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# Attitudes Towards Dependent Personality Disorder: The Role Of Sex And Sexual Orientation

Brandon Sentell
*Indiana State University*

# ATTITUDES TOWARDS DEPENDENT PERSONALITY DISORDER: THE ROLE OF SEX AND SEXUAL ORIENTATION

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Brandon Sentell, M.S.

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**Brandon Sentell**

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## Education

Doctorate of Psychology**:** Clinical Psychology — Expected August 2018
*Indiana State University*
Terre Haute, Indiana

Master of Science: Psychology — May 2015
Indiana State University; Terre Haute, Indiana

Bachelor of Arts**:** Psychology — May 2010
*University of Alabama Huntsville*
Huntsville, Alabama

## Clinical Internship

*Central Alabama Veterans Health Care System* — July 2017-July 2018
Tuskegee & Montgomery, AL
**Psychology Resident**
Director of Training: George Munkachy, Psy.D.

## Clinical Training and Experience

*Richard A. Roudebush VA Medical Center* — August 2016- May 2017
Indianapolis, Indiana
**Graduate Clinician**
Supervisor: David Fingerhut, Ph.D., HSPP

*Valley Professionals Community Healthcare Center* — July 2015-June 2017
Clinton, Indiana
**Graduate Clinician**
Supervisor: Julia Wernz, Ph.D., HSPP

*Union Hospital – Family Medicine* — August 2015-May 2016
Terre Haute, Indiana
**Clinician**
Supervisor: Michael Urban, Psy.D., HSPP

*Indiana State University Psychology Clinic* — August 2014-August 2016
Terre Haute, Indiana
**Graduate Clinician**
Supervisors: June Sprock, Ph.D., HSPP, Liz O'Laughlin, Ph.D., HSPP, Rebecca Murray, Ph.D., HSPP

## Supervision Experience

*Indiana State University Psychology Clinic* August 2016-May 2017
Terre Haute, IN
**Peer Supervisor**
Supervisor: Cathy O'Campo, Ph.D., HSPP

## Research Experience

*Indiana State University* May 2015-August 2017
Terre Haute, Indiana
**Dissertation Research**
Chair: June Sprock, Ph.D.

## Teaching Experience

*Indiana State University* August 2014-May 2015
Terre Haute, Indiana
**Lecturer**: Interviewing Skills

## Awards & Recognitions

*Outstanding Graduate Assistant Award* March 2015
Indiana State University Psy.D. Program

COMMITTEE MEMBERS

Committee Chair: June Sprock, Ph.D.

Professor of Psychology

Indiana State University

Committee Member: Liz O'Laughlin, Ph.D.

Professor of Psychology

Indiana State University

Committee Member: Veanne Anderson, Ph.D.

Professor of Psychology

Indiana State University

## ABSTRACT

Relatively little research has focused on Dependent Personality Disorder (DPD) and even less research has examined sex differences, despite evidence of sex differences in prevalence of DPD and evidence that DPD is perceived as a feminine PD. Men who demonstrate DPD symptoms might be perceived as violating the male sex role and therefore risk being seen as more dysfunctional or labeled homosexual. However, there is a dearth of research regarding attitudes towards men with DPD, and no known research investigating attitudes towards gay and lesbian individuals with DPD. Undergraduates ($n$ = 318) read one of four versions of a DPD vignette that was presented as either a heterosexual or homosexual man or woman and rated the perceived level of dysfunction and likability of the individual in the vignette. The influence of participant sex, sex role attitudes, homonegativity, and social desirability on the ratings were also examined.

A multivariate analysis of covariance (MANCOVA) indicated main effects of sex and sexual orientation of the individual in the vignette and participant sex on the ratings. There were no interaction effects. The male version of the vignette was rated more negatively than the female version, and the homosexual version of the vignette was rated more negatively than the heterosexual version. However, univariate analyses revealed that most of the variance was associated with the rating of distress, which might reflect empathy for the stigma that homosexuals and individuals with DPD might experience. Contrary to predictions, female participants were more negative in their ratings than male participants. Male participants had significantly higher homonegativity and more traditional gender role attitudes than female participants, as predicted. However, contrary to hypotheses, correlations revealed that higher homonegativity was associated with less negative ratings of the gay man or lesbian woman in the

DPD vignette, and more traditional sex role attitudes were associated with less negative ratings for two of the ADS items, regardless of sex of the individual in the vignette. Explanations for the findings, limitations and strengths of the study, and implications for future research and clinical application are discussed.

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# CHAPTER 1

## INTRODUCTION

Relatively little research has focused on Dependent Personality Disorder (DPD), despite it being one of the more commonly diagnosed personality disorders (PD) in inpatient and outpatient settings (APA, 2013; Bornstein, 2012; Disney, 2013). Additionally, little research has examined sex differences, despite evidence of sex differences in the prevalence of the diagnosis of DPD, with women diagnosed more frequently than men (Bornstein, 1996, 2012; Jackson et al., 1991; Widiger & Spitzer, 1991). Kaplan (1983) first suggested that biased diagnostic criteria (i.e., traditional female gender role incorporated in the DSM) account for the differential sex prevalence of DPD. However, differential prevalence does not necessarily indicate bias (Kass, Spitzer, & Williams, 1983; Widiger & Spitzer, 1991) as biological factors and differences in socialization might contribute to real differences for men and women (Kass et al., 1983; Widiger & Spitzer, 1991). In fact, some PDs are diagnosed less frequently in women and more frequently in men (Corbitt & Widiger, 1995; Kass et al., 1983). Further, if there is bias it may be that sampling bias or clinician bias provides a better explanation for the differences in prevalence rates (Anderson, Sankis, & Widiger, 2001; Kass et al., 1983; Widiger & Spitzer, 1991).

There is some evidence that DPD is perceived as the most feminine PD (Sprock, Blashfield, & Smith, 1990), and feminine individuals are also perceived to be dependent (Klonsky, Jane, Turkheimer, & Oltmanns, 2002). Additionally, it is possible that clinicians' personal stereotypes (i.e., traditional gender role attitudes) and misapplication of diagnostic criteria might contribute to the increased diagnosis of DPD in women (Widiger & Spitzer, 1991). However, evidence for this hypothesis has been mixed (Adler, Drake, & Teague, 1990; Anderson et al., 2001; Loring & Powell, 1988). Bornstein has suggested that women are simply

more willing to acknowledge dependency needs (Bornstein, 1996; Bornstein, Manning, Krukonis, Rossner, & Mastrosimone, 1993; Bornstein, Rossner, Hill, & Stepanian, 1994). It may be that dependency traits are similar, but men are traditionally discouraged from expressing them. Overall, women may be significantly more likely than men to receive a diagnosis of DPD due to a combination of factors, including traditional gender role socialization, diagnostic criteria that describe a feminine stereotype or may be biased, self-report bias, and possible biased clinician attitudes.

In contrast, relatively little is known about attitudes toward men diagnosed with DPD. Society generally holds a negative view toward those diagnosed with mental illness (Parcespe & Cabassa, 2013; Rabkin, 1974). Stigma associated with mental illness shifts the focus away from individuals and is associated with many adverse effects (Goffman, 1963) including homelessness, financial dependence, unemployment, subpar treatment, social isolation, and shame (Corrigan et al., 2014b; Percesepe & Cabassa, 2013). Personality disorder is viewed as one of the more stigmatizing mental health labels, a pejorative term that can affect quality of care (Newton-Howes, Weaver, & Tyrer, 2008). Those with PDs are perceived as difficult, manipulative, unsympathetic, and less deserving of resources (Lewis & Appleby, 1988). Research suggests that DPD is not perceived as more dysfunctional or distressing than other PDs (Functowicz & Widiger, 1999). However, DPD is perceived as a feminine disorder and society overwhelmingly holds the view that women are traditionally more dependent than men (Bornstein, 1996). Therefore, men who exhibit symptoms of DPD violate traditional gender role norms, and may be perceived more negatively than women (Kaplan, 1983; Sprock, 1996).

Research suggests that men who do not conform to traditional gender roles risk being labeled homosexual and that gay men are more likely to violate traditional gender roles by

behaving in an effeminate manner (Bosson, Prewitt-Freilino, & Taylor, 2005). Further, gay men may be perceived as more pathological, more distressed, and more maladaptive than heterosexual men, particularly by those with traditional gender role attitudes (Basow & Johnson, 2000; Goodman & Moradi, 2008; Whitley, 2001). This same trend has not been investigated with lesbian women (Herek & McLemore, 2013). Although numerous studies have examined attitudes toward homosexual individuals, there is a dearth of research regarding attitudes toward homosexual individuals with mental disorders (Herek & McLemore, 2013). Specifically, there are no known studies investigating attitudes toward homosexual individuals with DPD. However, the above findings suggest the possibility that sex and sexual orientation might influence attitudes toward an individual with DPD, particularly by those with traditional gender role attitudes.

Given the dearth of research regarding attitudes towards men with DPD, and the lack of research investigating attitudes towards gay and lesbian individuals with DPD, there is a need for research in this area. Further, sexual orientation has become a more salient issue and, with a reduction in stigma, more individuals express their sexual identities. Given this trend, it is important to understand how one's sexual orientation might affect perception of his or her mental disorders by laypersons or mental health professionals. This study examined the role of an individual's sex and sexual orientation in the stigma associated with exhibiting symptoms of DPD. The influence of traditional gender role attitudes on ratings of stigma was also explored. It was hypothesized that men with DPD would be perceived more negatively than women with DPD, particularly by male participants. Additionally, it was hypothesized that homosexuals with DPD would be perceived more negatively than heterosexual individuals with DPD, particularly by men and by those with traditional gender role attitudes. Finally, it was hypothesized that

those with traditional gender role attitudes would perceive the homosexual male with DPD more negatively than the heterosexual male with DPD and more negatively than the homosexual and heterosexual female with DPD.

# CHAPTER 2

# LITERATURE REVIEW

## Overview of Dependent Personality Disorder

### Description

In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5; APA, 2013), Dependent Personality Disorder (DPD) is defined as an excessive and pervasive need to be cared for that often leads to fear of separation, clinging behavior, and submissiveness. This pattern of behavior typically begins in early adulthood and is present in a variety of contexts. Those with DPD experience difficulty in making decisions, assuming responsibility, or taking initiative, and are chronically pessimistic and tend to belittle themselves. Consequently, social and occupational functioning is impaired and comorbid diagnoses of depression, anxiety, or adjustment disorders are common. Individuals with DPD are thought to have low self-esteem and to be incapable of effective social navigation (Disney, 2013). However, Bornstein found that those with DPD often self-enhance or self-deprecate in order to obtain and maintain supportive and nurturing relationships (as cited in Disney, 2013). The DSM-5 lists eight symptoms of DPD and requires that at least five be met in order to assign a diagnosis (see Appendix A).

### History

A modern conceptualization of DPD can be traced to early psychodynamic theory, specifically to Freud's psychosexual stages of development. Although he provided little empirical support, Freud set the stage for other psychodynamic theorists such as Abraham and Sullivan who suggested that dependent individuals believe there will always be a person, typically a mother, to care and give them what they want (Bornstein, 2012). Sullivan

hypothesized that the mother figure would likely be dominant, which is also consistent with modern research regarding the etiology of DPD (Bornstein, 2012).

Although the first edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM; APA, 1952) made no specific mention of DPD, it contained a passive-aggressive personality that was characterized by a tendency to be helpless, indecisive, and clinging, much like a child toward his or her mother. It was not until the release of the third edition (DSM-III; APA, 1980), that DPD was included as a unique diagnosis. As new versions of the DSM have been released, the diagnostic criteria have expanded and evolved, but the essential features remain the same. Prior to the publication of the DSM-5, the Personality Disorders Workgroup had considered deleting DPD and several other personality disorders (PDs) based on the arguments that these diagnoses had limited validity and provided little clinical utility. As an alternative, a dimensional model was proposed that described personality disorders based on traits (Zachar & First, 2015). Due to numerous concerns about deleting some PDs, and critiques of the proposed dimensional model, the APA board of directors voted to maintain the existing PD criteria from the DSM-IV-TR (APA, 2000) and the dimensional model was put in Section III for further study (Disney, 2013; Zachar & First, 2015).

**Etiology**

Relative to other personality disorders, there has been little empirical research examining the etiology of DPD (Disney, 2013). However, some hypothesize that biological predisposition, attachment style, family environment, and childhood trauma may contribute to the development of DPD (Ampollini, Marchesi, Signifredi, & Maggini, 1997; Disney, 2013). According to Bornstein (2012), there have only been five studies examining the heritability of DPD and those results vary considerably, ranging from heritability estimates of .22 to .98. One meta-analysis

found the average heritability to be .32, indicating that roughly 32 percent of the variance in DPD can be accounted for by genetic factors (Bornstein, 2012). Other research suggests that neurotransmitters (e.g., serotonin) play a role in the development of DPD (Gjerde et al., 2012). Research also suggests that temperament and social factors such as insecure and avoidant attachment styles in infancy (Fossati et al., 2003; Livesley, Schroeder, & Jackson, 1990; Sroufe, Fox, & Pancake, 1983; West, Rose, & Sheldon-Keller, 1994) and parental disciplinary styles (e.g., authoritarian, maternal overprotection, high control) are associated with DPD (Baker, Capron, & Azorlosa, 1996; Ojha & Singh, 1998). In addition, the development of maladaptive cognitive styles (i.e., cognitive distortions) in childhood is also implicated (Beck, Freeman, & Davis, 2004). Although there is limited research in this area, findings point to several etiological factors in the development of DPD, suggesting that an integrative biopsychosocial model provides the most comprehensive explanation (Bornstein, 2012; Disney, 2013).

**Epidemiology**

Although prevalence rates vary depending upon the sensitivity of screening measures or sample selection, research suggests that up to 10% of those in outpatient settings and 5 to 15% of those in inpatient psychiatric units are diagnosed with DPD (Bornstein, 2012). Prevalence rates in the general adult population in the United States seem to be in the range of 1 to 2% (Trull, Jahng, Tomko, Wood, & Sher, 2010), but some studies suggest more conservative estimates (Grant et al., 2005).

**Gender differences in epidemiology.** Research suggests that prevalence rates are disproportionate by gender, as women are diagnosed with DPD significantly more frequently than men. According to the DSM-5, DPD is diagnosed more frequently in women in clinical settings, however, "… some studies report similar prevalence rates among males and females"

(p. 677). Research suggests that frequencies of DPD diagnoses for women in inpatient, community, and outpatient settings are roughly twice those for men, with rates of 25%, 11%, and 9%, respectively, compared to frequencies of 11%, 5%, and 4% in these same settings for men (Jackson et al., 1991; Kass et al., 1983).

Additionally, research is suggestive of disproportionate diagnoses of DPD by gender when considering comorbid diagnoses. Barzega, Maina, Venturello, and Bogetto (2001) found that women diagnosed with panic disorder were more likely than men to also be diagnosed with Cluster C PDs, including DPD. In another study, participants with an opiate addiction completed the Millon Clinical Multiaxial Inventory (MCMI), an objective personality measure. Results showed that women were more likely to have scores suggestive of a diagnosis of DPD than men (Calsyn, Fleming, Wells & Saxon, 1996). In another study, Loranger (1996) found that participants with major depressive disorder and dysthymia were more likely to be female and also more likely to be diagnosed with DPD compared to men.

Other studies, however, have not found gender differences of DPD prevalence in individuals with comorbid disorders. In a sample of 96 psychiatric outpatients diagnosed with OCD, Baer et al. (1990) found that women were no more likely than men to be diagnosed with a PD, including DPD. In another study, King (2000) found male and female college students that completed a structured personality scale, were equally likely to be diagnosed with several PDs, including DPD. Lopez-Rodriguez et al. (1999), using a sample of epileptic patients, found that women were not significantly more likely than men to be diagnosed with DPD. However, Bornstein (2012) has criticized these studies due to inadequate sample size, and has suggested that other research (Barzega et al., 2001; Loranger, 1996) that is more methodologically sound supports differential sex prevalence in the diagnosis of DPD. There are several hypotheses for

the difference in the prevalence rates among men and women including criterion bias, clinician bias, self-report bias, and sampling bias (Bornstein, 1996, 2012; Disney 2013; Widiger & Spitzer, 1991).

## Sex Bias in the Diagnosis of DPD

A problematic and contentious issue in the diagnosis of PDs over the last 30 years has been sex bias (Anderson et al., 2001). Specifically, concerns have been raised that certain PDs (e.g., dependent, histrionic, and borderline) are diagnosed more frequently in women due to bias. Kaplan (1983), in her influential paper, theorized that the DSM-III diagnostic criteria for DPD were biased and would lead to artificially high rates of the diagnosis in women. She argued that the members of the DSM task forces have been disproportionally male and that these male dominated work groups overpathologize stereotypic female behavior more so than stereotypic male behavior. As a result, she claimed that the DSM-III diagnostic criteria for PDs, including DPD, are biased and include masculine-based assumptions about what is a normal and healthy, and that behaving in a feminine manner may be enough to earn a diagnosis.

In response to Kaplan's (1983) argument, Williams and Spitzer (1991) pointed out that the symptom criteria for seven other PDs, including antisocial, paranoid, schizotypal, and obsessive compulsive, contain maladaptive variants of stereotypic male behavior and that it may be that diagnostic criteria are actually biased against men. In addition, Kass et al. (1983) found across their sample of 1,200 participants that women were no more likely to be diagnosed with a PD than men. More recently, Corbitt and Widiger (1995) completed a meta-analysis and found that across 15 studies, men were diagnosed more frequently than women with many PDs. However, these studies only examined differences in prevalence rates of diagnoses, not bias.

**Bias**

Widiger and Spitzer (1991) were the first to provide a critical analysis of sex bias in the diagnosis of PDs. They defined sex bias as a deviation from an expected value associated with the sex of a person. They argued that differential sex prevalence, or an unequal prevalence of a diagnosis by gender, was not sufficient to assume sex bias. Differences in the prevalence of DPD and other PDs might be related to biological factors resulting in real differences in prevalence between the sexes. According to Widiger and Spitzer, research regarding sex bias should also consider socio-cultural factors, and examine different potential sources of bias including bias in assessment and sampling and criterion bias. Widiger and Spitzer suggested that much of the research criticizing the DSM criteria for DPD and other diagnoses as biased is methodologically flawed due to a failure to distinguish criterion from clinician bias, which has resulted in misinterpretations.

Widiger and Spitzer (1991) suggested that one problem in this area of research lies in inaccurate assumptions. PDs can be conceptualized as maladaptive variants of normal traits and these traits are driven by social and biological factors that differ by gender (Slavney, 1984). Therefore, Widiger and Spitzer suggested that it might actually be more problematic to find equal rates of DPD in men and women. It has consistently been shown that different environmental conditions and biological predispositions contribute to development of many mental disorders, including PDs (Reichborn-Kjennerud et al., 2007; Torgersen, 1980). According to Widiger and Spitzer (1991), changing or removing DSM diagnostic criteria purely for the sake of reducing differential sex prevalence for DPD would likely reduce the validity and accuracy of diagnosis. Currently, it is widely accepted that DPD is diagnosed more frequently in

women than in men. However, what is less agreed upon is the cause for this discrepancy (APA, 2013; Bornstein, 1996, 2012; Disney, 2013). Four theories tested thus far are sampling bias, self-report bias, diagnostic (clinician) bias, and criterion bias.

**Sampling bias.** Widiger and Spitzer (1991) suggested that sex differences in one sample may not represent sex differences in the population and that poor sampling procedures might account for diagnostic discrepancy by gender. For example, Kass et al. (1983) found that female patients were no more likely than male patients to be diagnosed with a PD, suggesting equal prevalence rates for men and women for PDs overall. In another study, Reich (1987) found that 72% of female participants were diagnosed with DPD, but suggested that this was not significant as 72% was not significantly higher than the 64% base rate for women in the original clinical sample overall. However, Widiger and Spitzer (1991) challenged this conclusion because it is unknown what the differential sex prevalence should have been, and it cannot be assumed that PDs are distributed evenly between the sexes (i.e., biological and environmental factors might affect vulnerability by sex). Additionally, evidence suggests that women are more likely to seek help, and therefore, more likely to be represented in a clinical setting, suggesting clinical samples are often inherently biased. However, no consistent relationship has been found between setting or population and the magnitude of sex differences in prevalence rates of DPD (Bornstein, 1996). In fact, consistent sex differences have been found across race, socioeconomic status, education, and culture (Kass et al., 1983; Nakao et al., 1992; Reich, 1987). Taken together, these results suggest that there is strong evidence for a differential sex prevalence rate for DPD, but not a lot of support for the role of sampling bias in the differential sex prevalence of DPD (Widiger & Spitzer, 1991).

**Self-report bias.** Related to the theory of sampling bias in clinical samples, some research suggests that sex differences in prevalence rates for DPD and other diagnoses are due to the fact that women are simply more willing than men to acknowledge and seek help for dependent feelings. For example, Bornstein (1995) found that parents are significantly more likely to discourage boys than girls from expressing dependent, passive, or insecure feelings, as it is a violation of traditional gender roles. Evidence suggests that men's and women's dependency needs are equal, but men are simply discouraged from expressing those needs as it violates basic masculine assumptions for behavior (Bornstein, 1995, 1996). Bornstein et al. (1993) found that women scored significantly higher on dependency than men on a self-report measure (high face validity), but were not different than men on a projective measure (low face validity). In addition, Bornstein et al. (1994) assessed the relative face validity of several measures for DPD and found that as face validity decreased, the magnitude of sex differences in the diagnosis of DPD decreased. Not only are women more willing to disclose dependent symptoms than men on measures with high face validity (e.g., MMPI, MCMI), women score higher on distress, social impairment, and occupational impairment related to dependency (Bornstein, 1996). Taken together, these results suggest that men and women with DPD have similar dependency needs, but women are more willing to acknowledge those feelings (Bornstein, 1996). Thus, there is some support for self-report bias on measures of dependency.

**Clinician bias.** Others have argued that clinician bias, a tendency to allow one's own gender role stereotypes to influence judgments regarding diagnosis of various psychopathologies, provides the best explanation for the gender gap in the prevalence of DPD. Ashmore (as cited in Bornstein 1996) suggested that dependency might be so linked with femininity that any patient appearing feminine may consciously or unconsciously evoke a bias

from a clinician such that DPD is considered the appropriate diagnosis. However, research has not been supportive of this theory. If this theory is accurate, clinician bias would be demonstrated when the accuracy of clinical diagnosis is influenced by the sex of the patient (e.g., diagnosing DPD for women, but not for men who have the same number of DPD symptoms). For example, Loring and Powell (1988) found little evidence of clinician bias in the diagnosis of DPD based on the patient's sex. Instead, psychiatrists in the study were more likely to accurately diagnose DPD in a case vignette with schizophrenia and DPD when the patient's race and sex was consistent with their own. The authors concluded that patient sex and race influence accuracy of diagnosis, with psychiatrists most accurate in diagnosing individuals of their own sex and race. Widiger and Spitzer (1991) noted that the case vignette used by Loring and Powell (1988) was not ideal for detecting sex bias because DPD was the appropriate diagnosis for the hypothetical patient (i.e., the design did not allow for examination of overpathologizing bias). In addition, the case presented an individual with schizophrenia as well as PD symptoms, which may have influenced how the DPD symptoms were conceptualized by the clinicians.

**Criterion bias**. Kaplan's (1983) original claim was that biased DSM criteria explain sex differences in the diagnosis of PDs. Specifically, she stated that the criteria for some PDs, including DPD and Histrionic PD, incorporate stereotypic feminine behaviors. A number of studies have examined the evidence for criterion bias in the DSM definition of PDs using undergraduate students as participants. Sprock et al. (1990) asked participants to rate all 142 PD symptom criteria in the DSM-III-R (APA, 1987) along a masculinity-femininity continuum and found that DPD was rated as most feminine. In a follow up study, Rienzi and Scams (1991) asked participants to sort descriptions of PDs into masculine and feminine groups. They found that DPD was viewed as the most feminine PD, with 88% of participants placing the description

of DPD in the feminine group. In a subsequent study, Rienzi et al. (1995) found that participants, given a gender-neutral vignette, were significantly more likely to perceive an individual with DPD as female than male. Additionally, it was found that both media exposure and personal interaction strengthened stereotypic gender role assumptions, resulting in increased confidence that the person described in the vignette was female (Rienzi et al., 1995).

In a similar study, Adler et al. (1990) examined whether mental health professionals would also view a vignette of an individual with DPD as female. Their participants included psychiatric residents, social workers, nurses, clinical psychologists and psychiatrists. Results showed that these mental health professionals were not significantly more likely to perceive the person in the vignette with DPD to be female. In another vignette-based study, clinicians perceived an individual with DPD as female more often than male, but did not perceive DPD features to be more pathological in women, suggesting that even if the clinicians are biased to think of DPD features as feminine, it may have little practical effect on diagnoses (Anderson et al., 2001). Moreover, Widiger and Spitzer (1991) argued that PDs are exaggerated versions of normal personality traits, some of which represent more feminine and others more masculine sex role behaviors. Inclusion of the exaggerated normal sex role behaviors in the diagnostic criteria does not necessarily suggest criterion bias.

Klonsky et al. (2002) asked undergraduate participants to provide ratings of the masculinity and femininity of others with whom they shared a dorm floor. Participants provided self and other reports of personality traits, including maladaptive traits listed in the DSM-IV (APA, 1994). They found that those who were rated high in femininity, both male and female, were more likely to have traits of a PD and that for women, but not men, traits of DPD were associated with low scores in self-reported masculinity and higher scores in self-reported

femininity. These results suggest that femininity is associated with increased PD traits, and women who were perceived as having DPD traits were also seen as more feminine. Overall, these studies provide support for Kaplan's (1983) original concern that the DSM criteria for DPD incorporate a feminine sex role stereotype.

Bornstein (1996) suggested that without clear and unambiguous DSM criteria, the question of whether criterion bias actually exists remains open to debate. Reich (1990) suggested that if DSM criteria are biased toward masculine definitions of healthy behavior, then men diagnosed with DPD should have increased psychopathology (i.e., would require more severe symptoms to be diagnosed with DPD). Overholser, Kabakoff, and Norman (1989) compared male and female psychiatric outpatients diagnosed with DPD. They found that with respect to sex, there were no significant differences on their Minnesota Multiphasic Personality Inventory profiles and no differences in terms of suicidal ideation, length of hospitalization, number of times hospitalized, or drug and alcohol use. In addition, Reich (1990) found no differences in overall level of psychopathology between men and women in his sample of 41 individuals diagnosed with DPD. Taken together, these studies provide mixed support for Kaplan's (1983) claim that DSM criteria are biased toward a masculine definition of healthy behavior and that DPD is little more than an exaggeration of a normal female gender role (Disney, 2013). Given the methodological and theoretical concerns presented by Spitzer and Widiger (1991), it may be difficult to differentiate clinician bias from criterion bias.

## Attitudes Toward Mental Disorders

### Stigma

A review of the literature suggests that society has held a generally negative view toward those diagnosed with mental illness (Parcespe & Cabassa, 2013; Rabkin, 1974). In his classic

paper, Goffman (1963) defined stigma as a social construct that occurs in social relationships and manifests itself through stereotyping and labeling and can often lead to prejudice and discrimination (see also Hinshaw & Stier, 2008). Stigma shifts focus away from individual traits, is deeply discrediting, and is associated with many adverse effects including poor academic performance, low self-esteem, and increased rates of mental and physical illness (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Tsao, Tummala, & Roberts, 2008).

**Stigma and mental illness.** Public stigma refers to negative beliefs and attitudes that cause individuals to fear, avoid, reject, and discriminate against those diagnosed with a mental illness (Percesepe & Cabassa, 2013). In the 1970s, research suggested that the public, although less quick to label someone as mentally ill compared to mental health professionals, are much quicker to hold stigmatizing beliefs and to socially isolate those with mental illness. Given this problem, funding was allocated for educational and ideological campaigns to reduce stigma (Rabkin, 1974). One study suggests that stigma has been somewhat reduced over time and society now holds a relatively more favorable view of mental disorders and mental health care (Corrigan, Druss, & Perlick, 2014a).

Despite some improvement in education and societal attitudes, evidence suggests continued stigmatization of mental illness, as individuals with mental disorders are more likely to be homeless, financially dependent, and unemployed compared to people that have not been diagnosed with a mental illness (Corbiere et al, 2011; Corrigan, Larson, Watson, Boyle, & Barr, 2006). Additionally, evidence suggests that regardless of any real improvement in public attitudes toward mental illness, individuals diagnosed with mental disorders continue to perceive stigma from others (Link, Cullen, Mirotznik, & Struening, 1992). Moreover, this perceived stigma results in reduced rates of seeking psychological services and high dropout rates during

treatment (Corrigan et al., 2014a). In one study, Corrigan et al. (2014b) found that mental health professionals, who held stigmatizing beliefs toward a hypothetical patient, were less likely to believe that the patient would adhere to treatment or refill their prescriptions, and were less likely to refer him to a needed specialist.

Other research suggests continued stigmatization of mental illness by the general public. Percesepe and Cabassa (2013) found that that the public's perception of those diagnosed with a mental illness, particularly those involving psychosis, is that they are dangerous to both themselves and others and that this perception has strengthened over time. In another study, participants surveyed in 1996 were 2.3 times more likely than participants surveyed in 1950 to hold the view that those with a mental illness are more prone to violence than individuals not considered mentally ill (Phelan, Yang, & Cruz-Rojas, 2006). Other evidence suggests that the intensity of stigma might be affected by the causal attributions of mental disorders; participants that view mental illness as a product of genetic factors or chemical imbalance perceive the mentally ill significantly more negatively than participants that view mental illness as a product of social or environmental factors (Pescosolido et al., 2010).

Compared to those diagnosed with mental disorders characterized by psychosis, those with more common mental illnesses such as depression are more likely to experience shame (Percesepe & Cabassa, 2013). Walker, Coleman, Lee, Squire, and Friesen (2008) found that children rated depression and ADHD as more shameful than being diagnosed with a physical illness such as asthma and were more likely to blame parents for a diagnosis of a mental illness than a diagnosis of physical illness. Anglin, Link, and Phelan (2006) found that adult participants felt that those diagnosed with depression were more to blame for their actions compared to those diagnosed with schizophrenia, which is inconsistent with previously

mentioned research suggesting that mental health stigma is correlated with biological explanations of mental illness (Pescosolido et al., 2010).

Evidence suggests that the general public prefers more social distance from those diagnosed with major depression than those considered to be "troubled" (i.e., mild worrying, nervousness, and sleep problems that do not cause functional impairment); only 53% of participants endorsed items reflective of a willingness to interact with a person diagnosed with major depression (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999). Additionally, Corrigan, Kuwabara, and O'Shaughnessy (2009) found that participants reported that they would be more likely to avoid a person diagnosed with a mental disorder (e.g., major depression, alcohol dependence) than someone with a physical disability (e.g., paralysis). In one study, roughly one third of participants expressed a desire for social distance from a person suffering from major depression (Link et al., 1999).

It appears that preference for social distance from those with mental illness has not decreased. Participants' attitudes regarding preferred distance from those diagnosed with major depression, alcohol dependence, and schizophrenia have remained stable from 1996 to 2006 (Pescosolido et al., 2010). However, preferences for social distance vary, which may be related to the causal hypotheses for the development of mental illness. For example, people that attribute mental illness to stress-related factors preferred significantly less social distance than those that attributed biological factors for the development of mental illness (Martin, Pescosolido, & Tuch, 2000). Taken together, these results suggest diminished quality of care and quality of life for those suffering from mental illness.

**Stigma and personality disorders.** Research appears to indicate that the level of stigma differs based on the type of mental disorder diagnosis, and that PDs are among one of the more

stigmatizing diagnoses. In fact, PD is widely considered a pejorative term by mental health professionals and one that often impacts quality of care (Lewis & Appleby, 1988; Newton-Howes et al., 2008). As noted above, level of stigma is correlated with causal hypotheses for mental illness. Those with mental illness are seen as less in control and less responsible for their actions when the cause of mental illness is attributed to genetic or biological factors (Pescosolido et al., 2010). These attributions lead to less sympathy, increased blame, and decreased quality of care (Lewis & Appleby, 1988; Weiner, 1980).

Although extensive research has been conducted on attitudes toward mental illness in general, researchers have largely ignored PDs (Egan, Haley, & Rees, 2014; Newton-Howes et al., 2008). Specifically, there is a dearth of research regarding mental professional's attitudes toward PDs despite the considerable time they spend with this population (Servais & Saunders, 2007). Lewis and Appleby (1988) surveyed 240 psychiatrists regarding their opinion of a hypothetical patient. The psychiatrists were given one of six possible vignettes manipulated by the diagnostic information (depression, personality disorder, no diagnosis) and presence of a previous diagnosis (or no previous diagnosis) of PD. The participants were asked to rate their opinions regarding the person in the vignette. Results suggested that psychiatrists form significantly more pejorative, judgmental, and rejecting attitudes toward those who had been previously diagnosed with a PD compared to other diagnoses. Moreover, Lewis and Appleby found that those diagnosed previously with a PD were significantly more likely to be seen as difficult, manipulative, unsympathetic, and less deserving of the psychiatrists' resources. Further, psychiatrists viewed those with a PD as less mentally ill and more likely to consider suicide attempts as attention seeking.

In a related study, Newton-Howes et al. (2008) examined mental health professionals' attitudes toward patients at a community mental health center with and without a clinical diagnosis of a personality disorder using previously collected data. Patients were interviewed with a brief screening measure of personality disorders (Quick Personality Assessment Schedule; PAS-Q; Tyrer, 2000) and completed self- report measures about their level of functioning. The facility staff rated each patient in terms difficulty of management and treatment compliance using five bipolar domains (e.g., complaint-noncompliant). Additional information was obtained from the patient's chart, including diagnoses, incidents of aggression, level of functioning and social needs. Based on these measures, patients were categorized into those with "overt" PD (clinical diagnosis of a PD and met criteria for a PD on the PAS-Q) and "covert" PD (no clinical diagnosis, but met criteria for a PD on the PAS-Q). Results showed that clinicians rated those with a clinical diagnosis of a PD (overt PD) as more difficult to manage than patients with a covert diagnosis of PD. The authors concluded that awareness of a PD diagnosis is enough to cause mental health professionals to believe that a patient is more difficult to manage, despite no differences in the two groups of patients' social needs, social functioning, or level of aggression. They suggested that their findings may be due to the stigma associated with the diagnosis of a PD. In related research, Egan et al. (2014) found that individuals who endorsed increased levels of stigma associated with PDs were generally older, male, and had minimal qualifications and little experience working with PD populations.

**Dependent personality disorder.** Few studies have examined attitudes toward DPD specifically. Gazzillo et al. (2015) asked 148 clinicians to complete the Therapist Response Questionnaire (TRQ; Betan, Heim, Conklin, & Weston, 2005), a measure used to assess emotional reactions of therapists to their clients. Psychotherapists were randomly assigned to

complete the TRQ with one of their current patients. Patients were diagnosed using Psychodiagnostic Chart (PDC; Gordon & Bornstein, 2012) and the Personality Diagnostic Prototype (PDP; Gazzillo, Lingiardi, & Del Corno, 2012). Results suggested that 33 clinicians had clients diagnosed with DPD, and those clinicians had a disengaged (i.e., bored, withdrawn, and distracted) or a parental (i.e., a desire to help or care for the client) response style toward those patients based on their responses on the TRQ. Additionally, results suggested that clinicians felt burdened by clients' DPD needs, which resulted in withdrawal or behaving in an exceedingly caring or nurturing manner. In a related study, Bender (2005) found that working with those diagnosed with DPD was often described as a frustrating experience for clinicians due to a tendency for those diagnosed with DPD to withhold information and be resistant to developing independence.

Other research has focused on differences in the perceived dysfunction of DPD and other "feminine" PDs compared to "masculine" PDs such as antisocial. Funtowicz and Widiger (1999) recruited 590 psychologists from Division 12 (Clinical Psychology) of the American Psychological Association and asked them to rate the perceived social dysfunction, occupational dysfunction, and subjective distress associated with six DSM-IV PDs (borderline, dependent, histrionic, obsessive-compulsive, antisocial, and paranoid). They found that the clinicians perceived DPD, and other stereotypically feminine PDs (i.e., borderline and histrionic), as more distressing, but less dysfunctional than stereotypically masculine PDs (i.e., antisocial, obsessive-compulsive, and paranoid). More broadly, the trait of dependency is perceived as maladaptive in western cultures that value independence and individualism (Disney, 2013).

**Role of patient sex in stigma.** Bornstein (1996) argued that laypersons and mental health professionals overwhelmingly hold the view that women are traditionally more dependent

than men. He also suggested that passivity and dependency are central aspects of the typical person's view of stereotypic feminine behavior, and that some empirical evidence does suggest that diagnostic criteria for DPD are perceived as feminine (Sprock et al., 1990). Moreover, Kaplan (1983) suggested that sex bias, regardless of the source, has a real effect on society's attitude toward those with DPD. Specifically, she argued that dependency exists for both men and women, but society views men's dependency as normal and perceives women's dependency as pathological, perhaps because it is expressed differently (Disney, 2013; Kaplan, 1983).

However, others have suggested that men who display DPD may be seen as more pathological. Despite similar dependency needs, dependency is viewed more negatively in men than women due to traditional gender role attitudes that are socialized in western culture (Berk & Rhodes, 2005). Men who express dependency may be seen as abnormal because their behavior violates traditional gender role norms. Additionally, researchers have found that men who express dependency needs are perceived as effeminate and often as homosexual (Basow & Johnson, 2000; Goodman & Moradi, 2008; Whitley, 2001). Research suggests that factors such as gender and gender role attitudes both contribute to attitudes toward those diagnosed DPD.

Sprock (1996) recruited 60 undergraduate students, assigned them to three instruction conditions, (male, female, or gender neutral) and asked them to rate the abnormality of DSM-III-R PD symptoms for men, for women, or without asking them to consider sex. Overall, results showed that gender influenced perceived maladaptivity of symptoms, such that behaviors consistent with an individual's gender role (e.g., DPD in women) were perceived by participants to be less maladaptive than those that were inconsistent with an individual's gender role, such as symptoms of DPD or Histrionic PD in men. In contrast, Sprock, Crosby, and Nielson (2001) found that PD symptoms were perceived as more maladaptive when they were consistent with

traditional gender roles. Specifically, they found that DPD was rated as more maladaptive in women than in men, consistent with Kaplan's (1983) initial claims. Inconsistent results may be explained by changes in the methodology, including differences in the definitions of maladaptivity provided in the studies.

Slowik (2014) examined attitudes toward men with DPD via a vignette-based study with approximately 250 (99 men and 149 women) undergraduate participants. Overall, she found that men with DPD were not viewed significantly different than women with DPD. However, results showed that female participants perceived the hypothetical male to be higher in personal distress compared to the hypothetical female. Additionally, female participants were less likely to believe that the general public would react favorably to the hypothetical male compared to the hypothetical female. She also found a medium effect size for participant sex role attitudes, such that participants with less traditional gender role attitudes rated the hypothetical individual with DPD more negatively than those with traditional gender role attitudes, which contradicted previous research.

These results suggest that there is perceived stigma associated with DPD and DPD traits, although results are mixed with regard to whether DPD traits are viewed as more maladaptive in men or women. To date, the majority of studies completed on attitudes toward those with DPD have recruited undergraduate samples that are not trained in formal diagnosis. However, Anderson et al. (2001), using a sample of mental health professionals, found no difference in perceived maladaptivity of females versus males with DPD.

**Sex of participant.** Research regarding attitudes toward those with DPD has also considered the influence of the sex of the participant on attitudes toward DPD and other PDs. Although relatively few studies have considered this variable, it appears that participant sex has

little to no effect on the perception of PD symptoms. For example, Sprock et al. (1990) found that men and women did not rate DSM-III-R DPD symptoms significantly differently in terms of a masculinity-femininity scale, as both sexes viewed symptoms of DPD as more feminine. Additionally, men and women did not differ significantly in their perception of the maladaptivity of DPD in several other studies (Anderson et al., 2001; Sprock, 1996; Sprock et al., 2001). However, Slowik (2014) found that female participants attributed more distress and negative reaction by others to the male than the female with DPD in her vignette, suggesting that there may be an interaction of patient sex and the participant's sex in perceived stigma in those with DPD. Taken together, these results suggest that the sex of participants has little effect on attitudes toward those with DPD. However, more research is needed to determine the effect of participant age and gender role attitudes, as many of these studies used college students who may have different attitudes than older adults.

## Attitudes Toward Sexual Orientation

### Attitudes Toward Homosexuality

Prior to 1972, homosexuality was officially considered a mental illness, a problem in society, and was highly stigmatized (APA, 1952). However, in 1972, Weinberg introduced the term homophobia, which characterized the stigma toward homosexuality as a fear or phobia. Additionally, his definition of homophobia described self-criticism and self-loathing that was hypothesized to occur within homosexuals (Herek & McLemore, 2013). Although this was an advance in reducing stigma directed at homosexuals, it had significant limitations. Specifically, it assumed that negative attitudes were a phobic response, characterized by irrational fear (Herek, 2004). However, empirical evidence suggested that levels of fear are not present at high levels in homophobia as with other phobias, and emotions such as anger, disgust, and distrust were more

prevalent (Giner-Sorolla, Bosson, Caswell, & Hettinger, 2012; Herek, 2002a; Parrott, Peterson, Vincent, & Bakeman, 2008; Shields & Harriman, 1984). Negative attitudes toward sexual minorities are now referred to as sexual prejudice (Herek, 2009b).

Recently, cultural trends in the United States suggest decreased negatives attitudes toward homosexuality, as people are now less condemning of homosexuality than at any other time in history (Andersen & Fetner, 2008; Herek, Chopp, & Strohl, 2007; Wilcox & Norrander as cited in Herek & McLemore, 2013). For example, numerous states have removed anti-sodomy laws and the military no longer bans homosexuality (Herek & McLemore, 2013). Moreover, the United States Supreme Court ruled in 2015 to legalize gay marriage in all 50 states. Sexual minorities are now guaranteed access to Social Security spousal and survivor benefits and statutes now prevent employment discrimination (Herek, 2007; Sareen-Tak, 2015). However, there have been many societal structures and policies that created differential treatment based upon sexual orientation, such as religious institutions (Herek et al., 2007). Moreover, research suggests that after controlling for level of education and previous experience, gay men have lower annual incomes compared to heterosexual men (Carpenter, 2007), and homosexual individuals were likely to be harmed by institutional policies related to individual and family health care coverage (Inst. Med., 2011). However, little research has been completed since gay marriage was legalized in all states and although there has been increased equality, many questions remain regarding spousal employment benefits (Sareen-Tak, 2015).

Although there has been significant improvement in attitudes toward homosexual men and women, a sizable portion of people still hold stigmatizing beliefs (Herek, 2002a; Norton & Herek, 2013). Ten percent of sexual minorities have reported experiencing housing discrimination or employment discrimination (Herek, 2009a) and Herek and McLemore (2013)

cite research that suggests that roughly 50% of gay individuals reported experiencing verbal harassment at some point in their lives. Twenty percent of sexual minorities also reported being victimized in a crime based on their sexual orientation. In fact, the FBI found that more than 1,200 hate crimes related to sexual orientation occurred in 2010 alone (as cited in Herek & McLemore, 2013). Moreover, it appears that bullying of LGB children and adolescents is rampant in U.S. school systems (Herek & McLemore, 2013).

Researchers have found that sexual prejudice is more common in older heterosexuals who live in rural areas, have lower levels of education and who report high levels of authoritarian beliefs (Herek, 2009b). Many of these factors are mitigated by increased contact with members of sexual minority groups, but contact between these groups appears to occur rarely (Pettigrew & Tropp, 2006). Additionally, there are still settings or institutions (i.e., certain religions) where it is socially acceptable to express overt sexual prejudice (Herek & McLemore, 2013).

Sexual prejudice is correlated with religiosity and moral objection to a deviance from traditional male and female relationships, often expressed via negative affect toward homosexual individuals (Batson, Floyd, Meyer, & Winner, 1999; Brint & Abrutyn, 2010; Fulton, Gorsuch, & Maynard, 1999). Religious fundamentalism has been found to be strongly linked with increased rates of sexual prejudice (Kellstedt & Smidt, 1991; Whitley, 2009), but might be mediated by authoritarianism. Authoritarianism is correlated with sexual prejudice, religious fundamentalism, and general defensiveness (Altemeyer, 2003; Altemeyer & Hunsberger, 1992; Herek & McLemore, 2013). In fact, some studies have indicated that after accounting for the effects of authoritarianism, there is no relationship between religiosity, religious fundamentalism, and sexual prejudice (Ford, VanValey, Brignall, & Macaluso, 2009; Jonathan,

2008). Moreover, many sexual minorities identify as religious and attend churches that are supportive of homosexuality, suggesting that many congregations are welcoming (Rodriguez, 2010).

**Gender and Sexual Prejudice**

Within the literature examining gender and sexual prejudice, there exists an imbalance, as the majority of research has examined the attitudes of heterosexual males toward homosexual males (Herek & McLemore, 2013). Researchers have found that heterosexual men, compared to heterosexual women, report less comfort with sexual minorities overall (Herek, 2002a) and are more likely to hold and express negative attitudes (Herek, 2000; Herek & Gonzalez-Rivera, 2006; Kite & Whitley, 2003). In their review, Herek and McLemore (2013) cite research that reported heterosexual males, compared to heterosexual females, are significantly more likely to behave in a hostile manner toward gay men, but this same trend was not present with lesbian women.

Research examining differences in attitudes by gender have found that heterosexual men respond to gender, rather than sexual orientation. Heterosexual males perceive gay and bisexual men significantly more negatively than lesbian or bisexual women (Herek, 2000, 2002b, 2009b). This is the opposite of what has been found with heterosexual women, who appear to respond to sexual orientation rather than gender, as evidenced by significantly more negative attitudes toward bisexual individuals regardless of sex (Herek, 2002b, 2009b). In a related study, Herek (2002a) found that when measuring latency in responding, prejudiced heterosexual men have significantly longer delays in responses when asked about their attitudes toward lesbian women. This latency was not present when asked about gay men, suggesting that perceptions of gay men are more readily accessible.

Taken together, the research suggests that heterosexual men have more sexual prejudice than heterosexual women, particularly toward gay and bisexual men. Sex differences in sexual prejudice appear to be the best explained by gender socialization. According to this theory, masculinity and femininity are culturally created concepts and carry with them certain expectations. Moreover, masculinity is perceived by western society as something that must be earned and can easily be lost (Gilmore, 1990). Due to the instability of the masculine gender role, men are often compelled to explicitly establish a masculine gender role, often by expressing sexual prejudice, or risk losing the approval of their heterosexual peers (Franklin, 2000; Glick, Gangl, Gibb Klumpner, & Weinberg, 2007).

Researchers have provided robust support that losing one's masculinity is an aversive experience (Herek & McLemore, 2013). Evidence has shown that men who are perceived by others to violate masculine gender roles risk being labeled as homosexual, and are significantly more likely to experience isolation, verbal aggression, and physical aggression from heterosexual peers (Bosson et al., 2005; Bosson, Taylor, & Prewitt-Freilino, 2006; Bosson, Vandello, Burnaford, Weaver, & Wasti, 2009; Bosson & Vandello, 2011). Therefore, it appears that sexual prejudice is used not only to establish one's masculinity, but also as a punishment for those who violate traditional masculine gender roles (Herek & McLemore, 2013).

Anti-femininity, status (i.e., power), toughness, and lack of openness to new experiences have been found to be associated with a traditionally masculine gender role as well as with sexual prejudice toward homosexual men (Barron, Struckman-Johnson, Quevillon, & Banka, 2008; Baunach, Burgess, & Muse, 2010; Keiller, 2010). In tasks that called into question one's masculinity, heterosexual men behaved aggressively toward other participants that they believed to be homosexual (Talley & Bettencourt, 2008). Glick et al. (2007) found that threatening a

heterosexual male participant's masculinity resulted in the overt expression of negative affect (i.e., frustration, anger) toward effeminate homosexual male participants. In a related study, researchers found that masculinity threat is associated with an increased rate of physically aggressive cognitions (Bosson et al., 2009). In contrast, researchers have found that women do not express prejudice toward sexual minorities through physical aggression. Bosson et al. (2009) found that, unlike men, negative gender role feedback did not result in an increase in physically aggressive cognitions for women. Overall, threats toward gender identity appear to be less relevant to women's self-image (Herek, 2000).

**Gender role attitudes.** Traditionally, the behavioral sciences held that masculinity and femininity are bipolar opposites of a continuum and that the presence of masculine attributes discounts feminine ones (Spence & Helmreich, 1978). From this perspective, the absence of masculinity was thought to equate femininity and vice versa, with the goal of socialization to ensure that children learn and demonstrate sex-appropriate characteristics assigned by society (Bohan, 2002). Guided by these principles, the behavioral sciences have conducted research and created scales to measure gender role attitudes based upon this bipolar continuum. More recently, however, this theoretical framework has been challenged, as researchers have argued that although masculine and feminine traits do distinguish the sex roles to some degree, sharp distinctions are not necessary. Moreover, a person's gender role might be comprised of a combination of both feminine and masculine traits (Spence & Helmreich, 1978).

Given the shift in attitudes regarding gender role stereotypes, Bem (1974) created the Bem Sex Role Inventory (BSRI). Unlike previous measures of gender role behaviors and attitudes, the BSRI allowed for androgyny, or the combination of both feminine and masculine traits. Rejecting a bipolar conceptualization of gender role, Bem employed a mixed self-concept

approach that allowed individuals to express both masculine and feminine characteristics and allowed researchers to measure the degree to which a person internalized society's traditional gender role attitudes. Other popular scales that have been used to measure nontraditional gender role behaviors and attitudes are the Sex-Role Egalitarianism Scale (King & King, 1985) and the Attitudes Towards Women Scale (Spence & Helmreich, 1978). Although these measures are well established and have been widely used, they incorporate items based on the bipolar conceptualization of gender roles that is now outdated (Baber & Tucker, 2006; Bem, 1974; Spence & Helmreich, 1978). In reaction to these measures, Bohan (2002) proposed a postmodern view of gender roles and the self, such that different selves manifest in different circumstances. Rather than having a firm gender role orientation in all situations, this postmodern, or constructivist view, suggests that the self and gender behaviors are not as central and fixed as previously theorized. Instead, different selves can manifest in different situations with varying levels of femininity and masculinity.

**Measurement of gender role attitude.** Given this trend, Baber and Tucker (2006) moved away from a bipolar conceptualization of masculinity and femininity, arguing that previous scales are limited and are not good measures of modern gender role attitudes. They created the Social Roles Questionnaire (SRQ), which measures one's adherence to traditional gender roles associated with one's sex. The measure includes contemporary items and does not focus on dichotomous thinking. Additionally, the SRQ includes items that assess for gender transcendence (i.e., that social roles are not fundamentally sex linked). The SRQ contains 13 items that are answered by indicating agreement in percentage (0% to 100%). Baber and Tucker's (2006) initial research on the measure found a test-retest reliability of .87 for the general items and .67 for the gender transcendent items. Cronbach's α was .91 for the general

items and .66 for the gender transcendent items. The SRQ was also found to have convergent validity with the Attitudes Toward Women Scale (Spence & Helmreich, 1978) and the Attitudes Toward Marital and Child Rearing Scale (Hoffman & Kloska, 1995) and research showed good discriminant validity with the Personal Attributes Questionnaire (Baber & Tucker, 2006; Spence & Helmreich, 1978). Moreover, men were more likely to be less gender role transcendent and more sex-linked than women, which is consistent with research on gender role attitudes as well as attitudes toward sexual minorities (Baber & Tucker, 2006).

Taken together, these results suggest a connection between masculinity and sexual prejudice. More broadly, evidence supports a connection between traditional beliefs regarding gender roles and sexual prejudice (Goodman & Moradi, 2008; Kilianski, 2003; Nagoshi et al., 2008; Parrott, Adams, & Zeichner, 2002; Whitley, 2001). Additionally, traditional values regarding family structure (i.e., nuclear family) and sexual behavior (i.e., abstinence before marriage) are also associated with increased sexual prejudice (Callahan & Vescio, 2011, Kite & Whitley, 1996; Vescio & Biernat, 2008). Although research suggests that heterosexual men tend to hold more strongly negative beliefs toward sexual minorities, some evidence suggests that some women who identify as strongly religious might have more negative views toward sexual minorities than non-religious heterosexual men and women (Ahrold & Mestion, 2010; Brown & Henriquez, 2008; Herek, 2002b; Stefurak, Taylor, & Mehta, 2010). Overall, sexual prejudice in men may be seen as bolstering masculine status, whereas for women, sexual prejudice may be related to their value system (Herek & McLemore, 2013).

## Present Study

Overall, the research suggests that DPD is associated with a female gender role (Rienzi et al. 1995, Sprock et al. 1990), which likely affects diagnosis and the perception of DPD

symptoms in men and women. However, relatively little is known about attitudes toward men with DPD. Research suggests that expressions of dependency are a violation of masculine gender roles and may be viewed negatively (Berk & Rhodes, 2005). In addition, men and women with traditional gender role attitudes have more negative attitudes toward DPD and violations of traditional gender roles (Kaplan, 1983; Sprock, 1996). Slowik (2014) did not find that men with DPD were perceived more negatively than women with DPD, overall, although she found that individuals with traditional gender roles actually had less negative attitudes toward those with DPD compared to individuals with less traditional gender role attitudes, which seemed to contradict previously completed research. However she did find that, among female participants, men with DPD were viewed as more personally distressed and less likable than women with DPD.

Given the lack of research, as well as recent cultural trends making sexual orientation a more salient issue, the current study examined attitudes toward men with DPD, specifically whether men with DPD were viewed more negatively than women. In addition, the current study examined the effect of participant sex and participant gender role attitudes toward those with DPD, as men and individuals with traditional gender role attitudes typically perceive gender role violations more negatively. Finally, research suggests that there continues to be stigma associated with homosexuality and with gender role violations. Therefore, the current study examined the effect of sexual orientation in those with DPD, specifically, whether a homosexual individual with DPD is viewed more negatively than a heterosexual individual with DPD. The current study employed a case vignette methodology to measure perceptions of a hypothetical individual with DPD. Case vignettes have been used successfully in personality disorder research in the past (e.g., Rienzi et al., 1991, 1995), and allow for the manipulation of the variables of

interest while keeping other information constant. A vignette of an individual with DPD that met DSM-5 DPD diagnostic criteria was used, and the sex and sexual orientation of the individual in the vignette was manipulated, resulting in four versions of the vignette. Undergraduate volunteers from a Midwestern university were recruited as participants.

Participants were asked to read the vignette and provide ratings of the hypothetical individual's social and occupational dysfunction as well as his or her level of distress and psychopathology. Participants were also asked to complete four items on a general attitudes scale adapted from Rubin's (1974) Liking Scale. Furthermore, participants were asked to complete the Social Roles Questionnaire (SRQ; Baber & Tucker, 2006) to determine their gender role attitudes and the Modern Homonegativity Scale (Morrison & Morrison, 2002) to determine their attitude toward sexual minorities. Parallel items for gay men and lesbian women were developed on the MHS given the findings that there are differences in attitudes towards these two groups. Finally, participants were asked to complete The Social Desirability Scale -17 (Stöber, 2001), to measure their tendency to respond in a socially desirable manner.

**Hypotheses**

Based on the review of the literature regarding sex bias in the diagnosis of DPD, gender role attitudes, and stigma toward mental illness and sexual orientation, the following hypotheses were proposed:

1. It was hypothesized that male participants would have more negative attitudes toward gay and lesbian individuals in general (i.e., homonegativity) than female participants.
2. It was hypothesized that male participants would have more traditional gender role attitudes compared to female participants.

3. There would be a main effect of sex of the individual described in the DPD vignette, such that the male version of the vignette would be perceived more negatively (i.e., higher ratings of distress, occupational and social dysfunction, psychopathology; lower ratings of liking) than the female version of the DPD vignette.
4. There would be a main effect of the sexual orientation of the individual described in the vignette. It was predicted that the homosexual version of the DPD vignette would be perceived more negatively (i.e., higher ratings of distress, occupational and social dysfunction, psychopathology; lower ratings of liking) than the heterosexual version of the DPD vignette.
5. There would be a main effect of participant sex, such that male participants would perceive the individual in the DPD vignette more negatively than female participants.
6. There would be a significant interaction between participant sex and the sex of the individual described in the DPD vignette, such that male participants would perceive the male individual in the DPD vignette more negatively (i.e., higher ratings of distress, occupational and social dysfunction, psychopathology; lower ratings of liking) than the female individual, and more negatively than the ratings of female participants.
7. There would be a significant positive association between the level of sexual prejudice and negative attitudes toward the gay and lesbian individuals described in the DPD vignette (i.e., higher sexual prejudice associated with higher ratings of distress, occupational and social dysfunction, and psychopathology, and with lower ratings of liking). This association would be stronger for the gay individual described in the vignette than the lesbian individual.

8. There would be a significant interaction between participant sex and the sex and sexual orientation of the person described in the vignette, such that male participants would rate the gay male in the DPD vignette more negatively (i.e., higher ratings of distress, occupational and social dysfunction, psychopathology; lower ratings of liking) than the heterosexual man, lesbian and heterosexual female, and more negatively than rated by female participants.
9. There would be a significant association between traditional gender role attitudes and negative attitudes toward the male individual in DPD vignette (i.e., higher ratings of distress, occupational and social dysfunction, psychopathology; lower ratings of liking), but not a significant relationship with negative attitudes toward the female individual in the DPD vignette.

# CHAPTER 3

# METHODS

## Design of the Study

The current study used a quasi-experimental design to investigate the effect of participant sex and gender role attitudes on their attitudes toward homosexual and heterosexual men and women with DPD. The independent variables were sex of the person described in the vignette (female or male), sexual orientation of the person described in the vignette (homosexual or heterosexual), and sex of the participant. Participants were randomly assigned to receive one of four written vignettes. The dependent variables were the ratings of the person described in the vignette in terms of social and occupational dysfunction, distress, overall psychopathology, as well as several items from a liking scale developed in social psychology.

## Power Analysis

At this time, there has been little research comparing attitudes toward men and women with DPD or considering the role of sexual orientation and participant gender role attitudes in influencing attitudes toward DPD. However, similar studies used a medium effect size (Anderson et al., 2001; Slowik, 2014). It was determined that, using a MANCOVA, a sample size of 180 participants (i.e., 23 participants per group) was needed to find a medium effect size for the variables (i.e., ratings of distress, occupational and social dysfunction, psychopathology; ratings of liking), with an $\alpha$ of 0.05 and $\beta$ of .80.

## Participants

Participants were recruited from introductory psychology courses at a medium-sized Midwestern university. Efforts were made to oversample for men (i.e., opening the survey to men only during the second semester of data collection). Prior to analyses, the data were

screened for outliers. Participants that left 10% or more of their overall responses blank on any of the measures (SRQ, MHS, SDS-17) were excluded. For participants leaving less than 10% of responses blank on any of the measures (SRQ, MHS, SDS-17), the participant's mean score for that measure was substituted for the missing response(s) on that measure. Given the importance of the participant's gender and culture for this research study, data from participants who failed to indicate their gender or who were from countries other than the United States were discarded. Data from participants who missed either of two manipulation check questions or completed the survey in an unrealistically short time were also deleted. Data from a total of 146 participants were eliminated and the final data set consisted of 318 participants. Consistent with the distribution of students at the university and in the introductory psychology classes, 69.8% were women and 72.6% were Caucasian. Demographic information for the final sample is presented in Table 1, including frequency for sex, race/ethnicity, sexual orientation, and year in school. The mean age of participants was 20.13 (*SD* = 4.92).

## Vignettes

The current study utilized four versions of a case vignette developed by Slowik (2014) to portray a hypothetical individual that meets criteria for Dependent Personality Disorder. The DSM-5 criteria had been used verbatim to create the vignettes. The four versions of the vignette were identical, except for the sex (male or female) and sexual orientation (homosexual or heterosexual) of the person in the vignette. Sex and sexual orientation were indicated by pronouns and the name of the individual and the name of their partner in the vignette. Names were selected to have strong gender associations (i.e., John/Jennifer; Michael/Mary). A manipulation check was used to ensure that participants were aware of the sex and sexual orientation of the individual in the written DPD vignette. See Appendix B for the case vignette.

## Measures

### Attitudes toward Dependency Scale (ADS)

The 8-item scale that was used in the current study was developed by Slowik (2014) and used by the researcher to measure attitudes towards the individual with DPD in the case vignette. The first four items were adopted from Funtowicz and Widiger (1999) and measure perception of level of social dysfunction, level of occupational dysfunction, personal distress, and psychopathology of the person depicted in the DPD vignette (see Appendix C). A 7-point Likert scale (i.e., 1 = none, 3 = mild, 5 = moderate, 7 = severe) was used to rate these items for the individual in the vignette. Reliability of the measure in the original study was in the acceptable range, as Cronbach's α ranged from .72 to .84 for the various personality disorders (Funtowicz & Widiger, 1999). Four items were adopted from Rubin's (1974) Liking Scale and were reworded to be appropriate for a hypothetical individual. An example of a reworded item is, "It seems to me that it is very easy for this person to gain admiration." Participants responded to these items using a 7-point Likert scale (i.e., 1=Strongly Disagree, 3=Disagree, 4 = Neutral, 5=Agree, 7=Strongly Agree). For the purposes of this study, ADS items were examined individually, for the four psychopathology items, the four liking items, and for the total scale across all eight items. Because the liking items were phrased in the opposite direction of the psychopathology items, with higher scores indicating a more favorable rating, these items were reverse coded so that the total score could be calculated and used for the multivariate analyses (i.e., MANCOVA) using the eight items. Alpha coefficients for the psychopathology items, the liking items, and the total ADS scale were good, .81, .75 and .82, respectively.

**Manipulation Check Items**

The manipulation check items followed the ADS items and consisted of two items asking the person in the vignette's sex and sexual orientation. Both items had to be answered correctly for the participant's data to be included.

**Social Roles Questionnaire (SRQ)**

The Social Roles Questionnaire (SRQ) was used to measure the participant's gender role attitudes (see Appendix D). The SRQ is a 13-item self-report questionnaire that assesses a person's adherence to traditional gender role values and tendency to behave in gender stereotypical manners (Baber & Tucker, 2006). The questionnaire is divided into the Gender-Transcendent and Gender-Linked subscales and there is also an overall score. The Gender-Transcendent subscale measures the extent to which a participant is willing to reject a traditional gender role attitude and the Gender-Linked subscale measures the tendency of a participant to maintain a traditional gender role attitude. Participants indicated their agreement on 13 items such as, "Tasks around the house are not assigned by sex" (Gender-Transcendent Item) and "Some types of work are just not appropriate for women" (Gender-Linked Item). Participants circled their level of agreement with each statement on a scale of 0% (strongly disagree) to 100% (strongly agree) divided into increments of 10%. Responses are scored by dropping the zero off of each percentage response (i.e., 0% = 0, 10% = 1). Items 1, 4, 8, 10, 13 (Gender-Transcendent items) are reverse coded such that items receiving a score of 100% would be coded with a score of 0%. Therefore, lower scores on the Gender-Transcendent scale indicate more gender transcendent (less traditional) views, whereas higher scores on the Gender-Linked subscale indicate more Gender-Linked (more traditional) views. Lower scores on the total SRQ indicate less traditional gender roles. Total scores on the SRQ range from 0-130, with Gender

Transcendent and Gender-Linked subscale scores ranging from 0 to 50 and 0 to 80, respectively. Research suggests that the SRQ has good discriminant, convergent, and content validity and the SRQ was found to have a Cronbach's α of .66 for the Gender-Transcendent (GT) items and .91 for the Gender-Linked (GL) items (Baber & Tucker, 2006). The present study used the SRQ Total score to measure participants' gender role attitudes, with subsequent analyses examining the two subscales individually. Internal consistency, using Cronbach's α, was .64 for the GT subscale, .79 for the GL subscale, and .96 for the total SRQ scale.

**Modified Modern Homonegativity Scale (MHS)**

Participants also completed a modified version of the Modern Homonegativity Scale (MHS; Morrison & Morrison, 2002), which is a 12-item questionnaire that assesses attitudes toward gay men and lesbian women (see Appendix E). Participants rate their attitudes on a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with scores ranging from 12 to 60 and higher scores indicating increased homonegativity. The developers of the MHS provided evidence that it is a psychometrically reliable instrument, reporting a strong internal consistency rating (α = .91). Correlational studies also provide evidence that the MHS is a valid method to assess contemporary attitudes concerning sexual orientation without considering traditional moral objections to homosexuality. The MHS is correlated with political conservatism, religious self-schema, and modern sexism, but not correlated with measures of social desirability (Morrison & Morrison, 2002). For the purposes of the present study, parallel items for gay men and lesbian women were developed on a "modified" MHS, given the findings that there are differences in attitudes towards these two groups (Herek & McLemore, 2013). Two scales were developed, Gay Men (GM) and Lesbian Women (LW) subscales, each with 12 items, including two nonspecific items that were included in each version. The items were

presented randomly by Qualtrics to participants. Scores on the GM and LW subscales range from 12 to 60. Total scores on the modified MHS were based on responses to all 22 items and range from 22 to 158. The analyses used each of these scores separately as well as the total score. Internal consistency coefficients were excellent, with a Cronbach's α of .92 for the Gay Men Subscale, .92 for the Lesbian Women Subscale, and .96 for the overall MHS scale.

**Social Desirability Scale-17 (SDS-17)**

The Social Desirability Scale-17 (SDS-17) is a 16-item questionnaire, adapted from the revised Eysenck Personality Questionnaire (EPQ), that assesses participants' tendency to give biased, distorted, and overly positive responses in an effort to portray themselves in an unrealistically positive manner to make a favorable impression on others. Items on the SDS-17 are answered true or false. Research suggests that the SDS-17 is a psychometrically reliable instrument with good internal consistency (α = .72) and a test-retest ($r$ = .82) across four weeks (Stöber, 2001). Additionally, correlational studies suggest that the SDS-17 is a valid measure of social desirability as it was strongly correlated with other measures of social desirability such as the Eysenck Personality Questionnaire-Lie Scale, the Sets of Four Scale, and the Marlowe-Crowne Scale (Stöber, 2001). The SDS-17 was used as a covariate to control for a social desirability response set. The internal consistency coefficient, using Cronbach's α, was .69 in the present study. See Appendix F for the SDS-17.

**Demographic Questionnaire**

Participants were asked to provide information regarding their age, sex, race/ethnicity, sexual orientation, major, and year in school.

## Procedure

Participants were recruited from undergraduate introductory psychology courses at a small Midwestern university using an online experimental recruitment tracking system (i.e., SONA systems). Individual computer based administration was competed online using a Qualtrics survey and took approximately 15 minutes to complete. Participants were presented with an informed consent document (See Appendix G) prior to beginning the survey and then completed a brief demographics survey. Next, they were randomly assigned by sex to receive one of the four written vignettes. After reading one of the four vignettes, participants completed the Attitudes Toward Dependency Scale (ADS), followed by the 2 manipulation check items. The Social Roles Questionnaire (SRQ), the "Modified" Modern Homonegativity Scale (MHS), and the Social Desirability Scale-17 (SDS-17) followed, presented in random order. After the questionnaires were completed, participants were directed to a webpage that thanked them for their participation and displayed a debriefing statement (see Appendix H). They also received information regarding psychological services should they react negatively to the study.

# CHAPTER 4

# RESULTS

## Statistical Analyses

The data were screened for outliers and excessive missing data before completion of statistical analyses. Participants that left 10% or more of their overall responses blank on any of the measures (SRQ, MHS, SDS-17) were excluded. For participants leaving less than 10% of responses blank on any of the measures (SRQ, MHS, SDS-17), the participant's mean score for that measure was substituted for the missing response(s) on that measure. As this study relies on comparing male and female participants, participants that did not provide their sex were also excluded from the analyses. Additionally, data from participants who did not correctly answer both manipulation check items or who completed the survey in an unreasonably fast time (less than five minutes) were discarded as well. The data from a total of 146 participants were eliminated and the final data set consisted of 318 participants. For a description of participants see Table 1.

Descriptive statistics were calculated for all variables. Skewness and kurtosis values for the key variables were all well within acceptable limits (i.e., + 2.0; George & Mallery, 2010) except for the ADS item measuring distress. Standardized scores were calculated for this variable and used in all subsequent analyses. Correlations were run for all dependent variables to test for multicollinearity and internal consistency was calculated for all measures. Correlations above .70 suggest multicollinearity, but none were found. Internal consistency for each of the measures was good (see results for specific measures in the Methods section).

Two separate one-way ANOVAs were used to examine differences in homonegativity (MHS) and sex role attitudes (SRQ) between male and female participants (Hypotheses 1 and 2).

The primary hypotheses (Hypotheses 3 through 6 and 8) were tested using a 2 (sex of the individual in the vignette) x 2 (sexual orientation of the person in the vignette) x 2 (participant sex) multivariate analysis of covariance (MANCOVA) with the items on the ADS as the dependent variables. The Social Desirability Scale-17 (SDS-17) was entered as a covariate to control for a socially desirable response set. Results of the MANCOVA are presented, including main effects and interactions effects, with follow up univariate analyses for each of the items on the ADS scale. Correlations were used to examine the relationship between homonegativity and ratings on the ADS for the gay and lesbian versions of the vignettes, and for each of these two vignettes separately (Hypothesis 7). Correlations were also used to examine the relationship between gender role attitudes (SRQ) and ratings on the ADS for the male and for the female versions of the vignettes (Hypothesis 9).

## Descriptive Analyses

The means and standard deviations of the items on the ADS were calculated and are presented in Table 2. Descriptive statistics were also calculated for the SDS-17. Participants had an overall mean of 23.94 ($SD$ = 3.07) with a range of 17 to 32, indicating a relatively low level of social desirability in the responses for participants overall. Descriptive statistics for the MHS and SRQ are presented in Tables 3 and 4, respectively. See below for discussion of these results.

## Primary Analyses

### Univariate Analyses

A one-way analysis of variance (ANOVA) was conducted to examine differences in homonegativity between male and female participants (Hypothesis 1). See Table 3 for the mean scores for male, female and total participants for the Modified Modern Homonegativity Scale

(MHS) total and the Gay Men (GM) and Lesbian Women (LW) subscales. Results indicate that there was a main effect for participant sex, $F$ (1, 317) = 26.25, $p < .001$, $\eta_p^2 = .077$, such that male participants held significantly more negative attitudes than female participants toward homosexual individuals (gay and lesbian), as well as more negative attitudes toward gay men, $F$ (1, 317) = 29.41, $p < .001$, $\eta_p^2 = .085$ and lesbian women, $F$ (1, 317) = 23.02, $p < .001$, $\eta_p^2 = .068$.

A one-way analysis of variance (ANOVA) was also conducted to examine differences in gender role attitudes between male and female participants (Hypothesis 2). Table 4 presents the means on the Social Roles Questionnaire (SRQ) for male, female and total participants for the SRQ total score and the Gender-Linked (GL) and Gender-Transcendent (GT) subscales. Overall, female participants were significantly less traditional in their gender role attitudes compared to male participants, $F$ (1, 317) = 16.62, $p < .001$, $\eta_p^2 = .050$, as well as significantly less gender linked, $F$ (1, 317) = 18.56, $p < .001$, $\eta_p^2 = .055$, than male participants. Additionally, female participants were more gender transcendent than male participants, but the difference did not reach statistical significance, $F$ (1, 317) = 3.15, $p = .077$, $\eta_p^2 = .010$. Due to the scoring in which the GT items are reverse scored, there was a significant positive correlation between the GT and GL scales, ($r = .395$, $p < .01$).

**Multivariate Analyses**

The primary hypotheses (Hypotheses 3 through 6, and 8) were tested using a 2 (sex of the individual in the vignette) x 2 (sexual orientation of the individual in the vignette) x 2 (participant sex) multivariate analysis of covariance (MANCOVA) with the items on the Attitudes Towards Dependency Scale (ADS) as the dependent variables and the items on the Social Desirability Scale -17 (SDS-17) entered as a covariate to control for socially desirable

responding. See Table 5 for the correlations between the ADS items.

Results of the MANCOVA are presented in Table 6. Results indicated a significant effect of participant sex, with female participants ($M$ = 42.41, $SD$ = 7.46) rating the ADS items higher (more negative ratings) than male participants ($M$ = 39.13, $SD$ = 7.89). There was also a significant main effect of sexual orientation of the individual described in the vignette, with the homosexual (gay and lesbian) versions of the vignette rated more negatively ($M$ = 41.68, $SD$ = 7.45) than the heterosexual versions of the vignette ($M$ = 41.23, $SD$ = 7.94) on the ADS items. The effect of sex of the individual in the vignette was also significant, with more negative ratings on the ADS items for the male ($M$ = 41.51, $SD$ = 7.54) than female versions ($M$ = 41.31, $SD$ = 7.96) of the vignette. There were no significant interaction effects between the variables nor was there a significant effect of socially desirability (SDS-17). Overall the model accounted for approximately 5 percent of the variance ($R^2$ = 0.49, Adjusted $R^2$ = .012).

Table 7 presents the results of the follow-up univariate analyses that are significant. The primary findings were a main effect of participant sex, with several of the psychopathology items and one liking item rated more negatively by women than men. The sexual orientation of the individual in the vignette had a significant effect on ratings of personal distress, with higher ratings of distress for the homosexual (gay and lesbian) than heterosexual versions of the vignette. Sex of the individual in the vignette had a significant effect on the ratings for the item that most people would react favorably to the person, with more negative ratings for the male than female versions of the vignette. The one significant interaction was between sex of the individual in the vignette and sexual orientation of the individual in the vignette, in which the lesbian woman vignette was rated as having higher levels of personal distress than the other three

versions of the vignette. See Appendix I for the ADS ratings for the four versions of the vignette for men, women and the total sample of participants.

**Correlational Analyses**

Correlations were calculated to examine the relationship between homonegativity, as measured by the MHS, and ratings on the ADS for the homosexual (gay man and lesbian woman) versions of the vignette (Hypothesis 7). See Table 8 for the results of the correlational analyses. Results show that participants' level of homonegativity was significantly *negatively* correlated with ratings of distress (i.e., higher homonegativity associated with lower ratings of distress) and *negatively* correlated with ratings that most people would react favorably to the person in the vignette (reverse coded; i.e., higher homonegativity associated with less negative ratings). Ratings of social and occupational dysfunction, psychopathology, and remaining "liking" items (recommend for a job, admiration, or judgment) were not significantly correlated with level of homonegativity. Additionally, correlations were calculated to examine this relationship for the lesbian woman and gay man vignettes individually. Results show that homonegativity toward gay men (GM subscale) was significantly *negatively* correlated with ratings that the gay man in the vignette would be viewed unfavorably by others (i.e., higher homonegativity associated with less negative ratings). Results also show that homonegativity toward lesbian women (LW subscale) was significantly *negatively* correlated with ratings of likelihood the lesbian woman in the vignette would be viewed unfavorably by others (i.e., higher homonegativity associated with less negative ratings). The GM and LW subscales were strongly positively correlated with one another ($r = .964$, $p < .001$), suggesting that the ratings for the GM and LW items were essentially identical.

Correlations were also calculated to examine the relationship between gender role

attitudes (SRQ) and ratings on the ADS for the male and female versions of the vignette (Hypothesis 9). For the male version of the vignette (see Table 9), gender role attitudes were significantly negatively correlated with ratings of social dysfunction, occupational dysfunction, distress, and psychopathology, as well as ratings of confidence in the individual's judgment, that most people would react favorably to the individual, and that the participant would recommend the individual for a responsible job. Contrary to the hypothesis, more traditional gender role attitudes predicted less negative ratings and more nontraditional attitudes predicted more negative ratings. A similar pattern was observed for Gender-Linked and Gender Transcendent subscales. For the female version of the vignette (see Table 10), gender role attitude was negatively correlated with ratings of distress, confidence in the person in the vignette's judgment, and ratings that the participant would recommend the person in the vignette for a job. The correlations for the Gender-Linked and Gender Transcendent subscales were similar, although only the GT subscale was significantly correlated with ratings of distress. Overall, there were fewer significant correlations between gender role attitudes and ratings on the ADS items for the female vignettes than for the male vignettes, however, the direction of the relationship was the same, with more nontraditional gender role attitudes associated with negative ratings of the ADS items.

**Post-hoc Analyses**

A series of *post-hoc* analyses were conducted to further explicate the results. First, the MANCOVA was repeated adding gender role (total SRQ score) as a covariate. There was a significant main effect of participants' gender role attitudes (SRQ) on ADS ratings, but no significant interactions of gender role attitudes with any of the other variables. In addition, the effect of participant sex was somewhat reduced ($p = .006$ *vs.* $p < .001$), although still significant.

To further assess for possible mediation, following the procedure outlined by Baron and Kenny (1986), zero-order correlations between participant sex, participant gender role attitudes, and the ADS total score were calculated. The correlation between participant sex and the ADS total score ($r$ = .195, $p$ < .001), participant sex and participant gender role attitudes ($r$ = -.224, $p$ < .001), and gender role attitudes with the ADS total score ($r$ = -.308, $p$ < .001) were all significant. A two-step multiple regression analysis was conducted using participant sex and sex and sexual orientation of the individual in the vignette as predictors of the ADS total score. The model was significant in predicting total ADS ratings, $F(3, 317) = 4.256$, $p$ =.006. Participant sex was a significant predictor of total ADS ratings. Neither sex nor sexual orientation of the individual in the vignette were significant predictors. A measure of gender role attitudes (SRQ) was added in the second step. The model was significant $F(4, 317) = 10.066$, $p$ <.001. Participant sex remained a significant predictor, but the amount of variance was reduced ($p$ < .001 to $p$ = .014). See Table 11 for results of the multiple regression. Together, the results suggest that participant gender role attitudes served as a partial mediator of the effect of participant sex on the ADS ratings.

A second *post-hoc* analysis used homonegativity (total MHS score) as a covariate in the MANCOVA. Homonegativity (MHS) did not have a significant effect on ADS ratings, but the effect of participant sex on the ADS ratings was reduced ($p$ < .001 *vs*. $p$ = .015), although still significant. There were no significant interactions of homonegativity with any of the other variables.

Again, following Baron and Kenny's (1986) procedure, zero-order correlations between participant sex, participant homonegativity, and the ADS total score were examined. As noted above, the correlation between participant sex and the ADS total was significant ($r$ = .195,

$p < .001$), as were the correlations of participant sex with homonegativity ($r = -.277$, $p < .001$) and homonegativity with the ADS total score ($r = -.201$, $p < .001$). A two-step multiple regression analysis was conducted using participant sex and sex and sexual orientation of the individual in the vignette as predictors of the ADS total score. The model was significant in predicting total ADS ratings, $F(3, 317) = 4.256$, $p = .006$. Participant sex was a significant predictor of total ADS ratings. Neither sex nor sexual orientation of the individual in the vignette were significant predictors. A measure of homonegativity (MHS) was added in the second step. The model was significant $F(4, 317) = 5.325$, $p < .001$. Participant sex remained a significant predictor, but the amount of variance was reduced ($p < .001$ to $p = .008$). See Table 12 for results of the multiple regression. Overall, results suggest that participant homonegativity partially mediated the effects of participant sex on the ADS ratings.

The final set of analyses examined results for just the female participants given the large effect of participant sex on ratings and the preponderance of women (69.8%) in the sample. Results of the MANCOVA, using sex and sexual orientation of the individual in the vignette as independent variables and social desirability as the covariate for the female participants, indicated no significant main effects of sex or sexual orientation of the individual in the vignette, or any interaction effects on the ADS ratings. Correlational analyses for only the female participants indicated a significant negative correlation between gender role attitudes (total SRQ) and ratings on all of the items on the ADS scale for the male case (6 of the 8 ADS items for the GT and GL subscales). Like the correlations for the total sample, more traditional gender role attitudes were associated with less negative ratings and more nontraditional attitudes were associated with more negative ratings. The correlations between gender role attitudes and ADS ratings were in the same direction for the female case, but were significant for only four of the

ADS items. Correlations between homonegativity (MHS) and ADS ratings for the homosexual cases were significant for only two of the liking items on the ADS (i.e., easy for the person to gain admiration, most people would react favorably to this person), with higher homonegativity associated with less negative ratings. Overall, these results replicated the findings for the total sample.

# CHAPTER 5

# DISCUSSION

The current study sought to contribute to the research regarding perceptions of those with DPD through examination of the attitudes (i.e., ratings of psychopathology, distress, and liking) of laypersons. Given the lack of research regarding attitudes toward men diagnosed with DPD, this study adds to the literature by comparing attitudes toward hypothetical men versus women with DPD. Additionally, the current study measured differences in attitudes toward sexual minorities with DPD by manipulating sex of the person in the vignette as well as his or her partner's sex. Finally, the influence of participant sex, gender role attitudes and homonegativity on attitudes was examined.

## Sex of the Individual in the Vignette

It was hypothesized that the male version of the DPD vignette would be perceived more negatively (i.e., higher ratings of occupational and social dysfunction, distress, and psychopathology; lower ratings of liking items on the ADS scale) than the female version of the DPD vignettes. This hypothesis was confirmed. DPD symptoms have been found to be more consistent with the female sex role (Kaplan, 1983; Rienzi & Scrams, 1991; Sprock et al., 1990), so that a man with DPD would be violating the masculine sex role (Bornstein 1995, 1996; Herek & McLemore, 2013) and therefore, was expected to be viewed more negatively. In the follow up univariate analyses, the male version of the vignette was rated significantly more negatively than the female version of the vignette on the item that most people would react favorably to the individual, which is consistent with the hypothesis.

The results for the ADS ratings overall, and particularly the favorability rating, are consistent with research that suggests that the expression of dependency in men is a violation of

traditional Western gender roles in men and is likely to be viewed negatively (Berk & Rhodes, 2000). However, on four items on the ADS (two psychopathology items and two liking items), the female version was perceived slightly more negatively, although not significantly so. These findings are somewhat contradictory and contrary to the hypothesis. However, the research findings in this area are also not consistent. Some previous studies have found that men who display dependency are perceived as more maladaptive (Slowik, 2014; Sprock, 1996). The study by Slowik (2014) is of particular importance given the similarity in methodology, with the present study using the same vignette as well as the same 8-item ADS scale. Slowik found that female participants rated the hypothetical male higher in personal distress and lower on the item that most people would react favorably to the individual compared to the hypothetical female. However, she did not find significant differences on the ADS overall between the male and female versions of the vignette or for all participants. The current study included a measure of social desirability (SDS-17) as a covariate, however, it was not a significant predictor of ratings in the present study nor did it correlate with any of the dependent variables or other measures. See further discussion of the influence of participant sex on the results below.

In contrast, Sprock et al. (2001) found that DPD is perceived as more maladaptive when manifested by women than men. Kaplan's (1983) original criticism of the personality disorders in the DSM-III (APA, 1980) was that the criteria pathologized normal female gender role behaviors through the inclusion of DPD and Histrionic PD. She further proposed that dependency in women, but not men, is considered pathological according to the DSM-III (Kaplan, 1983). As an explanation for their findings, Sprock et al. suggested that as gender roles have become more flexible and androgynous, traditional gender role behaviors (i.e., women who display dependency) may be seen as less adaptive. However, using a similar methodology as

Sprock et al., Anderson et al. (2001) found that DPD symptoms were not perceived as more maladaptive in one sex or the other, highlighting the variability of the findings in the literature. It is important to note that Sprock et al. used a methodology in which the DSM-III-R (APA, 1987) personality disorder criteria were individually rated for their maladaptiveness for males or females. Differences in the DPD criteria between different versions the DSM (i.e., DSM-III-R *vs.* the DSM-IV/5), consideration of individual criteria rather than the criteria as a whole presented in a vignette, and using a global rating of "maladaptiveness" rather than ratings for specific areas of dysfunction (e.g., social dysfunction, occupational dysfunction, personal distress) as in the present study, may account for the differences in their findings compared to the present study. Also, in contrast to the other studies, Anderson et al. used mental health professionals rather than undergraduates as participants. Overall, the present findings reflect the variable effects of sex on the perception of PDs in general, and specifically DPD symptoms. These differences may be partly due to methodological factors, including limitations of the vignette methodology and the ADS questionnaire as well as the use of college students as participants. See limitations for further discussion of methodological issues.

**Sexual Orientation of the Individual in the Vignette**

It was also hypothesized that the homosexual versions of the DPD vignette would be perceived more negatively (i.e., higher ratings of occupational and social dysfunction, distress, and psychopathology; lower ratings of liking) than the heterosexual versions. This hypothesis was supported. The homosexual versions of the vignette were rated significantly more negatively than the heterosexual versions of the vignette on the ASD ratings overall. The fact that the homosexual version of the vignette was viewed more negatively across the items on the ADS is consistent with research showing that there continues to be stigmatizing attitudes toward

homosexuality (Herek, 2002a; Herek 2009b; Norton & Herek, 2013). Research suggests that stigma is prevalent and that negative attitudes toward homosexual men and women continue to be expressed in various ways, such as housing and employment discrimination, verbal harassment, bullying, and hate crimes (Herek 2009a, Herek & McLemore, 2013).

However, follow up univariate analyses indicated that the significance of the main effect of sexual orientation of the individual in the vignette on the ADS ratings was largely due to the significant difference in ratings of distress, with other ADS items not significantly different. These results suggest the possibility that rather than viewing the homosexual individual "negatively," ratings of higher personal distress for the homosexual individuals in the vignette may be more of a reflection of compassion or empathy for the stigma that sexual minorities face. Although there continues to be stigma and discrimination, there is also evidence of a recent cultural shift toward acceptance of homosexuality, as people are less condemning of homosexuality now than at any other time in history (Andersen & Fetner, 2008; Herek et al., 2007; Herek & McLemore, 2013). For example, the military no longer bans homosexuality, numerous states have removed anti-sodomy laws (Herek, 2007; Herek & McLemore, 2013), and the U.S. Supreme Court recently legalized gay marriage (Sareen-Tak, 2015).

## Participant Factors

This study also examined the role of participant characteristics on attitudes toward those with DPD. It was hypothesized that male participants would perceive the individual in the DPD vignette more negatively (i.e., higher ratings of occupational and social dysfunction, distress, and psychopathology; lower ratings of liking) than female participants. This hypothesis was not supported. Of the variables examined, participant sex had the strongest effect on the ADS ratings, however, results were opposite of the prediction, with female participants assigning

significantly more negative ratings on the ADS overall and on four of the eight ADS items. Previous research has suggested that men, particularly young men, tend to have more negative attitudes toward mental illness and mental health treatment compared to women (Gonzalez et al., 2009; Parcesepe & Cabassa, 2013). In addition, using a sample of clinical psychologists, Egan et al. (2014) found that males had more negative attitudes than female towards individuals with PDs. Further, it was hypothesized that the male participants would view the male version of the vignette more negatively than the female version of the vignette. This hypothesis was also not supported as there were no significant interactions between participant sex and sex of the individual in the vignette.

Although these results are contrary to the hypotheses, they are somewhat consistent with previous research. As mentioned above, Slowik (2014) found that female participants rated men with DPD more negatively (i.e., higher in personal distress and lower for the item that most people would view the individual favorably) compared to male participants (Slowik, 2014). However, Slowik did not find a difference in ADS ratings between male and female participants overall. As noted earlier, the present study used the same vignette and the same ADS scale items as the Slowik study, but used social desirability as a covariate, which may account for some of the differences in results.

One reason that it was expected that men would rate the male with DPD more harshly than the female with DPD was that men have been found to have more traditional gender roles attitudes than women (Berk & Rhodes, 2005; Disney 2013; Kaplan 1983), and therefore, would be more likely to view dependency displayed by a man as a violation of the masculine gender role. It was hypothesized that male participants would have more traditional gender role attitudes compared to female participants, and that more traditional gender role attitudes would be

associated with more negative ratings for the male with DPD than the female with DPD. The first hypothesis was confirmed. Male participants had more traditional gender role attitudes overall, were more gender linked, and were somewhat less gender transcendent (although not significantly so) compared to female participants. This finding is consistent with previous research that men are socialized in western culture to express traditional gender role attitudes (Berk & Rhodes, 2005). However, the second hypothesis was not supported. In fact, more traditional gender role attitudes were significantly related to more positive ratings on the ADS for both the male and female versions of the DPD vignette.

Although these results are surprising, Slowik (2014) found that individuals with traditional gender role attitudes did not rate a man with DPD more harshly than a female with DPD or compared to participants with non-traditional gender roles (Slowik, 2014). However, Slowik used gender role attitude (SRQ total score) as a covariate in her multivariate analyses. She found that gender role attitude was a significant predictor of ADS ratings across vignettes and also fully mediated the effect of participant sex, which was not significant. In the present study, *a post-hoc* analysis using gender role attitudes (SRQ total score) as a covariate was conducted, but only partly replicated Slowik's findings. Gender role attitude was a significant predictor of ADS ratings, but only partially mediated the effect of participant sex on ADS ratings, with participant sex remaining a significant predictor. Reasons for the differences between the results may reflect slight differences in the methodology (i.e., Slowik had 2 vignettes – the DSM-IV/5 DPD vignette used in the present study and a second DPD vignette using the DSM-5 alternative model of personality disorders; the present study manipulated both sex and sexual orientation of the person in the vignette) as well as minor differences in participant characteristics.

It has been proposed that the pressure on men to hold and express traditional gender role beliefs is so high that men who do not adhere to traditional gender roles risk being labeled homosexual (Bosson et al., 2005). Moreover, previous studies suggest that men who exhibit dependency may be perceived as effeminate and possibly homosexual (Basow & Johnson, 2000; Goodman & Moradi, 2008; Whitley, 2001). Because of the association between nontraditional gender role and sexual orientation, the present study explored the influence of sexual orientation of the individual in the vignette on perceptions of DPD (see above section on sexual orientation of the individual with DPD). The present study also examined the role of participant homonegativity and its interaction with participant sex on the perception of homosexual individuals with DPD. First, it was hypothesized that male participants would score higher in homonegativity compared to female participants. This hypothesis was supported. The literature has consistently demonstrated that heterosexual men report less comfort with sexual minorities and are more likely to express negative attitudes towards sexual minorities than women (Herek & McLemore, 2013; Herek, 2000; Herek & Gonzalez-Rivera, 2006; Kite & Whitley, 1996). In addition, research suggests that heterosexual men have more negative attitudes towards homosexual men than towards lesbians (Herek & McLemore, 2013; Herek, 2000, 2002b, 2009b). Therefore, it was hypothesized that male participants would rate the male homosexual in the DPD vignette more negatively than the heterosexual man, homosexual female, and heterosexual female, and more negatively than rated by female participants. This hypothesis was not supported. There were no significant interactions between the sex and sexual orientation of the individual with DPD with participant sex in the overall MANCOVA. In fact, the only significant interaction was between sex and sexual orientation of the individual with DPD for the rating of

personal distress, with the lesbian woman vignette being rated higher in distress than the other three versions of the vignette, but there was no interaction with participant sex.

Related, it was hypothesized that higher homonegativity would be associated with more negative ratings of the homosexual versions of the vignette. This hypothesis also failed to be supported. In fact, homonegativity (as measured by the MHS) was negatively correlated with ADS ratings for the gay male and lesbian versions of the DPD vignettes (i.e., higher homonegativity associated with lower ratings), significantly so for ratings of personal distress and the item that most people would respond favorably to the individual. Although this is contrary to the hypothesis, it is consistent with research suggesting that individuals who disapprove of homosexuality are able to compartmentalize moral judgment from attitudes toward individual homosexuals (Bassett, Kirnan, Hill, & Schultz, 2005; Mak & Tsang, 2008). Further, as suggested earlier, the association of higher ratings for these two items with lower levels of homonegativity may be more of a reflection of empathy and understanding of the stigma that sexual minorities face on the part of participants with lower levels of homonegativity.

Two separate versions of the Modern Homonegativity scale (MHS) were developed for the present study, a subscale focusing on attitudes towards gay men (GM) and the other focusing on attitudes towards lesbian women (LW) based on findings of differential attitudes towards gay men and lesbian women (Herek, 2000, 2002b, 2009b). Nearly identical results were found for the correlations between the GM and LW subscales and the ADS ratings for the gay male and lesbian versions of the vignette, respectively, as for the total MHS scale. In fact, these two subscales were so highly correlated with each other that they could be considered synonymous. It is possible that current cohorts of college students have very similar attitudes towards gay men and towards lesbians. It is also possible that the similarity of their responses on the two subscales

were due to the use of identical items except for the substitution of "gay men" and "lesbian women" for the wording of the original scale (i.e., gay men and lesbian women).

## Limitations

The present study has a number of limitations. First, the sample consisted of Midwestern undergraduate college students who participated in order to receive course credit. Therefore, this sample is not representative of the general population in terms of age, education, and geographic location. Moreover, the college experience is characterized by liberalization of political views (particularly for male participants) that may not be representative of similarly aged non-college students, or remain after graduation (Bryant, 2003). Therefore, the sample's gender role attitudes, attitudes regarding sexual orientation, and attitudes towards personality traits and disorders may not be representative of the general population. In addition, roughly 72% of participants in this study were Caucasian and 20% were African American, which limits the generalization of the results to individuals of other ethnicities. Although the distribution is very representative of the Midwestern university from which the sample was obtained, it over-represents Caucasians and African Americans, and underrepresents Hispanics/Latinos and Asians, relative to the United States population.

Another limitation of a college sample is that undergraduate students may not have an accurate or complete understanding of the terminology used in the vignette or the ADS items. Further, their responses may not generalize to the attitudes of mental health professionals, which would be important to know since these individuals diagnose and treat individuals with DPD. Additionally, because participants took the survey for course credit, they may not have taken adequate care in completing the survey. In fact, a large number of participants ($N$=146, 31.47%) were eliminated from the initial pool due to failure to accurately answer both manipulation check

items, not answering critical items (e.g., participant sex) or more than 10% of the items on the survey, or completing the survey in an unreasonably short time. This also resulted in an uneven number of participants for each condition.

Further, the results may have limited generalizability because participants were making value judgments about a hypothetical individual in a written vignette, rather than an actual individual with DPD, which may limit the external validity of the results. Hughes and Huby (2004) found that vignettes do not always accurately capture reality, and research suggests that the decision making processes used in making value judgments in hypothetical situations are not the same as the decision processes used in real world situations (Carlson, 1996). Finally, the ADS may not be a good measure of stigma and negative attitudes, and some of the items may be more reflective of other constructs (i.e., ratings of distress may reflect concern, empathy, or compassion). In addition, measurement of gender role attitudes and homonegativity was based on self-report, which may not be a reliable or valid measure of the actual attitudes of participants.

**Strengths**

Although several limitations have been identified, the present study also has a number of strengths. Compared to mental health professionals, laypersons, including undergraduates, are less likely to recognize symptoms of DPD or to have any preconceived notions about the relationship of sex, gender roles or sexual orientation to diagnostic categories. Their attitudes may be a better reflection of general attitudes towards individuals with dependency and DPD than those of professionals who may respond based on their training and knowledge of base rates of disorders.

In addition, the topics of gender roles and sexual prejudice are polarizing issues. In the present study, a measure of social desirability (SDS-17) was used to control for socially desirable

responding and results showed that a social desirability response set did not contribute to the ratings on the ADS. Also, notwithstanding the limitations of a vignette methodology, the design allowed for the manipulation of the independent variables (i.e., sex and sexual orientation of the person with DPD) while keeping other variables consistent, thus making results more directly attributable to the variables of interest. A vignette methodology has been widely and successfully used in previous research (e.g., Adler et al., 1990; Anderson et al., 2001; Rienzi et al., 1995; Slowik, 2014). Moreover, this study employed the same vignette and ADS scale as Slowik (2014), so that results are more directly comparable, which is important since the varying methodologies used in the research studies have contributed to the inconsistent findings in the literature. Another strength of the current study is that the questionnaires that were used (i.e., SRQ, MHS, SDS-17) have strong support for their validity and reliability (Baber & Tucker, 2006; Funtowicz & Widiger 1999; Morrison & Morrison, 2002; Stöber, 2001) and have been used similarly in previous research (e.g., Rienzi et al., 1995; Slowik, 2014).

Additionally, participants in the study were randomly assigned to each of the four versions of the vignette balanced by participant sex, such that participant sex was controlled for in the design of the study. Furthermore, the online administration made it relatively easy to collect data and minimize data errors. Data from a large number of participants were collected quickly and with little cost. Moreover, the program used to administer the survey and collect the data (Qualtrics) allowed for exporting the data directly in a statistical analysis program, without risk of lost data or errors in entry of data. Finally, manipulation check items were used to ensure that participants accurately perceived the sex and sexual orientation of the individual in the vignette. Individuals who failed to answer either question correctly were eliminated from the

dataset, as were those who failed to report their sex, left more than 10% of the survey blank, or completed the survey in an unreasonably short time suggesting hasty responding.

## Implications

The present study contributes to the literature regarding DPD in a number of ways. There has been little research conducted regarding attitudes towards men and women with DPD. Moreover, there are inconsistencies in the research findings, at least partly due to differences in the methodologies, pointing to the need for replication studies. The present study utilized much of Slowik's (2014) methodology, allowing for a more direct comparison of results and increased support for those findings that were consistent across the two studies. Overall, this and other areas of research are advanced through replication of previous findings, as well as use of different methodologies to identify convergent findings.

Additionally, there has been no known research completed thus far measuring attitudes toward homosexual individuals with DPD. Currently, civil rights of sexual minorities have gained increasing attention in the media, and it appears that this will become a more salient issue in society as views of sexual minorities seem to be becoming more polarized and politicized. Although the results of this study did not suggest that homonegativity was associated with more negative attitudes towards gay male and lesbian versions of the case vignette, male participants demonstrated a higher level of homonegativity than women, suggesting a need for further efforts to reduce stigma and negative attitudes towards non-heterosexual orientations. Because sexual minorities are likely to subject to an even higher level of discrimination, additional research on attitudes towards sexual minorities is needed investigating the influence of an individual's sexual orientation on perception of their level of impairment, distress, and acceptance by others, as well as the implications for diagnosis and treatment.

Finally, results of this study serve as a potential bridge toward future research examining clinicians' attitudes toward men and sexual minorities with DPD. Previous research has found that male clinicians have more negative attitudes towards PDs than female clinicians (Egan et al., 2014), and that clinicians view DPD as causing higher levels of distress but less impairment than other PDs (Functowicz & Widiger, 1999). However, there are no known studies examining clinicians' attitudes towards men or homosexual individuals with DPD. It is likely that the attitudes of clinicians will differ from those of laypersons given their specialized training. Results from that research, particularly findings of bias, could serve as the basis for mental health training and education to improve the accuracy of diagnosis and the quality of treatment.

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# TABLES

Table 1.

*Participant Demographic Information*

| Trait | *n* | % |
|---|---|---|
| **Race/Ethnicity** | | |
| Caucasian | 231 | 72.6 |
| African American | 63 | 19.8 |
| Asian | 4 | 1.3 |
| Hispanic | 1 | 3.5 |
| Native American | 1 | 0.3 |
| Other | 8 | 2.5 |
| **Sex** | | |
| Male | 96 | 30.2 |
| Female | 222 | 69.8 |
| **Sexual Orientation** | | |
| Heterosexual | 281 | 88.9 |
| Homosexual | 9 | 2.8 |
| Bisexual | 19 | 6.0 |
| Other | 2 | 0.6 |
| **Year in School** | | |
| Freshman | 206 | 65.0 |
| Sophomore | 73 | 23.0 |
| Junior | 20 | 6.3 |
| Senior | 18 | 5.7 |

Table 2.

*Descriptive Statistics for Attitudes Towards Dependency Scale (ADS)*

| Item | *M (SD)* | Range[1] |
|---|---|---|
| What is this person's level of social dysfunction likely to be (i.e., impaired function)? | 5.17 (1.54) | 1-7 |
| What is this person's level of occupational dysfunction likely to be (i.e., impaired function)? | 4.85 (1.46) | 1-7 |
| What is this person's level of personal distress likely to be? | 5.9 (1.35) | 1-7 |
| What is this person's level of psychopathology likely to be (i.e., degree to which one has a mental disorder)? | 4.66 (1.50) | 1-7 |
| ***ADS Psychopathology Items Total*** | ***20.57 (4.67)*** | ***4-28*** |
| It seems to me that it is very easy for this person to gain admiration[2] | 4.93 (1.5) | 1-7 |
| I have great confidence in this person's good judgment[2] | 5.47 (1.37) | 1-7 |
| Most people would react favorably to this person after a brief acquaintance[2] | 4.78 (1.4) | 1-7 |
| I would recommend this person for a responsible job[2] | 5.65 (1.45) | 1-7 |
| ***ADS Liking Items Total*** | ***20.85 (4.32)*** | ***4-28*** |
| **ADS Scale Total** | **41.42 (7.73)** | **8-56** |

[1]Responses were rated on a scale of 1-7 with higher scores indicating a more negative rating (i.e., higher levels of psychopathology)
[2]Responses were reverse coded for the liking items to make them consistent with the psychopathology items on ADS scale (i.e., higher scores indicate a more negative view of the individual).

Table 3.

*Descriptive Statistics for the Modified Modern Homonegativity Scale (MHS) total and the Gay Men (GM) and Lesbian Women (LW) Subscales for Total Participants and by Participant Sex*

| | Male Participants ($n$ = 96) | | Female Participants ($n$ = 222) | | Total ($n$ = 318) | |
|---|---|---|---|---|---|---|
| Scale | *n* | *M* (*SD)* | *n* | *M* (*SD*) | *n* | *M* (*SD*) |
| MHS | 96 | 66.51 (18.15) | 222 | 55.54 (17.24) | 318 | 58.85 (18.20) |
| GM | 96 | 36.59 (10.35) | 222 | 30.07 (9.60) | 318 | 32.04 (10.27) |
| LW | 96 | 35.68 (10.05) | 222 | 30.04 (9.42) | 318 | 31.74 (9.94) |

*Note.* Scores on the GM and LW scales range from 12 to 60; scores on the modified MHS (total) range from 22 to 158. Higher scores on the MHS, GM and LW scales indicate higher homonegativity.

Table 4.

*Descriptive Statistics for the Social Roles Questionnaire (SRQ) and the Gender-Linked (GL) and Gender-Transcendent (GT) Subscales for Total Participants and by Participant Sex*

| | Male Participants ($n$ = 96) | | Female Participants ($n$ = 222) | | Total ($n$ = 318) | |
|---|---|---|---|---|---|---|
| Scale | $n$ | $M$ (SD) | $n$ | $M$ (SD) | $n$ | $M$ (SD) |
| SRQ | 96 | 52.80 (18.29) | 222 | 43.78 (18.02) | 318 | 46.50 (18.54) |
| GL | 96 | 39.93 (15.48) | 222 | 32.42 (13.73) | 318 | 34.69 (14.67) |
| GT | 96 | 12.86 (7.18) | 222 | 11.36 (6.82) | 318 | 11.81 (6.95) |

*Note.* Scores on the SRQ range from 0-130, with Gender-Linked and Gender-Transcendent subscale scores ranging from 0 to 50 and 0 to 80, respectively. Higher scores on the SRQ and GL scales indicate more traditional and gender linked sex role attitudes whereas lower scores on the GT scale indicate more gender transcendent.

Table 5.

*Correlations between Attitudes Towards Dependency Scale (ADS) Items*

| ADS Items | SD | OD | PD | P | A | GJ | RF | RJ |
|---|---|---|---|---|---|---|---|---|
| Social Dysfunction (SD) | 1 | | | | | | | |
| Occupational Dysfunction (OD) | .669*** | 1 | | | | | | |
| Personal Distress (PD) | .566*** | .526*** | 1 | | | | | |
| Psychopathology (P) | .474*** | .431*** | .431*** | 1 | | | | |
| Easy for Person to Gain Admiration (A) | .168** | .125* | .131* | .147** | 1 | | | |
| Confidence in person's Good Judgment (GJ) | 386*** | .351*** | .422*** | .294*** | .321*** | 1 | | |
| React Favorably to Person (RF) | .301*** | .276*** | .268*** | .236*** | .428*** | .466*** | 1 | |
| Recommend Person for a Responsible Job (RJ) | .394*** | .400*** | .484*** | .259*** | .271*** | .643*** | .447*** | 1 |

*$p < .05$, **$p < .01$, ***$p < .001$

Table 6.

*MANCOVA Results for the Ratings on the Attitudes Towards Dependency Scale (ADS)*

| Independent Variable | Wilks' Lamba | *df* | *F* | *p* | $\eta_p^2$ |
|---|---|---|---|---|---|
| Sex of Individual in Vignette | 0.951 | 8, 302 | 1.946 | .050 | .049 |
| Sexual Orientation of Individual in Vignette | 0.944 | 8, 302 | 2.230 | .025* | .056 |
| Sex of Participant | 0.915 | 8, 302 | 3.518 | .001*** | .085 |
| Social Desirability | 0.991 | 8, 302 | 0.327 | .955 | .009 |
| Sex of Individual in Vignette x Sexual Orientation of Individual in Vignette | 0.956 | 8, 302 | 1.754 | .086 | .044 |
| Sex of Individual in Vignette x Sex of Participant | 0.971 | 8, 302 | 1.141 | .336 | .029 |
| Sexual Orientation of Individual in Vignette x Sex of Participant | 0.984 | 8, 302 | 0.628 | .754 | .016 |
| Sex of Individual in Vignette x Sexual Orientation of Individual in Vignette x Sex of Participant | 0.974 | 8, 302 | 1.017 | .423 | .026 |

*$p < .05$ **$p < .01$ ***$p < .001$ $R^2 = 0.49$, Adjusted $R^2 = .012$

Table 7.

*Significant Univariate Results of the Ratings on the Attitudes Towards Dependency Scale (ADS)*

| Independent Variable | *df* | *F* | *p* | $\eta_p^2$ |
|---|---|---|---|---|
| Sex of Participant | | | | |
| Social Dysfunction | 1, 302 | 9.688 | .002** | .030 |
| Personal Distress | 1, 302 | 11.475 | .001*** | .036 |
| Psychopathology | 1, 302 | 9.676 | .002** | .030 |
| React Favorably to Person[1] | 1, 302 | 9.698 | .002** | .030 |
| Sexual Orientation of Individual in Vignette | | | | |
| Personal Distress | 1, 302 | 6.375 | .012* | .020 |
| Sex of Individual in Vignette | | | | |
| React Favorably to Person[1] | 1, 302 | 4.152 | .042* | .013 |
| Sex of Individual in Vignette x Sexual Orientation of Individual in Vignette | | | | |
| Personal Distress | 1, 302 | 8.492 | .004** | .027 |

[1] Reverse coded, *$p < .05$ **$p<.01$ ***$p < .001$

Table 8.

*Correlations between the Modern Homonegativity Scale (MHS), the Gay Men (GM) and Lesbian Women (LW) Subscales, with Ratings on the Attitudes towards Dependency Scale (ADS) for the Homosexual, Gay Man and Lesbian Woman Vignettes*

| ADS Items | MHS Total[1] ($n$ = 134) | GM Subscale[2] ($n$ = 75) | LW Subscale[3] ($n$ = 59) |
|---|---|---|---|
| Social Dysfunction | -.139 | -.140 | -.128 |
| Occupational Dysfunction | -.097 | -.096 | -.077 |
| Personal Distress | -.170* | -.211 | -.168 |
| Psychopathology | -.122 | -.185 | -.007 |
| Easy for Person to gain admiration | -.158 | -.142 | -.191 |
| Confidence in person's good judgment | -.019 | -.107 | .104 |
| React Favorably to Person | -.298** | -.250* | -.349** |
| Recommend Person for a responsible job | -.045 | -.061 | .004 |

[1]Homosexual case vignettes
[2]Gay man case vignette
[3]Lesbian woman case vignette

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

Table 9.

*Correlations between the Sex Role Questionnaire (SRQ), Gender-Linked (GL) and Gender Transcendent (GT) Subscales, with Ratings on the Attitudes towards Dependency Scale (ADS) for the Male (M) Vignettes*

| ADS Items | SRQ Total | GL Subscale | GT Subscale |
|---|---|---|---|
| Social Dysfunction | -.338** | -.279** | -.316** |
| Occupational Dysfunction | -.294** | -.242** | -.275** |
| Personal Distress | -.389** | -.325** | -.357** |
| Psychopathology | -.217** | -.211** | .141 |
| Easy for Person to gain admiration | -.019 | -.004 | -.041 |
| Confidence in person's good judgment | -.289** | -.221* | -.305** |
| React Favorably to Person | -.169* | -.146 | -.147 |
| Recommend Person for a responsible job | -.241** | -.175* | -.273** |

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

Table 10.

*Correlations between the Sex Role Questionnaire (SRQ), Gender-Linked (GL) and Gender Transcendent (GT) Subscales, with Ratings on the Attitudes towards Dependency Scale (ADS) for the Female (F) Vignettes*

| ADS Items | SRQ Total | GL Subscale | GT Subscale |
|---|---|---|---|
| Social Dysfunction | -.152 | -.134 | -.119 |
| Occupational Dysfunction | -.062 | -.033 | -.097 |
| Personal Distress | -.230* | -.152 | -.294** |
| Psychopathology | -.107 | -.085 | -.104 |
| Easy for Person to gain admiration | -.126 | -.122 | -.073 |
| Confidence in person's good judgment | -.224** | -.223** | -.118 |
| React Favorably to Person | -.150 | -.139 | -.103 |
| Recommend Person for a responsible job | -.300** | -.257** | -.250** |

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

Table 11.

*Multiple Regression Analysis for Predicting ADS Ratings with SRQ as Covariate*

| | β | *t* | *p* |
|---|---|---|---|
| Variable | | | |
| Step 1 | | | |
| Participant Sex | 1.96 | 3.530 | .000 |
| Sex of Individual in Vignette | -0.230 | -0.415 | .679 |
| Sexual Orientation of Individual in Vignette | 0.018 | 0.333 | .739 |
| $R = .198$, $R^2 = .039$, Adjusted $R^2 = .030$ | | | |
| *Step 2* | | | |
| Participant Sex | 0.135 | 2.472 | .014 |
| Sex of individual in vignette | -0.043 | -0.812 | .418 |
| Sexual orientation of Individual in vignette | -0.016 | -0.291 | .771 |
| SRQ Total | -0.284 | -5.144 | .000 |
| $R = .338$, $R^2 = .114$, Adjusted $R^2 = .103$ | | | |

Table 12.

*Multiple Regression Analysis for Predicting ADS Ratings with MHS as covariate*

| | β | *t* | *p* |
|---|---|---|---|
| Variable | | | |
| Step 1 | | | |
| Participant Sex | 1.96 | 3.530 | .000 |
| Sex of Individual in Vignette | -0.230 | -0.415 | .679 |
| Sexual Orientation of Individual in Vignette | 0.018 | 0.333 | .739 |
| $R = .198$, $R^2 = .039$, Adjusted $R^2 = .030$ | | | |
| *Step 2* | | | |
| Participant Sex | 0.151 | 2.653 | .008 |
| Sex of individual in vignette | -0.025 | -0.460 | .646 |
| Sexual orientation of Individual in vignette | 0.020 | 0.364 | .716 |
| SRQ Total | -0.160 | -2.809 | .005 |
| $R = .250$, $R^2 = .063$, Adjusted $R^2 = .051$ | | | |

# APPENDIX A

## DSM-5 DIAGNOSTIC CRITERIA FOR DEPENDENT PERSONALITY DISORDER

A pervasive and excessive need to be taken care of that leads to submissive and clinging behavior and fears of separation, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

1. Has difficulty making everyday decisions without an excessive amount of advice and reassurance from others.
2. Needs others to assume responsibility for most major areas of his or her life.
3. Has difficulty expressing disagreement with others because of fear of loss of support or approval. (**Note:** Do not include realistic fears of retribution).
4. Has difficulty initiating projects or doing things on his or her own (because of a lack of self-confidence in judgment or abilities rather than a lack of motivation or energy).
5. Goes to excessive lengths to obtain nurturance and support from others, to the point of volunteering to do things that are unpleasant.
6. Feels uncomfortable or helpless when alone because of exaggerated fears of being unable to care for himself or herself
7. Urgently seeks another relationship as a source of care and support when a close relationship ends
8. Is unrealistically preoccupied with fears of being left to take care of himself or herself.

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*Note.* American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th Edition)* (p. 675). Washington, DC: Author.

# APPENDIX B

## CASE VIGNETTE

(John/Jennifer) has difficulty making everyday decisions without an excessive amount of advice and reassurance from (his/her) romantic partner (Michael/Mary) and needs others to assume responsibility for most major areas of (his/her) life. (He/She) has difficulty expressing disagreement with others because of fear of loss of support or approval. (He/She) has difficulties initiating projects or doing things on (his/her) own because of lack of self-confidence. (He/She) goes to excessive lengths to obtain nurturance and support from others, to the point of volunteering to do things that are unpleasant. (He/She) feels uncomfortable or helpless when alone because of exaggerated fears of being unable to take care of (him/her)self. (He/She) urgently seeks another relationship as a source of care and support when a close relationship ends. (He/She) is unrealistically preoccupied with fears of being left to take care of (him/her)self

# APPENDIX C

## ATTITUDES TOWARD DPD SCALE

**Using the seven-point scale below, where 1=none, 3=mild, 5=moderate, and 7=severe, please rate the person described in the vignette on the following traits.**

|----------|----------|----------|
1 3 5 7
(none) (mild) (moderate) (severe)

1) What is this person's level of social dysfunction likely to be (i.e., impaired function)? _____

2) What is this person's level of occupational dysfunction likely to be(i.e., impaired function)?

_____

3) What is this person's level of personal distress likely to be? _____

4) What is this person's level of psychopathology likely to be (i.e., degree to which one has a

mental disorder)? _____

**Using the seven-point scale below, where 1=Strongly Disagree, 3=Disagree, 5=Agree, and 7=Strongly Agree, please indicate your agreement to the following statements based the individual described in the vignette.**

|----------|----------|----------|----------|----------|----------|
1 3 4 5 7
(Strongly) (Disagree) (Neutral) (Agree) (Strongly)
Disagree Agree

5) It seems to me that it is very easy for this person to gain admiration _____

6) I have great confidence in this person's good judgment _____

7) Most people would react favorably to this person after a brief acquaintance _____

8) I would recommend this person for a responsible job _____

What is the sex of the individual described in the vignette?

What is the sexual orientation of the individual described in the vignette?

# APPENDIX D

## SOCIAL ROLES QUESTIONAIRE

**We are interested in the ways that people think about different social roles. The following statements describe attitudes different people have towards roles for men and women. There are no right or wrong answers, only opinions.** ***Please express <u>your personal opinion</u> about each statement.*** **Think about your opinions now and indicate how much you agree with each statement with 0% meaning you strongly disagree and 100% indicating you strongly agree with the statement.**

1. The freedom that children are given should be determined by their age and maturity level and not by their sex.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

2. Some types of work are just not appropriate for women.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

3. A father's major responsibility is to provide financially for his children.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

4. Tasks around the house should not be assigned by sex.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

5. Only some types of work are appropriate for both men and women; for example, it is silly for a woman to do construction and for a man to do sewing.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
agree disagree

6. Mothers should make most decisions about how children are brought up.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

7. Men are more sexual than women.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

8. People can be both aggressive and nurturing regardless of their sex.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly strongly
disagree agree

9. For many important jobs, it is better to choose men instead of women.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

strongly disagree — strongly agree

10. People should be treated the same regardless of their sex.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly disagree — strongly agree

11. Girls need to be protected and watched over more than boys.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly disagree — strongly agree

12. Mothers should work only if necessary.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly disagree — strongly agree

13. We should stop thinking about whether people are male or female and focus on other characteristics (e.g., kindness, ability, etc.).

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
strongly disagree — strongly agree

Highlighted items are reverse coded.

## Coding Directions

Response options for each item are as follows:

| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
|---|---|---|---|---|---|---|---|---|---|---|
| strongly disagree | | | | | | | | | | strongly agree |

The value for each item was determined by dropping the 0, so 0% = 0, 10% = 1, 20% = 2, etc. For reverse coded items (#1, #4, #8, #10, #13) , 0% = 10, 10% = 9, 20% = 8, etc.

Scores on each subscale were calculated by summing the item values.

Gender-Transcendent subscale includes items #1, #4, #8, #10, #13.

Gender-linked subscale includes items #2, #3, #5, #6, #7, #9, #11, #12.

**Lower scores indicate **less** traditional beliefs

# APPENDIX E

## MODERN HOMONEGATIVITY SCALE

ORIGINAL SCALE

Use the following scale to indicate how much you agree or disagree with the statements below. Put your responses in the blank next to each statement.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

1. _____ Many gay men and lesbian women use their sexual orientation so that they can obtain special privileges.

2. _____ Lesbian women and gay men seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.

3. _____Gay men and lesbian women do not have all the rights they need.

4. _____The notion of universities providing students with undergraduate degrees in Gay and Lesbian Studies is ridiculous.

5. _____Celebrations such as "Gay Pride Day" are ridiculous because they assume that an individual's sexual orientation should constitute a source of pride.

6. _____Lesbian women and gay men still need to protest for equal rights.

7. _____Gay men and lesbian women should stop shoving their lifestyle down other people's throats.

8. _____ If lesbian women and gay men want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.

9. _____Gay men and lesbian women who are "out of the closet" should be admired for their courage.

10. _____Lesbian women and gay men should stop complaining about the way they are treated in society, and simply get on with their lives.

11. _____In today's tough economic times, Americans' tax dollars shouldn't be used to support gay men's and lesbian women's organizations.

12. _____Lesbian women and gay men have become far too confrontational in their demand for equal rights.

GAY MEN VERSION

Use the following scale to indicate how much you agree or disagree with the statements below. Put your responses in the blank next to each statement.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

1. _____ Many gay men use their sexual orientation so that they can obtain special privileges.
2. _____ Gay men seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.
3. _____Gay men do not have all the rights they need.
4. _____The notion of universities providing students with undergraduate degrees in Gay and Lesbian Studies is ridiculous.*
5. _____Celebrations such as "Gay Pride Day" are ridiculous because they assume that an individual's sexual orientation should constitute a source of pride.*
6. _____ Gay men still need to protest for equal rights.
7. _____Gay men should stop shoving their lifestyle down other people's throats.
8. _____ If gay men want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.
9. _____Gay men who are "out of the closet" should be admired for their courage.
10. _____ Gay men should stop complaining about the way they are treated in society, and simply get on with their lives.
11. _____In today's tough economic times, Americans' tax dollars shouldn't be used to support gay men's organizations.
12. _____ Gay men have become far too confrontational in their demand for equal rights.

*These items will only be presented once but will be used to calculate the score for each subscale.

LESBIAN WOMEN VERSION

Use the following scale to indicate how much you agree or disagree with the statements below. Put your responses in the blank next to each statement.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |

1. _____ Many lesbian women use their sexual orientation so that they can obtain special privileges.

2. _____ Lesbian women seem to focus on the ways in which they differ from heterosexuals, and ignore the ways in which they are the same.

3. _____Lesbian women do not have all the rights they need.

4. _____The notion of universities providing students with undergraduate degrees in Gay and Lesbian Studies is ridiculous.*

5. _____Celebrations such as "Gay Pride Day" are ridiculous because they assume that an individual's sexual orientation should constitute a source of pride.*

6. _____Lesbian women still need to protest for equal rights.

7. _____ Lesbian women should stop shoving their lifestyle down other people's throats.

8. _____ If lesbian women want to be treated like everyone else, then they need to stop making such a fuss about their sexuality/culture.

9. _____Lesbian women who are "out of the closet" should be admired for their courage.

10. _____Lesbian women should stop complaining about the way they are treated in society, and simply get on with their lives.

11. _____In today's tough economic times, Americans' tax dollars shouldn't be used to support lesbian women's organizations.

12. _____Lesbian women have become far too confrontational in their demand for equal rights.

*These items will only be presented once but will be used to calculate the score for each subscale.

# APPENDIX F

## SOCIAL DESIRABLITY SCALE -17 (SDS-17)

Instructions

Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you, check the word "true"; if not, check the word "false".

Items

1. I sometimes litter.

2. I always admit my mistakes openly and face the potential negative consequences.

3. In traffic I am always polite and considerate of others.

4. I have tried illegal drugs (for example, marijuana, cocaine, etc.).

5. I always accept others' opinions, even when they don't agree with my own.

6. I take out my bad moods on others now and then.

7. There has been an occasion when I took advantage of someone else.

8. In conversations I always listen attentively and let others finish their sentences.

9. I never hesitate to help someone in case of emergency.

10. When I have made a promise, I keep it--no ifs, ands or buts.

11. I occasionally speak badly of others behind their back.

12. I would never live off other people.

13. I always stay friendly and courteous with other people, even when I am stressed out.

14. During arguments I always stay objective and matter-of-fact.

15. There has been at least one occasion when I failed to return an item that I borrowed.

16. I always eat a healthy diet.

17. Sometimes I only help because I expect something in return.

Note
Answer categories are "true" (1) and "false" (0). Items 1, 4, 6, 7, 11, 15, and 17 are reverse keyed. Item 4 was deleted from the final version of the SDS-17.

# APPENDIX G

## INFORMED CONSENT

You are being asked to participant in research study interested in understanding attitudes toward different individuals. The research is being conducted by a doctoral student, Brandon Sentell, and Dr. June Sprock of the Psychology Department at Indiana State University. Your participation in this study in completely voluntary, so please read the information listed below before deciding whether or not to participate.

**Procedure**:
Should you volunteer to participate in this study, you will click a link listed below that states, "I agree to participate in this study." Next, you will be routed to an Indiana State Website and be asked to answer questions about your attitudes towards different individuals. You will also be asked to provide information about yourself including your age, sex, race/ethnicity, current relationship status, academic major, and year in school. It is estimated that this study will take 20 minutes to complete. No identifying information will be recorded and your responses will be kept in a secure database and only accessed by the current researchers.

**Participation Risk and Benefits**:
Risks of participating in this study are minimal and not expected to be greater than what one would encounter in everyday activities. However, anonymity cannot be guaranteed on the internet. Also, it is possible that by providing your attitudes you may encounter some mild anxiety. If you do experience distress while participating in this study, you are encouraged to contact the Student Counseling Center (812 237 3939) or the Psychology Clinic located in Root Hall (812 237 3317).

There may not be any direct benefits for participating in the study. However, by answering the surveys, you may gain some knowledge about your own attitudes towards different individuals. In addition, you have the opportunity to contribute to the research regarding attitudes toward particular individuals.

**Participation and Withdrawal**:
Your participation in this study is entirely voluntary and you may choose to withdraw at any time without penalty. Should you choose to withdraw your responses will not be recorded, as they are not entered into the database until you select "submit" at the end of the study. Additionally, you may choose to not answer any questions you do not want to answer. You may receive course credit or extra credit (provided at the discretion of your instructor) in some introductory psychology courses for your participation.

**Rights of Research Participants**:
The project as been reviewed and approved by the Institutional Review Board (IRB) of Indiana State University as adequately safeguarding the participant's privacy, welfare, civil liberties, and rights. If you have any questions about your rights as a research participant, you may contact Indiana State University Institutional Review Board (IRB) by mail at 114 Erikson Hall, Terre Haute, IN 47809, by phone at (812) 237 – 8217, or email the IRB at irb@indstate.edu

**Identification of Investigators**:
If you have any questions or concerns regarding this research study, please contact the primary researcher, Brandon Sentell in the ISU Psychology Clinic at (812) 237-3317, or by email at bsentell@sycamores.indstate.edu. You may also contact the project supervisor, Dr. June Sprock, in the Department of Psychology at (812) 237-2463, or by email at june.sprock@indstate.edu.

Please print a copy of this form for your records and click "I agree to participate in this study" below to begin the study.

# APPENDIX H

## ONLINE DEBRIEFING

In this study we are interested in college students' attitudes toward individuals with Dependent Personality Disorder. Previous research indicates that men who violate traditional masculine gender role norms by acting in a dependent manner are viewed more negatively than women, who are not viewed as negatively. In addition, previous research indicates that those with traditional gender roles also perceive homosexual individuals, particularly men, more negatively than heterosexual individuals. We are interested to see whether the attitudes towards a heterosexual or homosexual individual with Dependent Personality Disorder are affected by the sex or sex role attitudes of the rater.

Thank you for your participation in this study. If you have any questions or if you are interested in the results of the study please contact Brandon Sentell at: bsentell@sycamores.indstate.edu. You may also contact the research supervisor, June Sprock, Department of Psychology, at 812-237-2462 or jsprock@indstate.edu.

If you experience any distress as a result of participating in this study, you can access psychological services at the University's Student Counseling Center (812-237-3939) or the Psychology Clinic in Root Hall (812-237-3317).

Also, please do not discuss this study with your friends because they may be participating in it in the future.

# APPENDIX I

## ATTITUDES TOWARDS DEPENDENCY (ADS) SCORES BY VIGNETTE

Heterosexual Male Version

| ADS Items[1] | Male Participants ($n$ = 31) *M* (*SD*) | Female Participants ($n$ = 63) *M* (*SD*) | Total ($n$ = 94) *M* (*SD*) |
|---|---|---|---|
| Social Dysfunction | 5.06 (1.36) | 5.51 (1.48) | 5.36 (1.45) |
| Occupational Dysfunction | 4.81 (1.30) | 5.05 (1.55) | 4.97 (1.47) |
| Personal Distress | 5.45 (1.29) | 6.10 (1.06) | 5.88 (1.17) |
| Psychopathology | 4.29 (1.60) | 4.93 (1.37) | 4.72 (1.47) |
| Easy for Person to gain admiration[2] | 5.19 (1.45) | 5.00 (1.44) | 5.06 (1.44) |
| Confidence in person's good judgment[2] | 5.03 (1.40) | 5.44 (1.46) | 5.31 (1.44) |
| React Favorably to Person[2] | 4.71 (1.40) | 5.02 (1.26) | 4.91 (1.31) |
| Recommend Person for a responsible job[2] | 5.42 (1.54) | 5.60 (1.51) | 5.54 (1.51) |

[1]Responses were rated on a scale of 1-7 with higher scores indicating a more negative rating (i.e., higher levels of psychopathology)
[2]Responses were reverse coded for the liking items to make them consistent with the psychopathology items on ADS scale (i.e., higher scores indicate a more negative view of the individual).

Homosexual Male Version

| ADS Items[1] | Male Participants ($n$ = 24) *M* (*SD)* | Female Participants ($n$ = 51) *M* (*SD*) | Total ($n$ = 75) *M* (*SD*) |
|---|---|---|---|
| Social Dysfunction | 4.42 (1.64) | 5.31(1.44) | 5.03(1.55) |
| Occupational Dysfunction | 4.54 (1.50) | 4.96 (1.33) | 4.83 (1.39) |
| Personal Distress | 5.29 (1.97) | 6.12 (1.18) | 5.85 (1.51) |
| Psychopathology | 4.04 (1.68) | 4.82 (1.57) | 4.57 (1.64) |
| Easy for Person to gain admiration[2] | 4.71 (1.71) | 5.04 (1.47) | 4.93 (1.55) |
| Confidence in person's good judgment[2] | 5.29 (1.43) | 5.69 (1.17) | 5.56 (1.27) |
| React Favorably to Person[2] | 4.63 (1.21) | 4.94 (1.32) | 4.84 (1.28) |
| Recommend Person for a responsible job[2] | 5.21 (1.53) | 5.76 (1.14) | 5.59 (1.30) |

[1]Responses were rated on a scale of 1-7 with higher scores indicating a more negative rating (i.e., higher levels of psychopathology)
[2]Responses were reverse coded for the liking items to make them consistent with the psychopathology items on ADS scale (i.e., higher scores indicate a more negative view of the individual).

Heterosexual Female Version

| ADS Items[1] | Male Participants ($n$ = 28) *M* (*SD)* | Female Participants ($n$ = 62) *M* (*SD*) | Total ($n$ = 90) *M* (*SD*) |
|---|---|---|---|
| Social Dysfunction | 4.54 (1.55) | 5.23 (1.62) | 5.01(1.62) |
| Occupational Dysfunction | 4.36 (1.45) | 4.69 (1.55) | 4.59 (1.52) |
| Personal Distress | 5.07 (1.56) | 5.87 (1.43) | 5.62 (1.51) |
| Psychopathology | 3.93 (1.41) | 4.79 (1.46) | 4.52 (1.49) |
| Easy for Person to gain admiration[2] | 4.68 (1.42) | 5.10 (1.43) | 4.97 (1.43) |
| Confidence in person's good judgment[2] | 5.36 (1.47) | 5.55 (1.39) | 5.49 (1.41) |
| React Favorably to Person[2] | 4.36 (1.25) | 5.00 (1.54) | 4.80 (1.48) |
| Recommend Person for a responsible job[2] | 5.68 (1.49) | 5.66 (1.55) | 5.67 (1.52) |

[1]Responses were rated on a scale of 1-7 with higher scores indicating a more negative rating (i.e., higher levels of psychopathology)
[2]Responses were reverse coded for the liking items to make them consistent with the psychopathology items on ADS scale (i.e., higher scores indicate a more negative view of the individual).