Scale.....	38
Comprehensive Assessment of Psychopathy (CAPP).....	38
Vignette.....	41
Procedure.....	44
Results.....	48
Analyses.....	48
Missing Data.....	48
Prototypicality Ratings.....	48
Symptom Severity Ratings.....	62
Covariates.....	62
Assumptions.....	68
Discussion.....	74
Implications.....	79
Limitations.....	81
Future Directions.....	83
Conclusions.....	84
References.....	86
Appendices.....	102

List of Tables

Table 1. Demographic Variables for Prototypicality Ratings Sample.....	34
Table 2. Demographic Variables for Symptom Severity Sample.....	36
Table 3. Psychopathic Traits Similarities and Differences Among Males and Females.....	43
Table 4. Prototypicality Ratings for CAPP Items Rated More Prototypical of Males.....	50
Table 5. Prototypicality Ratings for CAPP Items Rated More Prototypical of Females.....	52
Table 6. Prototypicality Ratings for CAPP Domains.....	54
Table 7. Differences in Prototypicality Ratings Between Students and Affiliates – Consistent Results.....	56
Table 8. Differences in Prototypicality Ratings Between Students and Affiliates – Inconsistent Results.....	59
Table 9. Differences in Prototypicality Ratings by Students and Affiliates – Domain Scores.....	61
Table 10. Correlations of Potential Covariates with Dependent Variables.....	63
Table 11. Multivariate Results for Individual Covariates.....	65
Table 12. Intercorrelations of Potential Covariates.....	67
Table 13. Symptom Severity Ratings by Vignette Type – Male Prototypical Behaviour.....	70
Table 14. Symptom Severity Ratings by Vignette Type – Female Prototypical Behaviour.....	71
Table 15. Descriptive Statistics for Symptom Severity Ratings by Students and Affiliates.....	73

List of Appendices

Appendix A: Demographics Questionnaire.....102

Appendix B: Traditional Masculinity-Femininity Scale (TMF).....103

Appendix C: Gender Roles Stereotypes Scale (GRSS).....104

Appendix D: Comprehensive Assessment of Psychopathic Personality (CAPP).....105

Appendix E: Male Gender Male Prototypical Behaviour Vignette.....106

Appendix F: Female Gender Female Prototypical Behaviour Vignette.....108

Appendix G: Male Gender Female Prototypical Behaviour Vignette.....110

Appendix H: Female Gender Male Prototypical Behaviour Vignette.....112

Appendix I: Gender Blind Male Prototypical Behaviour Vignette.....114

Appendix J: Gender Blind Female Prototypical Behaviour Vignette.....116

Appendix K: Ethics Certificate.....119

Appendix L: American Psychology Law Society (APLS) Recruitment Notice.....121

Appendix M: Affiliate Email Recruitment Notice.....122

Appendix N: Student Recruitment Notice.....124

Appendix O: Student Consent Form.....125

Appendix P: Affiliate Consent Form.....128

Appendix Q: Prototypicality Ratings Form.....130

Appendix R: Symptom Severity Ratings Form.....133

Appendix S: Student Debriefing Form.....135

Appendix T: Affiliate Debriefing Form.....138

Introduction

Much of what is known about criminal offending has been obtained from research with male offenders and then generalized to female offenders. However, feminist scholars have consistently demonstrated that there is merit to the argument that female offenders differ from males in a number of ways, including their pathway into the justice system (Daly, 1992; Belknap & Holsinger, 2006; Jones, Brown, Wanamaker, & Greiner, 2014). Similarly, psychopathy in females is not fully understood as the current conceptualization and accompanying assessment measures have been developed based on research with mainly male samples. Subsequent research suggests that psychopathy may be less prevalent, manifest differently, and may overlap more frequently with other personality disorders in females when compared with males (Cale & Lilienfeld, 2002; Salekin, Rogers, & Sewell, 1997; Sevecke, Lehmkuhl, & Krischer, 2009). It has been posited that current measures for assessing psychopathic traits may not fully capture the construct of female psychopathy given observed differences (Caceres, 2014). However, another explanation for the differential findings is potential gender biases in the ratings of psychopathic criteria and formal diagnoses.

Widiger and Spitzer (1991) identified a number of ways that gender bias can influence diagnosis such as through diagnostic criteria, clinician biases, self-report inventory assessments, participant sampling, or etiological factors. Gender biases have been known to affect personality disorder diagnoses (Davidson & Abramowitz, 1980; Ford & Widiger, 1989; Fuller & Blashfield, 1989; Hamilton, Rothbart, & Dawes, 1986; Morey & Ochoa, 1989; Samuel & Widiger, 2009; Warner, 1978) and psychopathy may be no exception. To develop a clear conceptualization of psychopathy in women, which has yet to be consistently characterized, the features and diagnostic clarity of female psychopathy must be fully established. In order to do this, gender

bias must be ruled out as a potential cause for the differences found among males and females. Consequently, the purpose of the current study was to determine if pre-existing gender biases and rater characteristics (i.e., gender, age, ethnicity, gender roles, knowledge of psychopathy) contribute to how female psychopathy is conceptualized in two samples: members of a professional organization in psychology and subject-matter researchers (affiliates) and first- and second-year psychology students (students). This will be accomplished by assessing differences in psychopathy symptom prototypicality ratings for males and females using a hypothetical vignette approach. Additionally, differences in symptom severity ratings between male and female psychopathic behaviour will be assessed.

The main goal of the current literature review is to provide a snapshot of the current state of the research on the construct of psychopathy while demonstrating how findings relating to psychopathy in females are lacking. First, the construct of psychopathy will be introduced, followed by a discussion of the link between psychopathy and criminal behaviour. Next, discussion will focus on how feminist theory attempts to explain criminal behaviour among females, followed by the empirical findings related to psychopathy in females. A discussion of what is known regarding hypothesized gender biases within ratings of psychopathy will follow. It will become evident that there is a clear need for a more accurate depiction of female psychopathy. Next, the fallibility of diagnoses and the importance of diagnostic accuracy will be discussed. Two competing theories accounting for gender biases within diagnoses will be introduced. Methodological approaches to assessing gender biases, followed by applicable research findings and their relation to the competing theories will provide a rationale and direction for the current study.

Psychopathy

The concept of ‘psychopathy’ became much more ubiquitous with the publication of *The Mask of Sanity*, a landmark book on the subject, written by Hervey Cleckley in 1941. Cleckley (1941) characterized the psychopath as a deviant individual capable of presenting themselves as a socially acceptable and well-functioning member of society. Though appearing intelligent and charming, these individuals often lacked many basic human characteristics and emotions. Cleckley described them as antisocial, insincere, immoral, manipulative, and lacking in remorse and shame for their actions. The fifth edition of Cleckley’s work (1976) incorporated two female cases. While psychopathy was still relatively new and under-researched at this time, this suggests female psychopathy may not be as rare as current research suggests. Cleckley’s work remains incredibly influential to this day and the general essence of his psychopathic personality remains intact, though with slight modifications over the years as the empirical research base grows.

Building upon Cleckley’s work, Dr. Robert Hare, a prominent Canadian psychologist, began the development of a checklist to assess psychopathic traits. Now in its’ second edition, The Hare Psychopathy Checklist-Revised (PCL-R; Hare, 2003) is now one of the most widely used tools for assessing psychopathic traits in clinical and forensic populations and is used in a multitude of settings including psychiatric facilities, correctional facilities, and legal settings. Other versions include the Psychopathy Checklist: Screening Version (PCL:SV; Hart, Cox, & Hare, 1995) and the Psychopathy Checklist: Youth Version (PCL:YV; Forth, Kosson, & Hare, 2003). Hare’s conceptualization involves a two-factor structure with four facets: interpersonal difficulties, affective deficits, impulsive lifestyle, and antisocial tendencies. This factor structure is particularly influential in the current description of psychopathy which is known as a personality pattern characterized by affective and emotional deficits, interpersonal difficulties, impulsive behaviour, and antisocial tendencies (Cleckley, 1941; Hare, 1996).

The Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke, Hart, Logan, & Michie, 2012) is a relatively new and innovative approach to defining the core characteristics of psychopathy. The CAPP first appeared in 2004 as the Comprehensive Assessment of Psychopathic Personality – Institutional Rating Scale (CAPP-IRS; Cooke et al., 2004), though this version is unpublished. The CAPP is most often mentioned and referenced as the 2012 version, which will be used in the current study. The CAPP uses a concept map approach to psychopathy and was developed based on a large-scale literature review and consultation with subject matter experts. Identified symptoms of psychopathy were translated into plain language for clarity, greater utility and efficiency. The 33 symptoms are presented as descriptive adjectives or short adjectival phrases and are grouped into six personality domains: *Attachment*, *Behavioural*, *Cognitive*, *Dominance*, *Emotional*, and *Self*. The *Attachment* domain encompasses items indicative of interpersonal relationship and intimacy difficulties, as well as the need for acceptance. The *Behavioural* domain includes items related with the organization of goal-oriented activities, behaviour regulation, and adaptive strategies. The *Cognitive* domain contains items associated with mental actions and processes, including flexibility and adaptability. The *Dominance* domain assesses interpersonal style through status seeking, assertiveness, power, and control. The *Emotional* domain reflects mood regulation and affective responses. The final domain of *Self* contains items relating to identity and personal sense of self.

While psychopathy has long been recognized as a personality pattern, it is not a diagnosable disorder in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed; DSM-5; American Psychiatric Association [APA], 2013). The DSM-5 (APA, 2013) is the fundamental guide to diagnosing personality and mental disorders, used by health care and mental health professionals. It includes personality disorders in Sections II and III. Section II retains the prior

categorical approach to diagnosing personality disorders while Section III introduces a new dimensional model for these disorders which is considered emerging and requiring additional empirical research (Few, Lynam, Maples, MacKillop, & Miller, 2015). In the current DSM, psychopathy is only included in Section III under antisocial personality disorder (ASPD) as a ‘specifier’ (Few et al., 2015). Both disorders share many traits, with correlations between the disorders ranging from .35 to .69 for the total score of the PCL-R (Hildebrand & de Ruiter, 2004; Klipfel, Garofalo, & Kosson, 2017; Warren & Burnette, 2013). ASPD is differentiated by more observable behavioural manifestations while psychopathy is more focused on personality traits and interpersonal style (Few et al., 2015; Hare, Hart, & Harpur, 1991). For the purposes of this study, the term psychopathy will be used.

Psychopathy and Crime

Psychopathy is often associated with criminal justice involvement. The reason for this is the high rates of criminal behaviour among this group which is reflective of the antisocial, deviant lifestyle they often lead. Offenders with higher levels of psychopathic traits have been found to commit more crime, recidivate more frequently, and exhibit greater criminal versatility and violence in the commission of their crimes when compared with lower levels (de Vogel & Lancel, 2016; Dyck, Campbell, Schmidt, & Wershler, 2013; Fix & Fix, 2015; Laurell & Daderman, 2005; Porter, Birt, & Boer, 2001). An extended follow-up study of psychopathic sex offenders found that those higher on psychopathy were more likely to recidivate and recidivate more seriously than those with lower scores (Barbaree, 2005). A meta-analysis of various risk assessment measures found a mean effect size of $r = .24$, demonstrating a small to moderate ability of the PCL/PCL-R to predict violent recidivism (Campbell, French, & Gendreau, 2009). Similarly, a meta-analysis of multiple risk assessment tools found that the overall PCL-R,

PCL:SV, and PCL-R/PCL:SV Factor 2 scores were predictive of violence, $AUC = 0.65$, $AUC = 0.68$, and $AUC = 0.67$, respectively (Yang, Wong, & Coid, 2010).

Female Offenders and Feminist Theory

Much research has demonstrated that female offenders differ from their male counterparts in many ways. Those supporting a feminist pathways approach often attribute female criminal involvement to circumstances that contribute to the oppression of women such as economic marginalization, poverty, as well as lack of access to government funding and community resources (Jones et al., 2014). The patriarchal nature of society, along with prescribed gender roles, have placed women in positions that increase vulnerability to victimization, economic marginality, and the need for survival that ultimately drive women to criminal activity (Steffensmeier & Allan, 1996). A number of pathways to female crime have been identified and they generally focus on prior victimization, intimate relationship difficulties, and coping mechanisms characterized by substance misuse as catalysts for criminal involvement (Daly, 1992; Salisbury & Van Voorhis, 2009). However, it is important to note that not all justice-involved females appear to follow a gendered path into the criminal justice system, but an equal number have been found to follow a more gender-neutral antisocial pathway into crime (Jones et al., 2014). The above results demonstrate that many female offenders differ from their male counterparts, validating the need to assess females separately. As psychopathy is often associated with criminal involvement and female offenders differ from their male counterparts in many respects, it stands to reason that the crime-committing psychopathic female may differ from the male equivalent.

Psychopathy in Females

Psychopathy in females is not very well understood as it has not been studied as extensively as it has in male populations. The most consistent findings are that psychopathy appears to be less prevalent in females, females score lower on psychopathy scales, and females may have different presentations of psychopathy than males (Cale & Lilienfeld, 2002; Hazelwood, 2006; Salekin et al., 1997; Sevecke et al., 2009). Additionally, there is mixed evidence regarding the predictive utility of psychopathy instruments for violence and recidivism in females. Each of these proposed differences will be discussed in turn.

Base Rate and Prevalence Issues. Prevalence of psychopathy in the general population has been estimated to be around 1%, and 15% to 30% for male offender populations (Hare, 1991, 1995, 2003). Many studies with female offenders have found base rates ranging from 6% to 10% when using the PCL-R cut-off of 30 (Jackson, Rogers, Neumann, & Lambert, 2002; Vitale, Smith, Brinkley, & Newman, 2002; Weizmann-Henelius et al., 2010). Others have found much lower rates ranging from 0% to 1.9% (Logan & Blackburn, 2009; Rutherford, Cacciola, Alterman, & McKay, 1996; Coid et al., 2009). Strachan (1993) found a remarkably higher prevalence rate among female offenders with an overall base rate of 31%, with maximum security females exhibiting higher prevalence when compared with medium and minimum-security females. A systematic review assessing the prevalence and structural composition of psychopathy in criminal justice involved and forensic psychiatric females confirmed these results, finding large discrepancies in prevalence rates, varying dependent on sample setting and security level (Beryl, Chou, & Vollm, 2014).

Psychopathy Checklist-Revised Cut-off Scores Among Females.

The PCL-R (Hare, 2003), the most well-known measure of psychopathy, was developed and validated using male samples. Numerous studies have provided evidence of its applicability

to females, though those studies have raised a number of methodological issues with using the PCL-R in female samples (Vitale et al., 2002). Using the PCL-R, a score of 30 or higher (out of a possible 40) was designated as the original cut-off score to recognize an individual as psychopathic (Hare, 1991; 2003). However, a cut-off score of 25 has been recommended for file-based ratings, research purposes, and is often used as the diagnostic cut-off in Europe (Hildebrand, de Ruiter, & de Vogel, 2004; Olver, Sewall, Sarty, Lewis, & Wong, 2015). Lowering the cut-off score by region may in itself represent a cultural bias as those from other countries may not need to present with the same level of pathology to be labelled a psychopath. Others have suggested that the cut-off score for women should be similarly lowered as well (Falkenbach, 2008; Hicks, Vaidyanathan, & Patrick, 2010; Weizmann-Henelius et al., 2010), and studies with females have utilized this cut-off (Hicks et al., 2010; Nicholls, Ogloff, Brink, & Spidel, 2005). When a cut-off of 25 is used in female criminal justice samples, base rates have been found to more than double, increasing from 9.3% and lower to upwards of 21.9% (Jackson et al., 2002; Weizmann-Henelius et al., 2010). Hicks and colleagues (2010) argue that because females exhibit lower mean scores on the PCL-R, a lower cut-off score is required to obtain adequate sample sizes and equivalent comparison groups of males and females for analyses. Additionally, The Female Additional Manual (FAM; de Vogel, de Vries Robbé, van Kalmthout, & Place, 2012), created to be used in conjunction with the Historical Clinical Risk Management-20 (HCR-20; Webster, Douglas, Eaves, & Hart, 1997) risk assessment tool, utilizes a PCL-R cut-off score of 23 for women. Lowering a cut-off score purely based off gender may be a gender bias within itself as it requires females to exhibit fewer maladaptive behaviours and personality traits to achieve the same designation as a male would. This suggests that females need not be as deviant as males to be considered psychopathic. This relates back to the expectations that

patriarchal society has regarding acceptable behaviour for females. When these norms are violated, it is regarded more negatively because the perpetrator is a female.

Psychopathy, Gender and Factor Structure. Despite the widespread support for Hare's conceptualization and factor structure, Cooke and Michie (2001) argue a three-factor structure is more appropriate as they view the antisocial/criminal behaviour facet should be recognized as a by-product of the disorder rather than a defining feature. However, it is important to note that this three-factor structure has been criticized as the model to create it excluded the antisocial/criminality items (Jackson et al., 2002). Despite this, research with females has demonstrated that the two-factor, four-facet Hare (2003) conceptualization of psychopathy may not capture female psychopathy as well as it does for males (Strand & Belfrage, 2005). Other models of psychopathy do exist, with Cooke and Michie's (2001) three-factor structure being one of the most prominent. Some have found evidence that the factor structure of the PCL-R may remain relatively similar among female and male offenders (Hare, 2003; Warren et al., 2003). While Warren and colleagues (2003) found some evidence that the two-factor Hare (1991) conceptualization may be an acceptable model for female psychopathy, they also found evidence suggesting that the three-factor model proposed by Cooke and Michie (2001) provided the best fit to the data. The three-factor model has found support for use with females elsewhere (Hazelwood, 2006; Strand & Belfrage, 2005).

In a study assessing the factor structure of the Psychopathic Personality Inventory – Revised (PPI-R; Lilienfeld & Widows, 2005), a main goal was validating the factor structure in mixed-gender samples as most studies use exclusively male samples (Anestis, Caron, & Carbonell, 2011). When using the mixed-gender sample, none of the three proposed models (1 factor, 2 factor, 3 factor) provided adequate fit for the data. Though the one- and two-factor

models provided the best model fit, partial invariance across gender was still present. Invariance tests found that allowing each gender to vary in their factor structure by freeing cross-group constraints on problematic items enhanced model fit for the one-factor and two-factor models. These results suggest that generally applying either model to a mixed-gender sample is inappropriate. Similar results have been replicated elsewhere where differing factor structures and factor loadings have been found for females with psychopathic traits (Brinkley, Diamond, Magaletta, & Heigel, 2008; Jackson et al., 2002; Salekin, Rogers, & Sewell, 1997; Strachan, 1993; Strand & Belfrage, 2005; Weizmann-Henelius et al., 2010).

Gender and the Presentation of Psychopathy. Research has demonstrated many differences between males and females in the construct of psychopathy particularly in regards to interpersonal and behavioural items (Kreis & Cooke, 2011). For example, it has been found that females with psychopathy offend more due to relational frustration, exhibit less physical violence, and exhibit more manipulative and self-destructive behaviour than males (de Vogel & Lancel, 2016). Similarly, psychopathic females have been regarded as less grandiose but more emotionally unstable than psychopathic males (Hazelwood, 2006; Kreis & Cooke, 2011). Additionally, while psychopathic males are considered more physically aggressive, psychopathic females are believed to use more relational aggression and impression management, as well as sexual seduction to manipulate others for their own gain (Kreis & Cooke, 2011). Differences have been observed using multiple research approaches and methods of comparison. Three of these will be discussed in turn: primary/secondary variants, item response theory (IRT)/differential item functioning (DIF), and prototypicality studies.

Some researchers have disaggregated psychopathy into primary and secondary variants. Primary psychopathy is explained through a genetic pre-disposition to emotional deficits such as

lacking empathy or a fear response, coupled with manipulation, callousness, and calculated actions (Cleckley, 1941; Karpman, 1941; Lykken, 1995). Secondary psychopathy is often explained through environmental influences disrupting healthy development and resulting in emotional dysregulation and impulsivity, leading to antisocial behaviour (Blackburn, 1975; Glaser, 2013; Karpman, 1941, 1948). The secondary variant has been closely linked with borderline personality disorder (BPD) as they share similar characteristics and symptomatology (Blackburn, 1996; Glaser, 2013).

Among adolescents with high psychopathic traits, females were three times more likely to be identified with secondary psychopathy than primary psychopathy while no significant difference between the variants was found for males (Nelson, 2016). Other research with justice-involved adolescents has demonstrated that a history of child protective services involvement was correlated with the behavioural facet of psychopathy for females, but correlated with the interpersonal facet for males, suggesting different expressions in externalizing distress (Strand, Luebbers, & Shepherd, 2016).

Item response theory (IRT) is a method used to determine differences in item and test functioning while remaining unaffected by comparison group differences in the underlying trait distributions (Embretson & Reise, 2000). Differential item functioning (DIF) is believed to be present when there are differences in the relationship between an overall trait and the individual item scores that comprise the overall trait across populations. DIF is important to establish as it is a measure of validity, such that items demonstrating DIF may be of questionable validity and potentially introduce bias into the total score (Bolt, Hare, Vitale, & Newman, 2004). It is possible that items exhibiting DIF are affected by extraneous factors unrelated to the item being measured (Bolt et al., 2004). IRT-based DIF studies can help determine whether individual items

manifest at different levels of the target disorder (i.e. psychopathy) across different populations. In other words, this method can help determine whether patterns of psychopathic traits vary when individuals receive the same total score on a measure such as the PCL-R.

Contrary to prior research findings that females differ more on the affective/interpersonal items, Bolt and colleagues (2004) found that males and females differed mostly on items associated with the antisocial/behavioural symptoms. For male and female offenders with the same latent levels of psychopathy, females scored lower on the PCL-R items: *Early behaviour problems*, *Juvenile delinquency*, and *Criminal versatility* and higher on the item *Conning/manipulative*, all with large differences observed. When observing DIF at the factor structure level, PCL-R Factor 1 items (interpersonal/affective) demonstrated less DIF than Factor 2 items (behavioural/lifestyle), with facet 4 (antisocial) consistently producing lower scores for females. Elsewhere, facet 4 has failed to be considered representative of female psychopathy, showing no substantial difference in prototypicality ratings from other personality disorders (Hazelwood, 2006). These results suggest that Factor 1 items may be more central to the concept of psychopathy as they appear to exhibit less DIF, with Factor 2 less informative and less representative of female psychopathy (Bolt et al., 2004; Hazelwood, 2006). The inability of the antisocial items in representing female psychopathy provides further support for Cooke and Michie's (2001) three-factor model for women (Hazelwood, 2006).

In using the PCL:SV among male and female forensic psychiatric patients and offenders, Strand and Belfrage (2005) found that males scored significantly higher than females on seven items: *Superficial*, *Grandiose*, *Lacks remorse*, *Lacks empathy*, *Lacks goals*, *Adolescent antisocial behaviour*, and *Adult antisocial behaviour*. The females scored higher on two items: *Impulsive* and *Poor behavioural control*. When comparing the males and females who met or exceeded the

cut-off to be diagnosed as a psychopath, males scored significantly higher on the items *Adolescent antisocial behaviour* and *Adult antisocial behaviour* while females scored significantly higher on *Deceitful* and *Poor behavioural control*. Additionally, five items from the PCL:SV were found to exhibit Differential Item Functioning (DIF): *Poor behavioural control*, *Impulsivity*, *Adolescent antisocial behaviour*, *Lacks remorse*, and *Adult antisocial behaviour* with females scoring higher on *Impulsive* and *Poor behavioral controls*. These results are in contrast to Bolt and colleagues (2004) as these behavioural/lifestyle items were scored higher for females, further demonstrating the uncertainty characterizing the conceptualization of the psychopathic female.

The second approach to establishing gender differences in psychopathy is prototypicality studies. A prototype is considered the gold standard of a concept and is used for comparison purposes – the closer you are to the prototype, the more reflective you are of the underlying concept (Rosch, 1978). Prototypicality studies are useful for identifying the central characteristics of an underlying concept, which is a useful starting point for identifying gender differences in the presence of psychopathy. Prototypicality studies are often used in two ways; ratings are based on either a general perception of a concept or based on a single representative case formulation (Hazelwood, 2006). In terms of a general concept, participants are provided with a list of symptoms and they are asked to rate how prototypical each symptom is for the target disorder. When based on a single case, prototypicality ratings involve rating each symptom according to how prototypical it is of a particular individual.

As discussed previously, prototypicality studies are often used for identifying the central characteristics of an underlying concept. Additionally, prototypicality studies are also useful in establishing gender differences within disorders. In a prototypicality study, Hazelwood (2006)

asked 242 forensic psychologists and mental health workers with professional experience with psychopathic offenders to think of their most prototypical male or female psychopathy case. They were then asked to rate this client on various personality disorder criteria (antisocial, borderline, histrionic, narcissistic) from the DSM-IV-TR (American Psychiatric Association, 2000) and the PCL-R (Hare, 2003). Using their one chosen case, participants rated the list of traits based on how representative of psychopathy each trait was. Items were rated on a 7-point Likert scale with 1 (*not at all representative*), 4 (*moderately representative*), and 7 (*highly representative*). It was hypothesized that item ratings of prototypical psychopathy traits would differ significantly across gender. In line with prior research on adolescent psychopathy (Cruise, Colwell, Lyons, & Baker, 2003; Salekin, Rogers, & Machin, 2001), it was expected that the *Promiscuous sexual behaviour* item would be rated more prototypical of females and the violent antisocial behaviour and early behaviour problems items would be rated more prototypical of males. It was also expected that Hare's (2003) four PCL-R facets would be rated as significantly more prototypical than the other personality disorder criteria, with prototypicality ratings more similar to antisocial personality disorder (APD) ratings.

As expected, prototypicality ratings of items did differ by gender. At the item level, it was found that males were rated significantly higher on several PCL-R, antisocial, and narcissistic criteria while females were rated significantly higher on histrionic and borderline criteria. The females were rated higher on items reflective of attention seeking, dramatic demeanor, and instability while the males were rated more highly on items reflective of grandiosity, callousness, and arrogance. At the facet and overall disorder level, males were rated significantly higher on PCL-R facets 1, 2, and 4 and APD, while females were again rated significantly higher on histrionic and borderline disorders.

Counter to the hypotheses, the promiscuous item was rated similarly for males and females; though interestingly, females were rated significantly higher on the histrionic criteria item related to inappropriate provocative behaviour. Counter to past research, the aggression, violence, and early behaviour problem items were not differentiated by gender, though the PCL-R juvenile delinquency and the APD conduct disorder items were found to be less representative of females. This suggests females may exhibit similar early behaviour problems as males, but with lessened severity into adolescence; a finding that is consistent with past theorizing and research about gender differences (Keenan & Shaw, 1997). Whether the reported gender differences in prototypicality ratings were real or a function of potential gender biases cannot be discerned based on the current methodology because participants were explicitly asked to think about a prototypical female and a prototypical male and rate them accordingly. Rater characteristics such as gender, primary professional setting, primary client population, and years of experience were assessed for their influence on prototypicality ratings, though no variable proved influential.

Kreis and Cooke (2011) used a prototypicality study with 132 mental health professionals experienced in working directly with psychopathic individuals to explore potential gender differences in psychopathy and to validate the Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al., 2012) across gender. Participants rated the 33 CAPP symptoms and nine foil symptoms unrelated to psychopathy. Participants rated the prototypicality of each symptom in relation to psychopathy at a general level (both males and females) on a seven-point scale with 1 (*more prototypical of psychopathy in men*), 4 (*equally prototypical of psychopathy in both genders*), and 7 (*more prototypical of psychopathy in women*) as anchor points. Participants were then asked to rate the prototypicality of each symptom in relation to a single

chosen client who exhibited the clearest and most representative presentation of psychopathy (male or female). Symptoms were again rated on a seven-point Likert scale with 1 (*low prototypicality*) and 7 (*high prototypicality*) as anchor points. At the general level, 25 CAPP symptoms were rated as more prototypical of psychopathic males compared with females, with 24 of those demonstrating significant differences. Only three symptoms were rated as significantly more prototypical of psychopathy in females when compared with males: *Lacks emotional stability*, *Unstable self-concept*, and *Manipulative*.

When using a specific client to rate prototypicality, 21 symptoms were rated high in prototypicality for females and 24 were rated high for males. When compared, gender differences were few, though mirrored the results found at the general level. Four CAPP symptoms were rated significantly more prototypical of psychopathy in males, though these same four items were still rated highly prototypical for both genders: *Self-centered*, *Aggressive*, *Self-aggrandizing*, and *Disruptive*. In other words, these four items appear to be highly prototypical of psychopathy for both genders, but significantly more for males. Two CAPP items were rated significantly more prototypical of female clients: *Lacks emotional stability* and *Unstable self-concept*. *Lacks emotional stability* was rated highly prototypical for females only, but *Unstable self-concept* was not rated highly prototypical for either gender. In other words, *Lacks emotional stability* may be particularly salient to female psychopathy. Though *Unstable self-concept* may be only moderately prototypical of psychopathy in general, it appears more salient for females. While the *Unstable self-concept* item has been found to be a weaker item in the CAPP (Kreis, Cooke, Michie, Hoff, & Logan, 2012), it appears it may be useful for female psychopathy. Based on the findings, Kreis and Cooke (2011) posit the female psychopath may be more manipulative, self-centered, uncaring, self-entitled, and unstable than men. This study

suffers from the same limitations as Hazelwood (2006), as raters chose the client to rate. Again, rater gender was assessed with no significant differences. Kreis and Cooke (2011) attempted to assess female client experience but did not have adequate power for analyses. Participants completed the questionnaires on their own and returned them at conferences or through mail. There is no information to suggest that the two ratings (general, specific) were counter-balanced to account for order effects. It is possible that assessing the gender prototypicality of psychopathy symptoms in general could have influenced their decision of which client to choose as well as impacted ratings of prototypicality.

In exploring gender differences in conceptualizations of psychopathic personality disorder (PPD) and borderline personality disorder (BPD), Viljoen and colleagues (2015) assessed prototypical ratings using the Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al., 2004, 2012) and the Comprehensive Assessment of Borderline Personality (CABP; Cook et al., 2013). Similar to Kreis and Cook (2011), Viljoen and colleagues (2015) sought to determine the extent to which mental health professionals perceive symptoms of PPD and BPD as more prototypical of males or females as conceptualized in the CAPP and CABP. The CABP is an analogue to the CAPP (described above) but developed for BPD. It consists of 27 symptoms grouped into the same six domains of the CAPP: *Attachment, Behavioural, Cognitive, Dominance, Emotional, and Self*.

The final sample included 119 mental health professionals/trainees. The CAPP and CABP symptoms were amalgamated into one list of 58 symptoms for participants: 23 psychopathy-only symptoms, 17 borderline-only symptoms, 10 overlap symptoms appearing for both disorders, and 8 items considered to be unrelated to both disorders, otherwise known as 'foil' items. The participants were provided with one target disorder (PPD or BPD) and asked to

rate the overall prototypicality of each symptom with respect to the target disorder and to rate the gender prototypicality of the symptoms with respect to the target disorder. Most of the symptoms of PPD, including those shared with BPD (overlap symptoms) were rated more prototypical of males regardless of whether the target disorder was specified as psychopathy or borderline, though they were rated particularly prototypical of males with PPD. Many of the symptoms of BPD (mainly borderline-only symptoms) were rated more prototypical of females regardless of whether the target disorder was specified as BPD or PPD, with some rated particularly prototypical of females with BPD. Most of the unrelated 'foil' symptoms were not strongly gendered. These results suggest that the majority of PPD and BPD symptoms are gendered, especially for psychopathy where most of the symptoms were rated as more prototypically male.

The Predictive Utility of Psychopathy Scores Among Women. The predictive utility of psychopathy has been less consistent for females than has been found for males. Among a sample of maximum-security female prisoners, psychopathy was significantly associated with more institutional infractions and fewer incident-free days prior to recidivism after release (Richards, Casey, & Lucente, 2003). Similarly, assessing violence among civil psychiatric patients, the PCL:SV demonstrated a moderate, significant relationship with female inpatient violence, though a moderate non-significant relationship for males (Nicholls, Ogloff, & Douglas, 2004). Additionally, the PCL:SV demonstrated small to moderate significant relationships with community violence for both females and males over a two-year follow-up. The PCL:SV total score *AUCs* for inpatient violence, community violence, and post-release crime were more often higher and significant for females ($AUC = .51 - .92$) compared to males ($AUC = .59 - .71$). The PCL:YV total score has been found to demonstrate moderate predictive accuracy for general recidivism among male and female youth (Scott, 2017). For violent recidivism, it was found to

predict only for the females. The PCL-R/PCL:SV Factor 1 scores have been found to not be predictive of violence for men but did demonstrate a small but significant effect for predicting violence risk among women (Yang et al., 2010). Similarly, a large meta-analytic study found that the PCL-R Total and Factor 1 scores demonstrated stronger effect sizes for predicting antisocial behaviour when females were included in the sample (Leistico, Salekin, DeCoster, & Rogers, 2008). On the contrary, research has demonstrated that the PCL-R total score and Hare's two- and four-factor model scores were not predictive in assessing risk of violent recidivism in a sample of violent female offenders (Weizmann-Henelius, Virkkunen, Gammelgård, Eronen, & Putkonen, 2015). Additionally, a meta-analysis of youth psychopathy and criminal recidivism found the majority of studies reported small nonsignificant effect sizes for females (Edens, Campbell, & Weir, 2006). The above results demonstrate that the evidence is mixed for the predictive utility of psychopathy diagnoses for female offenders, highlighting some of the potential instability with this construct for females.

Summary. In sum, the research to date suggests that females may have different presentations of psychopathy. These findings are questionable in that it is unknown if this is due to true differences in manifestation or possibly due to gender biases disrupting accurate assessment. Some of the above studies assessed rater characteristics such as gender, primary professional setting, primary client population, years of experience, and female client experience, though none proved influential on the results or power was inadequate to detect differences. However, it must be acknowledged that raters were asked to think of their most prototypical client and rate the symptoms based on that client. This method may have introduced a level of bias as individual participants' conceptualizations of a "prototypical psychopath" may be distorted by selection bias, professional experience, personal experience, or personal biases. The

number of differences found between male and female psychopaths underscores the need to determine if they are due to true gender differences in the disorder or attributable to other causes. Additionally, the mixed evidence regarding the predictive utility of psychopathy scores for females is concerning as psychopathy scores are often used for risk assessments, even though the scales were not intended for such a purpose.

Feminist criminologists have argued that the labelling of women as inherently different than their male counterparts is attributable to the *perception* of women as more emotional, manipulative, and irrational than men (McCorkel, 2003; Pollack, 2005). Therefore, it is essential to determine the true cause of gender differences found among those with psychopathy

Diagnostic Accuracy and the Role of Gender Bias

The diagnosis of clinical disorders involves a degree of subjectivity that leaves room for interpretation, disagreement, and misdiagnosis. One of the most infamous studies on the accuracy of clinical diagnosis involved a sample of eight psychologically healthy individuals (Rosenhan, 1973). The participants presented themselves at various hospitals claiming to be experiencing auditory hallucinations. Aside from verbally stating the presence of hallucinations, they presented as otherwise healthy and denied the presence of additional symptoms. Seven out of the eight participants were admitted to the hospitals with a diagnosis of schizophrenia. They remained at the hospitals for periods ranging from 7 to 52 days. When released, they all received a diagnosis of schizophrenia in remission; no participant was identified as being mentally healthy during their hospital stay. While this study is dated, misdiagnosis is still evident to this day.

Assessing the apparent underdiagnosis of bipolar disorder, it was found that less than half of those previously diagnosed met the criteria when using the Structured Clinical Interview for DSM-IV (SCID), a comprehensive diagnostic interview (Zimmerman, Ruggero, Chelminski, &

Young, 2008). In a study comparing the use of clinical judgement with checklists in the diagnostic process, checklists resulted in more accurate diagnoses (Cwik, Papen, Lemke, & Margraf, 2016). When clinical judgement was used, therapists were more likely to diagnose a comorbid disorder in addition to the target disorder.

Aside from subjective judgement and differences among assessments, another explanation for differences found in diagnoses is due to gender bias. Gender bias occurs when differences observed between genders in assigned diagnoses is due to prejudices and prejudgements within clinicians, rather than true gender differences (López, 1989). In experimental research, the presence of gender bias is often explored by presenting case studies to clinicians for assessment while manipulating the patient variable of interest, such as gender. In archival research, patient files are used to gather relevant information and statistical methods are used to control for certain variables to ensure levels of psychopathology are similar across patients. Analyses are then conducted to determine if the variable of interest, such as gender, is responsible for any differences observed.

The belief that personality disorders are diagnosed differentially based on gender has been explored. Kaplan (1983) believed that diagnostic criteria is particularly affected by gender bias as she argued masculine-biased assumptions classifying which behaviours are healthy and normal as opposed to unhealthy and deviant are codified in diagnostic criteria via the Diagnostic and Statistical Manual of Mental Disorders (DSM). For example, the personality disorders that are more often diagnosed in women (e.g. Histrionic, Dependent) are composed of criteria considered more inherently feminine such as ‘self-dramatization’, ‘irrational, angry outbursts’, and ‘inability to function independently’ (Kaplan, 1983). Under-diagnosis and over-diagnosis of disorders has been found to be particularly evident among female diagnoses (Crosby & Sprock,

2004). Clinicians appear to base diagnoses on the gender weightings of particular disorders; that is, disorders associated more often with females are over-diagnosed in females while disorders associated more often with males are under-diagnosed in females (Crosby & Sprock, 2004). In studies assessing gender biases within diagnoses, it has been found that when an individual presents with subthreshold symptoms of multiple disorders, gender does have an effect on the diagnosis given (Braamhorst et al., 2015). More specifically, when a patient presented with subthreshold levels of borderline (BPD) and narcissistic personality disorder (NPD) symptoms, gender influenced the diagnosis provided with females receiving more borderline diagnoses than males. Additionally, BPD was assigned less often than NPD for males. The dependent, histrionic, borderline, and antisocial personality disorders have been consistently criticized for exhibiting evidence of gender bias (Ali, Caplan, & Fagnant, 2010). Therefore, it is possible psychopathy may be no exception.

Labelling an individual as a ‘psychopath’ or ‘psychopathic’ is associated with mostly negative connotations and has been found to result in higher ratings of future dangerousness, harsher sentence recommendations, lower credibility ratings, higher guilt ratings, and higher ratings of risk (Blais & Forth, 2014). Following the publication of a controversial study on the treatment of psychopaths, many believe they are untreatable or that treatment can actually make them worse (Rice, Harris, & Cormier, 1992). Therefore, not only does the diagnosis of psychopathy negatively impact how an individual is viewed by others, it can also affect the perception of treatment amenability. Using lower cut-off scores for females could potentially result in a psychopathy label applied more often and erroneously, with detrimental consequences. Therefore, diagnostic accuracy is especially important where psychopathy is concerned, especially for females.

Theories Guiding the Role of Gender Biases in Diagnoses

Two hypotheses have been presented to explain hypothesized gender biases in the assessment of psychological-based diagnoses. First, the sex-role-consistency hypothesis suggests that diagnoses are based on traditional gender roles, that is females more often receive diagnoses of disorders considered to be very feminine whereas males more often receive diagnoses of disorders considered to be more masculine (Crosby & Sprock, 2004). In contrast, the sex-role-inconsistency hypothesis suggests that individuals presenting with symptoms considered to be more inconsistent with traditional gender roles are often rated as more pathological (Rosenfield, 1982; Sprock, 1996). This suggests that individuals would receive a diagnosis more often associated with the opposite gender (e.g. a female exhibiting symptoms more often associated with a masculine disorder would receive the diagnosis for the masculine disorder because they are rated more harshly due to the inconsistencies of the behaviours they exhibit with their biological gender). The two hypotheses are contradictory in nature and in need of further testing (Crosby & Sprock, 2004).

Methodological Approaches for Assessing Potential Gender Biases in the Diagnosis of Personality Disorders

Potential gender biases among personality disorders have been assessed using two methodological approaches: hypothetical vignettes and symptom ratings. Vignettes are written case descriptions intended to be representative of the core characteristics of a specific psychological disorder. Vignette studies often use two identical vignettes, differing only in gender, to assess gender biases. Other vignette studies utilize many conditions, manipulating gender as well as sex-role typical/atypical behaviour, and include a gender unknown condition.

Participants are often asked to identify the disorder(s) depicted in the vignette under the various conditions, either through open-ended responses or forced-choice options.

The second approach involves using symptom ratings to assess the degree to which a particular symptom is considered to be abnormal for a given gender. If two patients (one male, one female) present with the same symptoms and same symptom severity, they should be rated identically. Essentially, evidence in support of the sex-role inconsistency bias emerges if symptoms that are considered to be inconsistent with the patient's gender are rated as more severe and a diagnosis of a personality disorder is more likely. For example, if a female presented with a complete lack of empathy, she may be rated more pathological than a male exhibiting the same symptom severity because lacking empathy is in contrast with gender-role stereotypes of females as caring and emotional.

Vignette-based Research for Assessing Gender Bias. Vignette studies have been known for supporting the sex-role-consistency (Crosby & Sprock, 2004). This effect has been supported in a number of vignette-based studies that have specifically examined PPD and gender, which will be discussed in turn.

Caceres (2014) used two identical case vignettes, differentiated only in respect to gender, to assess if the PCL:SV is rated differently based on vignette gender. The sample consisted of 20 clinical forensic psychology students. The vignette was written to be representative of psychopathy, though with moderate levels of psychopathic traits. It was written based on prior research of psychopathy, seemingly gender-neutral in nature. One group received the male vignette while the other received the female version. Both groups scored the Psychopathy Checklist: Screening Version (PCL:SV; Hart et al., 1995) based on the vignette and a one-way between MANOVA was followed by univariate tests to determine differences in ratings. It was

hypothesized that participants would assign lower PCL:SV scores to the female vignette than the male vignette. The results found that participants did rate the female vignette lower than the male version, but the difference was only significant for the items *Grandiosity* and *Adolescent antisocial behaviour*. Additionally, many participants endorsed the belief that gender does influence the assessment of psychopathy. As psychopathy is considered more prevalent in males and the criteria are considered more masculine, these results support the sex-role-consistency hypothesis as females were rated lower despite exhibiting the same symptoms and severity. However, it is important to note that there was no gender-blind condition and the researchers did not assess the influence of rater characteristics, though this may have been impossible given the sample size.

Mosier (2014) explored a new frontier by assessing the impact of gender biases in the assessment and diagnosis of personality disorders for homosexual individuals, who may be more detrimentally impacted by gender role biases and stereotypes. The participant sample consisted of 204 students in clinical and counselling psychology doctoral training programs in the United States. Using vignettes, it was hypothesized that those exhibiting traditionally feminine characteristics and symptoms (heterosexual females and homosexual men) would receive more diagnoses of BPD. Additionally, it was expected that those exhibiting more traditionally masculine characteristics and symptoms (heterosexual males and homosexual females) would receive more diagnoses of APD. The vignette utilized portrayed an individual exhibiting symptoms of both BPD and APD; five identical vignettes were used varying only in gender (male/female) and sexual orientation (heterosexual/homosexual) with one gender-blind control condition. After reading the vignette, participants were first asked to provide diagnoses using an open-ended response method and participants could identify more than one diagnosis. Then

participants were asked to choose the diagnosis that was most appropriate for the vignette using a forced-choice list which included BPD and APD, among others. In the open-ended responses, sexual orientation did not demonstrate a significant effect on diagnoses, but gender did. As predicted, female and male vignettes were more often assigned a diagnosis of BPD and APD, respectively. When disaggregated by sexual orientation, heterosexual females received significantly more diagnoses of BPD than heterosexual males. This pattern was observed among homosexual females and males but did not reach significance. With the diagnosis of APD, gender and sexual orientation did affect diagnoses, though the differences did not reach significance. Heterosexual vignettes in general received more diagnoses of APD, with heterosexual and homosexual males receiving the most and least number of APD diagnoses, respectively. The force-choice response diagnoses did not differ. These results support a sex-role-consistency effect as gender did impact diagnoses given, though sexual orientation did not. The sex-role-inconsistency hypothesis was not supported as sexual orientation did not impact diagnoses to a statistically significant degree.

Symptom Rating Gender Bias Research Findings. Sprock (1996) found evidence of the sex-role-inconsistency bias among 60 university students assessing personality disorder criteria. Participants were randomly assigned to three groups and asked to rate the degree to which personality disorder criteria were considered abnormal for a given gender. One condition asked for abnormality ratings for men, a second condition asked for abnormality ratings for women, and a third condition was gender-unspecified. The results demonstrated a significant interaction effect for instruction condition (men, women, gender-unspecified) with 38 symptoms and three personality disorders rated differently among the three conditions. Females were rated significantly higher on abnormality than men for 27 symptoms (15 antisocial, 7 sadistic, 3

narcissistic, 1 borderline, 1 paranoid) and for the overall disorders of antisocial, sadistic, and narcissistic. Males were rated significantly higher on abnormality than women for 2 symptoms (1 dependent, 1 schizoid). Participant gender was found to interact with instruction condition, suggesting gender may have played a role in judging abnormality more strongly for female participants. However, these results failed to replicate in a subsequent study (Sprock, Crosby, & Nielsen, 2001), suggesting the evidence for this hypothesis is inconsistent.

Combined Vignette and Symptom Rating Research Findings. Crosby and Sprock (2004) merged the diagnosis-based vignette approach with the symptom rating approach to test both sex-role hypotheses in one study. Gender bias in antisocial personality disorder (APD) was assessed in a sample of 167 professional psychologists. Participants were given two case vignettes, one featuring the target disorder (APD) and the other featuring a mix of personality disorder symptoms. Both male and female versions of the vignettes were used, participants were aware of gender. A gender-unspecified condition was used to establish baseline diagnostic and symptom ratings for comparisons. Participants were asked rate the representativeness of various Axis I anxiety and mood disorders and Axis II personality disorders for the given case and rate the presence/severity of disordered personality traits from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994). They were also asked to assign one diagnosis from the Axis I/Axis II disorder lists which they considered most representative of the given case. Participants were also instructed to provide confidence ratings for their identified diagnosis and prognosis ratings for the client. While the APD vignette was identical, save for gender, male vignettes received more diagnoses of APD than the female APD vignette, though this difference was not statistically significant. The female vignette received significantly more diagnoses of borderline personality disorder (BPD). Diagnoses assigned to the

female vignette also differed significantly from the gender-unspecified case with the female version receiving fewer antisocial diagnoses and more borderline diagnoses than the gender-unspecified case. Additionally, BPD and histrionic personality disorder (HPD) were rated as more representative for the female vignette compared with the gender-unspecified version. These results support the sex-role-consistency hypothesis.

Rater Characteristics. In addition to vignette and symptom rating differences, some studies have assessed rater characteristics for their potential influence on ratings of psychopathy. In a prototypicality study assessing gender differences in psychopathy presentation, Hazelwood (2006) assessed the influence of rater gender, primary professional setting, primary client population, and years of experience with null findings for all variables. Kreis and Cooke (2011) assessed rater gender and degree of female client experience in a prototypicality study on psychopathy with gender producing no significant findings beyond chance levels. However, the analyses for female client experience lacked power to detect meaningful differences.

Mosier (2014) assessed a large number of rater characteristics as potential covariates on diagnostic ratings of personality disorders including gender, sexual orientation, attitudes toward women, attitudes toward homosexuals, political views, religious views, theoretical orientation, current year in program, number of abnormal psychology courses taken, number of multicultural courses taken, and number of face-to-face client contact hours. The only factor demonstrating a significant effect on diagnoses was year in program with those in the program longer assigning an APD diagnoses more often in the open-ended response. Attitudes toward women did influence borderline personality disorder (BPD) diagnoses among heterosexual vignettes with those holding egalitarian views of women assigning BPD less frequently, though this did not reach significance.

Summary and Current Study Rationale

The above literature review has demonstrated that psychopathy among females may differ from male psychopathy in several ways. Specifically, psychopathy may be less prevalent among females, females may score lower on psychopathy assessments, and females may have different presentations of psychopathy than males. However, there does appear to be inconsistencies in empirical findings relating to all of these proposed differences. Research has demonstrated that some of the above findings may be attributable to gender biases affecting individual item ratings and subsequently the total score as well. As there is a lack of research on female psychopathy, additional research is needed to fully establish the cause of the differential findings and obtain an accurate conceptualization of the psychopathic female. Two competing hypotheses of gender biases have been posited suggesting that 1) females are diagnosed more often with disorders considered to be more common among females and 2) females are rated more harshly on items that are inconsistent with traditional gender role stereotypes. The sex-role-consistency hypothesis has received more empirical support than the sex-role-inconsistency hypothesis suggesting that diagnoses at the disorder level may be more affected by gender stereotypes than individual diagnostic criteria/symptoms (Sprock, 2000). These two theories are contradictory in nature and require further testing as well.

In the current research project, the aim was to replicate and expand on prior research (Crosby & Sprock, 2004; Kreis & Cooke, 2011; Viljoen et al., 2015) using the CAPP to further establish how female psychopathy is conceptualized among laypersons and knowledgeable individuals. Differences in prototypicality ratings were assessed and compared with prior research to determine where females and males may differ on psychopathic traits. Fictional vignettes varying by gender and psychopathic behaviour were used to obtain symptom severity

ratings. The goal of the current study was to establish if there is bias in ratings of psychopathy for females and trying to determine the potential source of those biases. The aim was to assess whether differences in client presentation (gender, gender role typical/atypical behaviour) influence symptom severity ratings. Additionally, the potential impact of rater characteristics (gender, gender role orientation, knowledge of psychopathy, gender role stereotypes) was analyzed. The competing theories discussed above provided a lens which to interpret the results obtained. The current study will add to the existing literature base on female psychopathy and will add to the evidence regarding the utility of the psychopathy construct among women. The current study is novel in that six vignette conditions were used varying by stated gender and gender-prototypical behaviour. Additionally, it is not believed that the CAPP has been used in symptom severity studies to assess potential gender biases.

Hypotheses

Supporting the sex-role-consistency hypothesis, it was expected the majority of the CAPP items would be rated more prototypically male relative to female. Specifically, it was expected that the majority of the items within the domains of *Behavioural*, *Self*, *Dominance*, *Emotional*, and *Attachment* would be rated more prototypically male than female. It was expected that there would be no significant differences for the *Cognitive* domain items.

Supporting the sex-role-inconsistency hypothesis, it was expected the CAPP item severity ratings would be highest in the conditions where vignette and gender were mismatched (i.e. when participants were asked to read the female prototypical psychopathy vignette but were told the gender of the individual was male and conversely, when participants were asked to read a male prototypical psychopathy vignette but were told the gender of the individual was female).

The literature has not established conclusive evidence regarding the influence of rater characteristics on psychopathy ratings. Therefore, the assessment of potential influence from rater characteristics was exploratory in nature.

Method

Participants

Total. The initial participant sample consisted of 1,356 individuals (1,184 students; 172 affiliates). Once duplicate responses from students were removed, the subsequent sample consisted of 1,118 individuals (946 students; 172 affiliates). Recorded responses with no entered data were removed from the dataset, resulting in a loss of 64 participants (32 students and 32 affiliates) for a final sample of 1,054 (914 students; 140 affiliates). The recorded responses with no corresponding data ($n = 64$) accounted for 5.7% of the total number of responses.

The final sample consisted of 1,054 participants; 914 students and 140 affiliates. The majority (74.3%) of the sample was female ($n = 783$), 23.4% were male ($n = 247$), 0.2% were non-binary ($n = 2$), and data was missing for 2.1% ($n = 22$). The majority of the sample self-identified as Caucasian (62.3%), with 6.6% identifying as African-American, 0.8% as Indigenous, 15.7% as Asian descent, 5.9% as Mixed Race, and 6.1% as Other. Race was missing for 2.7% of participants ($n = 28$). The age of the sample ranged from 17 to 72 ($M = 21.99$, $SD = 8.30$), data was missing for 4.3% of participants ($n = 45$). For the 7-point knowledge scale, the total sample scored near the mid-point, indicating their knowledge of psychopathy was below awareness of Hare's PCL-R scale ($M = 3.10$, $SD = 1.26$). The total sample scored towards the lower end due to the large number of students in the sample, who demonstrated a limited knowledge of psychopathy ($M = 2.83$, $SD = 0.98$) compared to the affiliates ($M = 4.94$, $SD = 1.41$).

Prototypicality Ratings. The full study was estimated to take approximately 30 minutes to complete. The mean time for completion ($M = 17.06$ minutes, $SD = 7.20$) was calculated based on the individuals who successfully passed the two manipulation checks and all six attention checks as these individuals likely would have attended to the questions in a thoughtful and purposeful manner. Participants who completed the study in a short amount of time, thus demonstrating a potential lack of attention to the material or indiscriminate responding, were removed from the analyses. Those with time to completion greater than one standard deviation below the mean (completed the study in less than 9.86 minutes) were removed, resulting in a loss of 194 individuals (178 students, 16 affiliates) for a final sample of 860 (736 students, 124 affiliates) participants.

Seventy-seven percent of the participants were female ($n = 664$), 22.1% were male ($n = 190$), and 0.1% were non-binary ($n = 1$). The majority of the participants (65%) self-identified as Caucasian ($n = 559$), with 6.7% identifying as African-American ($n = 58$), 0.8% as Indigenous ($n = 7$), 14.0% as Asian ($n = 120$), .6.3% as Mixed Race ($n = 54$), and 6.0% as Other ethnicities ($n = 52$). Race data was missing for 0.7% ($n = 4$). The age of the sample ranged from 17 to 72 ($M = 22.19$, $SD = 8.74$). The largest proportion of the sample (71.6%) identified their knowledge as a 3 or lower, 15.8% identified their knowledge at the mid-point (4), and 11.8% identified their knowledge on the upper range with 5 or higher. For the TMF, the participants had a mean score of $M = 27.72$, $SD = 8.49$. For the male and female stereotypes subscales, $M = 9.47$, $SD = 1.94$ and $M = 13.08$, $SD = 1.31$, respectively. The sample used for prototypicality ratings analyses varied on a number of demographic variables from the participants that were excluded. The participants retained for analyses were more often female, slightly older, and more often Caucasian. Additionally, the included participants scored slightly higher on the Masculinity-

Femininity Scale and the Female Stereotypes subscale but scored slightly lower on the Male Stereotypes subscale. However, 81.6% of the original sample was retained for prototypicality ratings which provides confidence that the current sample was representative of the overall sample. Additionally, the individuals removed from the current analyses were more often students than affiliates which could explain some of the differences (gender, age, and race). See Table 1 for the demographic characteristics of the sample used for prototypicality ratings.

Table 1

Demographic Variables for Prototypicality Ratings Sample

	Student (<i>n</i> = 736)	Affiliate (<i>n</i> = 124)	Total (<i>n</i> = 860)
	<i>M</i> (<i>SD</i>)		
Age	19.87 (4.65)	36.13 (13.43)	22.19 (8.74)
Knowledge	2.78 (0.93)	4.94 (1.41)	3.09 (1.26)
Masculinity-Femininity	27.72 (8.79)	27.71 (6.38)	27.72 (8.49)
Male Stereotypes	9.38 (1.98)	10.07 (1.54)	9.47 (1.94)
Female Stereotypes	13.14 (1.36)	12.66 (0.81)	13.08 (1.31)
	<i>n</i> (%)		
Gender			
Male	166 (22.6)	24 (19.4)	190 (22.1)
Female	568 (77.2)	96 (77.4)	664 (77.2)
Non-binary	1 (0.1)	0 (0)	1 (0.1)
Ethnicity			
Caucasian	457 (62.1)	102 (82.3)	559 (65.0)
Minorities	274 (37.2)	17 (13.7)	291 (33.8)

Note. Numbers and percentages may not sum to total or 100 due to missing data and/or rounding.

Symptom Severity Ratings. Of the initial 1,054 participants, 24 (2.3%) did not complete the symptom severity portion of the study, further narrowing the sample to 1,030 individuals. Given the importance of the manipulated variables to the study vignettes, it was decided that participant data would only be retained if both manipulation checks were answered correctly.

This resulted in a loss of 344 individuals (312 students; 32 affiliates), for a subsequent sample of 686 individuals (586 students; 100 affiliates). As mentioned above, participants who completed the study in a short amount of time (greater than 1 *SD* below the mean) were removed from the analyses as well, resulting in a loss of 90 participants (81 students; 9 affiliates). Therefore, the final sample for symptom severity ratings consisted of 596 participants for analysis.

The sample used for symptom severity analyses closely mirrored that of those that were excluded from analyses, with the exception of the race variable. Seventy-seven percent of the participants were female ($n = 459$), 22.8% were male ($n = 136$), and 0.2% were non-binary ($n = 1$). The majority of the participants (68%) self-identified as Caucasian ($n = 405$), with 5.9% identifying as African-American ($n = 35$), 0.8% as Indigenous ($n = 5$), 12.6% as Asian ($n = 75$), 5.5% as Mixed Race ($n = 33$), and 6.5% as Other ethnicities ($n = 39$). Race data was missing for 0.7% ($n = 4$). The sample retained for symptom severity ratings was comprised of more Caucasian individuals as opposed to minorities when compared to the group excluded from analyses. This is likely due to the large representation of minorities in the student sample and the large number of students excluded from the main analyses. The age of the sample ranged from 17 to 72 ($M = 22.10$, $SD = 8.20$). The largest proportion of the sample (72.6%) identified their knowledge as a 3 or lower, 14.9% identified their knowledge at the mid-point (4), and 12.2% identified their knowledge on the upper range with 5 or higher. For the TMF, the participants had a mean score of $M = 27.57$, $SD = 8.35$. For the male stereotypes and female stereotypes subscales, $M = 9.53$, $SD = 1.89$. and $M = 13.04$, $SD = 1.21$, respectively. See Table 2 for the demographic breakdown of the sample used for the symptom severity ratings.

Table 2

Demographic Variables for Symptom Severity Sample

	Student (<i>n</i> = 505)	Affiliate (<i>n</i> = 91)	Total (<i>n</i> = 596)
	<i>M</i> (<i>SD</i>)		
Age	19.70 (3.86)	35.22 (12.30)	22.10 (8.20)
Knowledge	2.77 (0.89)	4.90 (1.40)	3.09 (1.25)
Masculinity-Femininity	27.54 (8.71)	27.73 (5.95)	27.57 (8.35)
Male Stereotypes	9.42 (1.92)	10.19 (1.53)	9.53 (1.89)
Female Stereotypes	13.10 (1.26)	12.66 (0.82)	13.04 (1.21)
	<i>n</i> (%)		
Gender			
Male	121 (24.0)	15 (16.5)	136 (22.8)
Female	383 (75.8)	76 (83.5)	459 (77.0)
Non-binary	1 (0.2)	0 (0)	1 (0.2)
Ethnicity			
Caucasian	325 (64.4)	80 (87.9)	405 (68.0)
Minorities	177 (35.0)	10 (11.0)	187 (31.4)

Note. Numbers and percentages may not sum to total or 100 due to missing data and/or rounding.

Measures

Demographics. Participants were asked to complete a demographic questionnaire assessing gender, age, race, and pre-study knowledge of psychopathy. Participants were measured on a 7-item scale assessing their level of knowledge regarding psychopathy. The scale

developed for the current study ranged from 1 to 7 with anchors of 1 (*I do not know what psychopathy is*), 4 (*I am familiar with the PCL-R and Hare's two-factor structure of psychopathy*), and 7 (*I have professional experience treating diagnosed psychopaths of consistently publish research on psychopathy*). See Appendix A for a copy of the demographic questionnaire.

Traditional Masculinity-Femininity Scale. The Traditional Masculinity-Femininity Scale (TMF; Kachel et al., 2016) is a 6-item measure assessing self-reported levels of masculinity-femininity in a dimensional fashion. The TMF is a newer scale intended to assess an individual's overall level of masculinity-femininity. The TMF has been found to reliably measure an underlying one-dimensional construct. Items are rated on a seven-point Likert scale with each item ranging from 1 (*very masculine*) to 7 (*very feminine*). A mid-line score (4) is representative of an individual viewing themselves as moderately feminine and masculine. The total score could range from 6 (*very masculine*) to 42 (*very feminine*) with a score of 28 representing gender-neutrality (i.e. moderately feminine and masculine). The TMF has demonstrated high internal consistency and acceptable test-retest reliability (Kachel et al., 2016). Validity has been established as it has demonstrated the ability to differentiate among groups expected to differ (gender, sexual orientation) and has correlated moderately with similar established scales such as the Bem Sex Role Inventory (BSRI; Bem, 1974; Kachel et al., 2016). While the BSRI has demonstrated utility in the past, it has been criticized for exclusively assessing instrumentality and expressivity rather than behavioural manifestations of gender roles (Kachel et al., 2016). Additionally, as society has evolved, gender roles and sexual orientation of men and women have changed. With greater acceptance of changing roles and beliefs, the BSRI

may no longer be an accurate indicator of modern gender role stereotypes (Donnelly & Twenge, 2017). See Appendix B for a copy of the TMF.

Gender Role Stereotypes Scale. The Gender Role Stereotypes Scale (GRSS; Mills et al., 2012) is an 8-item scale assessing both female gender role stereotypes and male gender role stereotypes. The male and female stereotypes each comprise their own subscale. Each item is rated on a 5-point Likert scale with responses options of 1 (*should always be done by the man*), 2 (*should usually be done by the man*), 3 (*equal responsibility*), 4 (*should usually be done by the woman*), and 5 (*should always be done by the woman*). The scales are scored by summing responses to the four items in each scale and calculating a mean for each subscale. Each subscale has a possible total score of 4 to 20, with a score of 12 indicating perceived equal responsibility (i.e. a lack of stereotyping). Higher scores on the female subscale demonstrate a greater acceptance of female gender role stereotypes and lower scores on the male subscale demonstrate a greater acceptance of male gender role stereotypes. Scores in the middle (3), demonstrate a gender-neutral view of the item. The GRSS has demonstrated acceptable internal consistency and test-retest reliability. It has also demonstrated construct validity as it demonstrated significant correlations with similar scales (Mills et al., 2012). See Appendix C for a copy of the GRSS.

Comprehensive Assessment of Psychopathy (CAPP). The Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al., 2012) was developed based on a large-scale literature review and consultation with subject matter experts. Identified symptoms of psychopathy were translated into plain language using descriptive adjectives or short adjectival phrases. The plain language ensures that the average person would understand the items and makes language translation much easier, a key to establishing cross-cultural validity. The 33

symptoms are grouped into six domains of personality (see Appendix D for a copy of the CAPP items and domains). Ease of use and understandability has been validated in a sample of mental health professionals and students who were able to sort the CAPP symptoms into the six specified domains accurately, intuitively, and quickly (Hoff, Rypdal, Hart, Cooke, & Mykletun, 2015).

In establishing the reliability and validity of the CAPP, prototypicality studies are often employed. Prototypicality studies are useful for identifying the central characteristics of an underlying concept but also in assessing the inclusiveness of a model. In establishing content validity of the CAPP, a prototypicality study utilizing mental health professionals found that 25 out of 33 CAPP symptoms were rated as ‘highly’ or ‘very highly’ prototypical of psychopathy with 5 of the 6 over-arching domains rated highly prototypical of psychopathy, with the exception of the *Cognitive* domain (Kreis et al., 2012). The domains of *Attachment*, *Dominance*, and *Self* were rated most prototypical of psychopathy and it has been noted that these three domains are not well-incorporated into some current assessment tools and diagnostic conceptualizations for PPD, suggesting the CAPP model may provide a missing complement to current practices (Kreis et al., 2012; Cooke et al., 2012). Similar results were obtained in a community sample of individuals reporting for jury duty who also rated the majority of the CAPP items and the 6 domains as moderately or highly prototypical of psychopathy (Smith, Edens, Clark, & Rulseh, 2014). Among forensic mental health professionals in Sweden, the majority of the CAPP items and all domains were rated moderately or highly prototypical of psychopathy (Sörman et al., 2014). Prototypicality studies have been completed using translated versions with very similar results (Heinzen, Fittkau, Kreis, & Huchzermeier, 2011; Hoff et al., 2014; Stoll, Heinzen, Kohler, & Huchzermeier, 2011).

The CAPP model has been used to develop assessment measures, including the Comprehensive Assessment of Psychopathic Personality: Institutional Rating Scale (CAPP-IRS) and the CAPP-Staff Rating Form (CAPP-SRF) designed to be used together to obtain a more thorough assessment of the interviewee. The CAPP-IRS has demonstrated internal consistency, interrater reliability, and construct validity across various populations including Danish forensic psychiatric patients, Canadian violent youth offenders, Spanish offenders (Florez et al., 2018; McCormick, 2007; Pedersen, Kunz, Elsass, & Rasmussen, 2010; Sellbom, Cooke, & Hart, 2015). These measures have also demonstrated convergent validity with other psychopathy measures including the PCL:SV (Pederson et al., 2010). Lastly, predictive validity has been established with the CAPP-IRS as it has been found to be moderately to highly predictive of violent and non-violent recidivism in forensic psychiatric patients in Denmark with an $AUC = .70$ for the total score (Pederson et al., 2010). In fact, the predictive validity of the CAPP-IRS did not differ significantly from that of the PCL:SV, a well-established measure. A CAPP-Community Rating Scale is currently in development.

Overall, the CAPP model appears to be a thorough and valid method to assess psychopathic personality traits. As the concept of psychopathy in females is largely understudied and not well understood, the concept map method may prove particularly useful for developing a conceptualization that accurately portrays the manifestation of psychopathy in females.

The prototypicality of each CAPP item was rated on a 7-point scale with 1 (*more typical of psychopathy in males*), 4 (*equally typical of psychopathy in both genders*), 7 (*more typical of psychopathy in females*).

The scoring scheme of the CAPP-IRS was used in the current study for symptom severity ratings. The 33 symptoms of the CAPP are rated based on symptom severity on a 7-point scale.

The ratings are as follows: 0 (*not present*), 1 (*very mild*), 2 (*mild*), 3 (*moderate*), 4 (*moderately severe*), 5 (*severe*), and 6 (*very severe*). The maximum score possible is 198, with higher scores demonstrating higher severity.

In addition to the original 33 CAPP items, four items from the PCL-R were added into the symptom list used for the current study. Three antisocial facet items were added: *Juvenile delinquency*, *Revocation of conditional release*, *Criminal versatility*. Additionally, *Promiscuous sexual behaviour* was also added. To gain a full understanding and conceptualization of gender differences in psychopathy, it was decided to add these items to the current study as they have been found to differentiate between male and female psychopathy (see Table 3) and are not currently captured in the CAPP. The PCL-R antisocial items of *Poor behavioral controls* and *Early behavioral problems* were not added as they are similarly captured by the CAPP items *Reckless* and *Disruptive*, respectively. The items were translated into adjectives or adjectival phrases with three synonyms as per the spirit of the CAPP. The translated items and synonyms were then shared with an expert on the PCL-R to ensure the adjectives captured the spirit of the PCL-R item. A new domain, *Antisocial*, was created for the current study to capture the three antisocial PCL-R items added. The *Promiscuous sexual behaviour* item was not included in any of the CAPP domains and remained as an individual symptom.

Vignette. Two main fictional vignettes were constructed for this study. The first vignette portrayed a typical psychopathic male. The second vignette portrayed a typical psychopathic female. Psychopathic behaviours and traits considered typical of each gender were based on gender differences as described above in the literature review and subsequently summarized below (see Table 3). The two vignettes were sent to six experts with a variety of research experience in psychopathy, gender differences in psychopathy, or vignette studies. Four out of

the six experts provided areas for improvement and this feedback was incorporated into the final vignettes. The two revised main vignettes were used in a total of six different conditions as described below in the procedure section. See Appendices E-J for copies of each vignette.

Table 3

Psychopathic Traits Similarities and Differences Among Males and Females

Authors (Year)	Assessment	Method	Sample	Males higher/Females lower	Males lower/Females higher
Bolt et al. (2004)	PCL-R	DIF/IRT	Offenders and forensic psychiatric patients	Early Behaviour Problems, Juvenile Delinquency, Criminal Versatility	Conning/Manipulative
Strand & Belfrage (2005)	PCL:SV	DIF/IRT	Offenders and forensic psychiatric patients	Adolescent Antisocial Behaviour, Adult Antisocial Behaviour	Deceitful, Poor Behavioural Control
Hazelwood (2006)	PCL-R	Prototypicality	Mental health professionals rating previous clients	Juvenile Delinquency, Grandiose, Criminal Versatility, Conning/Manipulative, Lack Remorse/Guilt, Callous/Lack of Empathy	
Kreis & Cooke (2011)	CAPP	Prototypicality	Mental health professionals rating previous clients	Self-centered, Domineering, Reckless, Lacks Anxiety, Aggressive, Self-aggrandizing, Disruptive, Unempathic	Lacks Emotional Stability, Unstable Self-concept, Manipulative
Viljoen et al. (2015)	CAPP	Prototypicality	Mental health professionals	Reckless, Disruptive, Domineering, Aggressive, Sense of Invulnerability, Self-aggrandizing	Lacks Emotional Stability, Unstable Self-concept

Procedure

After obtaining ethics clearance from the Carleton University Research Ethics Board (CUREB) and all requisite recruitment permissions from external agencies, participant recruitment began. See Appendix K for a copy of the ethics certificate. Two samples were targeted for the current study. The first sample targeted approximately 1,877 affiliates within psychology and law. The affiliates were recruited via two methods. As a member of the American Psychology Law Society (APLS), the lead researcher applied to have access to the member email list for research purposes. APLS sent the research recruitment notice to 1,777 existing members. The recruitment notice contained a link to the study which was hosted on Qualtrics, a web-based platform for the administration of research studies. See Appendix L for a copy of the APLS recruitment notice. Additionally, 100 researchers with a minimum of two peer-reviewed articles on the subject of psychopathy were contacted directly through publicly available email addresses. See Appendix M for a copy of the direct email recruitment notice. Similar to prior research with professional samples (Crosby & Sprock, 2004; Kreis & Cooke, 2011), it was expected that the response rate would be approximately 15% or lower. The affiliate response rate for the current study was approximately 9.2% with a total sample of 172 affiliates. However, valid data was only available for 140 participants, resulting in a response rate of 7.5%. The affiliate sample was intended to increase the validity of the results as they would likely be trained (or at least familiar with) the concept of psychopathy, its characteristics, and the administration of assessments. Additionally, it was intended to compare responses based on level of expertise (student vs affiliate).

The second sample targeted a general population sample in the form of university students. The goal was to obtain a sample of 300 students. Students were recruited through the

Carleton SONA system, which is an online portal for participant recruitment. SONA recruits first- and second-year students in entry-level psychology classes in exchange for additional course credit. See Appendix N for a copy of the student recruitment notice. As students were granted additional course credit for participating, Qualtrics and the SONA system were linked to create a unique ID number for each student. This unique ID was used to assign course credit but also allowed the primary researcher to detect if students completed the study more than once. Duplicate responses from students were removed, retaining only their first attempt at the study.

Once directed to Qualtrics, participants were required to complete an informed consent form (see Appendices O and P for a copy of the student and affiliate consent forms). The purpose of the study was explained as assessing the representativeness of personality disorder traits and characteristics in reference to a client vignette. The current study required deception as stating the full purpose of the study (assessing potential gender biases) may have influenced respondent's answers.

All participants were assured of complete confidentiality. Data gathered was only accessible to the primary researcher and study supervisor. No identifiable information remained with respondent information. All participants were identified with an ambiguous unique numeric identifier.

After having agreed to participate in the study, participants were randomly assigned (by Qualtrics) to one of the following six study conditions:

- Condition 1 contained a male-specified vignette featuring gender role typical psychopathic traits and behaviours (i.e. those consistent with prototypical male psychopathy). See Appendix E for a copy of the vignette.

- Condition 2 contained a female-specified vignette featuring gender role typical psychopathic traits and behaviours (i.e. those consistent with prototypical female psychopathy). See Appendix F for a copy of the vignette.
- Condition 3 contained a male-specified vignette featuring gender role atypical psychopathic traits and behaviours (i.e. those consistent with prototypical female psychopathy). See Appendix G for a copy of the vignette.
- Condition 4 contained a female-specified vignette featuring gender role atypical psychopathic traits and behaviours (i.e. those consistent with prototypical male psychopathy). See Appendix H for a copy of the vignette.
- Condition 5 contained a gender-blind vignette featuring gender role typical male psychopathic traits and behaviours (i.e. those consistent with prototypical male psychopathy). See Appendix I for a copy of the vignette.
- Condition 6 contained a gender-blind vignette featuring gender role typical female psychopathic traits and behaviours (i.e. those consistent with prototypical female psychopathy). See Appendix J for a copy of the vignette.

Thus, a 3 (Female, Male, Gender Blind) x 2 (Male Prototypical Psychopathic Behaviour vs Female Prototypical Psychopathic Behaviour) between-subjects research design was used.

After the consent form, all participants were asked to rate whether they considered each CAPP item to be more prototypical of male psychopathy, female psychopathy, or equally prototypical of both genders. Each CAPP item was rated on a 7-point scale with 1 (*more typical of psychopathy in males*), 4 (*equally typical of psychopathy in both genders*), 7 (*more typical of psychopathy in females*). See Appendix Q for a copy of the prototypicality ratings form. Next, participants read their assigned vignette and completed symptom severity ratings for the client

portrayed in the vignette. Each CAPP item was rated on a severity scale: 1 (*very mild*), 2 (*mild*), 3 (*moderate*), 4 (*moderately severe*), 5 (*severe*), and 6 (*very severe*). See Appendix R for a copy of the symptom severity ratings form. Next, the participants completed the Traditional Masculinity-Femininity Scale (TMF; Kachel, Steffens, & Niedlich, 2016) and the Gender Role Stereotypes Scale (GRSS; Mills, Culbertson, Huffman, & Connell, 2012). Half of the participants completed the GRSS followed by the TMF while the other half completed the TMF first followed by the GRSS.

Next, each participant completed the demographic questionnaire assessing age, gender, race and pre-study knowledge of psychopathy. Participants were then presented the debriefing form (see Appendices S and T for copies of the student and affiliate debriefing forms). The purpose of the debriefing form was to detail the underlying purpose of the current study. The participant was informed the true purpose of the current study was to assess gender biases in personality disorder diagnosis, psychopathy in particular. Contact information and resources were provided to participants to address any issues they may have had. Participants also received a brief list of common psychopathy myths with factual corrections on the debriefing form.

Lastly, six attention checks and two manipulation checks appeared throughout the duration of the study. This was to ensure the validity of the data received, ensuring participants were reading the questions carefully and responding in a purposeful manner. However, it was decided that the attention checks would not be used to remove participants from the analyses as research has suggested they could potentially induce socially desirable responding or introduce demographic bias (Clifford & Jerit, 2015; Hauser & Schwarz, 2015; Vannette, 2017). Participants were required to successfully pass the two manipulation checks for the symptom severity ratings to be included in the analyses. The manipulation checks required the participants

to identify the gender of the client in the vignette and the crime committed. The crimes in the vignettes were chosen based on offences more common among males (assault) and females (prostitution). These details pertained specifically to information manipulated among the six vignette conditions. As the current study was focused on gender bias, it was pertinent they answered these questions correctly as responses would only be valid if they attended to this information.

Results

Analyses

All analyses were completed using IBM SPSS Statistics 20 software.

Missing Data

Missing data at the variable level ranged from a low of 0.1% (prototypicality – domineering) to a high of 4.3% (age). Missing data was dealt with through pair-wise deletion.

Prototypicality Ratings

In line with prior research (Kreis & Cooke, 2011; Viljoen et al., 2015), prototypicality ratings were assessed using means, standard deviations, and confidence intervals. Score distributions were explored with histograms and polar diagrams. The prototypicality scale ranged from 1 (*more prototypically male*) to 7 (*more prototypically female*), with a score of 4 considered gender neutral. Gender differences in prototypicality ratings were examined with one-sample *t*-tests with the mean set at 4 (gender neutral); effect sizes were calculated using Cohen's *d*. For the tables showing comparisons, the CAPP items are sorted in descending order by effect size.

Descriptive statistics and *t*-test results for the prototypicality items rated more prototypical of males and females are presented in Table 4 and Table 5, respectively. In line with prior research (Kreis & Cooke, 2011; Viljoen et al., 2015) and consistent with the hypotheses, it

was found that the majority of the CAPP items were rated more prototypical of psychopathy in males compared to females. These results support the sex-role consistency hypothesis.

Table 4

Prototypicality Ratings for CAPP Items Rated More Prototypical of Males

Symptom	<i>n</i>	<i>M (SD)</i>	<i>t</i>	<i>d</i>	95% CI
Aggressive	860	2.17 (1.27)	-42.45***	-1.44	[-1.54, -1.35]
Delinquent ^a	860	2.56 (1.24)	-34.01***	-1.16	[-1.25, -1.07]
Reckless	859	2.63 (1.36)	-29.43***	-1.01	[-1.09, -0.93]
Domineering	860	2.55 (1.47)	-28.98***	-0.99	[-1.07, -0.90]
Sense of invulnerability	859	2.67 (1.41)	-27.82***	-0.94	[-1.02, -0.86]
Lacks emotional depth	860	2.91 (1.34)	-23.87***	-0.81	[-0.89, -0.74]
Failed [prior release] ^a	857	3.04 (1.22)	-23.20***	-0.79	[-0.86, -0.71]
Lacks anxiety	857	3.03 (1.32)	-21.45***	-0.73	[-0.81, -0.66]
Criminally versatile ^a	858	3.08 (1.38)	-19.48***	-0.67	[-0.74, -0.59]
Lacks remorse	860	3.24 (1.29)	-17.32***	-0.59	[-0.66, -0.52]
Uncaring	860	3.36 (1.18)	-15.96***	-0.54	[-0.61, -0.47]
Unempathic	859	3.30 (1.38)	-14.86***	-0.51	[-0.58, -0.44]
Lacks planfulness	859	3.32 (1.34)	-14.87***	-0.51	[-0.58, -0.44]

Detached	860	3.30 (1.41)	-14.58***	-0.50	[-0.57, -0.43]
Antagonistic	860	3.31 (1.46)	-13.81***	-0.47	[-0.54, -0.40]
Disruptive	857	3.35 (1.38)	-13.79***	-0.47	[-0.54, -0.40]
Uncommitted	860	3.41 (1.34)	-13.00***	-0.44	[-0.51, -0.37]
Lacks concentration	859	3.50 (1.16)	-12.70***	-0.43	[-0.50, -0.36]
Unreliable	859	3.54 (1.07)	-12.60***	-0.43	[-0.50, -0.36]
Intolerant	858	3.59 (1.41)	-8.60***	-0.29	[-0.36, -0.22]
Lacks perseverance	858	3.71 (1.13)	-7.40***	-0.26	[-0.32, -0.19]
Self-aggrandizing	859	3.62 (1.48)	-7.60***	-0.26	[-0.32, -0.19]
Lacks pleasure	857	3.67 (1.26)	-7.59***	-0.26	[-0.33, -0.19]
Garrulous	855	3.79 (1.55)	-3.93***	-0.14	[-0.20, -0.07]
Insincere	860	3.85 (1.41)	-3.08**	-0.11	[-0.17, -0.04]
Deceitful	859	3.91 (1.20)	-2.16*	-0.08	[-0.14, -0.01]
Restless	859	3.92 (1.44)	-1.54	-0.06	[-0.12, 0.01]
Sense of entitlement	859	3.93 (1.56)	-1.25	-0.04	[-0.11, 0.02]
Suspicious	858	3.99 (1.42)	-0.24	-0.01	[-0.07, 0.06]

Note. ^aDenotes items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 5

Prototypicality Ratings for CAPP Items Rated More Prototypical of Females

Symptom	<i>n</i>	<i>M (SD)</i>	<i>t</i>	<i>d</i>	95% CI
Lacks emotional stability	859	4.67 (1.43)	13.75***	0.47	[0.40, 0.54]
Self-justifying	860	4.43 (1.46)	8.73***	0.29	[0.23, 0.36]
Manipulative	860	4.42 (1.55)	7.95***	0.27	[0.20, 0.34]
Unstable self-concept	859	4.20 (1.23)	4.71***	0.16	[0.10, 0.23]
Sense of uniqueness	859	4.18 (1.38)	3.78***	0.13	[0.06, 0.20]
Self-centered	860	4.10 (1.47)	1.92	0.07	[0.00, 0.13]
Inflexible	859	4.09 (1.42)	1.83	0.06	[-0.00, 0.13]
Promiscuous ^a	860	4.03 (1.48)	0.62	0.02	[-0.05, 0.09]

Note. ^aDenotes items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). *** $p < .001$.

To test the prototypicality of each domain, a total score was created by summing the individual prototypicality ratings for each item in the corresponding domains. Gender neutrality score varied for each domain, as a function of the number of items in each scale multiplied by four (the gender-neutral score for each individual item). See Table 6 for the prototypicality ratings by domain. Consistent with the hypotheses, the domains of *Attachment*, *Behavioural*, *Dominance*, *Emotional*, and *Self* were rated more prototypically male than female. Counter to the hypotheses, the domain of *Cognitive* was not considered gender neutral and was also rated more prototypically male.

Table 6

Prototypicality Ratings for CAPP Domains

Domain	Gender Neutral Value	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>t</i>	<i>d</i>	95% CI
Antisocial ^a	12	856	8.67 (2.87)	-33.96***	-1.16	[-1.25, -1.07]
Behavioural	24	853	19.32 (4.15)	-32.92***	-1.13	[-1.21, -1.04]
Attachment	16	859	13.37 (3.58)	-21.53***	-0.73	[-0.81, -0.66]
Emotional	20	853	17.52 (3.49)	-20.76***	-0.71	[-0.79, -0.64]
Dominance	24	854	21.85 (4.43)	-14.18***	-0.49	[-0.56, -0.41]
Cognitive	20	855	18.48 (3.37)	-13.17***	-0.45	[-0.52, -0.38]
Self	28	855	27.11 (5.02)	-5.17***	-0.18	[-0.24, -0.11]

Note. ^aThe antisocial domain consists of items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). The Gender Neutral Value was determined by the number of items in the subscale multiplied by four, the score indicating gender neutrality. A positive value for the Cohen's *d* indicates that the domain was rated more prototypically female whereas a negative value for the Cohen's *d* indicates that the domain was rated more prototypically male. *** $p < .001$.

Prototypicality ratings were also compared between students and affiliates. The majority of the CAPP items were rated similarly (i.e. same direction on the 7-point scale) by students and affiliates. That is, items rated as more prototypical of male psychopathy by affiliates were also rated more prototypical of male psychopathy by the students. The same pattern was observed for items rated as more prototypical of female psychopathy. See Table 7 for the CAPP items rated similarly by students and affiliates. The student sample rated four items in the opposite direction as the affiliate sample. Students rated *Sense of uniqueness*, *Self-centered*, and *Inflexible* as more prototypically female whereas the affiliates rated these items as more prototypically male. The students also rated *Suspicious* as more prototypically male whereas the affiliates rated this item more prototypically female. See Table 8 for the CAPP items rated differently by the two groups. The student sample rated 22 out of the 37 items more strongly gendered than the affiliate sample (i.e. further away from the score of gender-neutrality). Positive values for the Cohen's d indicate that the student sample rated the individual item higher on the 7-point scale than the affiliate sample did, whereas a negative Cohen's d indicates that the student sample rated the item lower than the affiliate sample. Nearly half ($n = 18$) of the items showing a difference between students and affiliates exhibited a non-significant t -value and negligible effect size. Fifteen of the items demonstrated a small effect size by Cohen's (1988) standards.

Table 7

Differences in Prototypicality Ratings Between Students and Affiliates – Consistent Results

Symptom	<i>Students</i>		<i>Affiliates</i>		<i>t</i>	<i>d</i>	95% CI
	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>			
Garrulous	731	3.91 (1.57)	124	3.10 (1.25)	5.43***	0.53	[0.34, 0.72]
Unstable self-concept	735	4.11 (1.29)	124	4.69 (1.08)	-4.95***	-0.48	[-0.67, -0.29]
Uncaring	736	3.29 (1.20)	124	3.77 (0.92)	-5.06***	-0.41	[-0.60, -0.22]
Reckless	735	2.56 (1.38)	124	3.06 (1.12)	-4.47***	-0.37	[-0.56, -0.18]
Lacks emotional depth	736	2.85 (1.35)	124	3.29 (1.22)	-3.70***	-0.33	[-0.53, -0.14]
Lacks planfulness	735	3.26 (1.38)	124	3.69 (0.93)	-4.33***	-0.32	[-0.51, -0.13]
Lacks remorse	736	3.18 (1.31)	124	3.59 (1.08)	-3.77***	-0.32	[-0.51, -0.13]
Unreliable	736	3.49 (1.10)	123	3.82 (0.76)	-4.11***	-0.31	[-0.50, -0.12]
Sense of invulnerability	735	2.61 (1.43)	124	3.01 (1.17)	-3.40***	-0.29	[-0.48, -0.10]
Self-aggrandizing	736	3.67 (1.51)	123	3.28 (1.28)	2.76**	0.27	[0.08, 0.46]
Lacks concentration	735	3.46 (1.21)	124	3.75 (0.77)	-3.57***	-0.25	[-0.45, -0.06]
Lacks anxiety	733	2.98 (1.35)	124	3.31 (1.14)	-2.82**	-0.24	[-0.43, -0.05]

Detached	736	3.25 (1.43)	124	3.58 (1.29)	-2.59*	-0.23	[-0.42, -0.04]
Lacks pleasure	735	3.64 (1.28)	122	3.90 (1.09)	-2.44*	-0.21	[-0.40, -0.02]
Lacks perseverance	734	3.68 (1.16)	124	3.91 (0.93)	-2.46*	-0.20	[-0.39, -0.01]
Manipulative	736	4.46 (1.60)	124	4.18 (1.20)	2.31*	0.18	[-0.01, 0.37]
Failed [prior release] ^a	734	3.01 (1.24)	123	3.21 (1.06)	-1.95	-0.17	[-0.36, 0.02]
Unempathic	735	3.27 (1.41)	124	3.48 (1.15)	-1.75	-0.15	[-0.34, 0.04]
Insincere	736	3.88 (1.45)	124	3.67 (1.15)	1.85	0.15	[-0.04, 0.34]
Domineering	736	2.52 (1.51)	124	2.72 (1.19)	-1.62	-0.13	[-0.32, 0.06]
Delinquent ^a	736	2.54 (1.26)	124	2.69 (1.11)	-1.39	-0.12	[-0.31, 0.07]
Aggressive	736	2.15 (1.29)	124	2.28 (1.13)	-1.11	-0.11	[-0.30, 0.08]
Sense of entitlement	735	3.96 (1.62)	124	3.79 (1.10)	1.45	0.11	[-0.08, 0.30]
Criminally versatile ^a	734	3.10 (1.40)	124	2.96 (1.27)	1.06	0.10	[-0.09, 0.29]
Self-justifying	736	4.46 (1.51)	124	4.31 (1.09)	1.32	0.10	[-0.09, 0.29]
Uncommitted	736	3.39 (1.36)	124	3.51 (1.23)	-0.91	-0.09	[-0.28, 0.10]
Restless	735	3.93 (1.48)	124	3.86 (1.21)	0.59	0.05	[-0.14, 0.24]
Promiscuous ^a	736	4.02 (1.54)	124	4.08 (1.01)	-0.54	-0.04	[-0.23, 0.15]

Intolerant	735	3.59 (1.46)	123	3.55 (1.12)	0.33	0.03	[-0.16, 0.22]
Lacks emotional stability	735	4.68 (1.48)	124	4.64 (1.15)	0.35	0.03	[-0.16, 0.22]
Antagonistic	736	3.31 (1.49)	124	3.33 (1.25)	-0.16	-0.01	[-0.20, 0.18]
Disruptive	734	3.35 (1.40)	123	3.33 (1.29)	0.14	0.01	[-0.18, 0.20]
Deceitful	736	3.91 (1.24)	123	3.91 (0.93)	0.01	0.00	[-0.19, 0.19]

Note. ^aDenotes items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). Positive values for the Cohen's *d* indicate that the student sample rated the individual item higher on the 7-point scale than the affiliate sample did, whereas a negative Cohen's *d* indicates that the student sample rated the item lower than the affiliate sample. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 8

Differences in Prototypicality Ratings Between Students and Affiliates – Inconsistent Results

Symptom	<i>Students</i>		<i>Affiliates</i>		<i>t</i>	<i>d</i>	95% CI
	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>			
Sense of uniqueness	735	4.29 (1.40)	124	3.50 (1.08)	7.23***	0.59	[0.39, 0.78]
Suspicious	734	3.92 (1.47)	124	4.42 (1.02)	-4.73***	-0.36	[-0.55, -0.17]
Self-centered	736	4.13 (1.54)	124	3.90 (0.95)	2.29*	0.16	[-0.03, 0.35]
Inflexible	735	4.11 (1.49)	124	3.98 (0.89)	1.36	0.09	[-0.10, 0.28]

Note. Positive values for the Cohen's *d* indicate that the student sample rated the individual item higher on the 7-point scale than the affiliate sample did, whereas a negative Cohen's *d* indicates that the student sample rated the item lower than the affiliate sample. * $p < .05$, *** $p < .001$.

When comparing students and affiliates on the CAPP domains, the results mirror those of the whole sample; both samples rated each domain more prototypically male than female. See Table 9 for the comparisons of CAPP domain scores by each group. Students rated the domains of *Emotional*, *Cognitive*, *Attachment*, *Behavioural*, and *Antisocial* lower than the affiliates, meaning they rated these domains as more prototypically male than the affiliates. Interestingly, the students rated the domains of *Dominance* and *Self* as slightly more towards the value indicating gender-neutrality while the affiliates rated these domains farther away from gender-neutrality (i.e. more prototypically male).

Table 9

Differences in Prototypicality Ratings by Students and Affiliates – Domain Scores

Domain	<i>Gender Neutral Value</i>	<i>Students</i>		<i>Affiliates</i>		<i>t</i>	<i>d</i>	95% CI
		<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>			
Emotional	20	731	17.33 (3.52)	122	18.70 (3.00)	-4.58***	-0.40	[-0.59, -0.21]
Cognitive	20	732	18.33 (3.47)	123	19.39 (2.55)	-4.03***	-0.32	[-0.51, -0.12]
Attachment	16	735	13.21 (3.57)	124	14.33 (3.46)	-3.25***	-0.32	[-0.51, -0.12]
Behavioural	24	730	19.15 (4.19)	123	20.28 (3.80)	-2.98**	-0.27	[-0.46, -0.08]
Dominance	24	731	22.00 (4.50)	123	20.94 (3.89)	2.73**	0.24	[0.05, 0.43]
Self	28	732	27.22 (5.12)	123	26.46 (4.33)	1.75	0.15	[-0.04, 0.34]
Antisocial ^a	12	733	8.64 (2.89)	123	8.85 (2.75)	-0.72	-0.07	[-0.26, 0.12]

Note. ^aThe antisocial domain consists of items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). The Gender

Neutral Value was determined by the number of items in the subscale multiplied by four, the score indicating gender neutrality.

Positive values for the Cohen's *d* indicate that the student sample rated the domain higher than the affiliate sample did, whereas a

negative Cohen's *d* indicates that the student sample rated the domain lower than the affiliate sample. ** $p < .01$, *** $p < .001$

Symptom Severity Ratings

Covariates. To determine the correct analyses (e.g., factorial multivariate analysis of variance (MANOVA) vs. factorial multivariate analysis of covariance (MANCOVA)), variables that had the potential to be covariates (age, race, gender, knowledge of psychopathy, gender role stereotypes, degree of masculinity-femininity) were examined for their relationship to the dependent variables using a correlational matrix. Eight potential covariates were each correlated with the seven dependent variables; a Bonferroni correction was used to account for the number of comparisons. At the univariate level, it was evident that five variables demonstrated a significant relationship with at least one dependent variable: group membership (1 = student, 2 = affiliate), knowledge, age, race (0 = Caucasian; 1 = minority), and male gender role stereotypes. Affiliates rated each domain lower in severity than students. The same result was found for those possessing a greater knowledge of psychopathy than those with less knowledge. Participants who were older rated each domain lower in severity with the exception of the *Self* domain, which they rated slightly higher in severity than younger participants. Participants identifying as belonging to a racial minority rated each domain slightly higher than Caucasians, with the exception of the *Attachment* and *Self* domains which they rated slightly lower in severity. Participants endorsing a lesser degree of male gender role stereotypes rated the domains lower than those endorsing a higher degree of stereotype, with the exception of the *Self* domain, which they rated slightly higher. See Table 10 for the correlation matrix.

Table 10

Correlations of Potential Covariates with Dependent Variables

	Attachment	Behavioural	Cognitive	Dominance	Emotional	Self	Antisocial
Group	-.07	-.17*	-.26*	-.09	-.18*	-.03	-.35*
Age	-.10	-.12	-.18*	-.03	-.15*	.03	-.31*
Race	-.01	.07	.14*	.04	.05	-.03	.10
Knowledge	-.11	-.13	-.17*	-.12	-.15*	-.06	-.26*
Gender	-.03	.01	-.07	-.05	-.02	-.03	-.04
Male Stereotypes	-.12	-.01	-.09	-.00	-.09	.03	-.16*
Female Stereotypes	.07	.01	.02	-.06	.05	-.07	.11
Masculinity-Femininity	.06	.04	-.01	.00	.07	.04	.04

Note. Group (1 = student; 2 = affiliate), Race (0 = Caucasian, 1 = minority). * $p < .001$. The Bonferroni correction resulted in a new significance level of $p < .001$.

Subsequently, the significant univariate relationships were individually tested at the multivariate level and confirmed using factorial MANCOVAs with group, age, race, Knowledge, and male stereotypes as the independent variables and the composite dependent variable consisting of each individual CAPP domain. See Table 11 for the multivariate results of each covariate. Again, there were significant effects for group membership, knowledge of psychopathy, age, race, and male gender role stereotypes.

Table 11

Effects of Covariates on the Dependent Variable

	Wilks' Lambda	<i>F</i>	Hypothesis df	Error df
Group	.85	14.32***	7	553
Age	.88	10.71***	7	546
Race	.96	3.04**	7	550
Knowledge	.93	6.22***	7	553
Male Stereotypes	.95	4.22***	7	546

Note. Group (1 = student; 2 = affiliate), Race (0 = Caucasian, 1 = minority). ** $p < .01$, *** $p < .001$.

Next the significant covariates were correlated with one another to explore potential multicollinearity among the covariates. Group membership and knowledge of psychopathy were highly correlated, $r = .62, p < .001$ (i.e. students had less knowledge and experience than affiliates). Additionally, the age variable was significantly correlated with both group membership, $r = .69, p < .001$ and knowledge, $r = 0.56, p < .001$ (i.e. older participants were more likely to be from the affiliate sample and older participants were more likely to have more knowledge).

As the variables of group membership, knowledge, and age demonstrated multicollinearity, it was decided to retain only one variable as a potential covariate. It was decided to retain the knowledge variable as it was a 7-item continuous variable, therefore able to allow for greater discrimination among participants. While knowledge and race were significantly correlated with each other $r = 0.18, p < .001$, they were not correlated strongly enough to suggest multicollinearity. Therefore, race and knowledge were both retained.

The male gender role stereotypes subscale was significantly correlated with knowledge $r = .13, p = .001$, and race $r = -.17, p < .001$. However, the items were not correlated strongly enough to be considered redundant variables. Therefore, three variables were retained as covariates: knowledge, race, and male gender roles stereotypes subscale. See Table 12 for the intercorrelations of the potential covariates.

Table 12

Intercorrelations of Potential Covariates

	Group	Age	Race	Knowledge	Male Stereotypes
Group	-				
Age	.69**	-			
Race	-.19**	-.17**	-		
Knowledge	.62**	.56**	-.18**	-	
Male Stereotypes	.14**	.18**	-.17**	.13*	-

Note. Group (1 = student; 2 = affiliate), Race (0 = Caucasian, 1 = minority). * $p < .01$, ** $p < .001$. The Bonferroni correction resulted in a new significance level of $p < .001$.

Assumptions. Given the presence of covariates and the absence of significant interactions among the independent variables, a MANCOVA was determined to be the appropriate analyses for the symptom severity ratings. The requisite assumptions to complete a MANCOVA were tested. Homogeneity of covariance was assessed and satisfied with a Box's M of 409.17, $p < .001$. Homogeneity of variance (Levene's test) was assessed for each of the dependent variables and there were no significant differences. Multivariate normality was assessed using boxplots, Q-Q plots, histograms, outliers, as well as skewness and kurtosis values. As the study was completed entirely online and participants were randomly assigned to one of six conditions, it is expected that responses are independent, thus satisfying this assumption. Additionally, the identified covariates demonstrated significant relationships with the dependent variables and variables that demonstrated multicollinearity were not retained. The presence of multicollinearity among related variables (group membership, age, and knowledge of psychopathy) suggests that they were measured in a reliable manner, without error. The homogeneity of regression slopes (parallelism of regression planes for two covariates) was assessed with each interaction term demonstrating non-significance. Therefore, all assumptions have been met and the MANCOVA was deemed the appropriate analysis.

A 2x3 between-subjects multivariate analysis of covariance was performed on the seven dependent variables (CAPP domain scores): *Attachment*, *Behavioural*, *Cognitive*, *Dominance*, *Emotional*, *Self*, and *Antisocial*. Three covariates were included: knowledge of psychopathy, race, and male gender role stereotypes. Independent variables were vignette behaviour (male, female) and vignette gender (male, female, unknown).

Supporting the sex-role-inconsistency hypothesis, it was expected that symptom severity ratings would be highest in conditions where the vignette gender was mismatched with vignette

behaviour (i.e. male gender with female prototypical behaviour and female gender with male prototypical behaviour). Using Wilks' criteria, the effect of vignette gender was not significant across conditions after controlling for the effects of the covariates, $F(14, 1,082) = 0.69, p = .79$. The same result was found for the effect of vignette behaviour after controlling for the effects of the covariates, $F(7, 541) = 1.39, p = .21$. The interaction of vignette gender and vignette behaviour was also not significant after controlling for the covariates, $F(14, 1,082) = 0.86, p = .60$. Counter to the hypothesis, the results suggest that each vignette was rated similarly on symptom severity regardless of stated gender or behaviour type (male, female). This suggests that there does not appear to be gender bias among ratings of psychopathy for males and females. See Table 12 for the descriptive statistics for the symptom severity ratings of each domain for vignettes with male prototypical behaviour. See Table 13 for the descriptive statistics for the symptom severity ratings of each domain for vignettes with female prototypical behaviour.

Table 13

Symptom Severity Ratings by Vignette Type – Male Prototypical Behaviour

Domain	<i>Male Gender</i>		<i>Female Gender</i>		<i>Gender Unknown</i>	
	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>
Attachment	109	19.99 (3.00)	102	20.04 (2.82)	54	20.33 (2.95)
Behavioural	108	25.29 (4.42)	101	25.19 (4.39)	54	25.91 (5.28)
Cognitive	107	19.39 (4.17)	101	19.25 (3.99)	53	19.25 (4.75)
Dominance	107	28.62 (3.66)	102	28.89 (3.95)	53	29.04 (3.97)
Emotional	108	22.94 (3.62)	102	22.53 (3.49)	54	22.11 (4.07)
Self	108	33.15 (4.78)	102	32.90 (5.19)	53	33.13 (5.16)
Antisocial ^a	107	12.60 (3.03)	102	12.26 (2.79)	52	12.56 (2.99)

Note. ^aThe antisocial domain consists of items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003).

Table 14

Symptom Severity Ratings by Vignette Type – Female Prototypical Behaviour

Domain	<i>Male Gender</i>		<i>Female Gender</i>		<i>Gender Unknown</i>	
	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>
Attachment	131	20.05 (3.12)	133	20.01 (2.33)	64	19.48 (2.94)
Behavioural	131	25.34 (5.09)	133	25.39 (4.43)	65	24.12 (4.20)
Cognitive	132	19.05 (4.42)	130	19.32 (4.49)	65	17.88 (4.09)
Dominance	129	28.55 (4.08)	132	28.46 (3.73)	63	28.16 (3.72)
Emotional	133	22.07 (3.94)	132	22.56 (3.29)	65	21.42 (2.63)
Self	132	33.67 (4.70)	132	33.27 (4.59)	64	32.25 (5.09)
Antisocial ^a	132	12.02 (3.24)	132	11.72 (3.10)	64	11.41 (2.81)

Note. ^aThe antisocial domain consists of items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003).

Table 15 presents the means and standard deviations of the symptom severity ratings for students and affiliates across the CAPP domains. While there were no differences in symptom severity ratings across the vignette conditions, students rated the symptoms as more severe in each of the domains compared to the affiliate sample.

Table 15

Descriptive Statistics for Symptom Severity Ratings by Students and Affiliates

Domain	<i>Student</i>		<i>Affiliate</i>		<i>Total</i>	
	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>	<i>n</i>	<i>M (SD)</i>
Attachment	502	20.08 (2.85)	91	19.53 (2.77)	593	19.99 (2.84)
Behavioural	501	25.57 (4.65)	91	23.38 (4.07)	592	25.23 (4.63)
Cognitive	498	19.57 (4.26)	90	16.44 (3.66)	588	19.09 (4.32)
Dominance	495	28.74 (3.85)	91	27.85 (3.74)	586	28.60 (3.85)
Emotional	503	22.62 (3.59)	91	20.82 (3.01)	594	22.35 (3.57)
Self	500	33.22 (4.91)	91	32.76 (4.58)	591	33.15 (4.86)
Antisocial ^a	498	12.54 (2.87)	91	9.57 (2.73)	589	12.08 (3.04)

Note. ^aThe antisocial domain consists of items taken from the Psychopathy Checklist-Revised (PCL-R; Hare, 2003).

Discussion

The construct of psychopathy is not fully understood in females and is currently understudied. Research suggests that female psychopathy differs from male psychopathy in a number of ways, though the mechanisms behind these differences are not fully established. Gender biases have been proposed as a possible cause and must be ruled out to establish a clear conceptualization of female psychopathy. The current study assessed the gender prototypicality of psychopathy symptoms using the Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al. 2012) to capture how male and female psychopathy is characterized by students, members of a professional psychology/law organization, and subject-matter researchers.

A prior prototypicality study (Hazelwood, 2006) using the PCL-R found that the antisocial and narcissistic items (e.g. grandiosity, callousness, and arrogance) were rated more prototypical of males while the borderline and histrionic items (e.g. attention seeking, dramatic demeanor, and instability) were rated more prototypical of females. The promiscuous item was rated similarly for males and females. While the current study did not employ the entirety of the PCL-R items, the items *Juvenile delinquency*, *Revocation of conditional release*, *Criminal versatility*, and *Promiscuous sexual behaviour* were included. Similar to Hazelwood (2006), the antisocial items were rated more prototypical of males in the current study and the *Promiscuous sexual behaviour* did not differ by gender.

Kreis and Cooke (2011) used the CAPP in a prototypicality study and found 25 CAPP symptoms rated more prototypical of males than females, with three symptoms rated as more prototypical of females than males. Of these 28 symptoms, 24 were rated similarly in the current study. Four symptoms that were rated as prototypically male in Kreis and Cooke (2011) were

rated as more prototypically female in the current study (greater than 4). These included: *Self-justifying*, *Sense of uniqueness*, *Self-centered*, and *Inflexible*. However, two of these differences were not significantly different from the score indicating gender-neutrality (4). Therefore, the current results strongly mirror the results of Kreis and Cooke (2011), with 86% of symptoms rated similarly in terms of prototypicality.

Viljoen et al. (2015) also used the CAPP in a prototypicality study and found that 31 of the 33 symptoms were significantly different from the score of gender-neutrality, with 29 rated more prototypically male and two rated more prototypically female. Of the 31 symptoms rated as more gendered, 26 were rated similarly in the current study, thus concordance was very high as 84% of the symptoms were rated similarly. Five symptoms that were rated as more prototypically male in Viljoen and colleagues (2015) were rated more prototypically female in the current study. These included the four symptoms rated differently than Kreis and Cooke (2011) noted above as well as *Manipulative*.

Prototypicality studies are often used to provide evidence for the central characteristics of an underlying concept or disorder. The prototypicality results from the current study closely mirror that of prior research with the exception of a few symptoms that were rated differently in the current study. The results supported the hypothesis that the majority of the items would be rated more prototypically male than female. It was also expected that all of the six CAPP domains would be rated more prototypically male than female, with the exception of the *Cognitive* domain, which was expected to be rated gender-neutral. This hypothesis was mostly supported, though all six domains were considered more prototypically male. The *Cognitive* domain was not considered gender-neutral. The prototypicality results suggest that symptoms of psychopathy are generally regarded as more representative of males than females, suggesting

that it is considered a more male-dominant disorder. These results partially support the sex-role consistency hypothesis in that psychopathy appears to be considered more male dominant.

However, there are two possible explanations for the current results: 1) psychopathy is more common in males therefore the identified symptoms of psychopathy are more characteristic of males 2) gender biases regarding psychopathy and/or the symptoms of psychopathy are responsible for the current results.

The prototypicality results demonstrate that female psychopathy is characterized by more emotional instability, self-justifying behaviours, manipulativeness, unstable self-concept, and a sense of uniqueness compared to male psychopathy. These results strongly mirror past research (Bolt et al., 2004; Kreis & Cooke, 2011; Strand & Belfrage, 2005; Viljoen et al., 2015). While this does provide confidence in the current conceptualization of female psychopathy and the validity of the current results, it raises new questions.

Current conceptualizations of psychopathy and assessment tools were formulated based on research with predominantly male samples including very few females (Cleckley, 1941, 1976; Hare, 1991, 2003). Therefore, it is worth questioning whether the current conceptualization and assessment tools adequately represent female psychopathy if they made up such a small proportion of the sample from which it was developed. It is possible that current assessment tools may be lacking items specific to female psychopathy, thereby not capturing the full manifestation of psychopathy in females. The Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al., 2012), used in the current study, was developed based on this prior research as well and interviews with subject matter experts. For all current research and assessment tools to be based on research with relatively few females, it is impossible to know

whether the current conceptualization accurately reflects the construct of female psychopathy in totality.

As suggested in the research, female psychopathy differs from male psychopathy in a number of ways, including presentation. This is supported by replicated research findings demonstrating that females consistently score higher than males on certain psychopathy criteria (i.e. manipulative, emotional instability, unstable self-concept) and these findings are responsible for the current conceptualization of female psychopathy. Therefore, prototypicality ratings and research attempting to characterize female psychopathy may be plagued by research that has already established the construct of female psychopathy in the minds of practitioners and researchers. In other words, items could be rated as more prototypical of female psychopathy because the research has demonstrated females to differ on specific items.

Students rated item and domain prototypicality comparably to the affiliates, even with a lack of psychopathy knowledge. This could be explained by societal expectations and biases regarding what is more typical behaviour of males and females, as opposed to specifically in relation to psychopathy. Therefore, the consistent replicated prototypicality results found in the research may not be demonstrating a consistent characterization of female psychopathy but may be reflective of gender role expectations and beliefs about behaviour.

Vignette and symptom severity studies are often used to determine the presence of gender biases. Keeping all other details identical, varying only client gender, any differences observed in ratings can only be attributed to client gender. Caceres (2014) employed a vignette study using the PCL:SV and found females were generally rated lower than males, though differences were only significant for two items. The items with significant differences were not among the PCL-R items included in the current study.

Two main vignettes were used in the current study, each portraying a personality and behavioural pattern of either a typical male or typical female psychopath. The gender typical characteristics and behaviours were based on prior research findings of psychopathic features consistently found as more common in one gender. Each vignette was used in three conditions varying by gender (male, female, and gender blind) for a total of six conditions. Participants rated the severity of the symptoms exhibited by their client in their assigned vignette. It was expected that symptom severity ratings would differ between vignettes, indicating that gender influenced the ratings of severity. This hypothesis was not supported in the current study as symptom severity ratings did not vary between vignette conditions. Therefore, the current results do not support the sex-role inconsistency hypothesis. When comparing students and affiliates on symptom severity ratings, it was observed that students rated each domain higher in severity compared to affiliates. It is possible that students rated symptoms as more severe due to their unfamiliarity with the construct of psychopathy and its' presentation.

In contrast to prior research (Hazelwood, 2006; Kreis & Cooke, 2011), the current study did find some rater characteristics to have a significant effect on ratings of psychopathy symptoms. Race (0 = Caucasian, 1 = minority), knowledge of psychopathy, and male stereotypes were included as covariates in the current study as they had a significant impact on the symptom severity ratings. Participants from a minority racial group rated the majority of the domains as higher in severity, particularly the *Cognitive* domain, compared to those who identified as Caucasians. The *Cognitive* domain includes the items *Suspicious*, *Lack of concentration*, *Intolerant*, *Inflexible*, and *Lacks planfulness*. It is possible that cultural differences in beliefs and values could be responsible for the more severe ratings on these items. Those indicating a lower level of knowledge of psychopathy rated symptoms higher in severity than affiliates did,

particularly for the domains of *Cognitive*, *Emotional*, and *Antisocial*. It is possible that those with less knowledge of psychopathy, therefore unfamiliar with the core characteristics and symptoms, considered certain behaviours and actions demonstrated in the vignette as more severe than those familiar with psychopathy and its' symptomatic presentation. Finally, those who held higher levels of male stereotypes (i.e. scoring lower on the male subscale of the GRSS) rated the majority of the domains as higher in severity, particularly for the *Antisocial* domain. This is an interesting finding given that the majority of antisocial symptoms are considered more reflective of males than females, particularly in relation to psychopathy (see Table 1).

Implications

The current results have important implications for psychopathy research as there is currently a lack of consensus regarding the differences observed between male and female psychopathy. While the prototypicality results demonstrated significant differences in symptoms representative of psychopathy in males and females, gender and behavioural expression (gender role typical vs atypical) did not impact symptom severity ratings as each vignette was rated similarly on each individual CAPP domain. This suggests that certain symptoms and characteristics are not rated more harshly or leniently as a function of gender. Additionally, an individual presenting with gender-role atypical behaviour (e.g. a female presenting with symptoms considered more male) did not receive more harsh ratings. This is promising for research on psychopathy for females as this provides evidence that gender biases and gender role expectations may not be responsible for the differences observed between male and female psychopathy. However, this must be interpreted with caution as the current results may only be applicable when using the CAPP. The CAPP differs from other psychopathy assessments by the use of plain language adjectives and adjective phrases representing symptoms, which may be

more gender neutral in nature. Therefore, it is possible that the CAPP may be a more appropriate, gender neutral tool for assessing psychopathy compared to other assessments.

Research assessing a variety of aspects relating to gender, such as gender biases, is incredibly important for forensic research given the multitude of decisions and consequences that can result from diagnoses and risk assessments. Any effects of gender resulting in differences in ratings must be established to ensure fair and accurate results. This research is incredibly important to establish at this time as it will inform future research assessing similar issues with transgender and non-binary populations, who do not fall within the traditional binary construct and may be even more adversely affected by biases. In the coming years, this research will be required as the numbers of those identifying as transgender or non-binary may rise as awareness and acceptance in society increases.

The current results also lend credibility to the ease of use and understandability of the CAPP as students and affiliates rated the items similarly, both in terms of prototypicality and symptom severity. Students were able to accurately characterize psychopathy, in line with prior research and affiliates in the current study. This provides support for the use of the CAPP with a variety of populations, with little to no training in utilizing the assessment.

The results are promising for current psychopathy tools as some of the criticisms they have received may be unwarranted. While research suggests that females score lower on established scales, it may not be due to gender biases within raters but rather true presentational differences between the genders. However, more research must support the current results to make this statement with any certainty. Additionally, the current results do not allow for a determination of whether current tools fully capture female psychopathy. If the current tools do not fully capture the construct of female psychopathy, it could explain the lower scores observed

in the literature. More research will be needed to further elucidate the implications for current assessment tools.

Limitations

One main limitation of the current study is the small sample size for the affiliate sample. While the overall sample size of the affiliate participants was adequate, the use of six conditions resulted in a small number of affiliates in each condition. The affiliate sample was obtained from two sources including direct emails to subject matter experts and from a professional association (American Psychology Law Society - APLS). The current study did not separate responses by recruitment method, therefore the representation of each group in the current sample is unknown. Additionally, the members of APLS are from a wide variety of experience levels including practicing psychologists and lawyers, sociologists, new graduates, and current undergraduate and graduate students. The current study did not ask affiliate participants to identify their current occupation or membership status. Therefore, the experience level of the affiliate sample is unknown. However, the results suggest the affiliate sample did have a higher level of psychopathy knowledge than the undergraduate student sample.

Further, the use of student participants limits the generalizability of the research results, especially given they made up the largest proportion of participants. In terms of prototypicality, students rated some items in the opposite direction as the affiliate sample. Additionally, students rated symptoms as more severe for each of the CAPP domains than affiliates did. The majority of the student sample scored lower on the knowledge of psychopathy scale, which is expected given the large number of lower-level undergraduate students. The lack of knowledge could potentially explain the null findings as participants may not have possessed the requisite knowledge to make prototypicality ratings or rate symptom severity appropriately. This lack of

knowledge could also have been particularly impactful for rating psychopathy among the female vignettes. The student sample indicated a level of knowledge below the mid-point and it is possible that the knowledge they possessed could have been informed through media, such as television and film, which more often depict male psychopathy.

A large number of participants were excluded from final analyses, particularly among the student sample. Some participants completed the study in a short amount of time, possibly demonstrating a lack of attention to the study materials or possible indiscriminate responding. Additionally, a large number of participants failed the manipulation check items, which were vital to assessing the presence of potential gender biases. The exclusion of participants potentially influences the representativeness of the sample and therefore could impact the generalizability and external validity of the current results. Additionally, the symptom severity rating scale ranged from 1 (*very mild*) to 6 (*very severe*), with no option to rate a symptom as ‘not present’. However, this likely would not have changed the results in any meaningful way.

The nature of the current study could also impact the generalizability and external validity of the current results. Experimental research suffers from a number of limitations that could impact the validity and utility of the current results. These include human error, unrealistic conditions, extraneous variables, and participant variability. The vignettes created for the current study may not have fully captured the construct of psychopathy in a reliable, measurable way. It is possible that the symptoms of psychopathy were not salient enough or that they were too salient. In a similar vein, psychopathy is not assessed via vignette in natural conditions. It is usually assessed with a file review, an interview, and information obtained from collateral contacts in the person’s life. As the current study used a vignette as the only source of information, the current results may not apply to real-world settings where psychopathy is being

assessed with multiple sources of information. As the study was completed entirely online, there are a number of extraneous variables uncontrolled for such as participant level of engagement.

Future Directions

Future research attempting to characterize female psychopathy should move away from a prototypicality approach and use other methods to determine the core characteristics. While prototypicality studies are useful in their own right, they may be reflecting more gender role expectations regarding behaviour rather than the construct of psychopathy among genders. Assessing symptoms in isolation to determine gender weightings may be problematic in itself as a degree of bias will potentially be introduced. Studies with clinicians and those assessing psychopathy using a qualitative approach in favour of Likert scales may be more useful for gathering important information about gender presentation. Qualitative methods may prompt participants to use more complex thought, past experience, and concrete examples to rate the prototypicality of symptoms, which could result in more accurate prototypicality results compared to quick judgements using Likert scales. Respondents may be required to explain how a symptom manifests similarly and/or differently in males and females rather than simply identifying a symptom as more male or more female.

Future research should continue to explore the possibility that gender biases in ratings of psychopathy may be responsible for the differential findings among males and females. More research is needed to draw conclusions with any certainty. The current study should be replicated in larger samples of forensic mental health professionals, particularly those responsible for assessing, diagnosing, and treating those with psychopathy. The current study should also be replicated using other measures of psychopathy, such as the PCL-R, to further establish the impact of gender biases on current, commonly-used assessment tools.

Replication of the current study using audio recorded and video recorded interviews of subjects is also needed to determine if mode of client presentation is responsible for differences in ratings and to replicate real-world settings. Using purely paper-based fictional vignettes may result in lower scores than if the psychopathic individual were presented in a more direct manner. Additionally, it may be prudent to replicate the current study using case studies of known psychopaths to ensure the details provided are accurate representations of the construct rather than a hypothetical vignette.

To more effectively determine if gender biases influence ratings of psychopathy, it would also be helpful to replicate the current study using a diagnostic-based approach. While it is important to look at the individual symptoms, it may also be helpful to look at how a cluster of symptoms are conceptualized and diagnosed similarly or differently based on gender.

The measures used in the current study to assess degree of masculinity-femininity and gender role stereotypes are newer measures with limited evidence of their validity and reliability. Therefore, any additional research on the current topic should continue assessing these factors in participants using the tools used in the current study as well as other similar, more established measures.

Research building the construct of female psychopathy using a bottom-up approach should be conducted to determine if current conceptualizations and assessment tools are fully capturing the construct in females. Using a large sample of known psychopathic females, including those exhibiting a large number of symptoms without meeting the diagnostic cut-off would help establish a more clear conceptualization of female psychopathy and help identify symptoms and characteristics that may be unique to females.

Conclusions

Overall, the results of the current study closely mirror those found in prior research. As expected, the majority of the CAPP items and domains were rated more prototypically male than female. Providing an identical client vignette to participants, varying only in gender, did not result in significant differences in symptom severity. Thus, whether a client presented as male, female, or gender-blind did not impact the symptom severity ratings they received. These results suggest that gender biases have no impact on ratings of psychopathy. The current results suggest that symptoms of psychopathy are considered more masculine in nature and that psychopathy is a male-dominant disorder but that participants rated clients similarly in terms of symptom severity, regardless of gender. These findings have great importance for research on psychopathy with females as it suggests the differences observed between males and females may be true differences. The criticisms of current psychopathy assessments and how the disorder is conceptualized may be unwarranted.

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Appendix C

Gender Role Stereotypes Scale (GRSS; Mills et al., 2012)

Using the rating scale provided, please indicate the extent to which you believe each task should be done by the man, should be done by the woman, or the man and woman share the responsibility equally, when there is a relationship between a man and a woman.

1 (*should always be done by the man*), 2 (*should usually be done by the man*), 3 (*equal responsibility*), 4 (*should usually be done by the woman*), and 5 (*should always be done by the woman*).

	1 (Should always be done by the man)	2 (Should usually be done by the man)	3 (Equal responsibility)	4 (Should usually be done by the woman)	5 (Should always be done by the woman)
Mow the lawn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prepare meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Select a 5 for this response	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Propose marriage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perform basic maintenance of vehicles, such as changing the oil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Perform household cleaning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wash, fold, and put away laundry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decorate the house	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shovel snow to clear driveways and sidewalks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Items 1, 3, 4, and 8 were written to reflect male gender role stereotypes; items 2, 5, 6, and 7 were written to reflect female gender role stereotypes.

Appendix D**Comprehensive Assessment of Psychopathic Personality (CAPP; Cooke et al., 2012)
Domains and Corresponding Items**

Attachment	Behavioural
-Detached -Uncommitted -Unempathic -Uncaring	-Lacks perseverance -Unreliable -Reckless -Restless -Disruptive -Aggressive
Cognitive	Dominance
-Suspicious -Lacks concentration -Intolerant -Inflexible -Lacks planfulness	-Antagonistic -Domineering -Deceitful -Manipulative -Insincere -Garrulous
Emotional	Self
-Lacks anxiety -Lacks pleasure -Lacks emotional depth -Lacks emotional stability -Lacks remorse	-Self-centered -Self-aggrandizing -Sense of uniqueness -Sense of entitlement -Sense of invulnerability -Self-justifying -Unstable self concept

Appendix E

Prototypical Male Psychopathy Vignette (Male Gender – Male Behaviours)

Offender Information

- Michael, 34-year old first-time male federal offender
- 10-year sentence for human trafficking and assault. He was the ringleader of a sex trafficking ring, otherwise known as a ‘pimp’ and assaulted three of his victims.

Background and Early Life

- Michael was raised in an affluent neighbourhood where he attended private school.
- His parents report that he was a difficult child. He was suspended constantly in elementary school and high school for “harmless” pranks, disrupting class and bullying. He has a number of juvenile charges for assault and theft.
- Michael disclosed a history of childhood physical abuse in the family home.

Education and Work History

- Michael barely graduated high school as he found school boring.
- He has worked in many different industries but quickly loses interest, always wanting to try something new. He has never stayed at any job longer than a few months. He has successfully acquired jobs, completed paperwork and orientation sessions, but failed to return for his shifts.
- For finances, he has admitted he prefers jobs where he has to do minimal work for maximum gain.
- He is not concerned with finances as he has “10 ideas for get-rich quick schemes that are fool-proof”. He refuses to elaborate on what his ideas are as he believes others will steal his “brilliant” ideas.

Personality

- Throughout the interview, it was difficult to keep Michael focused on one topic. He has no plans upon release and admits he prefers to live “one day at a time”.
- He is known as a chronic storyteller and has bragged about this ability, amused by his ability to deceive others.
- He uses manipulation and exploitation of others for personal gain by identifying others’ weaknesses and using them to his advantage, with no regard for the victim.
- He prefers to be the center of attention and dominate the conversation.
- He has also been described by others as having a bad temper and easily provoked.
- He has an entitled and aggressive demeanor and says he deserves the ‘lion’s share’ of his employees take-home. He believes he deserves the best of everything, whether he has earned it or not.

- He has been described as a superficially charming individual who is quick with a comeback to everything. He has been known to use technical language to give the impression of intelligence, but it is very surface level.
- He is known to have a very high opinion of himself, to an extreme level. He believes he is different from others and that his level of attractiveness, skill, and charisma cannot be beat.

Current Crime

- He described choosing victims who looked vulnerable, such as those who were homeless or had family troubles. He explained he would use flirting, flattery, whatever it took.
- When discussing his current offence, he demonstrates a very care-free attitude. He is confident he will win on appeal.
- He has no remorse or guilt and minimizes the seriousness of his crimes and claims the women were 100% willing participants.
- He is unable to demonstrate a range of emotions and often exhibits emotions that are inconsistent with his actions. While voicing that he feels bad for his victims, he also mocked them.
- When asked about his current offence, he stated he needed money to pay some bills and he found some women wanting to work with him. He doesn't understand how he was arrested for helping women gain employment and make money. He also blames the 'Johns' who pay for access to women, rather than himself.

Leisure

- He has no hobbies and can't report anything he enjoys doing in his free time. He reports going through the motions of his day-to-day life without feeling much happiness in anything he does. He states he is not depressed or lonely, and that he never has been. He reports to be content, not unhappy.

Relationships

- He has admitted to having approximately 100 sexual partners throughout his life, starting at the age of 11. He admitted to being unfaithful in every relationship he has had.
- He has bragged about his ability to seduce women and how he turns sex into a game to see what he can get women to agree to do in the bedroom.
- He was always in charge of the relationship and his partners always did what he asked.
- He has admitted to living with approximately 10 different women, all of whom took on the financial burden. He admitted to leaving some of these relationships on a moment's notice, packing his belongings while they were at work and leaving without a word. When asked how he thinks his partners felt when he did this, he reports he didn't really think about it and doesn't care.

Appendix F

Prototypical Female Psychopathy Vignette (Female Gender – Female Behaviours)

Offender Information

- Jessica, 34-year old first-time female federal offender
- 5-year sentence for prostitution and fraud. She attempted to solicit herself to a police officer and was using stolen driver's licenses and stolen credit cards at the time

Background and Early Life

- Jessica was raised in an affluent neighbourhood where she attended private school.
- Her parents report that she was a difficult child. She was suspended constantly in elementary school and high school for skipping school, disrupting class, and bullying. Her parents reported she often ran away from home as a teenager and was often returned by the local police. She does not have any juvenile charges.
- Jessica disclosed a history of childhood sexual abuse in the family home.

Education and Work History

- Jessica barely graduated high school as she found school boring.
- She has worked in many different industries but quickly loses interest, always wanting to try something new. She has never stayed at any job longer than a few months. She has successfully acquired jobs, completed paperwork and orientation sessions, but failed to return for her shifts.
- For finances, she has admitted she prefers jobs where she has to do minimal work for maximum gain.
- She is not concerned with finances as she knows her good looks are all she needs to get by. "No one can say no to a pretty girl" she said.

Personality

- Throughout the interview, it was difficult to keep Jessica focused on one topic. She has no plans upon release and admits she prefers to live "one day at a time".
- She is known as a chronic storyteller and has bragged about this ability, amused by her ability to deceive others.
- She uses manipulation and exploitation of others for personal gain by identifying others' weaknesses and using them to her advantage, with no regard for the victim.
- She prefers to be the center of attention and dominate the conversation.
- She has also been described by others as having a bad temper and easily provoked.
- She has an entitled demeanor and says she deserves to use other people's credit cards and cheques as the banks will reimburse the victims. She believes she deserves the best of everything, whether she has earned it or not.

- She has been described as a superficially charming individual who is quick with a come-back to everything. She has been known to use technical language to give the impression of intelligence, but it is very surface level.
- She is known to have a very high opinion of herself, though it manifests in a subtle manner. She often appears empathic and caring at first, though this quickly dissipates. She believes she is different from others and that her level of attractiveness, skill, and charisma cannot be beat.

Current Crime

- She described choosing fraud victims who looked lonely and would do whatever it took to get into their good graces. She would use friendship, caring, and listening with women and flirting and provocative behaviour with men. She would fake various hardships to get cash or would steal their credit cards and cheque books without their knowledge.
- When discussing her current offence, she demonstrates a very care-free attitude. She is confident she will win on appeal.
- She has no remorse or guilt and minimizes the seriousness of her crimes and claims that she didn't actually hurt anyone, saying only the banks were affected.
- She is unable to demonstrate a range of emotions and often exhibits emotions that are inconsistent with her actions. While voicing that she feels kind of bad for her victims, she mocked them for being upset and thinks they were over-reacting.
- When asked about her current offence, she stated she needed money to pay some bills. She doesn't understand how she was arrested for helping others learn how to protect their financial information, especially since the banks reimburse them.

Leisure

- She has no hobbies and can't report anything she enjoys doing in her free time. She reports going through the motions of her day-to-day life without feeling much happiness in anything she does. She states she is not depressed or lonely, and that she never has been. She reports to be content, not unhappy.

Relationships

- She has admitted to having approximately 100 sexual partners throughout her life (not including her escort clients), starting at the age of 11. She admitted to being unfaithful in every relationship she has had.
- She has bragged about her ability to seduce men and how she turns sex into a game to see what she can get men to agree to do in the bedroom.
- She was always in charge of the relationship and her partners always did what she asked.
- She has admitted to living with approximately 10 different men, all of whom took on the financial burden. She admitted to leaving some of these relationships on a moment's notice, packing her belongings while they were at work and leaving without a word. When asked how she thinks her partners felt when she did this, she reports she didn't really think about it and doesn't care.

Appendix G

Male Gender – Female Behaviours

Offender Information

- Michael, 34-year old first-time male federal offender
- 5-year sentence for prostitution and fraud. He attempted to solicit himself to a police officer and was using stolen driver's licenses and stolen credit cards at the time.

Background and Early Life

- Michael was raised in an affluent neighbourhood where he attended private school.
- His parents report that he was a difficult child. He was suspended constantly in elementary school and high school for skipping school, disrupting class, and bullying. His parents reported he often ran away from home as a teenager and was often returned by the local police. He does not have any juvenile charges.
- Michael disclosed a history of childhood sexual abuse in the family home.

Education and Work History

- Michael barely graduated high school as he found school boring.
- He has worked in many different industries but quickly loses interest, always wanting to try something new. He has never stayed at any job longer than a few months. He has successfully acquired jobs, completed paperwork and orientation sessions, but failed to return for his shifts.
- For finances, he has admitted he prefers jobs where he has to do minimal work for maximum gain.
- He is not concerned with finances as he knows his good looks are all he needs to get by. "No one can say no to a handsome man" he said.

Personality

- Throughout the interview, it was difficult to keep Michael focused on one topic. He has no plans upon release and admits he prefers to live "one day at a time".
- He is known as a chronic storyteller and has bragged about this ability, amused by his ability to deceive others.
- He uses manipulation and exploitation of others for personal gain by identifying others' weaknesses and using them to his advantage, with no regard for the victim.
- He prefers to be the center of attention and dominate the conversation.
- He has also been described by others as having a bad temper and easily provoked.
- He has an entitled demeanor and says he deserves to use other people's credit cards and cheques as the banks will reimburse the victims. He believes he deserves the best of everything, whether he has earned it or not.

- He has been described as a superficially charming individual who is quick with a comeback to everything. He has been known to use technical language to give the impression of intelligence, but it is very surface level.
- He is known to have a very high opinion of himself, though it manifests in a subtle manner. He often appears empathic and caring at first, though this quickly dissipates. He believes he is different from others and that his level of attractiveness, skill, and charisma cannot be beat.

Current Crime

- He described choosing fraud victims who looked lonely and would do whatever it took to get into their good graces. He would use friendship, caring, and listening with men and flirting and provocative behaviour with women. He would fake various hardships to get cash or would steal their credit cards and cheque books without their knowledge.
- When discussing his current offence, he demonstrates a very care-free attitude. He is confident he will win on appeal.
- He has no remorse or guilt and minimizes the seriousness of his crimes and claims that he didn't actually hurt anyone, saying only the banks were affected.
- He is unable to demonstrate a range of emotions and often exhibits emotions that are inconsistent with his actions. While voicing that he feels kind of bad for his victims, he mocked them for being upset and thinks they were over-reacting.
- When asked about his current offence, he stated he needed money to pay some bills. He doesn't understand how he was arrested for helping others learn how to protect their financial information, especially since the banks reimburse them.

Leisure

- He has no hobbies and can't report anything he enjoys doing in his free time. He reports going through the motions of his day-to-day life without feeling much happiness in anything he does. He states he is not depressed or lonely, and that he never has been. He reports to be content, not unhappy.

Relationships

- He has admitted to having approximately 100 sexual partners throughout his life (not including his escort clients), starting at the age of 11. He admitted to being unfaithful in every relationship he has had.
- He has bragged about his ability to seduce women and how he turns sex into a game to see what he can get women to agree to do in the bedroom.
- He was always in charge of the relationship and his partners always did what he asked.
- He has admitted to living with approximately 10 different women, all of whom took on the financial burden. He admitted to leaving some of these relationships on a moment's notice, packing his belongings while they were at work and leaving without a word. When asked how he thinks his partners felt when he did this, he reports he didn't really think about it and doesn't care.

Appendix H

Female Gender – Male Behaviours

Offender Information

- Jessica, 34-year old first-time female federal offender
- 10-year sentence for human trafficking and assault. She was the ringleader of a sex trafficking ring, otherwise known as a ‘madam’ and assaulted three of her victims.

Background and Early Life

- Jessica was raised in an affluent neighbourhood where she attended private school.
- Her parents report that she was a difficult child. She was suspended constantly in elementary school and high school for “harmless” pranks, disrupting class and bullying. She has a number of juvenile charges for assault and theft.
- Jessica disclosed a history of childhood physical abuse in the family home.

Education and Work History

- Jessica barely graduated high school as she found school boring.
- She has worked in many different industries but quickly loses interest, always wanting to try something new. She has never stayed at any job longer than a few months. She has successfully acquired jobs, completed paperwork and orientation sessions, but failed to return for her shifts.
- For finances, she has admitted she prefers jobs where she has to do minimal work for maximum gain.
- She is not concerned with finances as she has “10 ideas for get-rich quick schemes that are fool-proof”. She refuses to elaborate on what her ideas are as she believes others will steal her “brilliant” ideas.

Personality

- Throughout the interview, it was difficult to keep Jessica focused on one topic. She has no plans upon release and admits she prefers to live “one day at a time”.
- She is known as a chronic storyteller and has bragged about this ability, amused by her ability to deceive others.
- She uses manipulation and exploitation of others for personal gain by identifying others’ weaknesses and using them to her advantage, with no regard for the victim.
- She prefers to be the center of attention and dominate the conversation.
- She has also been described by others as having a bad temper and easily provoked.
- She has an entitled and aggressive demeanor and says she deserves the ‘lion’s share’ of her employees take-home. She believes she deserves the best of everything, whether she has earned it or not.

- She has been described as a superficially charming individual who is quick with a comeback to everything. She has been known to use technical language to give the impression of intelligence, but it is very surface level.
- She is known to have a very high opinion of herself, to an extreme level. She believes she is different from others and that her level of attractiveness, skill, and charisma cannot be beat.

Current Crime

- She described choosing victims who looked vulnerable, such as those who were homeless or had family troubles. She explained she would use flirting, flattery, whatever it took.
- When discussing her current offence, she demonstrates a very care-free attitude. She is confident she will win on appeal.
- She has no remorse or guilt and minimizes the seriousness of her crimes and claims the women were 100% willing participants.
- She is unable to demonstrate a range of emotions and often exhibits emotions that are inconsistent with her actions. While voicing that she feels bad for his victims, she also mocked them.
- When asked about her current offence, she stated she needed money to pay some bills and she found some women wanting to work with her. She doesn't understand how she was arrested for helping women gain employment and make money. She also blames the 'Johns' who pay for access to women, rather than herself.

Leisure

- She has no hobbies and can't report anything she enjoys doing in her free time. She reports going through the motions of her day-to-day life without feeling much happiness in anything she does. She states she is not depressed or lonely, and that she never has been. She reports to be content, not unhappy.

Relationships

- She has admitted to having approximately 100 sexual partners throughout her life, starting at the age of 11. She admitted to being unfaithful in every relationship she has had.
- She has bragged about her ability to seduce women and how she turns sex into a game to see what she can get men to agree to do in the bedroom.
- She was always in charge of the relationship and her partners always did what she asked.
- She has admitted to living with approximately 10 different men, all of whom took on the financial burden. She admitted to leaving some of these relationships on a moment's notice, packing her belongings while they were at work and leaving without a word. When asked how she thinks her partners felt when she did this, she reports she didn't really think about it and doesn't care.

Appendix I

Gender Blind – Male Behaviours

Offender Information

- 34-year old first-time federal offender
- 10-year sentence for human trafficking and assault. The offender was the ringleader of a sex trafficking ring and assaulted three of their victims.

Background and Early Life

- The offender was raised in an affluent neighbourhood where they attended private school.
- Their parents report that they were a difficult child. The offender was suspended constantly in elementary school and high school for “harmless” pranks, disrupting class and bullying. They have a number of juvenile charges for assault and theft.
- The offender disclosed a history of childhood physical abuse in the family home.

Education and Work History

- The offender barely graduated high school as they found school boring.
- The offender has worked in many different industries but quickly loses interest, always wanting to try something new. They have never stayed at any job longer than a few months. They have successfully acquired jobs, completed paperwork and orientation sessions, but failed to return for their shifts.
- For finances, they have admitted to preferring jobs where they have to do minimal work for maximum gain.
- They are not concerned with finances as they have “10 ideas for get-rich quick schemes that are fool-proof”. They refuse to elaborate on what these ideas are as they believe others will steal their “brilliant” ideas.

Personality

- Throughout the interview, it was difficult to keep the offender focused on one topic. They have no plans upon release and admit they prefer to live “one day at a time”.
- They are known as a chronic storyteller and have bragged about this ability, amused by their ability to deceive others.
- They use manipulation and exploitation of others for personal gain by identifying others’ weaknesses and using them to their advantage, with no regard for the victim.
- They prefer to be the center of attention and dominate the conversation.
- They have also been described by others as having a bad temper and easily provoked.
- The offender has an entitled and aggressive demeanor and says they deserves the ‘lion’s share’ of their employees take-home. They believe they deserve the best of everything, whether they have earned it or not.

- The offender has been described as a superficially charming individual who is quick with a come-back to everything. They have been known to use technical language to give the impression of intelligence, but it is very surface level.
- The offender is known to have a very high opinion of them self, to an extreme level. They believe they are different from others and that their level of attractiveness, skill, and charisma cannot be beat.

Current Crime

- They described choosing victims who looked vulnerable, such as those who were homeless or had family troubles. They explained they would use flirting, flattery, whatever it took.
- When discussing their current offence, they demonstrate a very care-free attitude. They are confident they will win on appeal.
- They have no remorse or guilt and minimize the seriousness of their crimes and claim the women were 100% willing participants.
- They are unable to demonstrate a range of emotions and often exhibit emotions that are inconsistent with their actions. While voicing that they feel bad for their victims, they also mocked them.
- When asked about their current offence, they stated they needed money to pay some bills and found some women wanting to work with them. They don't understand how they were arrested for helping women gain employment and make money. They also blame the 'Johns' who pay for access to women, rather than them self.

Leisure

- The offender has no hobbies and can't report anything they enjoy doing in their free time. They report going through the motions of their day-to-day life without feeling much happiness in anything they do. They state they are not depressed or lonely, and that they never have been. They report to be content, not unhappy.

Relationships

- The offender has admitted to having approximately 100 sexual partners throughout their life, starting at the age of 11. They admitted to being unfaithful in every relationship they have had.
- They have bragged about their ability to seduce people and how they turn sex into a game to see what they can get their partner to agree to do in the bedroom.
- They were always in charge of the relationship and their partners always did what they asked.
- The offender has admitted to living with approximately 10 different partners, all of whom took on the financial burden. They admitted to leaving some of these relationships on a moment's notice, packing their belongings while they were at work and leaving without a word. When asked how they think their partners felt when they did this, they report they didn't really think about it and don't care.

Appendix J

Gender Blind – Female Behaviours

Offender Information

- 34-year old first-time federal offender
- 5-year sentence for prostitution and fraud. The offender attempted to solicit them self to a police officer and was using stolen driver's licenses and stolen credit cards at the time.

Background and Early Life

- The offender was raised in an affluent neighbourhood where they attended private school.
- Their parents report that they were a difficult child. The offender was suspended constantly in elementary school and high school for skipping school, disrupting class, and bullying. Their parents reported they often ran away from home as a teenager and was often returned by the local police. The offender does not have any juvenile charges.
- The offender disclosed a history of childhood sexual abuse in the family home.

Education and Work History

- The offender barely graduated high school as they found school boring.
- The offender has worked in many different industries but quickly loses interest, always wanting to try something new. They have never stayed at any job longer than a few months. They have successfully acquired jobs, completed paperwork and orientation sessions, but failed to return for their shifts.
- For finances, they have admitted to preferring jobs where they have to do minimal work for maximum gain.
- They are not concerned with finances as they know their good looks are all they need to get by. "No one can say no to an attractive person" they said.

Personality

- Throughout the interview, it was difficult to keep the offender focused on one topic. They have no plans upon release and admit they prefer to live "one day at a time".
- They are known as a chronic storyteller and have bragged about this ability, amused by their ability to deceive others.
- They use manipulation and exploitation of others for personal gain by identifying others' weaknesses and using them to their advantage, with no regard for the victim.
- They prefer to be the center of attention and dominate the conversation.
- They have also been described by others as having a bad temper and easily provoked.
- The offender has an entitled demeanor and says they deserve to use other people's credit cards and cheques as the banks will reimburse the victims. They believe they deserve the best of everything, whether they have earned it or not.

- The offender has been described as a superficially charming individual who is quick with a come-back to everything. They have been known to use technical language to give the impression of intelligence, but it is very surface level.
- The offender is known to have a very high opinion of them self, though it manifests in a subtle manner. They often appear empathic and caring at first, though this quickly dissipates. They believe they are different from others and that their level of attractiveness, skill, and charisma cannot be beat.

Current Crime

- They described choosing fraud victims who looked lonely and would do whatever it took to get into their good graces. They would use friendship, caring, and listening with some and flirting and provocative behaviour with others. They would fake various hardships to get cash or would steal their credit cards and cheque books without their knowledge.
- When discussing their current offence, they demonstrate a very care-free attitude. They are confident they will win on appeal.
- They have no remorse or guilt and minimize the seriousness of their crimes and claim that they didn't actually hurt anyone, saying only the banks were affected.
- They are unable to demonstrate a range of emotions and often exhibit emotions that are inconsistent with their actions. While voicing that they feel kind of bad for their victims, they mocked them for being upset and thinks they were over-reacting.
- When asked about their current offence, they stated they needed money to pay some bills. They don't understand how they were arrested for helping others learn how to protect their financial information, especially since the banks reimburse them.

Leisure

- The offender has no hobbies and can't report anything they enjoy doing in their free time. They report going through the motions of their day-to-day life without feeling much happiness in anything they do. They state they are not depressed or lonely, and that they never have been. They report to be content, not unhappy.

Relationships

- The offender has admitted to having approximately 100 sexual partners throughout their life (not including their escort clients), starting at the age of 11. They admitted to being unfaithful in every relationship they have had.
- They have bragged about their ability to seduce people and how they turn sex into a game to see what they can get their partner to agree to do in the bedroom.
- They were always in charge of the relationship and their partners always did what they asked.
- The offender has admitted to living with approximately 10 different partners, all of whom took on the financial burden. They admitted to leaving some of these relationships on a moment's notice, packing their belongings while they were at work and leaving without a

word. When asked how they think their partners felt when they did this, they report they didn't really think about it and don't care.

Appendix K

Certification of Institutional Ethics Clearance

The Carleton University Research Ethics Board-B (CUREB-B) has granted ethics clearance for the research project described below and research may now proceed. CUREB-B is constituted and operates in compliance with the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS2).

Ethics Protocol Clearance ID: Project # 111084

Research Team: Cassandra Conley (Primary Investigator)

Dr. Shelley Brown (Research Supervisor)

Project Title: Examining the effects of rater characteristics and gender biases on ratings of psychopathic traits for women

Funding Source (If applicable):

Effective: **July 22, 2019**

Expires: **July 31, 2020.**

Please ensure the study clearance number is prominently placed in all recruitment and consent materials: CUREB-B Clearance # 111084.

Restrictions:

This certification is subject to the following conditions:

1. Clearance is granted only for the research and purposes described in the application.
2. Any modification to the approved research must be submitted to CUREB-B via a Change to Protocol Form. All changes must be cleared prior to the continuance of the research.
3. An Annual Status Report for the renewal of ethics clearance must be submitted and cleared by the renewal date listed above. Failure to submit the Annual Status Report will result in the closure of the file. If funding is associated, funds will be frozen.
4. A closure request must be sent to CUREB-B when the research is complete or terminated.
5. During the course of the study, if you encounter an adverse event, material incidental finding, protocol deviation or other unanticipated problem, you must complete and submit a Report of Adverse Events and Unanticipated Problems Form, found here: <https://carleton.ca/researchethics/forms-and-templates/>

Failure to conduct the research in accordance with the principles of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 2nd edition* and the *Carleton University Policies and Procedures for the Ethical Conduct of Research* may result in the suspension or termination of the research project.

Upon reasonable request, it is the policy of CUREB, for cleared protocols, to release the name of the PI, the title of the project, and the date of clearance and any renewal(s).

Please contact the Research Compliance Coordinators, at ethics@carleton.ca, if you have any questions.

CLEARED BY:

Date: July 22, 2019

Natasha Artemeva, PhD, Chair, CUREB-B

Janet Mantler, PhD, Vice-Chair, CUREB-B

Appendix L

American Psychology Law Society Recruitment Notice

Study Name: Who is a psychopath? Assessing the presence of psychopathic traits in men and women.

Study goal: To gain more knowledge about the presentation of psychopathy in men and women.

What will you be asked to do? You will be asked to think about the prototypical psychopathic person. Then you will view a list of 37 psychopathy symptoms and rate the gender prototypicality of each symptom. Next, you will be asked to read a hypothetical case vignette portraying a psychopath and rate the individual on the same 37 psychopathy symptoms in terms of symptom severity. You will also be asked to complete questionnaires about your personality, demographics, as well as your current level of professional knowledge and experience with psychopathy.

Eligibility: Fluent in English, and a member of the American Psychology Law Society.

Estimated Duration: 30 minutes.

Compensation: You will have the opportunity to place your name into a draw for a chance to win 1 of 4 \$25.00 Amazon gift cards.

Potential Risks: Because some of the questions ask about personal beliefs and characteristics, some people may find them embarrassing or otherwise disturbing. Your responses are anonymous and confidential, so nobody will be able to connect your responses with your identity. You can refuse to participate, skip any questions you do not wish to answer, or stop participating at any time without penalty.

Researchers: Shelley Brown

E-mail: shelley.brown@carleton.ca

Cassandra Conley

E-mail: cassandraconley@cmail.carleton.ca

Participation Deadline: November 1st, 2019.

This study has received clearance by the Carleton University Research Ethics Board - B (#111084)

https://carletonpsych.co1.qualtrics.com/jfe/form/SV_1RdhPNDaNp4PBXL

If you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4085 or via email at ethics@carleton.ca)

Appendix M

Email Recruitment Notice for Pre-identified Key Informants

Subject: Invitation to participate in a research project on psychopathy

Dear Sir or Madam,

My name is Cassandra Conley and I am a Master's student in the Psychology Department at Carleton University. I am working on a research project under the supervision of Dr. Shelley Brown.

Given your recognized expertise in the field, I am writing to you today to invite you to participate in a study entitled "*Who is a psychopath? Assessing the presence of psychopathic traits in men and women*". This study aims to further the research base about the presentation of psychopathy in men and women. Please see below for more information.

What will you be asked to do? You will be asked to think about the prototypical psychopathic person. Then you will view a list of 37 psychopathy symptoms and rate the gender prototypicality of each symptom. Next, you will be asked to read a hypothetical case vignette portraying a psychopath and rate the individual on the same 37 psychopathy symptoms in terms of symptom severity. You will also be asked to complete questionnaires about your personality, demographics, as well as your current level of professional knowledge and experience with psychopathy.

Eligibility: Fluent in English and have received a personalized email invitation to participate.

Estimated Duration: 30 minutes

Compensation: You will have the opportunity to place your name into a draw for a chance to win 1 of 4 \$25.00 Amazon gift cards.

Potential Risks: Because some of the questions ask about personal beliefs and characteristics, some people may find them embarrassing or otherwise disturbing. Your responses are anonymous and confidential, so nobody will be able to connect your responses with your identity. You can refuse to participate, skip any questions you do not wish to answer, or stop participating at any time without penalty.

Researchers: Shelley Brown

E-mail: shelley.brown@carleton.ca

Cassandra Conley

E-mail: cassandraconley@mail.carleton.ca

Participation Deadline: November 1st, 2019.

This study has received clearance by the Carleton University Research Ethics Board - B (#111084)

If you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4085 or via email at ethics@carleton.ca)

If you would like to participate, please click here (https://carletonpsych.co1.qualtrics.com/jfe/form/SV_1RdhPNDaNp4PBXL) and you will be directed to the consent form. If you have any questions, please contact me at 613-520-2600 ext. 4578 or cassandraconley@cmail.carleton.ca

Sincerely,

Cassandra Conley

Appendix N

SONA Recruitment Notice

Study Name: Who is a psychopath? Assessing the presence of psychopathic traits in men and women.

Study goal: To gain more knowledge about the presentation of psychopathy in men and women.

What will you be asked to do? You will be asked to think about the prototypical psychopathic person. Then you will view a list of 37 psychopathy symptoms and rate the gender prototypicality of each symptom. Next, you will be asked to read a hypothetical case vignette portraying a psychopath and rate the individual on the same 37 psychopathy symptoms in terms of symptom severity. You will also be asked to complete questionnaires about your personality, demographics, as well as your current knowledge about psychopathy.

Eligibility: First- or second-year student in a SONA-eligible psychology class and fluent in English.

Estimated Duration: 30 minutes

Compensation: 0.25% additional course credit

Potential Risks Because some of the questions ask about personality characteristics and beliefs, some people may find them embarrassing or otherwise distressing. You can refuse to participate, skip any questions you do not wish to answer, or stop participating at any time without penalty. Additionally, some people may be survivors of psychopaths and may find the content to be distressing. If you do participate and become disturbed by the study, you will be directed to various sources of support.

Researchers: Shelley Brown
E-mail: shelley.brown@carleton.ca

Cassandra Conley
E-mail: cassandraconley@cmail.carleton.ca

Participation Deadline: November 1st, 2019.

This study has received clearance by the Carleton University Research Ethics Board - B (#111084).

https://carletonpsych.co1.qualtrics.com/jfe/form/SV_6qTvrU59hslwCI5

If you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4085 or via email at ethics@carleton.ca)

Appendix O

Student Informed Consent Form

Name and Contact Information of Researchers

Principle Researcher and Contact Information: Cassandra Conley, Masters student, Department of Psychology, Carleton University, Faculty of Arts and Social Sciences, 613-520-2600 ext. 4578, cassandraconley@cmail.carleton.ca

Supervisor and Contact Information: Shelley Brown, Associate Professor, Department of Psychology, Carleton University, 613-520-2600, ext. 1505; shelley.brown@carleton.ca

Project Title

Who is a Psychopath? Assessing the Presence of Psychopathic Traits in Males and Females

Project Sponsor and Funder (if any)

None

Carleton University Project Clearance

Clearance #: #111084 Date of Clearance: July 22, 2019

Invitation

You are invited to take part in a research project because you are a first- or second-year Psychology student. The information in this form is intended to help you understand what we are asking of you so that you can decide whether you agree to participate in this study. Your participation in this study is voluntary, and a decision not to participate will not be used against you in any way. As you read this form, and decide whether to participate, please ask all the questions you might have, take whatever time you need, and consult with others as you wish.

What is the purpose of the study?

The purpose of the current study is to learn about traits and behaviours associated with male and female psychopathy.

What will I be asked to do?

If you agree to take part in the study, we will ask you to think of the prototypical psychopath and assess the gender prototypicality of 37 symptoms of psychopathy. Then, you will be asked to read a hypothetical case vignette portraying a psychopathic person and rate the individual on the same 37 psychopathy symptoms in terms of severity. You will also be asked to complete questionnaires about your personality, demographics, and your current knowledge about psychopathy. The entire study will be completed online and is expected to take approximately 30 minutes to complete.

Risks and Inconveniences

If you are a survivor of a psychopathic person, it is possible the current study may be distressing to you. You can refuse to participate, skip any questions you do not wish to answer, or stop participating at any time **without penalty**. More specifically, full credit (0.25%) will be granted for starting the survey, whether or not you answer all the questions or finish it. If you do participate and become disturbed by the study, you will be directed to various sources of support.

Possible Benefits

You may not receive any direct benefit from your participation in this study. However, you may gain an increased knowledge of psychopathy and your participation may allow researchers to better understand how psychopathy presents in men and women.

Compensation/Incentives

You will receive 0.25% additional course credit for participation in this study. You may withdraw from the study at any time and you will still receive this compensation.

No waiver of your rights

By signing this form, you are not waiving any rights or releasing the researchers from any liability.

Withdrawing from the study

If you withdraw your consent during the course of the study, all information collected from you before your withdrawal will be discarded.

After the study, it will not be possible to withdraw your data from the study. The study is occurring online in a survey platform (Qualtrics) which does not collect any personally identifying information. Therefore, it will be impossible to determine which responses belonged to you.

Confidentiality

We will remove all identifying information from the study data as soon as possible, which will be after your compensation has been provided.

We will treat your personal information as confidential, although absolute privacy cannot be guaranteed. No information that discloses your identity will be released or published without your specific consent. Research records may be accessed by the Carleton University Research Ethics Board in order to ensure continuing ethics compliance.

The results of this study may be published or presented at an academic conference or meeting, but the data will be presented so that it will not be possible to identify any participants.

You will be assigned a code/pseudonym so that your identity will not be directly associated with the data you have provided. All data, including coded information, will be kept in a password-protected and encrypted file on a secure computer. Because you will be granted course credit for taking part in the study, identifying information will be retained using a code until the course credit is granted.

Your data will be stored and protected by Qualtrics, in a server located in Toronto, Canada. However, it may be disclosed via a court order or data breach. We will encrypt and password protect any research data that we store or transfer.

Data Retention

Your de-identified data will be retained for a period of 7 years (after study publication) and then securely destroyed.

New information during the study

In the event that any changes could affect your decision to continue participating in this study, you will be promptly informed.

Ethics review

This project was reviewed and cleared by the Carleton University Research Ethics Board B. If you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4085 or by email at ethics@carleton.ca).

Statement of consent

I voluntarily agree to participate in this study.

Yes

No

Appendix P

Affiliate Informed Consent Form

Name and Contact Information of Researchers

Principle Researcher and Contact Information: Cassandra Conley, Masters student, Department of Psychology, Carleton University, Faculty of Arts and Social Sciences, 613-520-2600 ext. 4578, cassandraconley@cmail.carleton.ca

Supervisor and Contact Information: Shelley Brown, Associate Professor, Department of Psychology, Carleton University, 613-520-2600, ext. 1505; shelley.brown@carleton.ca

Project Title

Who is a Psychopath? Assessing the Presence of Psychopathic Traits in Males and Females

Project Sponsor and Funder (if any)

None

Carleton University Project Clearance

Clearance #: #111084 Date of Clearance: July 22, 2019

Invitation

You are invited to take part in a research project because you are a professional in the field of psychology. The information in this form is intended to help you understand what we are asking of you so that you can decide whether you agree to participate in this study. Your participation in this study is voluntary, and a decision not to participate will not be used against you in any way. As you read this form, and decide whether to participate, please ask all the questions you might have, take whatever time you need, and consult with others as you wish.

What is the purpose of the study?

The purpose of the current study is to learn about traits and behaviours associated with male and female psychopathy.

What will I be asked to do?

If you agree to take part in the study, we will ask you to think of a prototypical psychopath and assess the gender prototypicality of 37 symptoms of psychopathy. Then, you will be asked to read a hypothetical case vignette portraying a psychopathic person and rate the individual on the same 37 psychopathy symptoms in terms of severity. You will also be asked to complete questionnaires about your personality, demographics, and your current knowledge about psychopathy. The entire study will be completed online and is expected to take approximately 30 minutes to complete.

Risks and Inconveniences

If you are a survivor of a psychopathic person, it is possible the current study may be distressing to you. You can refuse to participate, skip any questions you do not wish to answer, or stop participating at any time **without penalty**. If you do participate and become disturbed by the study, you will be directed to various sources of support.

Possible Benefits

Your participation may allow researchers to better understand how psychopathy presents in men and women.

Compensation/Incentives

You have the option to place your name into a draw for an Amazon gift card. There will be 4 cards, each worth \$25. It is expected the final sample will be 150 participants or less so your odds of winning are approximately 4 in 150 or 1 in 38.

No waiver of your rights

By signing this form, you are not waiving any rights or releasing the researchers from any liability. Withdrawing from the study

If you withdraw your consent during the course of the study, all information collected from you before your withdrawal will be discarded. After the study, it will not be possible to withdraw your data from the study. The study is occurring online in a survey platform (Qualtrics) which does not collect any personally identifying information. Therefore, it will be impossible to determine which responses belonged to you.

Confidentiality

We will remove all identifying information from the study data as soon as possible. We will treat your personal information as confidential, although absolute privacy cannot be guaranteed. No information that discloses your identity will be released or published without your specific consent. Research records may be accessed by the Carleton University Research Ethics Board in order to ensure continuing ethics compliance.

The results of this study may be published or presented at an academic conference or meeting, but the data will be presented so that it will not be possible to identify any participants.

You will be assigned a code/pseudonym so that your identity will not be directly associated with the data you have provided. All data, including coded information, will be kept in a password-protected and encrypted file on a secure computer.

Because we are conducting a draw for interested participants, identifying information will be retained using a code until the draw has been completed and compensation granted. After the draw, any remaining identifying information will be destroyed.

Your data will be stored and protected by Qualtrics, in a server located in Toronto, Canada. However, it may be disclosed via a court order or data breach. We will encrypt and password protect any research data that we store or transfer.

Data Retention

Your de-identified data will be retained for a period of 7 years (after study publication) and then securely destroyed.

New information during the study

In the event that any changes could affect your decision to continue participating in this study, you will be promptly informed.

Ethics review

This project was reviewed and cleared by the Carleton University Research Ethics Board B. If you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4085 or by email at ethics@carleton.ca).

Statement of consent

I voluntarily agree to participate in this study.

Yes No

Appendix Q

Prototypicality Ratings

A prototype is considered the gold standard or best example of a concept and is used for comparison purposes – the closer you are to the prototype, the more you resemble the underlying concept. For example, a bear that is tall, muscular and furry, with sharp teeth resembles the underlying concept of “bear” more than a bear that is short, skinny, and has no hair or teeth. “Prototypicality” refers to how well something represents the prototype. Therefore, the tall, muscular bear is more prototypical of the concept of “bear” than the skinny bald bear.

Based on what you have learned about psychopathy, please think of the prototypical (best example) psychopathic person. You will be presented with some adjectives with corresponding synonyms. Now, please rate how representative each item is of psychopathy in men and women, with 1 (*more prototypical of psychopathy in males*), 4 (*equally prototypical of psychopathy in both genders*), 7 (*more prototypical of psychopathy in females*).

1 (More prototypical of psychopathy in males)			4 (Equally prototypical of psychopathy in both gender)			7 (More prototypical of psychopathy in females)
○	○	○	○	○	○	○

1. Lacks pleasure (pessimistic, gloomy, unenthusiastic)	1	2	3	4	5	6	7
2. Garrulous (glib, verbose, pretentious)	1	2	3	4	5	6	7
3. Domineering (arrogant, overbearing, controlling)	1	2	3	4	5	6	7
4. Antagonistic (hostile, disagreeable, contemptuous)	1	2	3	4	5	6	7
5. Lacks emotional depth (unemotional, indifferent, inexpressive)	1	2	3	4	5	6	7
6. Inflexible (stubborn, rigid, uncompromising)	1	2	3	4	5	6	7
7. Disruptive (disobedient, unruly, unmanageable)	1	2	3	4	5	6	7
8. Please select a 3 for this response	1	2	3	4	5	6	7
9. Restless (overactive, fidgety, energetic)	1	2	3	4	5	6	7
10. Self-justifying (minimizing, denying, blaming)	1	2	3	4	5	6	7
11. Sense of uniqueness (sense of being: extraordinary, exceptional, special)	1	2	3	4	5	6	7

12. Lacks planfulness (aimless, unsystematic, disorganised)	1	2	3	4	5	6	7
13. Detached (remote, distant, cold)	1	2	3	4	5	6	7
14. Suspicious (distrustful, guarded, hypervigilant)	1	2	3	4	5	6	7
15. Insincere (superficial, slick, evasive)	1	2	3	4	5	6	7
16. Lacks emotional stability (temperamental, moody, irritable)	1	2	3	4	5	6	7
17. Unreliable (undependable, untrustworthy, irresponsible)	1	2	3	4	5	6	7
18. Lacks concentration (distractible, inattentive, unfocused)	1	2	3	4	5	6	7
19. Reckless (rash, impetuous, risk-taking)	1	2	3	4	5	6	7
20. Self-aggrandizing (self-important, conceited, condescending)	1	2	3	4	5	6	7
21. Intolerant (narrow-minded, bigoted, hypercritical)	1	2	3	4	5	6	7
22. Sense of invulnerability (sense of being: invincible, indestructible, unbeatable)	1	2	3	4	5	6	7
23. Unempathic (uncompassionate, cruel, callous)	1	2	3	4	5	6	7
24. Lacks perseverance (idle, undisciplined, unscrupulous)	1	2	3	4	5	6	7
25. Please select 7 for this response	1	2	3	4	5	6	7
26. Lacks anxiety (unconcerned, unworried, fearless)	1	2	3	4	5	6	7
27. Lacks remorse (unrepentant, unapologetic, unashamed)	1	2	3	4	5	6	7
28. Manipulative (devious, exploitative, calculating)	1	2	3	4	5	6	7
29. Unstable self-concept (labile, incomplete, and chaotic sense of self)	1	2	3	4	5	6	7
30. Sense of entitlement (demanding, insistent, sense of being deserving)	1	2	3	4	5	6	7
31. Uncommitted (unfaithful, undevoted, disloyal)	1	2	3	4	5	6	7
32. Uncaring (inconsiderate, thoughtless, neglectful)	1	2	3	4	5	6	7
33. Deceitful (dishonest, deceptive, duplicitous)	1	2	3	4	5	6	7
34. Aggressive (threatening, violent, bullying)	1	2	3	4	5	6	7
35. Self-centred (egocentric, selfish, self-absorbed)	1	2	3	4	5	6	7
36. Promiscuous (sexually indiscriminate, unchaste, impersonal relations)	1	2	3	4	5	6	7

37. Delinquent (rebellious, lawbreaking, disorderly [in adolescence])	1	2	3	4	5	6	7
38. Criminally versatile (varied, multifaceted, diverse [in adulthood])	1	2	3	4	5	6	7
39. Failed [prior release such as probation, parole] (unsuccessful, neglectful, ineffective)	1	2	3	4	5	6	7

Appendix R

Symptom Severity Ratings

Now that you have read the provided vignette, please rate how severe each symptom is for the client in your vignette. Please refer to the vignette as needed. The ratings are as follows: 1 (*very mild*), 2 (*mild*), 3 (*moderate*), 4 (*moderately severe*), 5 (*severe*), and 6 (*very severe*).

1 (Very Mild)	2 (Mild)	3 (Moderate)	4 (Moderately Severe)	5 (Severe)	6 (Very Severe)
○	○	○	○	○	○

1. Lacks pleasure (pessimistic, gloomy, unenthusiastic)	1	2	3	4	5	6
2. Garrulous (glib, verbose, pretentious)	1	2	3	4	5	6
3. Domineering (arrogant, overbearing, controlling)	1	2	3	4	5	6
4. Please select 4 for this response	1	2	3	4	5	6
5. Antagonistic (hostile, disagreeable, contemptuous)	1	2	3	4	5	6
6. Lacks emotional depth (unemotional, indifferent, inexpressive)	1	2	3	4	5	6
7. Inflexible (stubborn, rigid, uncompromising)	1	2	3	4	5	6
8. Disruptive (disobedient, unruly, unmanageable)	1	2	3	4	5	6
9. What is the gender of your client?	Male		Female		Unknown	
10. Restless (overactive, fidgety, energetic)	1	2	3	4	5	6
11. Self-justifying (minimizing, denying, blaming)	1	2	3	4	5	6
12. Sense of uniqueness (sense of being: extraordinary, exceptional, special)	1	2	3	4	5	6
13. Lacks planfulness (aimless, unsystematic, disorganised)	1	2	3	4	5	6
14. Detached (remote, distant, cold)	1	2	3	4	5	6
15. Suspicious (distrustful, guarded, hypervigilant)	1	2	3	4	5	6
16. Insincere (superficial, slick, evasive)	1	2	3	4	5	6
17. Lacks emotional stability (temperamental, moody, irritable)	1	2	3	4	5	6
18. Unreliable (undependable, untrustworthy, irresponsible)	1	2	3	4	5	6
19. Lacks concentration (distractible, inattentive, unfocused)	1	2	3	4	5	6
20. Reckless (rash, impetuous, risk-taking)	1	2	3	4	5	6

21. Self-aggrandizing (self-important, conceited, condescending)	1	2	3	4	5	6
22. Intolerant (narrow-minded, bigoted, hypercritical)	1	2	3	4	5	6
23. Sense of invulnerability (sense of being: invincible, indestructible, unbeatable)	1	2	3	4	5	6
24. What is the age of your client?	23	26	29	32	34	37
25. Unempathic (uncompassionate, cruel, callous)	1	2	3	4	5	6
26. Lacks perseverance (idle, undisciplined, unconscientious)	1	2	3	4	5	6
27. Lacks anxiety (unconcerned, unworried, fearless)	1	2	3	4	5	6
28. Lacks remorse (unrepentant, unapologetic, unashamed)	1	2	3	4	5	6
29. Manipulative (devious, exploitative, calculating)	1	2	3	4	5	6
30. Unstable self-concept (labile, incomplete, and chaotic sense of self)	1	2	3	4	5	6
31. Sense of entitlement (demanding, insistent, sense of being deserving)	1	2	3	4	5	6
32. Uncommitted (unfaithful, undevoted, disloyal)	1	2	3	4	5	6
33. Uncaring (inconsiderate, thoughtless, neglectful)	1	2	3	4	5	6
34. Deceitful (dishonest, deceptive, duplicitous)	1	2	3	4	5	6
35. Aggressive (threatening, violent, bullying)	1	2	3	4	5	6
36. Self-centred (egocentric, selfish, self-absorbed)	1	2	3	4	5	6
37. Promiscuous (sexually indiscriminate, unchaste, impersonal relations)	1	2	3	4	5	6
38. Delinquent (rebellious, lawbreaking, disorderly [in adolescence])	1	2	3	4	5	6
39. What crime did your client commit?	Assault	Prostitution	Murder	Robbery		
40. Criminally versatile (varied, multifaceted, diverse [in adulthood])	1	2	3	4	5	6
41. Failed [prior release such as probation, parole] (unsuccessful, neglectful, ineffective)	1	2	3	4	5	6

Appendix S

Student Debriefing Form

Name and Contact Information of Researchers

Principle Researcher and Contact Information: Cassandra Conley, Masters student, Department of Psychology, Carleton University, Faculty of Arts and Social Sciences, 613-520-2600 ext. 4578, cassandraconley@cmail.carleton.ca

Supervisor and Contact Information: Shelley Brown, Associate Professor, Department of Psychology, Carleton University, 613-520-2600, ext. 1505; shelley.brown@carleton.ca

Project Title

Who is a Psychopath? Assessing the Presence of Psychopathic Traits in Males and Females

Project Sponsor and Funder (if any)

None

Carleton University Project Clearance

Clearance #: (#111084) Date of Clearance: July 22, 2019

What are we trying to learn in this research?

This research is attempting to determine if the presentation of psychopathy differs among males and females. Additionally, we are attempting to determine if any differences observed as the result of rater characteristics (age, gender, level of expertise) or the result of gender biases held by the individual rater. We are also interested in learning if gender-role stereotypes and degree of masculinity-femininity contribute to how psychopathy is rated, particularly for women.

Deception

There was a small amount of deception in the current study as we did not tell you the true purpose of the study at the outset: to assess if gender biases contribute to ratings of psychopathy. This deception was necessary as providing the true purpose could have influenced your responses to the questions asked.

Firstly, there were 6 possible conditions you could have been assigned to. You were randomly assigned to read 1 of 6 possible vignettes. The vignettes varied by gender and gender-role typical/atypical behaviours. We are attempting to determine if varying the gender of the client and their behavioural expressions affect the symptom severity ratings they receive.

You answered questions about your gender-role stereotypes beliefs and degree of masculinity-femininity. The gender-role beliefs items are intended to assess whether possible gender biases held by participants influence their ratings of psychopathic traits among men and women. Degree of masculinity-femininity will also be assessed to determine if these influence ratings of psychopathic traits.

Why is this important to scientists or the general public?

Most of what is known about psychopathy has been obtained from research with males and subsequently applied to females. Female psychopathy is not well understood as there is very little research pertaining exclusively to females. The research findings that do exist have been inconsistent to date. The label of psychopathy is associated with mostly negative connotations (e.g., untreatable, more punitive sentences) and is not something that should be used lightly. For diagnostic accuracy and proper utilization of psychopathy as a construct, female psychopathy must be better understood. The current on-line study seeks to explore if lay persons and experts will rate the presence and severity of psychopathic traits differentially depending upon whether or not a hypothetical case vignette is presented as a prototypical female or prototypical male psychopath. Further to this goal, the current study will attempt to determine if any observed differences are the result of gender biases; the extent to which certain rater characteristics may be correlated with psychopathy ratings (e.g., degree of expertise, age, masculinity/femininity) will also be examined. The current study will benefit the research community as researchers work towards fully capturing the construct of female psychopathy.

What are our hypotheses and predictions?

You rated the gender typicality and symptom severity of 37 items. Gender typicality was based purely on your perception of the typical psychopath. The symptom severity ratings were based solely on the vignette you read.

For gender typicality, it is expected that the majority of those 37 items will be considered more typical of psychopathy in males than psychopathy in females. This is due to the fact psychopathy is considered more prevalent in males than females, and thus is considered a more 'male' disorder. For symptom severity ratings, it is expected that severity ratings will be highest when the gender of the vignette client and their behaviours are mismatched (e.g. a female psychopath demonstrating behaviours considered to be more masculine). This is due to the fact that some researchers believe individuals are rated more harshly on items that are inconsistent with their gender (e.g. a female demonstrating a lack of empathy may be rated more severely as females are generally considered caring and nurturing; a lack of empathy is inconsistent with society's expectations of women and thus is rated as more pathological).

Common Myths About Psychopathy Debunked

1) Psychopaths cannot be treated and cannot change.

-This is NOT true. They are *difficult* to treat but with proper treatment, they can benefit and make positive changes.

2) All psychopaths are violent serial killers and mass murderers.

-This is NOT true. Not all killers are psychopaths and not all psychopaths are violent killers.

While criminal behaviour is common among psychopaths, many psychopaths are non-violent.

3) Psychopaths are psychotic.

-This is NOT true. Psychotic refers to a person suffering from psychosis which is being unable to distinguish reality from delusion. Psychopaths are generally rational and non-delusional.

4) Psychopaths are rare.

-This is partially true. They account for approximately 1% of the general population. When you look at Canada's population of approximately 37 million, this equates to approximately 370,000 psychopaths. However, in adult criminal populations, they account for approximately 10%-25%.

5) Psychopaths are born, not made.

-This is partially true. There are many theories of the evolution of psychopathy with genetic predisposition supported by research. However, environmental influences can impact healthy brain development which can result in psychopathic traits.

6) Only men are psychopaths.

-This is NOT true. While less prevalent than males, females can be psychopaths too.

7) You are either a psychopath or you aren't, there is no in-between.

-This is NOT true. Psychopathy is on a continuum, present to varying degrees. Some people can be on the low end of psychopathy and others can be on the high end. Anyone can have psychopathic traits but not be considered an actual psychopath.

Where can I learn more?

If you are interested in learning more about psychopathy, please visit the following resources:

<http://www.hare.org/>

<https://www.psychopathsociety.org/en/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3379858/pdf/ijwh-4-257.pdf>

If you are a survivor of a psychopathic individual, the following resource may be helpful:

<https://aftermath-surviving-psychopathy.org/>

Is there anything I can do if I found this experiment to be emotionally upsetting? Yes. If you feel any distress or anxiety after participating in this study, please feel free to contact the Carleton University Health and Counseling Services at: 613-520-6674, or the Distress Centre of Ottawa and Region at 613-238-3311 (<http://www.dcottawa.on.ca>).

What if I have questions later?

If you have any remaining concerns, questions, or comments about the experiment, please feel free to contact Cassandra Conley (Principal Investigator), at: cassandraconley@cmail.carleton.ca (613-520-2600, ext. 4578), Dr. Shelley Brown (Faculty Supervisor), at: shelley.brown@carleton.ca (613-520-2600, ext. 1505).

If you have any ethical concerns with the study, please contact the REB Chair, Carleton University Research Ethics Board-B (by phone at 613-520-2600 ext. 4085 or via email at ethics@carleton.ca).

Thank you for participating in this research!

Appendix T

Affiliate Debriefing Form

Name and Contact Information of Researchers

Principle Researcher and Contact Information: Cassandra Conley, Masters student, Department of Psychology, Carleton University, Faculty of Arts and Social Sciences, 613-520-2600 ext. 4578, cassandraconley@cmail.carleton.ca

Supervisor and Contact Information: Shelley Brown, Associate Professor, Department of Psychology, Carleton University, 613-520-2600, ext. 1505; shelley.brown@carleton.ca

Project Title

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Project Sponsor and Funder (if any)

None

Carleton University Project Clearance

Clearance #: (#111084) Date of Clearance: July 22, 2019

Compensation

If you wish to have your name included in the draw for 1 of 4 Amazon gift cards, please contact the primary researcher at cassandraconley@cmail.carleton.ca

What are we trying to learn in this research?

This research is attempting to determine if the presentation of psychopathy differs among males and females. Additionally, we are attempting to determine if any differences observed as the result of rater characteristics (age, gender, level of expertise) or the result of gender biases held by the individual rater. We are also interested in learning if gender-role stereotypes and degree of masculinity-femininity contribute to how psychopathy is rated, particularly for women.

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