To Gender Identity and Beyond: Does Femininity Lead to A Higher Risk Of Depression?

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TO GENDER IDENTITY AND BEYOND:

DOES FEMININITY LEAD TO A HIGHER RISK OF DEPRESSION?

by

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A thesis submitted in partial fulfillment of the requirements
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Abstract

The current study explored the possible links between gender identity, personality, and the experience of depression in a male and female sample. 260 University of Central Florida (UCF) Psychology students completed assessments of depression, "Big Five" personality traits, and gender identity. Correlational analyses revealed significant, positive associations between "Big Five" neuroticism scores and depression scores. Additionally, significant, negative correlations were found between masculinity scores and depression, as well as between femininity scores and depression. Although these correlations were significant, their general effect was small. Overall, additional research must be completed to further examine and validate these findings.

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Introduction

Depression causes feelings of sadness and/or discontent in all genders, nationalities, and ages. Between 2009 and 2012, on average, depression affected 7.6% Americans 12 and older, in any given 2-week period (Pratt & Brody, 2014). 6.7% are adults 18 and over, which is equivalent to about 16 million Americans (Major Depression Among Adults, 2015). These results are an increase from the 2005-2006 study which showed 5.4% of Americans aged 12 and up experienced depression within any given 2-week period (Pratt & Brody, 2008).

There are many types of depression. This includes: seasonal affective disorder, dysthymic disorder, and major depressive disorder. Seasonal affective disorder is believed to be caused by the shorter days of winter and involves feelings of fatigue and hopelessness (American Psychiatric Association, 2013). Dysthymic disorder, also known as chronic depression, is plagued with a persistent feeling of depression that occurs most days for two or more years (American Psychiatric Association, 2013). Major depressive disorder lasts at least two weeks with loss of interest, fatigue, agitation, indecisiveness, and recurrent thoughts of death (American Psychiatric Association, 2013). Depression can lead to difficulties in an individual's work, home, and social life (Pratt & Brody, 2008).

Major depression can cause an individual to feel sad, helpless, hopeless, and other negative emotions. It is accompanied by expressive, cognitive, and physical symptoms; some are so severe they are debilitating (Major Depression Among Adults, 2015). Specifically, major depression is attributed to 3.7% of all U.S. disability-adjusted life years (DALYs) and 8.3% of all U.S. years lived with disability (YLDs). One percent of DALYs and YLDs represents about

one year of life lost for a major depressive disorder sufferer (Major Depression Among Adults, 2015).

In a recent study, Pratt and Brody (2014) found that women are almost twice as likely as men to be diagnosed with depression. This research suggests that women are more vulnerable to depression throughout their lifetimes. Specifically, girls between ages 12-17 were 46% more likely than boys, of the same age, to be diagnosed with depression. Women between ages 18-39 were 36% more likely to be depressed and between ages 40-59 they were 41% more likely to be depressed than males in the same age range. Lastly, at age 60 and over women were found to be 52% more likely to be depressed than their male counterparts. Therefore, in every age group, women had significantly higher rates of depression than men (Pratt & Brody, 2014).

Femininity

If depression is twice as likely to occur in women, could it also be twice as likely to occur in feminine individuals? Bem (1981) describes femininity and masculinity as stereotypical averages of what makes a woman womanly and what makes a man manly. In this instance, femininity refers to attributes such as loyalty, compassion, and tenderness, while masculinity refers to attributes such as assertiveness, independence, and dominance (Bem, 1981). Szpitalak & Prochwicz, (2013) explain that both men and women have feminine and masculine attributes. According to these researchers, most females have higher levels of femininity, while most males have higher levels of masculinity. However, in some cases, men are more feminine and women are more masculine (Szpitalak & Prochwicz, 2013).

Bem (1981) suggests that gender stereotyping begins with children comparing themselves to other children and adults of the same sex. Consequently, children begin life by comparing

themselves to people of the same sex to have a better foundation with which to judge themselves (Bem, 1981). A more recent study by Weisgram (2016) supports Bem's (1981) idea that children start comparing themselves with their own gender before they learn the attributes of the other gender. This research suggests that even if parents avoid teaching their children gender stereotypes, the child is still likely to compare him- or herself to other same sex children (Weisgram, 2016). The comparison process then allows the child to adopt similar traits, expectations, and preferences. If children continue to copy individuals of the same sex, then Bem's sex-role research remains relevant to today's understanding of the development of gender identity.

Bem's (1981) sex role research classified individuals into four primary categories. These categories were: masculine, feminine, androgynous, and undifferentiated. Bem (1981) described the classification "feminine" as a rating high in femininity and lower in masculinity. The classification of "masculine" was then someone who rated high in masculinity and lower in femininity. Lee (1982) described androgyny as versatility. An androgynous person rates high in both femininity and masculinity (Bem, 1981). Being undifferentiated is similar to someone being undefined. An "undefined" individual rates low in both femininity and masculinity. This suggests that the person may not know exactly who they are or who they want to be (Bem, 1981). Consequently, there are few specific characteristics, traits, or behaviors of either gender with which they identify.

According to Szpitalak and Prochwicz (2013) the best mental health occurs in those who are psychologically masculine. Cross-sex typed women, or those women who were psychologically masculine, were characterized by less severe and less frequent symptoms of

depression than feminine women. Alternatively, feminine women, feminine men, and undifferentiated types rated high in depression severity and frequency (Szpitalak & Prochwicz, 2013). Based on the findings from this research, it may then follow that the characteristic tendencies, or personality, of feminine individuals would also be associated with depression

Personality

Everyone is believed to have the "big five" personality traits. These traits are conscientiousness, neuroticism, agreeableness, openness, and extraversion (Thompson, 2008; Schmitt, Realo, Voracek, & Allik, 2008; Klein, Kotov, & Bufferd, 2011). Therefore, what makes people different from one another, is their different levels of each trait (Klein et al., 2011). Women, in particular, have shown high levels of neuroticism and low levels of conscientiousness. In some research, high levels of neuroticism and low levels of conscientiousness have been shown to be predictive of depression (Klein et al., 2011).

Neuroticism

As stated previously, neuroticism is one of the "big five" personality traits. It is associated with worry, fear, moodiness, envy, frustration, jealousy, and loneliness (Thompson, 2008). Neuroticism has been defined as a natural tendency towards negative emotions (Ormel, Jeronimus, Kotov, Riese, Bos, Hankin, & ... Oldehinkel, 2013). Research has shown that women have significantly higher levels of neuroticism than men (Mandelli, Nearchou, Vaiopoulos, Stefanis, Vitoratou, Serretti, & Stefanis, 2015). It is possible that these high levels of neuroticism in women are one of the reasons why they are twice as likely as men to have more vigorous and frequent depression. A number of researchers have explored why high levels of neuroticism may correlate positively with depression (Ormel et al., 2013; Mandelli et al., 2015).

According to Mandelli and colleagues (2015) social contacts, neuroticism, and personal events were significantly correlated with depression. Findings suggested, however, that while an individual is in a depressive state, personal events no longer predict depression. These researchers reason that many women who are high in neuroticism are more likely to ruminate after a negative event. This rumination then leads to feelings of depression (Mandelli et al., 2015).

Ormel and colleagues (2013) examined five fundamental explanatory models about neuroticism and depression. Though these models overlap in places, they are as close as any researchers have come to analyzing the possible interactions between neuroticism and depression. Each model outlines the specific psychological, biological, or environmental pathways through which neuroticism and depression may interact. These models are: vulnerability, spectrum, common cause, scar, and state (Ormel et al., 2013).

The vulnerability model suggests that high levels of neuroticism lead to depression. Essentially, having a personality which is high in neuroticism makes an individual more vulnerable, than those low in neuroticism, to depression. The spectrum model assumes high levels of neuroticism are equivalent to high levels of depression. This means that they are present at the same time (Ormel et al., 2013). Essentially, depression and neuroticism are part of the same "spectrum" of the individual's characteristic traits, behaviors, and pattern of emotions. The common cause model argues that neuroticism may predict depression because they share similar biological, or genetic, and environmental causes. In this instance, the biology associated with the female gender would be a common foundation for both neuroticism and depression.

The scar model assumes that major depression has a lasting effect on neuroticism during and after a depressive episode. In essence, once a person has experienced a major depressive episode, they are "scarred" or changed by the experience, resulting in higher levels of neuroticism both during and after the depression (Ormel et al., 2013). Finally, the state model also proposes that major depression affects neuroticism. However, unlike the scar model, the state model asserts that the effect does not last after the depressive episode. All models are plausible. Therefore, it is possible that each model may describe a slightly different pathway to depression.

The current study does not attempt to explain the connection between neuroticism and depression, but rather to explore how the feminine identity may be related to the experience of depression. As has been discussed previously, women tend to experience higher levels of neuroticism than men (Ormel et al., 2013; Mandelli et al., 2015). Since femininity is a stereotypical description of women (Bem, 1981), feminine individuals may experience higher levels of neuroticism, regardless of biological sex. If high levels of neuroticism are linked to depression, then feminine individuals who are neurotic should also have a higher risk of depression compared to masculine individuals.

Conscientiousness

Conscientiousness is also one of the "big five" personality traits. People high in conscientiousness are known to achieve higher academic and performance goals, and have a stronger sense of wellbeing compared to others (DeYoung, Peterson, & Higgins, 2002). They are characterized by cautiousness and vigilance, with the desire to perform a task properly and completely. Contrastingly, people who are low in conscientiousness tend to be described as

ineffective and disorganized (Thompson, 2008). Thus, high levels of conscientiousness are linked with competency, while low levels of conscientiousness reflect inefficiency.

Nolen-Hoeksema, Larson, and Grayson (1999) examined the gender differences that can lead women to a higher risk of depression. The researchers looked at the associations between chronic strain, mastery, and rumination with the dependent variable, depression. For women, chronic strain was regarded as being a result of lower social power and greater workloads (Nolen-Hoeksema et al., 1999). Women's feelings of helplessness were measured and observed to determine their level of mastery. The associations between rumination, strain and mastery were also examined. Findings from this research did not show a direct relationship between chronic strain and depression, or mastery and depression. However, significance was found between chronic strain's interactions with rumination and the level of depressive symptoms (Nolen-Hoeksema et al., 1999). Therefore, when combined with recurrent worrisome thoughts, habitual stressors increased depression.

Nolen-Hoeksema and colleagues' (1999) study factors are very similar to two of the "big five" personality traits. Specifically, mastery and chronic strain seem to map onto the personality traits of conscientiousness and neuroticism, respectively. Low mastery could very well be conceptualized as low conscientiousness. Conscientiousness is defined by efficient and organized behavior (Thompson, 2008). If a person is low in conscientiousness, therefore, being low in efficiency and organization; then similarly, they may be low in mastery or accomplishment (Nolen-Hoeksema, 1991; Nolen-Hoeksema et al., 1999). Likewise, chronic strain could be a correlate of neuroticism. Neuroticism is characterized by worry, fear and frustration (Thompson, 2008), which could cause strain. A high level of neuroticism could then

relate to chronic strain caused by these negative emotions. Particularly, the worry or rumination component of neuroticism.

Using the previously discussed research, a pathway to depression through an interaction of low conscientiousness, or low mastery, and chronic strain, or neuroticism, may be examined. Overall, women tend to score slightly higher in conscientiousness compared to men (Schmitt, Realo, Voracek, & Allik, 2008; Klein et al., 2011). However, women who have low levels of conscientiousness and high levels of neuroticism may be at greater high risk for depression. Low conscientiousness mixed with neuroticism, resulting in increased rumination or worry, which leads to depression (Kalmbach, Pillai, & Ciesla, 2016).

The current study will examine the associations between gender identity, personality, and depression. Based on previous research, it is expected that neuroticism and conscientiousness should be significant predictors of depression. As femininity is a stereotype for women (Bem, 1981), it is expected to be associated with the personality trait of neuroticism. Therefore, more feminine individuals should also show higher levels of neuroticism. It is likely that study participants with higher levels of femininity will also have higher depression scores. Moreover, femininity is expected to remain a significant predictor of depression beyond personality traits.

Method

Participants

260 undergraduates (female *n*=196; male *n*=64) with access to the SONA system volunteered to participate in this study by completing all three questionnaires. Out of the 260 students, 4 identified with being transgender, 1 did not answer, and the rest identified with being cis gender, also known as the gender a person is assigned at birth. The average age was 21 years old (*Mo*=18). Most of the participants were in their Freshman year of college (Freshman *n*=112; Sophmore *n*=48; Junior *n*=54; Senior *n*=42; Graduate *n*=4). 50% of the participants were white, 22% Latino, 13% Black or African American, 9% Asian, 5.5% Other, and .5% Native Hawaiian or Pacific Islander. Their only compensation was credit in their participating psychology class.

Materials

Three questionnaires were entered into a single web-based survey and linked in SONA, which is the online participant database for UCF psychology students to voluntarily. The first questionnaire in the study, is the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991) for extraversion, agreeableness, openness, conscientiousness, and neuroticism, totaling 44 questions. The scales for extraversion (*a*=.85), agreeableness (*a*=.71), openness (*a*=.74), conscientiousness (*a*=.79), and neuroticism (*a*=.85) were all valid. The answers are on a 5-point scale, rated Very Inaccurate (+1), Moderately Inaccurate (2+), Neither Accurate Nor Inaccurate (3+), Moderately Accurate (4+), or Very Accurate (5+) (John, Donahue, & Kentle, 1991). The participant's scores are totaled to get a score for each scale.

The second questionnaire is the Beck Depression Inventory-II (BDI-II; Beck, Steer, Brown, Lovibond, P., & Lovibond, S., 1995). It is a 21 question measure that helps analyze the

level of depression the participant was experiencing at the time of taking the questionnaire, if any. The questions are on a 4-point scale, rated as, minimal (+1), mild (+2), moderate (+3), and severe (+4) (Beck, et al., 1995). Each question has a different set of four answers, but all range in order from minimal to severe. The participant's answers are added up and the total score will equal whether the participants level of depression is minimal (0-13), mild (14-19), moderate (20-28), or severe (29-63). The BDI-II is used in many studies and has good validity (a=.93).

The third and final questionnaire used was the BEM Sex Role Inventory (BSRI; Bem, 1974), which measures the levels of femininity and masculinity for each person. It can also be used to determine if the individual is androgynous, has high levels of both femininity and masculinity, or undifferentiated, the have low levels of both femininity and masculinity. For each question the participant rates themselves on 60 personality characteristic items on a 7-point scale from 1 (Never true) to 7 (Always true). Of the 60 items, 20 are scored feminine, 20 are scored masculine, and 20 are scored neutral. The BSRI has good validity for both scales (Masculinity a =.84; Femininity a =.79). The scores for the feminine group and the masculine group are added up separately, to get a feminine score and a masculine score; then, the scores are averaged by dividing the total scores by the total number of questions in each grouping, 20. As stated before, everyone is believed to have levels of both femininity and masculinity (Szpitalak & Prochwicz, 2013).

Procedures

Participants were recruited through the SONA system, which is the online participant database for psychology research at UCF. Participants self-select to participate in the study based upon the provided participant criteria and a description of the procedure. Participants were

forwarded to the online Web-surveyor Qualtrics, where they responded to study measures and completed demographic information. Participants received extra credit for completion of study responses.

Results

To examine the hypothesis that personality is significantly correlated with depression scores, bivariate correlational analyses were completed, which included BFI Neuroticism total scores, BFI Conscientiousness total scores and BDI total scores. Neuroticism had a significant, positive correlation ($r=.520$, $p=.000$) with depression. Conscientiousness had a significant, negative correlation ($r= -.218$, $p=.000$) with depression scores. These findings suggest that higher levels of neuroticism and lower levels of conscientiousness were associated with increased depression in this sample.

To test the hypothesis that gender identity is predictive of depression, composite scores for the BSRI femininity scale and masculinity scale were correlated with total scores for depression. Femininity ($r=-.154$, $p=.013$) and masculinity ($r=-.170$, $p=.006$) were both significantly, negatively correlated with depression. These findings suggest that as identification with both feminine identities and masculine identities increased depression scores decreased in this sample.

To examine the hypothesis that gender identity is significantly associated with personality, BSRI femininity scale scores and masculinity scale scores were correlated with total scores for BFI Neuroticism and BFI Conscientiousness. Femininity ($r=-.090$, $p=.150$) did not significantly correlate with neuroticism. However, masculinity ($r=-.239$, $p=.000$) was significantly, negatively related to neuroticism. This finding suggests that masculine gender identities tend to be less neurotic, or have lower trait levels of overall neuroticism. The feminine identity was not associated with neuroticism in this sample. Neither femininity ($r=.076$, $p=.220$)

nor masculinity (r=.100, p=.109) was significantly associated with conscientiousness in these data.

The correlations between gender identity, specifically femininity, and depression and personality and depression suggest that additional regression analysis to test the predictive ability of femininity, beyond personality, for depression is unnecessary. Given the magnitude of the correlation between femininity and depression (r=-.154, p=.013), and the magnitude of the correlation between neuroticism and depression (r=.560, p=.000), it would be unlikely for femininity to remain a significant predictor of depression, beyond neuroticism, in a regression analysis. Therefore, the hypothesis that femininity is a significant predictor of depression, beyond personality, is not supported. However, a hierarchical regression analysis was completed to confirm this stated assumption and determine whether femininity added any additional explanatory power, not otherwise covered by the personality variables.

A hierarchical multiple regression analysis was completed with depression as the dependent variable and conscientiousness, neuroticism, and femininity entered as independent variables. The personality variables were added at the first step. Femininity was added at the last step. The hierarchical regression revealed that at step 1 conscientiousness and neuroticism contributed significantly to the regression model, $F(2, 257)$= 49.029, p=.000, and explained 27.1% of the variance in depression scores. Introducing the femininity variable at the last step explained an additional 0.80% of the variance in depression scores. The change in R^2 was not significant, $F(1, 256) = 3.011$, p= .084. Therefore, while femininity did provide some additional explanatory information, this was not a significant addition beyond what was provided by the personality variables alone in the regression model. Overall, these results indicate that

personality is a sufficient predictor of depression scores in these data. The entirety of the

regression statistics are listed in Table 1.

Table 1: Summary of Hierarchical Regression Analysis for Variables predicting Depression

Variable	β	t	R	R^2	ΔR^2
Step 1			.53	.28	.28
Conscientiousness	-.08	-1.38			
Neuroticism	.50	9.01*			
Step 2			.53	.29	.008
Femininity	-.10	1.74			

Note. $N = 260$; *p< .001

Although not part of the primary expectations or hypotheses of the study, an independent

sample *t*-test was completed to help clarify some unexpected results. The independent sample *t*-

test allows for the examination of mean differences between groups on measured behaviors,

traits, or characteristics. Specifically, we wanted to examine how men and women compared to

one another on ratings of femininity and masculinity. Women, as a group, scored slightly higher

(*M*=3.69, *SD*=.42), than men (*M*=3.49, *SD*=.47) in femininity, $t(258)=3.13$, *p*=.000. Similarly,

men, as a group, scored slightly higher (*M* =3.70, *SD* =.50), than women (*M*=3.43, *SD*=.39) in

masculinity $t(258)= 4.36$, *p*=.002. The independent sample *t*-test analysis provided 95%

confidence intervals that that mean difference would fall between .07 and .36 for femininity

scores and fall between .08 and .35 for masculinity scores. This suggests that the overall

differences for males and females were very small as it related to gender identification. There

were no additional relationships of interest related to the specific hypotheses. Therefore, further

analysis seemed unnecessary based on the associations between the primary variables of interest.

Discussion

The current study explored the associations among gender identity, personality, and depression. This research examined the use of gender identity in the prediction of depression to see if, like women, feminine individuals had a higher risk of depression. Personality, specifically the traits of neuroticism and conscientiousness, was studied to determine if it related to gender identity and depression. The specific expectations of the study that: a) femininity would be associated with depression, b) femininity would be associated with neuroticism and c) femininity would be a significant predictor of depression, beyond personality, were not supported. Overall, many of the results of this study were unexpected.

Gender identity, overall, was found to be significantly related to depression. Both femininity and masculinity had significant, negative relations to depression. This finding suggests that as gender identification increased with feminine and masculine characteristics, depression scores decreased. It was expected that femininity would be positively related to depression. Specifically, that the more feminine the individual, the greater the risk for depression. There are some possible reasons for why this negative association, with femininity, was found in this sample. These reasons include: a) participants were undifferentiated in their gender identity, meaning they were neither strongly feminine nor masculine in their gender identification; and b) possible response bias, in that they may have altered their responses to questions due to social desirability issues related to gender stereotypes.

As stated previously, undifferentiated individuals are low in femininity and low in masculinity. The negative association between depression scores and femininity may suggest that undifferentiated individuals that have the highest risk of depression. The sample was mostly

young adults, in their early 20s, who are in the identity stage of their lives (Erikson, 1963). The participants may have scored as undifferentiated, being low in both feminine and masculine characteristics, because they are still attempting to identify their role in life. The scale scores from the BSRI were averaged around 3.5 for femininity and 3.6 for masculinity, which is approximately the midpoint of the 1-7 scale for the assessment. Overall, participants in this sample did not strongly identify with either gender. This lack of strong identification may in part explain the unexpected findings. Therefore, no one was stereotypically, "womanly" enough to demonstrate the expected association between the feminine identity and neuroticism, or the feminine identity and depression.

Another explanation for these findings is some sort of response bias. It is possible that the participants were answering the questions based on how they would like to be or how they believe society would like them to be. Although female participants scored significantly higher in femininity than male participants, and male participants scored significantly higher in masculinity than female participants, these mean differences were very small. It is possible then, that participants may have selected a lower score than what truly reflects who they are. These participants may wish, or even believe, they are less defined by their biological sex. This possible response bias may then have resulted in the current study findings.

Personality showed the expected relations to depression. Similar to previous research, neuroticism was significantly related to depression in this sample. As trait levels of neuroticism increased depression ratings also increased. Conscientiousness also had a significant relation to depression in this sample. Specifically, low trait levels of conscientiousness predicted higher, self-reported depression symptoms. Overall, based on the findings in this sample it is primarily

the trait of neuroticism which was a larger correlate and predictor of depression. Again, this replicates and confirms decades of research on the trait which demonstrate its negative effects at high levels (Ormell, et al., 2013; Mandelli et al., 2015).

In the process of examining other study hypotheses and expectations, it became apparent that femininity would not be a significant predictor of depression, beyond personality, in this sample. Specifically, the effect of the relationship between femininity and depression was small, while the effect of the relationship between neuroticism and depression was moderate. Therefore, the regression analyses focused on any additional explanatory power which femininity could contribute to a model which also contained the personality variables of conscientiousness and neuroticism. Femininity explained a small amount, 0.80%, of the variance in depression scores. However, this was not a significant change from the variance already explained by personality. As discussed previously, these results may be due to low levels of gender identification overall in the sample. Overall, the personality trait of neuroticism was simply a better predictor of depression. However, in a sample where gender identification levels are higher different results could be obtained.

Strengths and Limitations

There are several strengths and limitations to this research. First, this research presents a novel approach to understanding depression and the possible role which gender identity may have in the experience of depression. Although the study hypotheses were not confirmed as expected, the concept of understanding and relating gender identity to depression may be an area for additional research and exploration. Second, this study also provided additional replication and confirmation of the connection between personality and depression. Specifically, the

confirmation of the traits of conscientiousness and neuroticism as predictors of depression, serves as continued support for the role which these characteristic patterns of behavior and emotion play in an individual's experience or vulnerability to depression. Lastly, this study may have discovered an additional area of research for those interested in identity formation among young adults. Male and female participants in this sample did not identify strongly with the "stereotypical" traits or characteristics for their gender. Although this could have been due to lack of concern about answering truthfully to study measures, it could also be due to a genuine disconnect between the BSRI items and how participants viewed themselves as men or women. Overall, additional research in this area with the BSRI could confirm or explain these findings more clearly.

In regards to the limitations of this research: one limitation to this study was the use of a self-selected sample. For example, students with actual clinical levels of depression may have been too tired or withdrawn to participate in the study. Additionally, there may be characteristics or personality differences between those who self-select to participate in research and those who do not. For example, individuals higher in the personality trait of Openness may be more likely to participate in research overall. The participants who rated higher on openness may be more likely to be open about their depression level. People high in openness were probably also more likely to feel comfortable answering questions in a study with the words Gender and Depression in the title. However, self-selected, college samples are very common in psychological research.

Another limitation for this study, was the sample age. Per Erikson's (1963) model of psychosocial development, the youthfulness of the sample may have been an issue for measurement of gender identity. According to Erickson (1963) between 18 years of age and 21

years of age, young adults move from the identity stage to the love stage. However, some individuals may get left behind in the identity stage particularly if they have not found their identity and figured out who they are. It is possible that with a graduate student sample, or sample of individuals in mid to late adulthood, the gender scores would have been higher. Being more secure in their identities, the individuals would be comfortable responding to the items with higher ratings, such as 5's or 6's. As stated previously, the scale was scored 1-7, with participants answering at the mid-point of the scale for most questions. A score of 5's, 6's, or 7's would represent a much stronger gender identity. Again, having an older sample or individuals with stronger gender identities may result in different findings for this study.

Lastly, societal shifts in gender roles or acceptance of gender stereotypes may have reduced the effectiveness and validity of the BSRI. For example, over the past two decades it has become increasingly popular to encourage all children to be assertive, not just the boys. Self-reliance used to primarily characterize masculinity. However, women are now encouraged to be more independent. High status women and celebrities are speaking out to about the need for all women to receive their fair share without reliance on men. Therefore, as a culture there are many competing beliefs about what it means to be "womanly" or "manly" which may not have previously existed.

Gender stereotypes may be becoming taboo by certain standards. Bem's 1974 BSRI measure uses some language that may be interpreted differently today, such as masculinity being based on dominant and aggressive levels, and femininity being based on gullible and soft-spoken levels. Dominant and aggressive could be misconstrued as negative words by both sexes, suggesting a violent nature. Just like gullible and soft-spoken could be misconstrued as negative

words that suggest someone is dumb or weak. Overall, it may be necessary to re-examine and confirm that the language and concepts from the BSRI are still relevant to today's young men and women.

Future Directions

Future research may want to use selective sampling instead of self-selective sampling. By selecting the participants, the researcher is more likely to get the type of sample they want. They could get a more diverse sample by purposefully selecting participants from different schools or school years. They also have more control over their selections.

The sample used in this study was very narrow. The average age for the study was 21 with a mode of 18. The participants were mostly female (N=260, female n=196, male n=64). All the participants were psychology students. To better understand gender roles in depression, the sample should include older adults and more male participants. For a better understanding of depression, future researchers could select their own participants from a known depressed population. They may be selected from a hospital or clinic database.

Future research should include the use of different gender measures. For example, the Traditional Masculinity-Femininity scale (TMF; Kachel, Steffens, & Niedlich, 2016) is shorter than the BSRI. Like the BSRI it tests masculinity and femininity with an incremental validity (Kachel, Steffens, & Niedlich, 2016). Future researchers could also try to create their own questionnaire that encompasses all the genders, not just masculinity and femininity. Thus, there is still much work to be done to explore these concepts of gender identity and its connections to depression in today's society.

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