Associations of Sex, Gender, and Gender Role Beliefs with Mental Health Attitudes

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Associations of Sex, Gender, and Gender Role Beliefs with Mental Health Attitudes

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Social Work

by

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University of North Florida
Bachelor of Social Work, 2019

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This thesis is approved for recommendation to the Graduate Council.

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Abstract

Mental health stigma is a strong deterrent from utilizing mental healthcare for individuals with a mental illness. Individuals living with a mental illness experience shame and marginalization due to stigma. Stigma is perpetuated through stereotypes created and used by people in society. Studies have been done to assess individual’s attitudes toward mental healthcare seeking in regards to gender, age, race, and profession. This study aimed to look at traditional gender role beliefs, sex, and gender expression as predictors of individual’s mental health attitudes and individual’s views of mental health norms. Using a cross-sectional survey, 392 participants completed scales that included the Gender Role Attitudes Scale (GRAS), Traditional Masculinity/Femininity-Scale (TMF), and an adapted version of the City Mental Illness Stigma Scale. Participants in the final sample were 75.1% female and 88.5% White. About 45% of participants were between 18-25 years of age. This study found that gender role beliefs were the most significant predictor of mental health attitudes and norms. The more traditional gender role beliefs the more stigmatizing mental health attitudes held. The less traditional gender role beliefs the more likely to feel there are stigmatizing norms. Gender expression (femininity or masculinity) was significantly correlated to mental health norms. In the subsample of gender nonconforming participants, gender role beliefs significantly predicted mental health attitudes. Further research should include diversified populations and a larger sample size. Implications for social work practice include advocating for education around mental health and being cognizant of the assigned meanings that clients come to practitioners with.
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Chapter 1-Introduction

A mental health diagnosis affects many people’s lives. The National Institute of Mental Health (2017) reported that 46.6 million American adults have a diagnosable mental illness—meaning one in five U.S. adults. Among the 46.6 million individuals, only 19.8 million received mental health services. The National Institute of Mental Health (2017) also found that the majority of adults seeking services were women.

The majority of U.S. adults who suffer a mental illness do not seek treatment. In 2017, Mental Health America noted that 56.5% of adults with a mental illness received no treatment. There are many factors that affect willingness to receive treatment. One significant factor is stigma. In fact, in a recent meta-analysis of 144 studies, with 90,000 participants, Henderson et al. (2014) found that stigma was one of the top reasons why individuals would forego mental health services.

Taking care of one’s mental health is just as necessary as taking care of one’s physical health. Whole person functioning should be addressed through care of mind and body (Peate, 2014). However, people are much more likely to report physical health conditions than to report mental illnesses. Bharadwaj, Pai, & Suziedelyte (2017), report that 36.5% of participants using prescription drugs for depression did not report being diagnosed with depression or anxiety. In the same study, the average amount of under-reporting for physical health diagnoses is lower at 17%. Additionally, the authors found that males, individuals without a university degree, and those with Asian, African, or Middle Eastern ethnicities were significantly more likely to under-report mental illnesses. This study drew further conclusions that underreporting was likely due to the participants’ fear of stigma. The researchers believed that if mental illnesses were not
stigmatized, the difference between self-reported diagnoses and administrative health records
would be similar to the differences for physical health diagnoses.

Females and sexual minorities are more likely to experience mental health issues than are
heterosexual males (Koopmans & Lamers, 2007; Bockting, Miner, Swinburne Romine,
Hamilton, & Coleman, 2013). As a result, these groups are more likely to utilize treatment
services. Experience with mental health services may lead to more positive attitudes toward
services but may also lead to more feelings of stigma from others (Coman & Sas, 2016). In
summary, because females and sexual minorities are more likely to experience psychological
distress and seek out mental health services, these groups are more likely to be familiar with
treatment but suffer the consequences from stigma. However, stigma has become an inhibitor for
many individuals in different groups seeking treatment. This issues has consequences for
individuals and their support systems.

**Mental Health Stigma & Consequences**

Stigma can be defined as “a mark of disgrace that sets a person apart from others”
(Government of Western Australia Department of Health, 2009). Mental health stigma directly
affects both people diagnosed with a mental illness and their support systems, which may include
family, and service providers (Corrigan, Druss, & Perlick, 2014). Many individuals living with a
mental illness experience shame and marginalization due to stigma and some say living with the
effects of stigma can often be harder than the effects of their actual diagnosis (The Lancet, 2016).
A meta-analysis by Corrigan, Druss, & Perlick’s (2014) used knowledge of mental illness and
cultural relevance of mental illness as moderators for levels of stigma. This analysis found that
stigma had a negative impact on individuals living with a mental illness and care seeking or
engagement with treatment. Stigmatizing beliefs are also reported more often than logistics as
barriers to seeking out mental health care in individuals serving in the military (Sharp et al., 2015).

Where does stigma start? How is it constructed? Stigma evolves from a stereotype. Merriam-Webster defines a stereotype as “a standardized mental picture that is held in common by members of a group and that represents an oversimplified opinion, prejudiced attitude, or uncritical judgment.” Couture and Penn (2003) found that there were three common stereotypes shaped and perpetuated about people with a mental illness. These stereotypes include “that they are dangerous and need to be feared and isolated, they are naïve and helpless and need to be taken care of, or they are irresponsible and need to be restrained and controlled” (Coman & Sas, 2016, p. 74). Stigma can further cause fear in individuals due to these overgeneralizations and misunderstandings. These beliefs have been problematic in that people who receive a mental illness diagnosis may often become less likely to be employed, to be considered for tenancy, or to have control over choices in treatment (Hayward & Bright, 1997). Due to stereotypes, people with a mental illness diagnosis are at a higher risk to be wrongfully accused of crimes (Hayward & Bright, 1997). Social change is needed to identify populations at risk for experiencing mental health stigma and to produce general psychoeducation in communities to reduce fear and misunderstanding around mental health issues.

**Gender Identity vs Gender Expression vs Biological Sex**

This study explored the differences in attitudes through gender role beliefs, gender expression, and sex assigned at birth. To do this appropriately, it will be necessary to clearly define the differences between gender identity, gender expression, and sex assigned at birth. Identifying as a woman or man is much more than being born with a vagina or penis, or in the case of someone who is intersex—both. Sex is a biological coin toss resulting in what’s between
Gender is a social construction and gender can be fluid (Freeman & Knowles, 2012). However, research studies sometimes interchange sex and gender causing confusion as to what the researchers want measure (Freeman & Knowles, 2012). This is likely done by asking a participant what their sex was and then labeling the results as women and men, rather than males and females. Freeman and Knowles (2012) found this interchange to be harmful in interdisciplinary communication and in the translation of research into practice.

Gender identity can at times be incongruent with the biologically assigned sex. For instance, individuals can be transgender—meaning that they have female biology and identify as a man or vice versa. Gender identity can also be the lack of choosing a box to be labeled as and individuals may identify as gender fluid or nonbinary. The transgender population has been seen to have disproportionate rates of depression, anxiety, somatization, and other psychological distress than non-transgender individuals (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013). These researchers also found that enacted and felt stigma had a positive correlation with their psychological distress. Whilst research has been done to show the prevalence of psychological distress in this population, there is little research done on this population’s attitudes surrounding mental health or people with mental illnesses. In Bockting and colleagues’ (2013) study of 1,093 transgender participants, 44% endorsed depression, 33.2% endorsed anxiety, and 27.5% endorsed somatization. There have also been studies that have addressed their individualistic perception of their own mental health services and providers, but not the topic in general (White & Fontenot 2019).

Gender expression can also at times be incongruent with the socially assigned appropriate sex. Gender expression refers to an individual’s masculine or feminine traits and mannerisms (Austin et al., 2016). In Austin et al. (2016), the authors study individuals as either gender
conforming with their expression (i.e. feminine female) or gender nonconforming with their expression (i.e. feminine male). Gender nonconforming does not only encompass people with gender expression that does not align to their sex assigned at birth, but also includes gender nonbinary individuals. Studies have been done to assess gender nonconforming individuals’ rates of depression, suicidality, anxiety, and post-traumatic stress disorder (Valentine & Shipherd, 2018). Studies have also shown their disparities in accessing mental healthcare, as well as their review of received mental health services (White & Fontenot 2019). White & Fontenot’s study (2019) found that enacted stigma was a strong deterrent from seeking mental healthcare services.

**Social Work addressing Stigma**

The Substance Abuse and Mental Health Services Administration (SAMHSA, 2019) states that professional social workers are the United States’ largest group of mental health service providers. “There are more clinically trained social workers—over 200,000—than psychiatrists, psychologists, and psychiatric nurses combined” (SAMHSA, 2019). These numbers indicate that social workers will work with individuals who experience the shame and guilt from stigma. Social workers value social justice and are called on to challenge social injustices in macro settings (National Association of Social Workers, n.d.). Therefore, this profession will commonly encounter stigma around mental health as a social justice issue and need to have an understanding of the populations that are at risk for perpetuating these beliefs. As a profession that places focus on looking at individuals holistically, social workers will respect and hold dignity for their clients when the general population may not (National Association of Social Workers, n.d.).

This study explores beliefs about and experiences with gender roles and how these are
associated with beliefs about mental illness among adults in the United States. I will look at how individuals with more traditional gender role beliefs and more conforming gender identities view mental health to better gauge if stigma will be further relieved through the impacts of a modern society. A society where a woman is thought to be able to run for president, where there is same sex marriage equality, and where gender identity can be fluid. This will be done through individuals identifying their beliefs about traditional gender roles, sex assigned at birth, and gender expression along with their attitudes towards persons with mental health disorders to see if there is a significant association.
Chapter 2-Literature Review

Mental health attitudes have long been researched, in regard to specific demographics. Studies as early as Fischer and Turner (1970), have studied attitudes by measuring an individual's attitudes toward seeking professional help for psychological disturbances. Studies have looked at race (Ward, Wiltshire, Detry, & Brown, 2013), gender (Nam et al., 2010), and even age (Robb, Haley, Becker, Polivka, & Chwa, 2003) in regards to attitudes towards help seeking for mental illnesses. Underlying these individual attitudes, whether negative or positive, are stereotypes and societal norms that have shaped them.

Mental Health Stereotypes and Resulting Stigma

People with mental illnesses have been believed to be deviant in behavior (Veer, Kraan, Drosseart, & Modde, 2006). “The process of stigmatization follows when groups of power stereotype, hold prejudice, and discriminate against a group that has been labeled as separate or different” (Sharp et al., 2015, p.145). In society, the majority holds the power over the “others” or the oppressed. Stereotypes can be formed from generalizations made of whole groups. Stereotypes, once confirmed, are then perpetuated by individuals until society accepts this as a norm. The societal norm then allows for stigmatization to be felt by the oppressed groups of the constructed stereotype. For this study, I will consider individuals with traditional beliefs as the majority or as the holders of power.

Older adults (65+) were raised in what this study defines as traditional times. Meaning that they lived in a time when racism, homophobia, and the idea of a heteronormative family was still at the forefront. Individuals with more liberal attitudes toward women's roles in society are more likely to have accessed mental health services than individuals with more conservative attitudes toward women's roles (Zeldow & Greenberg, 1979). Veer, Kraan, Drosseart, &
Modde’s (2006) found that age had a stronger positive correlation to stereotypical attitudes regarding individuals with mental illness, than education level or personal experience with mental illness. These stereotypes held by older adults can then be passed onto other populations that may already carry biases towards individuals with mental illness.

**Mental Health Attitudes**

Past research has assessed mental health attitudes by measuring individual’s willingness to seek mental healthcare. Individual’s attitudes toward mental health shape how they experience their own psychological distress and whether they seek care (Centers for Disease Control and Prevention, 2012). These attitudes have been studied alongside sex, age, race, and profession.

**Of women.** In a meta-analysis of 16 studies, Nam et al. (2010) found that gender was significantly related to attitudes toward seeking professional psychological help. In their analysis they found that female undergraduate and graduate students seemed to have more positive attitudes toward seeking out these services than their male counterparts. This finding has been consistent throughout the literature. However, it is important to note that in their analysis they used “gender” and “females or males” interchangeably.

**Of men.** In Mackenzie, Gekoski, & Knox’s (2006) study, men were less open to acknowledge personal mental health problems and to seek professional help. Nam et al. (2010) found that male undergraduate and graduate students had more negative attitudes toward seeking out mental health services. These studies assessed attitudes towards help seeking, but do not look at their attitudes of people who carry a mental health diagnosis. If men tend to have negative perceptions and attitudes about individuals with mental illness, then it can be concluded that they would avoid services that would title them as such.
Of older adults. It has been well documented that older adults underutilize mental health services (Jimenez et al., 2013), but in Mackenzie, Gekoski, & Knox’s (2006) study they reported more positive attitudes towards help seeking than younger adults. However, older adults are open in describing themselves as less knowledgeable about mental health (Robb, Haley, Becker, Polivka, & Chwa, 2003). Robb and colleagues’ (2003) study also found that older adults reported that “access to mental healthcare was very important,” more so than younger adults.

By race. In a study on African-American women and men’s mental health attitudes, Ward et al. (2013) found that their attitudes suggested they do not acknowledge psychological problems and are often concerned about stigma associated with a mental health diagnosis. A recent study found that Latinos were least likely to have used mental health services than African-Americans, Asian-Americans, and Whites (Wong et al., 2017).

By profession. A study done on mental health professionals showed that psychologists and social therapists had the most positive attitudes towards individuals with mental illness (Olmo-Romero et al., 2019). Whilst, nursing assistants had the most negative attitudes. Another study on mental health nursing staff found that more positive attitudes towards individuals with mental illness when they had less stigmatized knowledge about mental health and if they had or have a close friend with a mental illness (Mårtensson, Jacobsson, & Engström, 2014).

Healthcare Utilization

Koopmans and Lamers (2007) stated that women are more likely than men to experience somatic morbidity and mental distress, which they found to be associating factors for overall healthcare utilization. In terms of mental health, women reported that they “had more depressive complaints and used more psycho-active medications” (Koopmans & Lamers, 2007, p.1221).
Good, Dell, & Mintz (1989) stated that individuals that were masculine in their gender roles were less likely to have an interest in accessing counseling than their feminine counterparts. Further, in a study of adolescents found that more progressive gender role beliefs were associated with better behavioral outcomes related to mental healthcare utilization (King, Singh, & Milner, 2019).

**Gender Roles**

Gender roles are socially constructed and define what is expected of each gender to be considered as proper or correct (Zeldow & Greenberg, 1979). Zeldow & Greenberg (1979) did a study that assessed people’s attitudes towards women’s gender roles and their attitudes toward seeking professional psychological help. They hypothesized that the more liberal the ideas about women’s gender roles the more negative attitudes towards help seeking would be. However, in a sample of only college students, they found the opposite to be true (Zeldow & Greenberg, 1979).

A more recent study has found that adolescents with more traditional gender role attitudes are associated with weaker outcomes in mental health (King, Singh & Milner, 2019). However, this study does not assess attitudes towards individuals with a mental illness but only what may be diagnosable in the individual. Assessing attitudes toward individuals with a mental illness will be an important part in understanding how stigma gets perpetuated.

**Gender Role Conflict.** Gender Role Conflict was studied in men to look at theoretical aspects of the male role. Aspects assessed were “success, power, and competition; restrictive emotionality; restrictive affectionate behavior between men” (Good, Dell, & Mintz, 1989, p. 295). Adherence of males to a role characterized by one’s strength, aggressiveness, and emotional restriction has resulted in negative consequences for these men (Good, Dell, & Mintz, 1989). Fischer and Turner (1970) found that interpersonal openness had a positive correlation
Men that are socialized into this traditional gender role may view help seeking as a sign of defeat or weakness (Good, Dell, & Mintz, 1989).

**Traditional Beliefs and Mental Health Attitudes**

King et al. (2019) did a study of adolescents and their mental health outcomes as associated to gender role attitudes. In their study, they found that more egalitarian gender role beliefs were associated to better mental health outcomes. Further, a study assessed only male’s personal subscription to gender role beliefs with their attitudes towards help seeking (Good, Dell, & Mintz, 1989). The present study looked at adults’ beliefs about traditional gender roles for both females and males association with attitudes towards individuals with mental illness as well as their beliefs about how society views individuals with mental illness. This was done due to literature stating that women are more likely to experience psychological distress and therefore have experience with mental health services (Bockting et al., 2013).

Past research has used attitudes toward seeking mental health care services as a proxy for mental health attitudes (Nam et al., 2010; Mackenzie et al., 2006; Good et al., 1989). This allows for the observation of internalized attitudes towards mental healthcare and stigma. However, the current study will assess personal attitudes towards mental illness and beliefs about how participants think society views individuals with mental illness. Assessing individual’s beliefs about society’s views about mental illness gives information on populations that feel the stigma related to mental health.

Further, the present study attempted to explore the difference between gender expression and sex assigned at birth. This was done to see if gender would have stronger associations to mental health attitudes than sex assigned at birth. Present literature commonly misuses sex and gender when reporting findings (Muehlenhard & Peterson, 2011). Clearly defining both allowed
for this study to fill the gap needed for research that correctly defines sex and gender when delivering results.
Chapter 3-Theory

Minority Stress Model

Minority Stress Model was proposed by Ilan Meyer in 1995 to address the physical health consequences of gay men who endure higher rates of stress than the majority population. His model was then adapted to include more minority populations in 2003. This model now includes the lesbian, gay, and bisexual population. The model states that there is often more stress on individuals in minority positions than those in the majority (Meyer, 2003). The minority stress model has also been used to underpin studies with sexual minorities including transgender or gender nonconforming individuals with findings of higher rates of psychological distress in these populations as well (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013). Bockting and colleagues (2013) found that the higher rates of psychological distress in their sample of transgender individuals was coming from enacted and felt stigma. Thus, leading to White & Fontenot’s (2019) conclusion that transgender or gender nonconforming individuals will interact more with mental health services.

Meyer “further provided subtypes of stressors: general stress (i.e., those experienced across sexual orientation status), distal minority stress processes (i.e., prejudice, discrimination, and violence), and proximal minority stress processes (i.e., expectations of rejection, concealment, and internalized homophobia)” (Cramer et al., 2017, p.1518). This model also further addresses how minority stress can impact an individual's physical health and mental health. This model is used in this study to further draw conclusions about minorities being more likely to experience psychological distress than an average individual and therefore more likely to have used mental health services and felt stigma but have been educated on mental illness.
The model informed this study as support for the exploration of gender nonconforming participants in sub-analysis, particularly when isolation the effects of gender roles. Gender nonconforming participants may have better attitudes towards people with a mental illness but feel that society has more stigmatizing beliefs towards people with a mental illness.

**MSLC**

Multi-Systems Life Course Perspective (MSLC) is a framework that utilizes three theories and one perspective to create a holistic perspective of client systems. Theories include Ecological Systems theory (Bronfenbrenner, 1989), Life Course theory (Elder, 1995), Symbolic Interactionism (Blumer, 1969), and the Perspectives of Social Change (Christy & Valandra, 2017). Social workers use MSLC as a lens to assess clients from micro to macro levels of practice. This perspective also allows for consideration of time and social change. All levels contributing to thorough analysis of clients and what factors are instrumental in their circumstance.


Life Course theory (Elder, 1995) is a theory that recognizes how an individual’s life has been shaped by factors experienced from birth to present. This theory allows for the individual’s development to be placed in context of politics, history, culture, family dynamics, and individual circumstances. Life Course theory also allows for a client’s trajectory to be assessed based on past and current circumstances (Elder, 1995).

Symbolic Interactionism (Blumer, 1969) states that interactions are utilized to form implications and norms for specific items. Further, this theory proposes that symbols are then
passed on through more interactions and that this is how meaning is assigned to our language (Blumer, 1969). Symbolic Interactionism is also used to assess how individuals perceive the world around them and their role in it.

Social Change perspectives are integrated into MSLC to provide an emphasis on strategies for social action to pursue progressive movements (Murphy-Erby, Christy-McMullin, Stauss, and Schriver, 2010). This perspective relies on challenging the status quo in regards to dynamics of power and oppression. The movement for these changes can then impact policies and larger society norms.

**MSLC Lens in Present Study.** Using Bronfenbrenner's Systems theory (1989), social workers assess micro-, mezzo-, macro-, exo-, and chronosystems of a client. For this study, we will look at how involvement with mental health services as microsystems in an individual's life may shape or alter their attitudes. We will also be looking at individual's beliefs towards people with a mental disorder at a macro level. Finally, thinking about individual’s chronosystems will be used to draw possible conclusions as to why gender identity and gender role beliefs may play a role in having more positive attitudes toward mental health. For instance, looking at the influence of patriarchy and ideals of the nuclear family.

Using Life Course theory (Elder,1995), MSLC is able to examine historical, social, and political influences that shape an individual’s or a community’s trajectory (Christy & Valandra, 2017). This theory encourages clinicians to be aware of age and what someone has lived through. Practitioners have to ask themselves “Did this client experience a time or culture of when mental health was seen poorly?” From here, we can work on education for individuals who aren’t present in a time of push for mental health utility.
Through the integration of Symbolic Interactionism (Blumer, 1969), MSLC is able to understand how stigma is created. Through Symbolic Interactionism, ideas like social constructs and symbolism are explained. Stigma is constructed when “groups of power stereotype, hold prejudice, and discriminate against a group that has been labeled as separate or different” (Sharp et al., 2015, p.145). Henceforth, stigma is also easily perpetuated through interaction. This theory was heavily used in the development of this study, due to questions being asked surrounding the socialization of the participants. The present study attempts to understand how the symbol of stigma is adapted by different groups.

The Perspective of Social Change can be used to analyze stigma as a social problem due to its oppression of individuals living with a mental illness. If social workers can see this and glean better ideas of its perpetuation, then education can be adapted to meet these needs. We can also see populations that are less likely to help seek in regards to mental health due to this. Clinicians can be made further aware of this and aid these clients through their possible anticipated stigma.

Minority Stress is also a model for social change. This model calls attention to the disparities in minority groups’ stress levels and psychological distress. Minorities were found with higher rates of psychological distress in a sample of transgender individuals due to enacted and felt stigma (Bockting et al., 2013). Advocates can make a claim to get people more education to reduce stereotypes that lead into felt stigma. Especially with a recent spark in talking about mental health, gender nonconforming, and more progressive gender roles.
Chapter 4-Methodology

Research questions

This study aimed to find a correlation between an individual's beliefs in traditional gender roles and their personal gender expression with their attitudes about individuals with mental illness.

RQ1: Are gender role beliefs associated with mental health attitudes and norms?
RQ2: Is gender expression associated with mental health attitudes and norms?
RQ3: Was there a significant difference in gender role beliefs, gender expression, mental health attitudes, or norms based on sex?
RQ4: Do gender nonconforming participants have significantly different mental health attitudes or norms than gender conforming participants?
RQ5: Does sex assigned at birth, gender expression, and gender role beliefs predict mental health attitudes or norms?
RQ6: In gender nonconforming participants, does sex assigned at birth, gender expression, and gender role beliefs predict mental health attitudes and norms?

Design

This study utilized a non-experimental cross-sectional survey to collect data from a convenience sample. The study was approved by the Institutional Review Board at the University of Arkansas.

Procedure

Using convenience sampling, I recruited people who were at least 18 years old to complete this study. Participants were recruited via invitation on social media, campus-wide e-newsletter, and university listservs. Interested people clicked on a link to the online survey,
which was administered using SurveyMonkey Software. On the first page of this survey, people were presented a statement of consent that explained the survey. Participants who were interested answered the first question of the survey by selecting that they agreed to participate and entered the survey. Those who did not agree were directed out of the survey. The survey consisted of 54 questions and took approximately 10 minutes to complete. The online surveys were completed confidentially. Data were stored on a password protected computer with online interface.

Participants

This study enrolled 457 respondents. Sixty-five respondents were removed from the final sample because of incomplete responses or unanswered questions. Participants in the final sample included 392 individuals. Participants in the final sample were 75.1% female and 88.5% white, between the ages of 18 and 74 (M = 32.16 years, SD = 13.11). Forty-five percent of participants were between 18-25 years of age; 36.1% of participants had completed up to a Bachelor’s degree. In the final sample, 10.2% identified as gender nonconforming. Please refer to Table 1.

Measures

**Sex assigned at birth.** To assess sex assigned at birth, I asked participants “What is your sex assigned at birth?” Response options included “Male, Female, or Intersex.” This variable was dichotomized: 0 = male and 1 = female.

**Gender identity.** To assess gender identity, I asked participants “Does your gender identity match your sex assigned at birth?” Response options included “Yes” or “No/Please specify.” This variable was dichotomized: 0 = no or nonbinary and 1 = yes or cisgender.

**Gender expression.** To assess gender expression, I administered the Traditional Masculinity/Femininity-Scale (TMF) (Kachel, Steffens, & Niedlich, 2016). The TMF separates
biological and social effects of gender with 6 items that ask participants to rate their tendencies
as feminine or masculine for a given construct. Example items include “Traditionally, my
interests would be considered as…” and “Ideally, I would like to be…” Response options were
on a 7-point scale, ranging from “very masculine” to “very feminine.” The scores across the six
items were averaged to create a composite score for gender expression (sample α = .91). Higher
TMF scores indicate higher levels of femininity.

**Gender role beliefs.** To assess gender role beliefs, I administered the Gender Role
Attitudes Scale (GRAS) García-Cueto et al., 2015). The GRAS includes 20 items that ask
participants to report on how they believe roles should be filled, by gender or not. Example items
include “Household chores should not be allocated by sex” and “Men should occupy posts of
responsibility.” Response options were on a 5-point scale, ranging from “totally agree” to
“totally disagree.” The final 13 items were reverse coded. The scores across the 20 items were
averaged to create a composite score for gender role beliefs (sample α = .88). Higher GRAS
scores indicate higher levels of traditional gender role beliefs.

**Mental health attitudes and community mental health norms.** To assess mental health
attitudes and community mental health norms, I administered an adapted version of The City
Mental Illness Stigma Scale, which was originally designed to examine mental illness in
perinatal mothers (Moore, Ayers, & Drey, 2017). The original scale assessed three factors:
internal stigma, perceived external stigma, and disclosure stigma. In the adapted version, 10
questions ask what a person thinks about people with mental illnesses (i.e., mental health
attitudes). These were labeled as “mental health attitudes” to give a more precise picture of how
the measure was assessing personal beliefs towards individuals with mental illness rather than
lumping it into “stigma.” Another 10 about what a person perceives the majority or society
thinks about people with mental illness (i.e., community mental health norms). These were labeled as “community mental health norms” to give a more precise picture of how the measure was assessing beliefs about participants’ view on society’s norms towards individuals with mental illness rather than lumping it into “stigma.” Response options for both attitudes and norms were on a 5-point Likert-type scale, ranging from “strongly disagree” to “strongly agree.” The scores across each set of ten items were averaged to create a composite score for mental health attitudes (sample α = .85) and community mental health norms (sample α = .91). Higher scores for the mental health attitudes composite indicate higher levels of stigmatizing attitudes towards individuals with a mental illness, and higher scores for the community mental health norms composite indicate that the participant feels that society holds stigmatizing norms about individuals with a mental illness.

**Data Analysis**

All tests were conducted at an α level of p < .05. All analyses were conducted using SPSS 26. In accordance with criteria by Cohen (1988), the present study used power analyses to determine the effect size when comparing means. A Cohen’s $d$ of .02 would indicate a small effect size, 0.5 would indicate a medium effect size, and 0.8 would indicate a large effect size.

To test RQ1 and RQ2, I conducted bivariate Pearson's correlations because each of these variables of interest were measured continuously. To test RQ3, I conducted independent samples t-tests because sex assigned at birth was a dichotomous variable and the four other variables of interest (i.e., gender expression, gender role beliefs, mental health attitudes, mental health norms) were all continuous. To test RQ4, I conducted independent samples t-tests in order to compare the means of the cisgender and gender nonconforming participants’ scores for mental health attitudes and norms. To test RQ5, I conducted two multiple linear regression models. The
outcome variable for the first model was the mean score for mental health attitudes; the mean score for mental health norms was the outcome variable for the second model. The predictor variables were the same for both models: sex assigned at birth, gender expression, and gender role beliefs. Finally, to examine RQ6, I tested these same models in the subsample of gender nonconforming participants.
Chapter 5-Results

Descriptive Statistics

The four variables of interest were gender role beliefs, gender expression, mental health attitudes, and mental health norms. The gender role beliefs mean score was 1.66 (SD = .55), with a range from 1.0 to 4.3 out of a possible 6.0, lower scores indicating more flexible beliefs and higher more traditional. The gender expression mean score was 4.36 (SD = 1.26), with a range from 1.0 to 7.0 out of a possible 7.0, with higher scores indicating more feminine expression. The mean score for mental health attitudes was 1.52 (SD = .44), with a range from 1.0 to 3.3 out of a possible 5.0. The mean score for community mental health norms was 3.22 (SD = .71), with a range from 1.0 to 5.0 out of a possible 5.0 (Table 2).

In the subsample of gender nonconforming participants, the gender role beliefs mean score was 1.35 (SD = .32), with a range from 1.0 to 2.8. The gender expression mean score was 3.93 (SD = .83), with a range from 1.67 to 5.33. The mean score for mental health attitudes was 1.34 (SD = .35), with a range from 1.0 to 2.2. The mean score for community mental health norms was 3.27 (SD = .66), with a range from 2.0 to 5.0. (Table 2).

RQ1: Gender Role Beliefs and Mental Health Attitudes and Norms

Gender role beliefs were significantly correlated with mental health attitudes, $r = .53, p < .001, R^2 = .28$. Specifically, people who endorsed relatively more traditional gender role beliefs reported more stigmatizing attitudes toward mental health. Further, gender role beliefs were also significantly correlated with community mental health norms, $r = -.15, p = .003, R^2 = .02$. Specifically, people who endorsed relatively more traditional gender role beliefs reported feeling that society held less stigmatizing norms toward mental health. (Table 3).

RQ2: Gender Expression and Mental Health Attitudes and Norms
Gender expression was not significantly correlated with mental health attitudes, $r = -.04, p = .457$, $R^2 = .00$. However, gender expression was significantly correlated with community mental health norms, $r = .13, p = .010, R^2 = .02$. Specifically, people who endorsed relatively more feminine expression reported feeling that their community held more stigmatizing norms toward mental health. (Table 3).

**RQ3: Differences by Sex Assigned at Birth**

When comparing males with females (sex assigned at birth) in this sample, there was a statistically significant mean difference in their gender role beliefs, t(390) = 4.50, $p < .001$, Cohen’s $d = .49$. Males (assigned at birth) had a significantly higher mean score indicating that they held more traditional gender role beliefs ($M = 1.87, SD = .58$) than females (assigned at birth) ($M = 1.59, SD = .52$). This statistic had a moderate effect size per Cohen (1988).

There was also a statistically significant mean difference between males and females for gender expression, t(390) = -16.442, $p < .001$, Cohen’s $d = 1.93$. This statistic had a moderate effect size per Cohen (1988). Males (assigned at birth) had a significantly lower mean score for gender expression ($M = 2.96, SD = .96$) than females ($M = 4.82, SD = .97$), indicating that males were more likely to score masculine and females were more likely to score feminine.

There was a statistically significant difference between males and females for mental health score, t(390) = 2.278, $p = .023$, Cohen’s $d = .24$. This statistic had a small effect size per Cohen (1988). Males (assigned at birth) had a significantly higher mean score for mental health attitudes ($M = 1.61, SD = .48$) than females ($M = 1.50, SD = .43$), indicating males held more stigmatizing attitudes toward people with mental illness than females.

Finally, there was a statistically significant difference between males and females for the community mental health norms score, t(390) = -4.189, $p < .001$, Cohen’s $d = .50$. This statistic
had a moderate effect size per Cohen (1988). Males (assigned at birth) had a significantly lower mean score for community mental health norms ($M = 2.96, SD = .64$) than females ($M = 3.3, SD = .72$), indicating that males more often believed that community mental health norms were more positive.

**RQ4: Do gender nonconforming participants have significantly different mental health attitudes or norms than gender conforming participants?**

When comparing gender conforming and non-gender conforming participants, there is a significant mean difference in the attitudes toward mental health score between groups $t(54.9) = -2.88, p < .001$, Cohen’s $d = 0.52$. This statistic had a moderate effect size per Cohen (1988).

Both groups had good attitudes toward mental health, however the gender conforming participants ($M = 1.55, SD = .45$) were more likely to have negative views than non-gender nonconforming participants ($M = 1.34, SD = .35$). For community mental health norms, there was no statistically significant mean difference between gender conforming ($M = 3.21, SD = .72$) and gender nonconforming participants ($M = 3.27, SD = .66$), $t(390) = .45, p = .653$, Cohen’s $d = 0.09$.

**RQ5: Do sex assigned at birth, gender expression, and gender role beliefs predict mental health attitudes or norms?**

The first hypothesized linear regression model explained 27.7% percent of the variance in mental health attitudes, $F(3, 388) = 49.63, p < .001$. Controlling for sex assigned at birth and gender expression, gender role beliefs significantly predicted mental health attitudes, $\beta = .53, p < .001$. Neither sex assigned at birth nor gender expression were significant predictors of mental health attitudes in this model. (Table 4).
The second hypothesized linear regression model explained 5.5% percent of the variance in community mental health norms, $F(3, 388) = 7.48, p < .001$. Controlling for gender expression and gender role beliefs, sex assigned at birth significantly predicted mental health norms, $\beta = .18$, $p = .007$. Controlling for sex assigned at birth and gender expression, gender role beliefs significantly predicted mental health norms, $\beta = -.11, p = .030$. Gender expression was not a significant predictor of mental health norms in this model. (Table 5).

**RQ6: In gender nonconforming participants, does sex assigned at birth, gender expression, and gender role beliefs predict mental health attitudes and norms?**

The first regression model explained 24.6% percent of the variance in mental health attitudes in the subsample of participants who identified as non-binary, $F(3, 39) = 3.91, p = .016$. Controlling for sex assigned at birth and gender expression, gender role beliefs significantly predicted mental health attitudes, $\beta = .3, p = .047$. Neither sex assigned at birth nor gender expression were significant predictors of mental health attitudes in this model. (Table 4).

The second linear regression model explained 4.8% percent of the variance in mental health norms in the subsample of participants who identified as non-binary, $F(3, 39) = .61, p = .616$. Sex assigned at birth, gender expression, and gender role attitudes were all insignificant predictors of mental health norms. (Table 5).
Chapter 6-Discussion

This study found that gender role beliefs were the most significant predictor of mental health attitudes and norms when controlling for sex assigned at birth and gender expression. However, gender expression was significantly correlated to community mental health norms. Specifically, high levels of femininity were associated with beliefs that society has more stigmatizing norms towards individuals with mental illness.

Controlling for gender expression and gender role beliefs, sex assigned at birth significantly predicted mental health norms. Gender expression was not a significant predictor of mental health norms. Further, in this study sex assigned at birth and gender expression were highly correlated and no significant difference was found in these predictors for mental health attitudes or norms.

When looking at sex assigned at birth, females and males significantly differed in gender role beliefs, gender expression, mental health attitudes, and mental health norms. Males were associated with more traditional gender role beliefs than females. Males were also associated with more masculine expression of gender identity than females. Further, males were associated with more stigmatizing mental health attitudes of individuals with mental illness. However, females were associated with greater belief that society has stigmatizing mental health norms about individuals with mental illness than males. This result is likely due to the fact that women are more likely to experience psychological distress, have utilized mental health services and have better attitudes towards mental health care.

In the subsample of participants who identified as non-binary, when controlling for sex assigned at birth and gender expression, gender role beliefs significantly predicted mental health attitudes. Neither sex assigned at birth nor gender expression were significant predictors of
mental health attitudes in this model. Further, sex assigned at birth, gender expression, and gender role beliefs were all insignificant predictors of community mental health norms.

These findings add to existing literature by examining mental health attitudes through a new intersectionality. In this study, gender role beliefs are associated to mental health attitudes in both cisgender and gender nonconforming samples. This study adds to current literature that is clearly defining participants by either sex or gender. However, this study did not identify gender expression as a more significant predictor than sex assigned at birth for any of the four variables of interest. Gender expression was not more likely to predict mental health attitudes and community mental health norms than sex assignment at birth. This study did add evidence to the literature that females and sexual minorities are more likely to feel the stigma resulting in a more negative view of community mental health norms but this group is more likely to have better attitudes towards people with mental illness.

Gender role beliefs was a significant predictor of mental health attitudes. This supports the idea of traditional beliefs as constructed through meanings assigned by an individual and then passed on by sharing the symbol with others (Murphy-Erby et al, 2010). The symbol of stigma may be reflected in these results as females who are more likely to experience psychological distress have better attitudes towards individuals with mental illness but worse views about how society sees individuals with mental illness. These populations are more likely to have interacted with mental health services and therefore created different assigned meanings than the males. This study also demonstrated how stigma can be felt or held within different systems. The assessment of how an individual perceives community mental health norms is an interpretation of stigma in a macro system. Further, this study gives a glimpse into how the life course
experience of patriarchy and heteronormativity might shape male’s attitudes about not confronting mental illness with sensitivity.

This study also supported the Minority Stress model. The mental health attitudes for this gender nonconforming participants were significantly less stigmatizing than cisgender participants. This is likely due to these participants having experience with psychological distress as stated by the model. Therefore, they have less stereotypical views on mental health. This model is also a social change model and draws attention to these disparities.

**Strengths**

The present study measured gender identity on a spectrum in congruence with the social worker value of “respect and dignity for all humans” (NASW, n.d.). This study also gives support to the compelling critique that was made by Muehlenhard and Peterson (2011) who stated that research too often defines women and men by their biological sex, rather than a full of gender (Muehlenhard & Peterson, 2011). The present study also contributes to the model on minority stress. Specifically how minority status shapes attitudes and norm perceptions of individuals with mental illness. Finally, this study add to the literature on mental health attitudes as well as how individuals perceive mental health norms.

Measurement and sampling were also strengths in this study. This study used 2 validated self-report measures. The Gender Role Attitudes Scale (GRAS) and the Traditional Masculinity/Femininity-Scale (TMF) were validated and used in past research studies. Using these scales allowed for this study to have more consistent and accurate interpretations on the items of interest. The sample is large enough to have results that can be measured for effect size (Cohen, 1988). Additionally, utilizing a correlation analysis allowed for the present study to look at complex relationships with nuanced variables.
Limitations

While there were strengths in the samples for this study, there were possible sampling biases identified. The study was limited to convenience sampling, therefore the study results may not be generalizable in all settings. Additionally, because 65 participants did not complete questionnaires and were removed from the sample, there is the possibility of sampling bias in that the remaining participants were very interested in the topic or for some other reason chose to finish the survey. Further, this study utilized recruitment methods that were geared towards reaching university students in Arkansas. Arkansas is a southern state in the United States as well as republican state. Results on mental health attitudes and gender role beliefs could be skewed due to participants reached being socialized in a conservative setting.

Measurement limitations were also noted. The scale used to measure mental health attitudes was an adapted scale of the City Mental Illness Stigma Scale (Moore, Ayers, & Drey, 2017). This scale has not been validated or measured for reliability. Additionally, the Gender Role and Attitude Scale was originally published in Spanish (King, Singh, & Milner, 2019). The authors provided translations in their manuscript, but the translations were not validated. Finally, the Gender Role and Attitudes Scale included questions that were heteronormative in nature, implying that some roles be filled by either man or woman only. Therefore, excluding the representation of same-sex partnerships or non-binary partners.

Implications & Recommendations

Study results indicate that males were associated with carrying more stigmatizing attitudes than females. Mental health stigma was more often perceived as a community norm by females and gender nonconforming individuals than males. This may be because these two groups have experienced the effects of stigma. This important for social workers and mental
health professionals to be aware of who is more likely to have negative attitudes towards mental health and who is more likely to feel stigmatizing attitudes from the community. Mental health practitioners should also remain conscious of what symbols individuals bring with them into mental health services and be ready address felt stigma or stereotypes. Knowing the populations that are more likely to carry stigmatizing attitudes, social workers can be aware of how they talk about mental illness and be sensitive to these populations if they were to be referred. This study can inform social work practice to be more sensitive to the constructs and symbols that a client can carry into a therapeutic session.

Social workers should also be aware of the gendered differences in our society. This includes policies related to gender issues like Title IX and the Workplace Gender Equality Act. Further, there should be a promotion for social change in gender and sexual minority equality. Social workers can also advocate for masculine and traditional individuals to receive education on mental health. Literacy in mental health, cultural competence, and family engagement may also mitigate stigma's impact on seeking out services. Advocates may also work in policy change to undermine the structure that stigma that has in government (Corrigan, Druss, & Perlick, 2014). Interventions to help clients feeling the consequence from stigma should aim to help society see a mental illness as one piece of a complex human, rather than as the full picture (Coman & Sas, 2016).

Social workers and other professionals in academia should be cognizant of sex being mislabeled as gender in academic writing. Research should be geared toward ratifying this issue, whenever analyzing sex or gender. Future researchers with adequate resources should consider collecting data cross-culturally and using sampling techniques that are more representative. Future research should also study how the constructs of gender roles and gender expression
interact with age, race, and education levels. Due to this survey being self-report, it would also be beneficial to qualitatively assess mental health attitudes through clinical interviews.

**Conclusion**

This study supports the literature that reports that women were more likely to have positive mental health attitudes and more likely to feel that the societal norms surrounding mental health were stigmatizing (Koopmans & Lamers, 2007) and contributes to the literature that feminine expression was associated in the same way to mental health norms. Sex, gender role beliefs, and gender expression were all correlated to community mental health norms. Sex and gender role beliefs both were correlated to mental health attitudes. Further, gender role beliefs were predictive of mental health attitudes in both samples. Gender was not a better predictor of mental health attitudes or community mental health norms than sex was assigned at birth. Because of study limitations, these ideas should be addressed in a larger more representative study that clearly defines gender.
References


Centers for Disease Control and Prevention, Substance Abuse and Mental Health Services Administration, National Association of County Behavioral Health & Developmental Disability Directors, National Institute of Mental Health, The Carter Center Mental Health Program. *Attitudes Toward Mental Illness: Results from the Behavioral Risk Factor Surveillance System*. Atlanta (GA); Centers for Disease Control and Prevention; 2012.


## Appendix

Table 1

**Sociodemographic Characteristics**

<table>
<thead>
<tr>
<th>Sociodemographic</th>
<th>Total Sample (N = 392)</th>
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<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Sex</td>
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</tr>
<tr>
<td>Female</td>
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<tr>
<td>Male</td>
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<tr>
<td>Nonbinary</td>
<td>40</td>
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</table>
Table 2

Descriptive Statistics for gender role beliefs, gender expression, mental health attitudes and community mental health norms

<table>
<thead>
<tr>
<th>Measure</th>
<th>Full Sample (n=392)</th>
<th>NC Subsample (n=40)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>GRAS</td>
<td>1.66</td>
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<tr>
<td>TMF</td>
<td>4.36</td>
<td>4.36</td>
</tr>
<tr>
<td>MHA</td>
<td>1.52</td>
<td>.44</td>
</tr>
<tr>
<td>CMHN</td>
<td>3.22</td>
<td>.71</td>
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</table>

Table 3

Bivariate Correlations between TMF, GRAS, Mental Health Attitudes, and Community Mental Health Norms

<table>
<thead>
<tr>
<th></th>
<th>TMF</th>
<th>GRAS</th>
<th>MHA</th>
<th>CMHN</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMF</td>
<td>–</td>
<td>.557***</td>
<td>-.281**</td>
<td>.125</td>
</tr>
<tr>
<td>GRAS</td>
<td>.317***</td>
<td>–</td>
<td>.492***</td>
<td>-.115</td>
</tr>
<tr>
<td>MHA</td>
<td>-.165**</td>
<td>.528***</td>
<td>–</td>
<td>.109</td>
</tr>
<tr>
<td>CMHN</td>
<td>-.041*</td>
<td>-.109</td>
<td>-.158**</td>
<td>–</td>
</tr>
</tbody>
</table>

Note. Males were represented above the diagonal. Females were represented below the diagonal. 

TMF = Gender expression, GRAS = Gender role beliefs, MHA = Mental Health Attitudes, CMHN = Community Mental Health Norms.

*p < .05; **p < .01; ***p < .001.
Table 4

Regression Analysis of Mental Health Attitudes

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>β</th>
<th>B (SE)</th>
<th>95% CI</th>
<th>p-value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Sample (n=392)</strong></td>
<td></td>
<td></td>
<td></td>
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<td>.277***</td>
</tr>
<tr>
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<td>[-.116, .117]</td>
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<tr>
<td>Gender Expression</td>
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<td>.001(.020)</td>
<td>[-.038, .040]</td>
<td>.956</td>
<td></td>
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<tr>
<td>Gender Role Beliefs</td>
<td>.527***</td>
<td>.424(.036)</td>
<td>[.354, .494]</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td><strong>NC subsample (n=40)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.246*</td>
</tr>
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<td>[-.015, .428]</td>
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<tr>
<td>Gender Expression</td>
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<td>-.097 (.062)</td>
<td>[-.223, .029]</td>
<td>.128</td>
<td></td>
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<tr>
<td>Gender Role Beliefs</td>
<td>.299*</td>
<td>.327 (.159)</td>
<td>[.055, .650]</td>
<td>.047</td>
<td></td>
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</tbody>
</table>

Note. NC = Gender nonconforming participants.

β = Standardized coefficient; B = Unstandardized coefficient; SE = Standard error; 95% CI = 95% confidence interval for the unstandardized coefficient; R² = variance explained by the model.

*p < .05; **p < .01 ***p < .001.

Table 5

Regression Analysis of Community Mental Health Norms

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>β</th>
<th>B (SE)</th>
<th>95% CI</th>
<th>p-value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Sample (n=392)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.055***</td>
</tr>
<tr>
<td>Sex</td>
<td>.178**</td>
<td>.294(.109)</td>
<td>[.080, .508]</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>Gender Expression</td>
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<td>.004(.037)</td>
<td>[-.068, .076]</td>
<td>.912</td>
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</tr>
<tr>
<td>Gender Role Beliefs</td>
<td>-.111*</td>
<td>-.143(.066)</td>
<td>[-.272, -.014]</td>
<td>.030</td>
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<tr>
<td><strong>NC subsample (n=40)</strong></td>
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<td></td>
<td></td>
<td></td>
<td>.048</td>
</tr>
<tr>
<td>Sex</td>
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<td>[-.169, .781]</td>
<td>.200</td>
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<tr>
<td>Gender Expression</td>
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<td>-.002 (.133)</td>
<td>[-.273, .269]</td>
<td>.987</td>
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<tr>
<td>Gender Role Beliefs</td>
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<td>.049 (.341)</td>
<td>[-.642, .740]</td>
<td>.886</td>
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</table>

Note. NC = Gender nonconforming participants.

β = Standardized coefficient; B = Unstandardized coefficient; SE = Standard error; 95% CI = 95% confidence interval for the unstandardized coefficient; R² = variance explained by the model.

*p < .05; **p < .01 ***p < .001.
Id: 46359
From: wmeeks@uark.edu
Recipients: aserazo@uark.edu, ajfergus@uark.edu, ihranik@uark.edu, knhartung@uark.edu, mazenkiev@uark.edu
Channel: Notification Channel
Protocol: Notification System
Type: FYI
Priority: Normal
Send Date: 2019-12-20T10:51:48.000-06:00
Removal Date: none

Title: Protocol 1911234729 is Approved as Exempt

Content:

The IRB protocol number 1911234729, principal investigator Ariel E Razo, has had the action "Protocol Exempt Approval" performed on it.
The approval action was executed by Windwalker, Re. Additional information and further actions can be accessed through the system. You can click the view correspondence link to view your approval letter.