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Depression and anxiety: Experiences, symptoms, and help seeking attitude differences between males and females

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By

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Abstract

The current study examined the differences in experiences of depression and anxiety, symptoms, and help-seeking behaviors between males and females. The importance of this research was to better understand the impact that sex has on how individuals are affected by and live with mental illnesses like depression and anxiety. Participants took an online survey that asked them a series of questions about their experiences with mental illness, their perceptions of mental illness, and their ideas toward mental health assistance. T-test analyses and correlations were conducted in order to better understand how males and females differ when it comes to mental illness. The findings can help provide new insights into how care should be fine-tuned for males and for females, and how the best and most effective help can be provided to those who suffer from depression and anxiety.

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Introduction

Many people suffer from depression and anxiety, but these are not one size fits all illnesses. According to the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (American Psychiatric Association, 2013), a person must experience symptoms like depressed mood, weight loss, a feeling of fatigue, and feelings of worthlessness for at least two concurrent weeks to be diagnosed with depression. In order to be diagnosed with anxiety, the DSM-5 states to look for feelings of excessive worry and anxiety that are difficult to control, with symptoms like fatigue, restlessness, or difficulty concentrating that appear more often than they do not for a period of three months (American Psychiatric Association, 2013). These symptoms also must be unable to be explained by another ailment.

This is an important topic that deserves a closer look due to the amount of individuals that suffer from depression and anxiety on a daily basis. According to the National Institute of Mental Health, about 18% of Americans older than 18 will experience anxiety in their life, but only 37% will work to seek treatment; 6.7% of American adults will experience a depressive episode over the course of their lifetime (NIMH 2021). If more males and females were aware of how mental illness tends to present in their sex, perhaps we could do more to assist them. Perhaps we could come up with more effective treatments and understand those with depression and anxiety a bit more. Mental health impacts every aspect of our lives. It is difficult to be successful when struggling with the hurdles of mental illness, which is why it is important to better understand the intricacies of mental health. If efforts are going to be made to support people with mental health issues, then our approaches need to be tailored in a way that makes the most impact, and an aspect that can make a big difference in mental health is sex.

Prevalence Rates

Prevalence rates of mental illnesses are a topic of research that has seen many studies and discussions. A meta-analysis that examined 73 articles by Afifi (2007) found that young boys tend to experience conduct disorders (which are often precursors to anxiety and social disorders) at almost three times the rates of young girls. During adolescence, young girls experience more depression and eating disorders when compared to young boys. They also attempt suicide more often than boys, but boys complete suicide more frequently. Teenage girls are statistically significantly more likely than teenage boys to experience depression and anxiety. When dealing with adults, males tend to experience higher rates of substance abuse issues and antisocial personality disorder than females do. Females were found to be slightly more likely to experience instances of mild depression than severe depression.

Rates of mental illness can depend on the amount of support that one has. Afifi (2007) also found that while females are not inherently more vulnerable to negative events than males, females who are without a proper support system are more vulnerable than males who also lack a proper support system. One study found that females with less support are more susceptible to depression, whereas females with adequate amounts of support are less susceptible (Kendler et al., 2006). To find this result, the researchers assessed groups of twins. The twins, who were male and female, were asked to report their depressive symptoms over the last 12 months in particular, as well as what they have experienced over their lifetime. This link between social support and depression was not found in males, however (Kendler et al., 2006). This difference in prevalence rates based on amounts of social support cannot fully explain these sex differences though, because even after controlling for social support, females still experienced higher rates of depression.

Eaton et al. (2012) conducted a survey in order to further understand the prevalence rate differences between males and females. To do this, they administered a survey to 43,093 individuals, 57% of whom were female. They also conducted interviews with their participants. They found that 22.9% of the female participants reported experiencing depression at least once, and 10.1% reported experiencing it within the last 12 months. Of the male participants, 13.1% reported experiencing depression at least once, and 5.5% reported experiencing it in the last 12 months. When it came to generalized anxiety, 5.8% of females reported experiencing it at least once, and 3.1% reported experiencing anxiety within the last 12 months. For males, 3.1% reported experiencing anxiety at least once, and 1.4% reported experiencing it in the last 12 months. These results show that females report their anxiety and depression more often than males do; however, while females report more instances of depression, anxiety, phobias, and panic disorder, males report more instances of drug dependence and antisocial personality disorder (Eaton et al., 2012).

The average rate of clinical depression in the United States is about 6.6%, but for males that percentage is about 3 to 5%, and for females it is 8 to 10% (Kessler et al., 2003). A study conducted in 2012 found that females have almost double the prevalence rates of major depression, generalized anxiety, and panic disorder when compared to males (Eaton et al., 2012). A study conducted by Gibbons et al. (2015) found a slight correlation between gender and ability to identify symptoms of mental illness, which might provide a reason for the difference in prevalence rates between males and females. Of males, 52% were able to correctly identify symptoms of various mental illnesses, and 64% of females were able to accomplish the same task.

Most recently, Liu et al. (2021) conducted a study looking specifically at healthcare workers during the Covid-19 pandemic. The researchers found that female healthcare workers reported higher rates of depression, anxiety, stress, and insomnia when compared to the rates of their male counterparts. Even after accounting for potential confounding factors, female healthcare workers were still experiencing higher rates of mental health problems and were considered more vulnerable to all types of mental health issues than male healthcare workers.

Symptom Differences

Not only are there prevalence differences in mental health between sexes, people of different sexes can also exhibit symptoms of the same mental illnesses in completely different ways. Males tend to seek more unhealthy coping mechanisms when compared to females. For example, males tend to abuse drugs and alcohol as a form of escapist behavior (Cole, 2018). Other symptoms that might not stick out at first glance include other forms of escapist behavior, like spending much more time at work or at the gym, engaging in risky behaviors like drug use or speeding, inappropriate anger, and even physical symptoms like headaches and pains (Cole, 2018). These are symptoms that can be attributed to other issues, like experiencing a traumatic event, suffering from certain cancers, as a result of peer pressure, and more, making them difficult to identify.

A literature review conducted in 2000 by Piccinelli and Wilkinson found that there is a difference in the way that depression specifically manifests between males and females. Females experience more issues with anxiety, getting to and staying asleep, a condition called anxious somatic depression (Silverstein 1999). Females tend to fixate on their feelings instead of turning away from them (Cole 2018). Piccinelli and Wilkinson also found that females tend to

experience more internal issues like anxiety whereas males experience more external issues like alcoholism and drug use.

A study conducted in the Netherlands by Schuch et al. (2013) found that females usually experience an earlier onset of major depressive disorder (about 28 years old when compared to males at 31), and experience more comorbidities like agoraphobia and panic disorder. On the other hand, males with major depressive disorder tend to experience more comorbidities like alcohol and drug use and abuse.

Help Seeking Attitudes

Help-seeking attitudes in this context is defined as how individuals feel toward mental health issues and how they perceive others with mental illnesses. The overall consensus on this topic is that females utilize mental health resources more often than males. In a 1987 study by Leaf and Bruce, participants underwent a series of interviews and it was determined that overall, only about 9% of the study participants reported seeking mental health resources. Instead, people who are suffering from mental illness tend to seek out general health care, but females are almost twice as likely as males to report utilization of mental health resources.

Females in general show more positive attitudes toward seeking help than males do (Leong & Zachar, 1999). This was found by administering a survey called the Cohen and Struenings (1962) Opinions about Mental Illness Scale, which grouped individuals into five categories. The categories were authoritarianism, which views mentally ill people as inferior; benevolence, which is a nurturing view of mentally ill people; mental hygiene ideology, which views mental problems as treatable illnesses; social restrictiveness, which views mentally ill people as dangerous to society; and interpersonal etiology, which views mental illness as arising from personal experience. Leong and Zachar (1999) found that while there were no statistically

significant differences in the groups between males and females, females were slightly more likely to experience benevolence toward a person suffering from a mental illness than males.

Schuch et al. (2013) also found that females in the Netherlands have a tendency to utilize more alternative healthcare methods when it comes to mental illness, and males utilize more mental health care organizations. This study also found no differences in frequency of therapeutic drug use or counseling. This result is slightly different from the results found by American researchers, which could be attributed to cultural differences between the Netherlands and America.

Further, Wendt and Shafer (2016) found that males tend to express less emotion and seek help less frequently than females do, and that is consistent regardless of age, race, socioeconomic status. They found that the gender gap that exists in seeking help fundamentally comes down to the attitudes that males and females have toward seeking help. In the same study, it was found that males tend to encourage people to seek help from informal sources like friends, and encourage seeking help from formal sources like health care professionals less frequently. In addition, males have a tendency to turn more toward work and other forms of independence when they are faced with a mental health issue, making recovery more difficult, but it is possible for males to overcome this issue if they can first develop a strong relationship with a healthcare professional (Latalova et al, 2014).

Attitudes toward mental health can make a big impact on help seeking behaviors. In one study, both males and females were presented with a series of mental health scenarios and asked to evaluate the symptoms and the severity of symptoms (Gibbons et al., 2015). Males were found to have not only a more difficult time identifying the symptoms, but they were also more likely to find the symptoms not as severe, expressing that the sufferer should be able to handle their

issues on their own (Gibbons et al, 2015), as opposed to the females who generally expressed more sympathy.

Summary of Research To Date

Overall, sex tends to play a very large role in how people see and respond to mental illness. Females experience more depression and anxiety, while males experience more issues with substance abuse and personality disorders, but this difference could be due to the fact that males struggle to identify symptoms of mental illness more than females do. Males also tend to be more reluctant to seek help with their mental illnesses, and tend to see symptoms as less serious compared to females. Females also tend to experience more internalizing symptoms like anxiety and issues with getting to and staying asleep, while males experience more anger and substance issues. There are some limitations in this research, like the fact that research on symptom differences is few and far between, and that many of the studies were conducted several years ago.

Current Study

The current study aimed to address the limited information that is available on this topic, primarily examining differences in symptoms of depression and anxiety between males and females. It also sought to expand on what has already been found when it comes to mental health experiences and help-seeking behaviors, which have both received more attention than symptom differences. The current study sought to answer three research questions. The first research question was, do males and females experience differences in mental illnesses, specifically anxiety and depression? It was hypothesized that females would experience higher degrees of both depression and anxiety, in part because they might be slightly better at recognizing

symptoms. Females are also socialized to seek help for their issues more than males are, which could lead to the difference in diagnosis rates (Afifi, 2007; Leaf & Bruce, 1987).

Second, do males and females experience differences in the symptoms of their mental illnesses? Previous research has found that males, because of their tendency to develop more externalizing behaviors, experience more symptoms of stress, anger, etc., while females experience more internalizing symptoms, like anxiety, sadness, fatigue, etc. (Piccinelli & Wilkinson 2000). Therefore, when averaging across symptoms, it was hypothesized that there would be no differences between males and females.

Finally, do males and females seek help for their mental illness differently? It was hypothesized that males would be less likely to seek help because they have been conditioned to not be as receptive to mental health treatment and are more likely to view mental health issues as not as serious (Latalova et al. 2014). It was also hypothesized that females would be more receptive to mental health assistance, which could lead them to seeking help more often than males (Gibbons et al., 2015; Leong & Zachar, 1999; Schon, 2010).

Method

Participants

The current study sampled from college aged students who attend Georgia Southern University. Not only was this a sample that was easy to access and utilize for this research, they are also of a good age for this research as well. Many studies and measures of depression and anxiety ask about the time after turning 18, and are written specifically for an age group that is older than 18 (Schön, 2010). College is also a transitional time for people that tends to bring out issues that might not have been visible a year or so ago (Boonk, 2018). The study population consisted of 180 (26%) male participants and 511 (74%) female participants, for a total of 691

participants. Of those participants, 177 (25.7%) identified as male, 499 (72.4%) identified as female, and 13 (1.8%) identified as non-binary, other, or they had a preference to not share that information. With regard to race and ethnicity, 410 participants reported their race as White (59.3%), 162 participants reported their race as Black or African American (23.4%), 45 participants listed their race as Latino or Hispanic (6.5%), and the remainder of the participants noted their race as being more than one of these options (10.7%). For age, 265 (38.4%) of the participants were 18 years old, 190 (27.5%) were 19 years old, 101 (14.6%) were 20 years old, 62 (9%) were 21 years old, 21 (3%) were 22 years old, and 52 (7.5%) were 23 years old or older ($M = 2.33$, $SD = 1.5$). For mental health, 274 (39.6%) participants reported that they had been diagnosed with a mental illness in the past, and the remaining participants had not.

Procedure

Participants were given the opportunity to fill out a survey at a single time point based on their personal experiences with depression and anxiety. Participants were recruited through Georgia Southern's SONA research system as well as through class announcements. The survey was administered online through the SONA system. All participants first filled out an informed consent agreeing to participate in the study. For those who did participate, the survey ended with a debriefing statement listing several online and local mental health resources. Participants were compensated with SONA research credits for their classes.

Measures

Data was collected through online surveys targeting students' opinions about mental illnesses, attitudes toward help-seeking, depression and anxiety symptoms, and demographic information such as sex, age, race, year in school, and socioeconomic status.

The Depression Anxiety Stress Scales (Lovibond & Lovibond 1995) was used to measure participants' amount of depression, anxiety, and stress. This is a twenty-one item measure, with items like "I felt that life was meaningless" ranked on a four-point Likert scale (1 = *Did not apply to me at all*, 4 = *Applied to me very much, or most of the time*). The higher the score, the more of each type of symptom the participant experienced. This measure had a high internal reliability for stress (α = .86), depression (α = .94), and anxiety (α = .89).

The Self Reporting Questionnaire-Adapted Version (Hathi et al. 2021) was used to look at the symptoms that participants experienced. It presented questions like "Do you have trouble sleeping?" and "Has the thought of ending your life been on your mind?" This measure had twenty items measured on a five point scale (1= *every day*, 5 = *never)*. The higher the score, the less symptoms of mental illness a participant experienced. This measure had high internal reliability (α = .96).

The Community Attitudes Toward the Mentally Ill Scales (Taylor & Dear 1981) includes forty items on a five point scale (1 = *strongly agree*, 5 = *strongly disagree*). It sought to explore the attitude that participants had toward those who suffer from mental illness, and by extension, mental illness itself. This measure asked questions like "As soon as a person shows signs of mental disturbance, he should be hospitalized" and "The mentally ill are a burden on society." The higher the score, the more negative of an attitude the participant has toward those that suffer from mental illness. This measure is referred to as Mental Ill Attitudes Mean in the results. This measure had high internal reliability (α = .94).

Fischer and Turner's (1970) Attitudes Toward Seeking Professional Psychological Help was used to measure participants' help-seeking attitudes. Items are ranked on a 4-point Likert scale (1 = *strongly disagree*, 4 = *strongly agree*), with a higher score indicating a more negative

attitude toward psychological help. This measure presented statements like “A person with a strong character can get over mental conflicts by himself, and would have little need of a psychiatrist.” This measure is referred to as Help Attitudes Mean in the results. This measure had high internal reliability (α = .88).

The Mental Help Seeking Attitudes Scale (Hammer et al., 2018) was also used to assess help-seeking attitudes. This is a nine item scale intended to measure how participants view seeking professional help, either favorably or unfavorably. The higher the score, the more negative the participant’s attitude toward seeking help for mental illness. This measure presented items like “If I had a mental health concern, seeking help from a mental health professional would be…” with “useful” on one end and “useless” on the other, for example, and the participant was to select the side that they agreed most with. This measure is referred to as Mental Help Seeking Attitudes Mean in the results. This measure had a high internal reliability (α = .92).

Results

Preliminary Analyses

Correlations across all measures are presented in Table 1. The two measures that looked at a person’s attitude toward seeking help for mental illness were very slightly positively correlated (r = .58, p < .01), meaning as the score in one measure increased, the score in the other also increased, as was expected. The scores for stress and depression were positively correlated (r = .63, p < .01), as were the scores for stress and anxiety (r = .68, p < .01). Depression and anxiety were also positively correlated (r = .62, p < .01). The more stress or depression or anxiety that a participant reported experiencing, the more of the other symptom measures they reported as well. Measures of depression (r = .64, p < .01), anxiety (r = .68, p <

.01), and stress ($r = .67$, $p < .01$) were also positively correlated with symptoms. There was also a positive correlation between people who reported being diagnosed with a mental illness and those who reported seeking help for their mental issues in the past ($r = .83$, $p < .01$).

Table 1

Correlations across all Outcome Variables

Outcome	1	2	3	4	5	6	7
1. Depression Sum	-						
2. Anxiety Sum	.62**	-					
3. Stress Sum	.63**	.68**	-				
4.Symptoms Mean	.68**	.67**	.64**	-			
5. Mental Ill Attitudes Mean	-.18**	-.22**	-.30**	.25**	-		
6. Help Attitudes Mean	-.01**	-.03**	-.06**	.04	.48**	-	
7. Mental Help Seeking Mean	.07**	0	.03	0	.27**	.58**	-

** $p < .01$

Sex Differences

To answer the main research questions in this study, a series of independent sample t-tests were conducted. The t-test results revealed that the differences between males and females for every dependent variable were statistically significant, each one having a significance value of less than 0.05 (see Table 2).

Females ($M = 16.6$, $SD = 5.02$) reported feeling statistically significantly more stressed than males ($M = 14.43$, $SD = 4.94$; $t(686) = -5.01$, $p < .01$). Females also reported feeling more depressed ($M = 13.34$, $SD = 5.72$) when compared to males ($M = 12.16$, $SD = 5.28$; $t(685) = -2.41$, $p < .05$). Further, females experienced more anxiety ($M = 13.03$, $SD = 5.14$) when compared to male participants ($M = 10.54$, $SD = 4.25$; $t(687) = -5.82$, $p < .01$). Females also reported more physiological symptoms of depression and anxiety ($M = 3.15$, $SD = .81$) than males ($M = 3.79$, $SD = .82$; $t(685) = 9.09$, $p < .01$).

Males (M = 2.36, SD = 1.11) reported more negative attitudes toward seeking help toward seeking help for mental illness, compared to females (M = 1.82, SD = .98; $t(686) = 6.15$, $p < .01$). Males (M = 2.32, SD = .39) also reported more negative attitudes toward seeking help in the other section that measured attitude, when compared to females (M = 2.14, SD = .38; $t(688) = 5.37$, $p < .01$). Further, males (M = 2.22, SD = .57) reported more negative attitudes toward those suffering from mental illnesses compared to females (M = 2.00, SD = .52; $t(687) = 4.77$, $p < .01$).

Table 2

Sex Differences across all Outcome Variables

Outcome	*M* (*SD*)		df	*t*-value	Cohen's *d*
	Males	Females			
Depression Sum	12.16 (5.28)	13.34 (5.72)	685	-2.41**	-.21
Anxiety Sum	10.54 (4.25)	13.03 (5.14)	687	-5.83**	-.51
Stress Sum	14.43 (4.94)	16.6 (5.02)	686	-5.01**	-.43
Symptoms Mean	3.79 (.82)	3.15 (.81)	685	9.09**	.79
Mental Ill Attitudes Mean	2.22 (.57)	2.00 (.52)	687	4.77**	.41
Help Attitudes Mean	2.31 (.39)	2.14 (.38)	688	5.37**	.47
Mental Help Seeking Mean	2.36 (1.11)	1.82 (.98)	686	6.15**	.53

** $p < .01$

Discussion

This study sought to expand upon the existing literature surrounding the relationship between biological sex and mental health experiences. There were three main questions that were meant to be answered through this study. Do males and females experience differences in mental illnesses, specifically anxiety and depression? Do males and females experience differences in the symptoms of their mental illnesses? Do males and females seek help for their mental illness differently? It was hypothesized that females would experience higher rates of both depression and anxiety, which was supported by the results: Females experienced higher rates of

depression, anxiety, and stress overall compared to males. The second hypothesis was that males and females would not meaningfully differ from one another based on a composite of externalizing and internalizing symptoms. This hypothesis was not supported as females had higher scores on a composite of symptoms compared to males. It was further hypothesized that males would be less likely to seek help because they have been conditioned to not be as receptive to mental health treatment while females would be more receptive to mental health assistance. This hypothesis was supported: Males were found to have more negative attitudes toward people with mental illnesses, mental illness itself, and seeking help for their mental illnesses. Females, on the other hand, reported more positive attitudes toward the same things.

Implications and Future Directions

More than 50% of people will be diagnosed with a mental health issue at some point in their lives (Ishikawa et al., 2015) so learning about how these illnesses affect people in general is a very important task. Learning about how symptoms differ, how mental illnesses manifest, how people feel about getting help, and how other people view their own or other peoples' mental illness can only help practitioners and scientists to better assist those who are suffering from mental illness. Not only is learning about these topics important in general, but learning about how mental illness can affect people differently based on characteristics like sex is also an important avenue of research. No two people are exactly the same, so forming treatment plans based on data collected from just one sex, or without paying attention to sex differences at all is a misstep. Males and females experience issues with mental illness in different ways, at different intensities, and at different times. These results have demonstrated that, and now we can use these results to improve the ways that we treat males and females with depression and anxiety.

Knowing that males experience different symptoms than females do, we can improve and personalize screening tests, similarly to the way that screenings for ADHD differ between sexes (Rucklidge, 2010; Klefsjö et al., 2021). For example, if we discover that females tend to experience anxiety hand-in-hand with their depression, that is something that we can screen for and be careful not to miss. If males experience more anger alongside their other symptoms, being aware of that would help professionals to ask the right questions and diagnose individuals more accurately. If we discover that females respond better to healthcare professionals and therapy, and perhaps males respond better to medication and group therapy, then we can optimize treatment, and help more people more efficiently. Being aware that depression in males tends to manifest in different ways can help the people around that individual to pick up on the symptoms more quickly and get the person more efficient, targeted help. Thus, more research in addition to the current study is needed to better understand the differences between males and females on mental health experiences and attitudes in order to better target interventions and treatments.

Limitations and Future Research

The current study did include several limitations that should be considered in the future. First, the current study utilized self-report data, therefore, there is a possibility that participants were not completely honest in their responses, no matter how anonymous the surveys were kept. The topics that were broached in this survey have the potential to make participants feel uncomfortable, which could lead to participants giving socially desirable responses and inaccurate results. Further, these results can only tell us what the differences are between males and females, and not why those differences exist, because the current study used a single time point, correlational design.

In addition, the survey was posted on a platform that is primarily utilized by psychology students, although it is not restricted to just psychology students. However, because of this, our sample came to be composed mostly of females because of the fact that females make up a majority of social science students (Trusz, 2020). This makes it difficult to know for certain if our results can be generalized to the greater population as a whole, because our participants were not at a 50/50 split along sex, but rather closer to a 25/75 split. The males who did take the survey, being predominantly psychology majors, may have had less negative attitudes toward mental illness than the average man who is not a psychology major or as familiar with mental illnesses and treatments.

This study also only examined rates of depression, anxiety, and elements of stress. Participants who might have experiences with other mental illnesses like bipolar disorder or schizophrenia would not have been able to accurately record their experiences with this particular survey and study. Future researchers might benefit from analyzing mental illnesses outside of depression and anxiety, which might allow them to also get a better grasp on the particular differences between males and females. This study also only looked at a composite score of overall symptoms; to further understand the exact differences between males and females, it might be beneficial for future researchers to look at specific symptoms, and compare those across sex lines, for example, anger, stress, sadness, eating issues, hygiene issues, etc.

It is also difficult to generalize these results to other generations, because we only took data from one, small age group. In the future, it would be useful to see how these results might differ if the exact same study was conducted using a more senior population. Perhaps an older generation would have different attitudes toward mental health than the young adult population that we surveyed. Older generations may utilize fewer mental health resources because they do

not want to be stigmatized. Mental illness may come with a taboo for older generations, which could lead to older generations taking mental illness less seriously or having more of a negative attitude toward mental illness and treatment (Quinn et al., 2009).

It would also be useful to examine further the different help-seeking behaviors that people partake in when it comes to mental health, especially when compared to their help-seeking attitudes. The current study only looked at help-seeking attitudes, not actually behaviors of participants. Do people with more positive attitudes toward mental illness utilize more resources? Are they more receptive to mental health assistance? Future studies should consider building on the current research to examine these questions.

References

Afifi, M. (2007). Gender differences in mental health. *Singapore medical journal*, 48(5), 385.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Boonk, L., Gijselaers H. J.M. ,Ritzen H., Brand-Gruwel S., A review of the relationship between parental involvement indicators and academic achievement, *Educational Research Review*, Volume 24, 2018, Pages 10-30, ISSN 1747-938X, https://doi.org/10.1016/j.edurev.2018.02.001.

Cole B. P. (2018). Predictors of men's psychotherapy preferences. *Counselling and Psychotherapy Research*, 19(1), 45-56. https://doi.org/10.1002/capr.12201

Eaton, N. R., Keyes, K. M., Krueger, R. F., Balsis, S., Skodol, A. E., Markon, K. E., Grant, B. F., & Hasin, D. S. (2012). An Invariant Dimensional Liability Model of Gender Differences in Mental Disorder Prevalence: Evidence from a National Sample. *Journal of Abnormal Psychology,* 121(1), 282-288. https://doi.org/10.1037/a0024780

Fischer, E. H., & Turner, J. L. (1970). Attitudes Toward Seeking Professional Help Scale [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t04321-000

Gibbons, R. J., Thorsteinsson, E. B., & Loi, N. M. (2015). Sex differences in beliefs and attitudes towards mental illness: An examination of mental health literacy in a community sample. PeerJ PrePrints, doi:http://dx.doi.org/10.7287/peerj.preprints.965v1

Hammer, J. H., & Parent, M. C., & Spiker, D. A. (2018). Mental Help Seeking Attitudes Scale (MHSAS): Development, reliability, validity, and comparison with the ATSSPH-SF and IASMHS-PO. Journal of Counseling Psychology, 65, 74-85. doi: 10.1037/cou0000248

Hathi, P., Coffey, D., Thorat, A., & Khalid, N. (2021). Self-Reporting Questionnaire--Adapted Version [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t82711-000

Ishikawa, H., Kawakami, N., & Kessler, R. C. (2015). Lifetime and 12-month prevalence, severity and unmet need for treatment of common mental disorders in Japan: Results from the final dataset of World Mental Health Japan Survey. *Epidemiology and Psychiatric Sciences*, 25(3), 217–229. https://doi.org/10.1017/s2045796015000566

Kendler, K. S., Gatz, M., Gardner, C. O., & Pedersen, N. L. (2006). A Swedish national twin study of lifetime major depression. *The American journal of psychiatry,* 163(1), 109–114. https://doi.org/10.1176/appi.ajp.163.1.109

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., Howes, M. J., Normand, S. L., Manderscheid, R. W., Walters, E. E., & Zaslavsky, A. M. (2003). Screening for serious mental illness in the general population. *Archives of general psychiatry*, 60(2), 184–189.

Klefsjö, U., Kantzer, A. K., Gillberg, C., & Billstedt, E. (2020). The road to diagnosis and treatment in girls and boys with ADHD – gender differences in the diagnostic process. *Nordic Journal of Psychiatry*, 75(4), 301–305. https://doi.org/10.1080/08039488.2020.1850859

Latalova, K., Kamaradova, D., & Prasko, J. (2014). Perspectives on perceived stigma and self-stigma in adult male patients with depression. *Neuropsychiatric disease and treatment*, 10, 1399–1405. https://doi.org/10.2147/NDT.S54081

Leaf, P., & Bruce, M. (1987). Gender Differences in the Use of Mental Health-Related Services: A Re-Examination. *Journal of Health and Social Behavior*, 28(2), 171-183. doi:10.2307/2137130

Leong, F. T., & Zachar P. (1999). Gender and opinions about mental illness as predictors of attitudes toward seeking professional psychological help. *British Journal of Guidance & Counselling*, 27(1), 123-132. https://doi.org/10.1080/03069889908259720

Liu, S., Yang, L., Zhang, C., Xu, Y., Cai, L., Ma, S., Wang, Y., Cai, Z., Du, H., Li, R., Kang, L., Zheng, H., Liu, Z., & Zhang, B. (2021). Gender differences in mental health problems of healthcare workers during the coronavirus disease 2019 outbreak. *Journal of Psychiatric Research*, 137, 393–400. https://doi.org/10.1016/j.jpsychires.2021.03.014

Lovibond, S. H., & Lovibond, P. F. (1995). Depression Anxiety Stress Scales [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t01004-000

National Institute of Mental Health. (2021, January). Mental Illness. Www.nimh.nih.gov; National Institute of Mental Health. https://www.nimh.nih.gov/health/statistics/mental-illness

Piccinelli, M., & Wilkinson, G. (2000). Gender differences in depression. Critical review. *The British journal of psychiatry: The Journal of Mental Science*, 177, 486–492. https://doi.org/10.1192/bjp.177.6.486

Quinn, D. M., & Chaudoir, S. R. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological

distress and health. *Journal of Personality and Social Psychology*, 97(4), 634–651. https://doi.org/10.1037/a0015815

Rucklidge, J. J. (2010). Gender differences in attention-deficit/hyperactivity disorder. *Psychiatric Clinics of North America*, 33(2), 357–373. https://doi.org/10.1016/j.psc.2010.01.006

Schön, U. (2010). Recovery from severe mental illness, a gender perspective. *Scandinavian Journal of Caring Sciences*, 24(3), 557-564. https://doi.org/10.1111/j.1471-6712.2009.00748.x

Schuch, J. J. J., Roest, A. M., Nolen, W. A., Penninx, B. W. J. H., & de Jonge, P. (2014). Gender differences in major depressive disorder: Results from the Netherlands Study of depression and anxiety. *Journal of Affective Disorders*, 156, 156–163. https://doi.org/10.1016/j.jad.2013.12.011

Silverstein, B. (1999). Gender difference in the prevalence of clinical depression: The role played by depression associated with somatic symptoms. *American Journal of Psychiatry*, 156(3), 480–482. https://doi.org/10.1176/ajp.156.3.480

Taylor, S. M., & Dear, M. J. (1981). Community Attitudes Toward the Mentally Ill Scales [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t12944-000

Trusz, S. (2020). Why do females choose to study humanities or social sciences, while males prefer technology or science? some intrapersonal and interpersonal predictors. *Social Psychology of Education*, 23(3), 615–639. https://doi.org/10.1007/s11218-020-09551-5

Wendt, D., & Shafer, K. (2015). Gender and attitudes about mental health help seeking: Results from national data. *Health & Social Work*, 41(1). https://doi.org/10.1093/hsw/hlv089