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GENDER DIFFERENCES IN COMMUNICATION WITH ONE'S MOTHER
AND FATHER AND ITS EFFECTS ON FEELINGS OF DEPRESSION
AMONG YOUNG ADULTS

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
Social Science

by
Ethan Blanchard
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Accepted by:
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ABSTRACT

Depression among young adults is a growing concern that becomes more severe every year. Several factors can contribute to one's feelings of depression including how much someone communicates their feelings to their parents. Communication with parent's relationship to depression among young adults is a largely unexplored area of research that this study covers. The purpose of this study is to test gender differences in communication with one's parents and how parental communication affects feelings of depression. Using the third wave of the National Study of Youth and Religion (NSYR), a nationally representative data set consisting of 1680 young adults living in the United States, this study tests several hypotheses analyzing this relationship. I show that young adults who communicate their feelings to their parents have lower feelings of depression, young adult women are generally more depressed than young adult men, young adults are more likely to communicate their feelings to the same gendered parent, and communicating with either one's mother or father affects feelings of depression at about the same rate. The results found in the present analysis differ from those found in prior research. This is likely due to differences between adolescents and young adults. These contrary results encourage that more research in this area be done focusing on young adults or older age groups.

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CHAPTER ONE

INTRODUCTION

Depression among young adults is a serious public health concern and it may be growing more prevalent. Most studies of young adults find that around 15 percent show signs of depressive feelings (Eisenberg, Gollust, Golberstein, & Hefner 2007; Sahoo & Khess 2010; Zivin, Eisenberg, Gollust, & Golberstein 2009). Furthermore, depression among young adults appears to be growing more prevalent over time. Recent studies show reported diagnoses of depressive disorders has increased (Hunt & Eisenberg 2010; Mojtabai, Olfson, & Han 2016). Depression among young adults and any increase in these rates is of broad concern because harmful side effects result from depression.

Various studies show it can cause a significant drop in work performance that may result in lower grades in school or punishment by an employer (Lerner et al. 2010), is related to lower physical well-being (Moussavi et al. 2007), and can encourage self-harm such as substance abuse (Buckner, Keough, & Schmidt 2007) and suicide (Nrugham, Holen, & Sund 2010). Depression is not merely about feeling sad. It causes harm, can ruin lives, and potentially end them.

Various studies show perceived social support can act as a buffer against depression (Ross & Mirowsky 1989; Wang, Cai, Qian, & Peng 2014; Zhou, Zhu, Zhang, and Cai 2014). Those who report high social support show lower levels of depression (Cobb 1976). Outside one's peers, support from parents is one of the most important sources of social support for young adults (Bokhorst, Sumter, & Westenberg 2010;

Friedlander, Reid, Shupak, & Cribbie 2007; Gariépy, Honkaniemi, & Quesnel-Vallée 2016). Social support, however, is a broad term that encompasses many different attitudes a person may have concerning how they are supported. In fact, there is much less research using specific measures of social support. This study aims to fill this gap in the literature by examining how actively communicating one's problems to their parents is associated with levels of depression among young adults. This is an important extension of prior work on perceived social support. It could be that young adults may have reported high levels of perceived social support from parents but were not willing to actively communicate their problems to their parents.

As a second contribution to the literature on depression and social support, the current study investigates if there are differences in communication with parents depending on parents' gender and how communicating with a mother or father might differentially affect depression. Prior research assumes that females tend to talk about their problems more and are more likely to receive social support than males (Eschenbeck, Kohlman, & Lohaus 2007; Nolen-Hoeksema & Aldao 2011). Furthermore, mothers tend to be more emotionally engaged than fathers (Noller & Callen 1990). This study tests these assumptions of gender differences in communicating problems to mothers versus fathers and if they are associated with depression in different ways. The research fills a significant gap in the literature because while much research examines gender differences among young adults concerning social support and depression, very little examines possible differences in communication patterns between

both genders of parents and whether communication with mothers or fathers has more of an effect on depression.

Finally, almost all prior research on parental social support and depression is somewhat dated and centered on adolescents (12-17 years old). This study fills this gap by drawing on a recent nationally representative sample of young adults (18-24 years old). It is important to study young adults instead of adolescents as there may be contextual differences between age groups that change how a person communicates with their parents and how it affects them. Previous studies show us how it effects children and adolescents, the present study will begin to show how different age groups differ on the topic. The current study aims to demonstrate to parents and young adults how communication about problems can mitigate the prevalence of depression. Pending the data analysis, it may be that communicating problems to parents (either mothers or fathers or both equally) can help mitigate depression for young adults. These findings will be of social significance by encouraging parents and young adults to initiate conversations about difficult issues. In the end, the results of this study may help protect young adults from the negative effects of depression.

CHAPTER TWO

LITERATURE REVIEW

Prevalence of Depression

Mental health issues are prevalent in adolescents and young adults. One study found that over one third of college students had some form of mental health problems, with about 15 percent of them reported high levels of depression (Zivin et al. 2009). Depression accounted for almost half of all the mental health problems in students. Other studies report similar findings. Another study of university students found that the prevalence of both depression and anxiety among undergraduate students was 15.6 percent (Eisenberg et al. 2007). Slightly fewer (13 percent) of graduate students had these same symptoms. Sahoo and Khess (2010) found that in a large sample of college aged individuals, depressive symptoms were present in about 18 percent of their sample. In fact, 12 percent of the sample exhibited symptoms of clinical depression. A study by Ohayon and Roberts (2014) found that between four different groups of young adults, about 24 percent indicated they felt depressed. These studies indicate that depression is a common issue among adolescents and young adults.

Not only are rates of depression currently prevalent among young adults, but they may actually be increasing in prevalence over time. Hunt and Eisenberg (2010) found that 95 percent of university counseling directors report a significant increase in psychological problems in students. They also found that from 2000 to 2010, rates of depression in college-aged individuals had increased from 10 percent to 15 percent.

Using data from the National Surveys of Drug Use and Health, another study found that depression rates are increasing (Mojtabai et al. 2016). Adolescents ages 12-17 saw an increase in depressive episode from 8.7 percent in 2005 to 11.3 percent in 2014. Among young adults aged 18-25, depressive episodes increased from 8.8 percent to 9.6 percent. In a qualitative study of college counseling services, Watkins, Hunt, and Eisenberg (2011) report that the rate of students needing psychological help is increasing. In fact, it is increasing at such a rate that counseling services are having trouble keeping up with client load increases from year to year. Watkins and his colleagues also note that not only are psychological issues increasingly more prevalent, they are also increasing in severity. Where counseling services previously had to handle students with mild depressive symptoms, it is increasingly more common that they must help students with major depressive disorders.

Finally, there are gender differences in the prevalence of depression. Various studies indicate women are more likely to show depressive symptoms than men with gender differences usually beginning in adolescence (Salk, Hyde, & Abramson 2017). Not only are women more likely to be depressed but the severity of depressive symptoms is also greater among women (Essau, Lewinsohn, Seeley, & Sasagawa 2010). Women have higher rates of major depressive disorder and this condition tends to be more chronic than it is with men. This same study shows women also tend to have more prolonged depressive episodes than men. The prevalence of depression among young adults takes on added importance when considering the consequences.

Consequences of Depression

As the prevalence for depression in young adults rises, so too do many of the complications associated with it. There are several adverse effects that are associated with depression beyond just the depressive symptoms themselves. First, depression negatively affects young adults at school and at work. For college students, academic performance can suffer from depression. One study shows that as a student's level of depression increases, their GPA decreases significantly (DeRoma, Leach, & Leverett 2009). Depression can also have a negative effect on a person's workplace performance. Another study shows that an increase in depression results in lower quality of work performance and increase in absenteeism (Lerner et al. 2010).

Second, along with lower performance rates at work and school, depression is also related to harmful lifestyle habits. Those suffering from depression are more likely to participate in substance abuse. Several studies find that increased levels of depression are strongly associated with alcohol consumption. One such study of young adults found that there is a strong statistically significant relationship between major depression and alcohol abuse/dependence that is likely a causal relationship (Fergusson, Boden, & Horwood 2009). Along with alcohol, depression can also be linked to illegal drug use. One study found that both alcohol and cannabis use are strongly related to feelings of depression in young adults (Buckner et al. 2007).

Third, depression is linked to many different health problems. For instance, one study shows depression is related to heart and circulatory problems (Davidson, Jonas, &

Dixon 2000). Davidson and colleagues also found that depression is highly predictive of hypertension in young adults. The Centers for Disease Control (CDC) also found that rates of obesity and depression are highly correlated (Pratt & Brody 2014). This is no small matter as obesity is linked to many other health problems. Furthermore, there is evidence that depression had the largest effect on worsening mean health scores compared with the other chronic health conditions (Moussavi et al. 2007). Finally, substance abuse due to depression can result in additional physical health problems.

Depression is strongly associated with one of the highest health risks of all: suicide. Both thoughts of suicide and suicide rates are connected to depression. Research by Garlow et al. (2008) found that students with suicidal ideation had significantly higher depression levels than those without suicidal ideation. Almost a third of students who had higher scores of depression reported suicidal ideation while 5.8 percent of students with lower scores reported the same. Naturally, those with suicidal thoughts are more likely to attempt suicide. Depression and suicide attempts are positively linked and statistically significant (Nrugham et al. 2010). While the negative consequences and health risks of depression are real growing literature demonstrates there are effective means of preventing both depression and its consequences.

Social Support and Depression

An effective buffer from the negative effects of depression is a person's perceived social support. Perceived social support is defined as how much a person believes they are cared about and supported by people in their social circle. Common contributors to a

person's perception of social support are typically family, friends, co-workers, mentors, and significant others. For decades researchers have considered social support as one of the primary means of protection from depression (Cobb 1976).

Perceived social support and actual social support are both important. Merely feeling a lack of social support can increase a person's chances for depression (Brown, Andrews, Harris, Adler, & Bridge 2009). Also, if a person believes they have social support but are then failed by that support they are at a greater risk for depressive symptoms. Research also shows that social support can help especially when other common protectors against depression are absent (Ross & Mirowsky 1989). Feelings of control over one's life and the ability to problem solve are both preventive factors of depression. If one lacks these traits, they are at high risk for depressive symptoms. A strong social support system, however, can aid a person in feeling more control and can help with problem solving helping protect a person from depression.

Social support can be particularly important to protect against depression in adolescents and young adults. Studies show that in this age group perceived social support is negatively correlated with depression. One such study by Zhou, Zhu, Zhang, and Cai (2014) found that not only does perceived social support have significantly high correlation with depression and anxiety, they indicate that social support is protective and can prevent such feelings. Social support is also not just a direct predictor of lower depression scores in young adults. Social support can affect other factors that also contribute to protecting young adults and adolescents against depression. Stress is one such factor. Wang and colleagues (2015) found that while stress is highly correlated with

depression, social support lowered a person's feelings of stress. Another study of adolescents found that low self-esteem was a major factor in being at risk for depression (Dumont & Provost 1998). Those with higher self-esteem had lower symptoms of depression and showed less destructive behavior. The authors indicate that high self-esteem is significantly associated with a person's perceived social support.

Like with depression prevalence and severity, there are also gender differences concerning social support. Typically, studies find that women are more likely to seek out and receive social support (Eschenbeck et al. 2007; Lee & Goldstein 2016; Nolen-Hoeksema & Aldao 2011), however this is not entirely consistent across all studies. Some researchers have found little to no difference between men and women in seeking social support (Crockett, Iturdibe, Torres Stone, McGinley, & Raffaelli 2007). For the most part though, women are more likely to seek and receive social support than men and this gender difference is prevalent in both adolescents (Eschenbeck et al. 2007) and young adults (Lee & Goldstein 2016). One explanation for why women receive more social support than men is because they are typically more likely to be depressed. Research has shown that this is not necessarily the case. Even when controlling for depressive symptoms, women still typically have more social support than men (Nolen-Hoeksema & Aldao 2011). Hoesksema and Aldao (2011) suggest that the heightened social support among women is not reliant on their higher rate of depression, but instead women are just more likely to seek out and receive support in general.

Parental Support and Depression

The current study focuses specifically on the effect of parental social support on depression in late adolescents and young adults. As with general social support, social support from parents can be extremely important for reducing depression. Late adolescence and young adulthood are typically significant transitional periods in a person's life and a lot of support may be required to transition properly. Feeling unsupported can result in the onset of depressive symptoms. Unfortunately, some may feel they do not get much support from their parents. One study shows that perceived support from parents is high in early adolescence, but it decreases in later adolescence (Bokhorst et al. 2010). These researchers attribute the lower feelings of support to the transitional nature of the age group. For this adjustment period social support from close friends and family are significantly associated with the ability to adjust. Another study found that adjustment to a college setting is strongly correlated to feelings of depression (Friedlander et al. 2007). An important component to a person's ability to adjust is their perceived social support. This study did find that support from parents predicts an increase in the ability to adjust which in turn makes young adults less likely to be depressed.

Several studies argue the case that parental support is one of the most important forms of support in prevention of depression in adolescents and young adults (Brausch & Decker 2013; Gariépy et al. 2016). In a systematic review of literature about parental support, parental support seemed to be most important in preventing depression among adolescents (Gariépy et al. 2016). Gariépy and colleagues indicate that once married,

spouse support takes over as the most important preventer of depression. Still, even after being married, family support remains the second most important preventer of depression. Another study compared the differences between parental support and peer support among adolescents with a focus on depression, self-esteem, and suicide ideation (Brausch & Decker 2013). The results revealed that depression and suicide ideation were strongly associated with parental support. It also found that the relationship between depression and suicide ideation is significantly moderated by parental support. This means that not only does parent support lower feelings of depression, it also lowers suicidal ideation in those who do exhibit depressive symptoms. In sum, not only is parental support important for combating depression, but it could be one of the most important factors among adolescents. However, there is evidence that feelings of parental support may decrease with age.

Despite the higher rates of depression and seeking out social support among women, gender differences tend to disappear regarding parental support. Among adolescents, there are no significant gender differences in feelings of parental support. This suggests that whether parents are more supportive of one gender or the other, adolescents tend to observe the support coming from parents to be about equal (Bokhorst et al. 2010). Additionally, there are no significant gender differences among young adults for the role of parental support in interacting with depression. (Needham 2008). Interestingly, while there are several studies that point towards the gender differences concluded in the present review, most studies involve the gender differences of adolescent children. In fact, parental support is typically a combined measure where

support from a father or mother are combined. There are very few studies that distinguish the gender of each parent and whether the adolescent or young adult feels social support and depressive symptoms (Landman-Peeters et al. 2005; Noller & Callen 1990). This is a significant gap in the research that this study hopes to fill.

Communication with Parents as Social Support

Communication is very important to maintaining a high feeling of social support. There are very few studies however that break down specific aspects of perceived social support. This study is specifically interested in how communication of feelings with parents can affect depression. There is very little literature that observes this interaction and the literature that does exist is somewhat dated (Chiarello & Orvaschel 1995; Jackson, Bijstra, Oostra, & Bosman 1998; Landman-Peeters et al. 2005; Noller & Callen 1990). Also, the research on communication with parents is usually centered on children or adolescents, not young adults. This literature suggests that communication with parents is correlated to lower levels of depression in adolescents (Chiariello & Orvaschel 1995). Communication does not just lower depression, it is also associated with having higher self-esteem and general well-being (Jackson et al. 1998). Those who communicate more with their parents also tend to report having more meaningful and satisfying relationships with their parents.

When looking at the gender differences between child-parent communication, there is still a general absence of recent research. This is particularly so for observing the gender differences of the parent. While there is very little difference between the gender

of the subject and how general parental communication affects depression (Jackson et al. 1998), the gender of the parents seems to make more of a difference. Adolescent girls report talking to their mothers more than their fathers. As a result, they feel closer to their mothers and feel higher levels of social support from them. As for adolescent boys, they tend to report having no real differences in the communication and feelings of support from either the mother or father (Noller & Callen 1990). Research has also shown that there is an overall difference between communication with one's mother and with one's father and how feelings of social support and depression are affected (Landman-Peeters et al. 2005). Communication with the father has a statistically significant interaction with feelings of social support and depression while communication with the mother shows no significant interaction. This indicates that communication is either an important factor in social support and lowering depression or at the very least it is an adequate predictor. While the findings from these studies using relatively small and localized samples are suggestive, the limitations of their samples and their focus on adolescents preclude us from generalizing to the young adult population. The current study uses a nationally representative sample of young adults in order to fill this gap.

This literature leads to the following predictions:

Hypothesis 1: *Young adults who communicate their feelings to their parents more frequently will report lower feelings of depression.*

Feelings of social support have been shown universally to have a protective effect on depression. Those who feel higher levels of social support have lower feelings of

depression. Parental support is a vital form of social support. Furthermore, those who communicate their feelings to their parents tend to feel less depressed and report a higher state of general well-being.

Hypothesis 2: *Young adult women will report higher feelings of depression than young adult men.*

Previous research indicates that women report more symptoms of depression than men. Depression is not only more prevalent in women, but the effects of depression can last much longer in women than men and can be more severe.

Hypothesis 3: *Young adult women are more likely to communicate their feelings to both parents than young adult men.*

Like with depression prevalence, prior research also indicates that women are more likely to seek out and receive social support. Regarding parental social support and communication this study expects to find that women are more likely to engage in communication with their parents than are young adult men.

Hypothesis 4: *Communicating feelings to one's father is a greater predictor of lower feelings of depression than communicating with one's mother.*

While there is not much research that exists to support this hypothesis, research that does exist points indicates that communicating with one's father is a better and more significant predictor of level of depression than communication with their mother

(Landman-Peeters et al. 2005). While prior research is mainly based around adolescents, it is hypothesized that a similar relationship will exist among young adults.

CHAPTER THREE

METHODS

Data

The data source for this study is the National Study of Youth and Religion (NSYR), a nationally representative longitudinal panel survey funded by The Lilly Endowment. Data from the NSYR are freely available for download from the Association of Religion Data Archives (theARDA.com). The survey was conducted three separate times to measure different attitudes in youths over time. The first wave of the survey was conducted in 2003, the second wave in 2005, and the third wave in 2007-2008. This study utilizes the data collected in Wave 3 as it is the most recent data available from the NSYR and it best fits the age range the current study is focusing on: young adults.

The population of Wave 3 of the NSYR is all English-speaking youths between the ages of 18-24 that reside within the United States. A single unit of observation for the NSYR during wave one was the oldest teenager in a household who lived in the household at least six months out of the year. Wave 3's unit of observation was respondents of the original Wave 1 survey. The NSYR utilized random digit dialing as its sampling method. It used randomly generated numbers that included possible numbers from all fifty states in the US including Alaska and Hawaii. In Wave 3, members of the previous sample were re-contacted by researchers. Wave three of the NSYR has a sample size of 2,532. With the combined response rates of Waves 1 and 3, the total response rate of the NSYR is 43.9 percent.

Telephone interviews were used to collect data from the respondents. The phone interviews were conducted using a computer assisted telephone interviewing system. Consent for the interviews was given verbally by the respondent. For Wave 3, respondents had to prove they were the same people from the interviews of the previous waves by providing their name, date of birth, and the name of the city and state the respondent lived in when the Wave 1 survey was conducted.

Measurements

Dependent variable.

The primary dependent variable is each young adults' level of depressive feelings. This variable is created using selected questions from the NSYR that are related to life outlook and negative emotions. The variables used for the depression scale were selected by analyzing questions from pre-existing depression scales such as the DASS and through factor analysis. The variables that best fit a depression scale are listed in Table 1. Most of the selected variables from the NSYR are answered using a Likert scale that asks respondents how much they agree or disagree with a statement by choosing "strongly agree," "agree," "disagree," and "strongly disagree." Two of the variables asks how often a person feels a certain way. These questions have a similar set of response categories like the previous questions mentioned. The respondent can answer either "very often," "fairly often," "sometimes," "rarely," or "never." The "very often" and "fairly often" responses were combined to make all variables have an equal number of responses.

Table 1: Factor Analysis for Depression Scale Measures

Depression Variables	
Variable Questions	Factor Loading Scores
<i>How often?</i>	
How often, if ever, does life feel meaningless to you?	.684
How often do you feel very sad or depressed?	.694
<i>Agree or disagree?</i>	
The conditions of your life are excellent.	.670
Your life often seems to lack any clear goals or sense of direction.	.590
You are satisfied with your life.	.727
You often feel helpless in dealing with problems of life	.690
Cronbach's α coefficient	.757

Source: 2007-2008 National Study of Youth and Religion

These six different variables that measures a person's overall feelings of depression were combined to create an overall depression index. This was done by computing the mean score of each variable. A higher score coincides with higher levels of depression with 4 being the highest possible score and 1 being the lowest. Factor analysis demonstrates that each of the measures load onto the same scale, with all factor loading scores greater than .590, which exceeds the commonly accepted cut-off of .50. The index is also internally consistent and is a reliable measure of depression with Cronbach α coefficient equal to .757.

Independent variables of interest.

The next variables of interest in this study focus on the communication between each young adult and their parents. These variables are used as both dependent and independent variable in the multivariate statistical models that follow. These measures use two questions from the NSYR that indicate how often a young adult talks about their

problems with their parents. A key strength of these data is that they ask specifically about frequency of communication with mothers and communication with fathers, something usually overlooked in prior research. It should be noted that there were two other questions that related to communication with a subject's parents. These questions ask how much a respondent believes they are understood by each of their parents. The questions were not included in this study because the results are almost identical to the questions asking about how often they talk to their parents, creating redundancy.

Furthermore, recall of frequency of action tends to be more trustworthy than perceptions of whether others understand us. The wording for these measures is as follows: "How often do you talk with [primary mother's name] about personal subjects?" and "How often do you talk with [primary father's name] about personal subjects?" The possible responses are "very often," "fairly often," "sometimes," "rarely," or "never." These two variables are measured independently to measure the association between each question and feelings of depression.

Gender is the second independent variable of interest in this study. Young adults could identify as either male or female. Associations between gender and the frequency of communication with both mothers and fathers are analyzed. Young adult women and men are also compared regarding depression.

Control variables.

There are multiple control variables used for this study. The control variables are age (measured in years), personal annual income (0 = less than \$2,000 to 26 = more than

\$50,000), education (0 = no formal schooling to 21 = six years of college/graduate school), marital status (1 = married and not separated), and current living situation which differentiates between those who live with their parents and those who do not.

Statistical Analyses

The data used in this study is analyzed using SPSS. Both bivariate and multivariate analyses are performed. The multivariate models proceed in stepwise fashion. First, a model is constructed that examines the effect of gender of young adults on communication with their mothers. A second model examines the effect of gender of young adults on communication with their fathers. A third model examines the effect of gender, net of the effects of the control variables, on depression. A fourth model, the full model, includes the communication with mother measure alongside gender predicting depression. A fifth model, another full model, then includes communication with father alongside gender while predicting depression. The final model includes all the variables of this study in predicting depression. These full models demonstrate how communication with one's mother and/or father is associated with depressive feelings. Due to the coding of the dependent variable, multivariate analyses are conducted using OLS regression. T-tests are used to determine levels of significance.

CHAPTER FOUR

RESULTS

Demographics and Bivariate Analysis

Table 2: Demographics and Correlations

Variable	Description	Mean (Std Dev)	Correlations		
			Depression Index	Mother Comm.	Father Comm.
Depression index	Mean scores. 1=low depression, 4=high depression	1.961 (.494)		-.100***	-.135***
Mother communication	1=Never to 5=Very often	3.567 (1.081)	-.100***		.298***
Father communication	1=Never to 5=Very often	2.814 (1.132)	-.135***	.298***	
Female	1=Female	.500 (.500)	.044 ⁺	.276***	-.089***
Live w/ parents	1=Live with parents	.406 (.491)	.093***	.030	-.012
Age	Range=18-24	20.1 (1.425)	.009	.045 ⁺	.043 ⁺
Income	Categorical; 1=less than \$2,000 to 26=more than \$50,000	5.53 (5.810)	-.060*	-.051*	-.005
Education	Highest education achieved	12.941 (1.758)	-.127***	.008	-.007
Marital status	1=Married (not separated)	.059 (.236)	-.021	.056*	.043 ⁺

Source: 2007-2008 National Study of Youth and Religion
 p <.05*, p <.01**, p <.001***, p<.1⁺

The total sample size for this study is 1,680, the number of cases from the NSYR Wave 3 that have answered all the variable questions selected for this study with missing values removed. The sample is evenly divided by gender with 50.4 percent reporting as

female and 49.6 percent reporting as male. The age range of the sample is 18 to 24. The average age of each participant is 20.1 with a standard deviation of 1.4. The average annual income of each person is roughly between \$8,001 and \$12,000. The average level of education completed by the sample is 12.9 with a standard deviation of 1.8 which is almost equivalent to about one year of college. 40.6 percent of the sample report that they live with their parents. Only 5.9 percent of the sample reported being currently married and not separated from their spouse. The average participant has low feelings of depression with a mean depression index score of 1.96 with a standard deviation of .49. Having a range of 1 to 5, the mean scores of how often the respondent talks to their mother and to their father are 3.57 with a standard deviation of 1.08 and 2.84 with a standard deviation 1.13 respectively. This means that overall, the members of the sample are more likely to talk to their mothers about their feelings instead of their father.

Using a simple bivariate analysis gender and depression are statistically unrelated (Table 2). The respondent's level of communication with their parents does have a significant association with the depression scale. More frequent communication with one's mother is shown to have a weak negative correlation with a respondent's level of depression with an r^2 equal to -.1. More frequent communication with one's father, however, has a stronger negative correlation with a person's feelings of depression with an r^2 equal to -.135. These relationships may indicate that talking with one's father may have a larger impact on someone's feelings of depression than talking to their mother.

When it comes to finding the relationship between the respondents' gender and communication with parents, there are significant relationships found for both the mother

and father. Young adult women are more likely to communicate with their mothers than young adult men since there is a moderate positive association between the female variable and communication with one's mother ($r^2 = .28$). Young adult men are shown to be more likely to communicate to their fathers than young adult women. With an r^2 equal to $-.09$, there is a weak negative correlation between the female variable and communication with one's father. Other variable correlations were observed in the analysis. These correlations were not included in the table because they did not contribute much to the overall context and findings of this study.

Communication with Parents and Gender

Table 3: Communication with Mother and Gender

	Model 1		Model 2		Model 3	
	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p
Live W/ parents			.130* (.054)	.015	.136** (.051)	.007
Age			.055* (.022)	.013	.039+ (.021)	.064
Income			-.007 (.005)	.156	-.004 (.005)	.397
Education			-.021 (.017)	.206	-.016 (.016)	.331
Marital status			.162 (.111)	.145	.096 (.105)	.359
Female	.597*** (.051)	.000	.591*** (.052)	.000	.661*** (.049)	.000
Father communication					.309*** (.021)	.000
Constant	3.266*** (.036)	.000	2.417*** (.387)	.000	1.749*** (.367)	.000
R-Square	.076		.084		.187	
N	1,680		1,680		1,680	

Source: 2007-2008 National Study of Youth and Religion

DV: Mother communication

$p < .05^*$, $p < .01^{**}$, $p < .001^{***}$, $p < .1^+$

The first relationship analyzed via multivariate models is how gender affects communication with one's mother. Using OLS regression, three models are constructed to observe this relationship (Table 3). The first model shows the bivariate relationship between gender and communicating feelings to one's mother. With no control variables considered in this model, women are more likely to communicate with their mother. This relationship is statistically significant. The second model in Table 3 also observes the relationship between gender and communication with mother but with all the control variables included. This model finds a similar result. When controlling for age, income, education, marital status, and whether the respondent currently lives with their parents, women are more likely to communicate with their mothers. This relationship is also statistically significant. The final model adds communication with one's father as a control variable. When controlling for age, income, education, marital status, if the person currently lives with their parents, and their communication with their fathers, women are more likely to communicate with their mothers. This result is also statistically significant.

Table 4: Communication with Father and Gender

	Model 1		Model 2		Model 3	
	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p
Live W/ parents			-.019 (.058)	.739	-.067 (.055)	.224
Age			.053* (.024)	.028	.033 (.023)	.150
Income			-.010 ⁺ (.005)	.065	-.007 (.005)	.147
Education			-.019 (.018)	.301	-.011 (.017)	.517
Marital status			.214 ⁺ (.121)	.078	.154 (.114)	.176
Female	-.202*** (.055)	.000	-.226*** (.056)	.000	-.441*** (.055)	.000
Mother communication					.364*** (.025)	.000
Constant	2.916*** (.039)	.000	2.163*** (.420)	.000	1.283** (.401)	.001
R-Square	.008		.014		.125	
N	1680		1680		1680	

Source: 2007-2008 National Study of Youth and Religion

DV: Father communication

p <.05*, p <.01**, p <.001***, p<.1⁺

The next relationship to be analyzed is the relationship between one's gender and communicating feelings to their father. Table 4 follows the same method of model building as Table 3. One model observes the two variables independent of the control variables and the other includes the control variables in the model. In the first model, young women are less likely than young men to communicate with their fathers when no control variables are considered. The second model in Table 4 shows that young women are less likely than young men to communicate with their fathers even when controlling for age, income, education, marital status, and whether the subject currently lives their parents or not. The relationship is statistically significant and shows that after adding

control variables, the relationship between the independent variable and dependent variable strengthens. The final model adds communication with one's mother as a control variable. When controlling for age, income, education, marital status, if the person currently lives with their parents, and their communication with their mothers, young women are less likely to communicate with their fathers than young men. After adding communication with mother to the model, the strength of the relationship between gender and communication with one's father nearly doubles. This result is also statistically significant.

An interesting difference between the two tables about communicating with parents is the difference the effect living with one's parents has on communicating feelings with either one's mother or father. Living with parents is shown to have a statistically significant positive relationship with communicating with mothers when controlling for all other variables. This variable does not have a significant effect on communication with one's father. The other control variables show similar results between the two dependent variables when controlling for all the other variables. Income, education, and marital status do not have a statistically significant effect on communication with either gender of parent. Age does have a statistically significant effect on communication with either parent when not controlling for communication with the other parent. When controlling for communicating with the other parent, the significance of this variable drops off.

Table 5: Gender and Parental Communication's Effects on Depression

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p	Coefficient (Std. Error)	p
Live w/ parents			.078** (.025)	.002	.087** (.025)	.001	.077** (.025)	.002	.083** (.025)	.001
Age			.051*** (.010)	.000	.054*** (.010)	.000	.054*** (.010)	.000	.056*** (.010)	.000
Income			-.008** (.002)	.001	-.008*** (.002)	.000	-.008*** (.002)	.000	-.008*** (.002)	.000
Education			-.051*** (.008)	.000	-.052*** (.008)	.000	-.052*** (.008)	.000	-.052*** (.008)	.000
Marital status			-.063 (.052)	.229	-.053 (.052)	.309	-.050 (.052)	.335	-.045 (.051)	.377
Female	.043+ (.024)	.073	.049* (.024)	.043	.086** (.025)	.001	.036 (.024)	.140	.065* (.025)	.010
Mother communication					-.062*** (.011)	.000			-.045*** (.012)	.000
Father communication							-.060*** (.010)	.000	-.046*** (.011)	.000
Constant	1.939*** (.017)	.000	1.591*** (.181)	.000	1.741*** (.182)	.000	1.721*** (.181)	.000	1.800*** (.181)	.000
R-Square	.002		.040		.056		.058		.066	
N	1680		1680		1680		1680		1680	

Source: 2007-2008 National Study of Youth and Religion

DV: Depression index

p <.05*, p <.01**, p <.001***, p<.1+

Gender and Parent Communication's Effect on Depression

Table 5 is a comprehensive table that includes all measures. Five models are displayed in this table that analyze the effects of gender and communication with parents on feelings of depression using OLS regression. Model 1 analyzes the effect gender has on feelings of depression without including control variables. The model shows that women are more likely to report depression, but this relationship is not shown to be statistically significant. The second model shows that women are more likely to report depression when controlling for age, income, education, marital status, and if they currently live with their parents. After adding the control variables to the model, the effect gender on feelings of depression became statistically significant.

The third model in table 5 analyzes the relationship between communicating feelings with one's mother and feelings of depression without controlling for communication with one's father. When controlling for gender, age, income, education, marital status, and if the subject currently lives with their parents, increasing communication with one's mother shows a decrease in feelings of depression. This finding is statistically significant.

The fourth model in table 5 analyzes the effect communicating feelings with one's father has on feelings of depression without controlling for communication with one's mother. The model shows that increasing communication with one's father decreases depression even when controlling for gender, age, income, education, marital status, and

if the subject currently lives with their parents. The relationship is observed to be statistically significant.

The fifth and final model in Table 5 analyzes the effect of communicating feelings with both one's mother and one's father on depression. The model indicates that increasing communication with one's mother decreases feelings of depression even when controlling for communication with father, gender, age, income, education, marital status, and if the subject currently lives with their parents. The model also finds that increasing communication with one's father decreases feelings of depression even when controlling for communication with mother, gender, age, income, education, marital status, and if the subject currently lives with their parents. Both findings are statistically significant. Both communication with one's mother and father are shown to have a similar effect on depression this model.

When not including the opposing gendered parent's communication with the subject in a given model, communication with one's mother is shown to have a slightly stronger effect on feelings of depression when compared to the relationship with communication with father when observing models 3 and 4. While these models indicate that communicating with mother has a stronger effect, it is a small difference. Model 5 shows the opposite effect. When controlling for the opposite parent's gender's communication with their child, communication with one's father is observed to have a stronger effect than communicating with one's mother. Like with the previous two models, this difference is also shown to be very small. It is also worth noting that model 3, which includes communication with mother only, shows gender as a statistically

significant variable while model 4, which includes communication with father only, shows gender as a statistically insignificant variable. Model 5, which includes both parent's communication, once again has gender as a statistically significant variable.

When looking at the control variables in Table 5, similar trends can be found between all the models. For one, whether someone is married or not seems to have no significant effect on feelings of depression across the sample when controlling for all other variables. Personal annual income and education decrease the likelihood of feeling depressed when all other variables are controlled. The opposite is true for a person's age. The older a person is in the sample the more likely they are to be have higher feelings of depression when all other variables are controlled. Finally, those in the sample who live with their parents have higher feelings of depression than those who do not when controlling for all other variables.

CHAPTER FIVE

DISCUSSION

Discussion of Results

There are several findings of note in this study. Some of the hypotheses were supported by the results, while others were not. The first hypothesis predicts that young adults who communicate their feelings to their parents more will report lower feelings of depression. The results support this hypothesis. In table 5, the models show that the more a young adult communicates with their mother or their father, feelings of depression decrease. The effect communication with either parent has on feelings of depression is relatively small but statistically significant.

This finding is consistent with previous literature. Previous literature overwhelmingly indicates that high feelings of parental support are significantly associated with lower levels of depression in young adults (Brausch & Decker 2013; Gariépy et al. 2016). While there is little research focused on young adults, there is existing literature of adolescents that indicate a similar finding specifically on communication with parents. Previous research has parallel findings to this study showing that higher communication with one's parents does decrease feelings of depression. (Chiariello & Orvaschel 1995; Jackson et al. 1998).

The second hypothesis proposes that young adult women will report more higher feelings of depression than young adult men. Table 5 indicates that without control variables, there is not a statistically significant difference between the overall feelings of

depression for young adult men and women. Once control variables were added, a significant relationship was revealed indicating that young adult women do have higher levels of depression than young adult men. This relationship is strengthened further when the communication with mother and father variables are added to the model. Like with the relationship between communication with parents and feelings of depression, gender does appear to have a small effect on feelings of depression.

This finding is supported by prior research on the subject. Relevant research indicates that women tend to have higher feelings of depression and more severe symptoms than men at all ages. (Essau et al. 2010; Salk et al. 2017). Interestingly, this study struggled to find a strong effect between the two variables. Other research shows that this difference can begin in early adolescence and it strengthens as a person progresses through life stages. The weak effect found in this study is inconsistent with other studies.

The third hypothesis states that young adult women are more likely to communicate their feelings to parents, regardless of the parents' gender, than young adult men. The results of this study do not support this hypothesis. The results do show that young adult women are much more likely than young adult men to communicate their feelings to their mothers than young adult men. However, young adult women are not more likely than young adult men to talk to their fathers. Rather, young adult men are a lot more likely to communicate feelings to their fathers than young adult women. The results also show that the relationship between communicating feelings with one's parents on feelings of depression is stronger between young adult women and

communicating to their mothers than young adult men and communicating to their fathers.

This finding is inconsistent with previous literature. The hypothesis was under the assumption that because women are more likely to both seek out and receive social support (Eschenbeck et al. 2007; Lee & Goldstein 2016; Nolen-Hoeksema & Aldao 2011) they would be more likely to receive support from both of their parents than men. Additionally, other research finds that women communicate more with their mothers than their fathers, but men have little difference in communicating with their mother (Noller & Callen 1990). That study would suggest then that women are more likely to communicate with both parents. If women are more likely to communicate with their mothers and men communicate with their mothers and fathers almost equally, then it can be assumed by that research that women communicate more to their fathers than men. The results found in the present study contradict these previous findings by suggesting that young adult men and young adult women communicate more with their same gendered parent. There could be a few reasons for these discrepancies. The first reason is simply that it was falsely assumed that because women would receive more social support in general, that the same result would be found when specifically looking at either parent. Another reason could be that the research that was found that compared gender and communication with either parent is dated (Noller & Callen 1990). Attitudes on communication between parents and their children or family dynamics most likely has changed between 1990 and 2007 (the year the data was collected). The reason could also be that prior research has a much stronger focus on adolescents rather than young adults. There could be a difference

in family dynamics or relationship between parents as a person grows out of adolescence and into young adulthood.

The last hypothesis predicts communicating feelings to one's father is a greater predictor of lower feelings of depression than communicating with one's mother. While this hypothesis is supported by the results, the difference between them is miniscule. When observing the models that look at communication with mother and father independently of each other, there is almost no difference in the effect the parent's gender has on feelings of depression. In fact, the effect communicating with one's father has on depression is slightly lower than communication with one's mother's effect. When controlling for the other gendered parent's communication in the fifth model, the difference between the two shrinks. In this model though, father's communication has a slightly stronger effect on depression than communication with one's mother.

Previous research contradicts this result. Prior findings show that communicating with one's father has a much stronger relationship with lowering feelings of depression (Landman-Peeters et al. 2005). This research also suggests that the effect communicating with one's mother has on feelings of depression is not even statistically significant while the present study finds the relationship significant for both parent genders. This all makes the findings of this study relatively unique and beg for further research. A possible reason for these contradictions may have to do with subjects of the previous research. Most research done that looks at communication between parents and their children is almost exclusively focused on adolescents rather than young adults. The results of the present study might suggest that the effect communicating with one's mother or father has on

feelings of depression changes when going from adolescence to adulthood. More specifically, communicating with one's mother may become more important as one gets older. The primary takeaway from the present findings is that communicating one's feelings with both their mother and their father is equally important in combating depression among young adults.

Aside from the hypotheses there are some other important findings to note from the current study. The results show across all the models with depression as the dependent variable that living with one's parents increases feelings of depression among young adults. This is particularly interesting because the same models show that increasing communication with either parent decreases depression. This finding is seemingly contradictory as it can be assumed that one should communicate with their parents more if they live in the same household as them versus if they live somewhere else. What makes it more interesting is that this assumption is partly proven by the previous tables. Table 3 shows that if a young adult lives with their parents they are more likely to communicate with their mother. This significant relationship does not exist when looking at communicating with one's father according to table 4. A possible reason for this strange finding could be the context of living at home. If a young adult still lives with their parents, they may feel a desire to leave the home and pursue their own life. It could also mean that the young adult may be struggling to make it alone and require their parents for support. The young adult's delay to leave or the circumstances surrounding them staying with their parents could be the cause of it increasing feelings of depression. It could also be due to the social stigma with living with one's parents. Among young

adults, not living on your own may be frowned on by others. The failure to conform with the expectations that comes with being a young adult could also be the cause of the increase in feelings of depression.

Limitations

There are a few limitations that deserve mention. The present limitations mainly focus on the variables used in the models. Two notable selections were not included in the control variables that would have been helpful in the analysis. One such variable is race. Race is a standard control variable used in almost all social science research. Observing race and how it affects communication with one's parents and feelings of depression could have been insightful and provide a deeper understanding of the topic. The data set used in this study, the NSYR Wave 3 did not have race as a variable, therefore it was left out of this analysis. Another control variable that would have been helpful that this study lacked is a variable that determines the marital status of one's parents. The marital status of the respondents' parents could have been helpful to have when running the analysis as that variable would certainly influence the results in some way. Like with race, it was absent from wave 3 of the NSYR. Additionally, the analyses performed in this study do not determine the directionality of influence between communication with parents, gender, and feelings of depression. It is also worth noting as a limitation that the dataset used in this study is over a decade old. The results may have yielded different results if the dataset was more current.

Implications for Further Research

There are several implications that follow from the present study. Several of the results found here are shown to oppose findings by prior research or not have as dramatic of results as they do. As discussed earlier, these discrepancies are most likely the result of the focus of prior research. Most research that focuses on communicating with one's parents has a primary focus on adolescents. There is very little research that looks at communication with parents at further stages of life. What the present research indicates is that age does make a difference in how one communicates with their parents. It is important to focus on young adults or those who are older. This future research would provide a broader understanding of parent-child relationships throughout one's life course.

Another focus of research that is needed is how communicating with different gendered parents affects one's feelings of depression. Existing literature is lacking on this subject by usually focusing only on adolescents. The results shown in this study differ from the literature that does exist. While other studies found that communication with one's father is more important in combatting depression and communication with one's mom does not even have a statistically significant effect, this study found that they both lower depression at about the same rate. This difference further shows how much more research needs to be done on communication with one's parents at different stages of life and how it affects people differently at different life stages. Additionally, the research that exists is dated. There could be factors related to the time period this study and previous research was conducted in that could explain the differing results. New research

on this subject could provide fresh and relevant results for our present time. Further, it would be interesting to see how communication with single parents affects depression or other variables. The difference in communication from parents who are together versus those who raised a child alone could have staggering effects on one's mental health.

An unexpected finding of this study also begs for further attention. This study found that while communicating with one's parents does decrease feelings of depression, living with them has the opposite effect. While this seems contradictory as living with them would increase communication, there is another variable that is not being seen that is causing this effect. Finding out what this variable or variables are would help increase our understanding of family dynamics and communication and how they affect one's mental health.

More research on depression, its prevalence, its effects, and what affects it is always helpful. With the growing prevalence and understanding of depression, there is always room to delve deeper into the subject and uncover its still misunderstood aspects. Gaining more research on depression would be beneficial not only for young adults, but it could help the countless people around the world who suffer from depression or depressive symptoms. The first step to solving any problem is to understand it fully.

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