Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for a degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter know, including display on the World Wide Web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis.

Elizabeth Soyeon Ahn April 8, 2011

A Study of Risk Factors, Protective Factors, and Resilience among College Students

by

Elizabeth Soyeon Ahn

Corey L. M. Keyes
Adviser

Department of Sociology

Corey L. M. Keyes

Adviser

Ellen Idler

Committee Member

Marshall Duke

Committee Member

April 8, 2011

A Study of Risk Factors, Protective Factors, and Resilience among College Students

By

Elizabeth Soyeon Ahn

Corey L. M. Keyes

Adviser

An abstract of
a thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Department of Sociology

2011

Abstract

A Study of Risk Factors, Protective Factors, and Resilience among College Students
By Elizabeth Soyeon Ahn

The effects of various risk and protective factors were studied using the 2007 Healthy Minds survey on a sample of 5,689 undergraduate and graduate students in colleges and universities. The effects of the risk and protective factors were further combined to study resilience. Analysis has confirmed that risk factors, such as racial discrimination, non-heterosexuality, academic competitiveness, and financial difficulties, are positively correlated with a negative outcome, such as a diagnosis of depression and anxiety. The study also confirmed that protective factors, such as religiosity, social supports from family and friends, and positive mental health, are negatively correlated with the diagnosis of mental illness. Finally, these protective factors also help the college students to be resilient despite the exposure to high levels of the risk factors.

A Study of Risk Factors, Protective Factors, and Resilience among College Students

By

Elizabeth Soyeon Ahn

Corey L. M. Keyes

Adviser

A thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Department of Sociology

2011

Acknowledgements

Special thanks to Dr. Keyes, Marco Hur, Esther Yunghwan Ahn, and Rebekah Jiyeon Ahn

Table of Contents

1 Introduction
2 Literature Review
12 Methods
14 Hypothesis
15 Results
22 Discussions/Conclusion
25 Appendix
91 References

Introduction

College education is essential to many people because it provides a better chance of finding a higher paying job and, eventually, financial stability. College years, however, cause much stress to students, as it is a period of transition (Keyes, Eisenburg, Dhingra, Dube, Perry and Kroenke in press). During their college years, adolescents explore their identities in adult roles (Friedman and Leaper 2010:153). They are removed from the comforts of home for the first time and are obligated to adjust to a new environment among new people, as they encounter new ideas that challenge their previous faiths and beliefs (Keyes et. al. in press; Astin et. al. 2011:101). College students today are academically pressured in a competitive environment, and they have become more anxious and overwhelmed, balancing school and work. They must make major life decisions, such as choosing a job and paying off student loans, after graduation (Astin et. al. 2011:3). Ongoing recessions, environmental concerns, political conflicts, and wars exacerbate their concerns (Astin et. al. 2011:3, 101). Thus, it is not surprising that many schools are concerned with the increasing number of students suffering from mental illness (Keyes et. al. in press). Students with mental illnesses, such as depression and anxiety, are more prone to substance abuse and academic problems (Keyes et. al. in press). Moreover, mental illness is the reason why many students drop out of college (Keyes et. al. in press).

This unfavorable trend among college students should not purely be viewed negatively, however, because recognizing the existence of a problem is the first step of finding a solution. A way to solve these problems is to make college less stressful by eliminating all stressors like final exams and grade point average. However, eradicating such institutions, which are essential for college education, is not practical. By changing our perspective, we find that there are populations of college students who are successful despite the increased risk and the problems

of mental disorders. These students are labeled as resilient. By studying this group of resilient students and what they share in common, we can help propose the preventive measures, in which students can overcome the risks and stay healthy without encountering more serious obstacles.

Resilience

Resilience is defined as “the capacity of dynamic systems to withstand or recover from significant disturbances” (Masten 2007:921). Resilience is usually unexpected, and after an adaptation, some resilient individuals function even better than when they were first exposed to the risk. Resilience is also considered a “regulatory capital,” including “self-regulation capacities and regulatory capacities built into social and cultural systems” (Masten 2007:926). Masten and Obradovic argue that there are “fundamental but common and ordinary adaptive systems” that, if operated normally, ensures resilience (Masten and Obradovic 2006:21). These include an attachment system (e.g. close relationships with friends), self-regulation system (e.g. emotion regulation), family system (e.g. parenting), school system (e.g. standards and expectations), and cultural and societal systems (e.g. religions, values, etc.).

According to Masten (2001), there are two models of resilience. In the main effect model, more risk means more negative outcomes whether an individual is protected. The protective factors are beneficial regardless of whether the individual is at a high risk or low, because individuals who are protected display a lower level of negative outcomes at the low or high levels of risk. In the interaction model, however, more risk means more negative outcomes only for the unprotected individuals. Risk factors do not affect an individual with protective factors, because the individual is protected whether he is at a low or high level of risk. Individuals who

experience a higher level of risk but display less negative outcome are considered resilient in both models (229, 231).

The study of resilience is broadly applicable. Resilience can be a "trait, a process, an outcome, a pattern of life course development, narrow or broad, multifaceted or unidimensional, short or long term" (Masten 2007:924). It can be applied to either individuals or systems, such as "families, classrooms, or schools" (Masten 2007:923). It may be "recovery as well as resistance, internal as well as external adaptive functioning, and external as well as internal resources" (Masten 2007:924). The study extends from ecology, medicine, psychology, and education to developmental science (Masten and Obradovic 2006: 13). It was discovered recently that resilience is also related to biology and genetics—a specific sequence of genes, such as 5-HTTLPR, moderate the effect of risk factors on the "behavioral outcomes" (Masten and Obradovic 2006:17). The study of resilience is thus widely applicable.

Historically, there were four waves of resilience study. The first wave was concerned with finding the correlation between the signs of positive adaptation and their struggle against the risks. The first wave of study was mostly descriptive and failed to specify the ultimate goal of studying resilience (Masten and Obradovic 2006: 14). The second wave was concerned with how children and youth process and regulate their potential assets or protective factors. The third wave focused on the prevention of negative outcomes by promoting resilience, and finally the fourth and current wave seeks to combine the previous analysis with more cautionary notes regarding the controversies of the resilience study (Masten and Obradovic 2006: 14). Resilience was also approached in many different ways. The "developmental task approach focused on external adaptation from a developmental perspective," rather than psychological health and symptoms of mental health (Masten and Obradovic 2006:15).

There are many obstacles in studying resilience. Because developmental resilience study is usually longitudinal, it is difficult to wait for the result for years (Masten 2007:926). Also, it is unethical to intentionally place individuals in traumatic situations to find whether the person displays resilience. Past studies of resilience also focus mostly on the development of children or adolescents as individuals, but there is a growing interest in resilience among adults.

Risk Factors

As it is evident from the definition of resilience, one cannot study resilience without identifying risk factors, which are "causes of undesirable, non-normative developmental outcomes" (Keyes 2004:223). Risk factors can be chronic and cumulative when an individual is periodically affected by negative events throughout his or her lifetime or momentary when a specific event, such as "divorce, bereavement, war, natural disasters, etc." occur (Masten and Obradovic 2006:16). Cumulative risks can be denoted as high, moderate, or low risks, as they can be co-occurring (Masten and Obradovic 2006:16). For this study, racial discrimination, sexual orientation, academic competitiveness, and financial difficulty will be studies as potential risk factors for internalizing mental illnesses like depression and anxiety in college students.

(1) Discrimination and Sexual "Deviance"

The concept of race is complex and ambiguous. According to Blank, Dabady, and Citro (2004), race can be defined as a "subjective social construct based on observed or ascribed characteristics that have acquired socially significant meaning" (Blank et. al. 2004:2). The concept about a certain race changes over time, according to social trends and governmental laws. Currently, the U.S. government recognizes black or African American, American Indian or

Alaska Native, Asian, Native Hawaiian or Pacific Islander, white, and Hispanic as the five official race groups.

Blank et. al. (2004) define racial discrimination in two ways: “differential treatment on the basis of race that disadvantages a racial group” and “treatment on the basis of inadequately justified factors other than race that disadvantages a racial group” (4). Although U.S. law forbids racial discrimination, many incidents of such discrimination remain a personal challenge because it is difficult to prove and measure discrimination. Racial disparities lead to differences in socioeconomic standing (SES) through higher rates of poverty, unemployment, and lower education levels among racial minorities than white non-Hispanic individuals. Studies show that SES explain some but hardly all of the health disparities by race (Williams, Costa, and Leavell 2010), leading many scholars to propose that exposure to discrimination is an additional burden to individuals and may explain more of the racial differences in health outcomes.

For this study, discrimination was defined as an unfair, disrespectful treatment of an individual based on his or her race, ethnicity, and cultural background. Discrimination was considered as a risk factor, because today’s college environment is becoming more racially diverse than ever. More diversity in schools means that there are more minority students, and more minority students means that there are more students who may experience these unfair and disrespectful treatments. The consequences of racial discrimination are chronic, and minority college students are not exception to these consequences. Racial discrimination can exacerbate the already stressful lives of these minority college students.

In a society where heterosexuality is the dominant majority, lesbian, gay, bisexual, transgender, and queer individuals are often considered deviant social identities. From when they are young, LGBTQ individuals suffer what is called “minority stress,” which “encompasses

externally stressful events, expectations of such events, and internalization of society's negative attitudes" (Lewis et. al. 2009:977). The external stressful events result from heterosexism, stigma, and discrimination. The LGBTQ individuals become the victims of verbal abuse and even physical threats from homophobic bullying (Friedman and Leaper 2010:153, Kelleher 2009:374). They also suffer from internal conflicts about their sexuality (Lewis et. al. 2009:977). It has been reported that these individuals are at a higher risk for mental illnesses, such as depression and anxiety, and are more likely to commit suicide (Lewis et. al. 2009:972). They are also more likely to have low self-esteem (Kelleher 2009:374). Sexual orientation was considered as a risk factor for the similar reasons to the discrimination. For sexual orientation, however, not only is the college environment becoming more diverse, but students also are becoming more open about their non-heterosexual orientations. This means that LGBTQ students are more exposed to the external stressors about their sexual orientations. Therefore, LGBTQ college students were considered more vulnerable than heterosexual students.

(3) Academic competitiveness and Financial Difficulty

Finally, academic, financial, and self-imposed stresses are the three major categories of stressors among college students (Misra and McKean 2000:41). Many students become shocked to find that their grades drop when they enter college. Their horror is exacerbated by the fact that they actually study more than they did in high school. (Astin 2011:90). An "A" average drops from 30 to 13 percent while "B" or lower doubles from 25 to 48 percent by the third year of college, compared to in high school (Astin 2011:117). This increase in academic demand occurs because students in college are an academically selected group that has similar levels of motivation and ability (Astin 2011:118). Such grade competition can become an academic

stressor (Misra and McKean 2000:41). If a student perceives that other students at his school are competitive, then she or he is likely to feel that it is difficult to distinguish oneself as the best among the others who are as good as or even better than the student himself. This sense of competition is therefore stressful for students and makes them more vulnerable.

Finally, the socioeconomic background of students also plays an important role in their academic achievement. Individuals who are financially stable often have "more educational opportunities, better material circumstances, [and] greater access to financial resources when they are needed" (Schoon 2004:384). In contrast, financially challenged individuals are simultaneously affected by negative cofactors, such as "poor living conditions" and a "lack of resources" (Schoon 2004:385). Students who are financially struggling were considered to be "at risk." Financial instability has recently become more problematic, because the economy is doing poorly and may be in a recession. Students without financial stability must question whether they can continue to afford their education, which is often important for them. Because these individuals are thus under a constant stress, they are more prone to suffer from mental illness.

Protective factors

Protective factors increase the chances of a positive outcome, such as being happy, and/or reduce the change of a negative outcome, such as being mentally ill, by mediating risk factors and having "buffering effects" on stress (Keyes 2004:224). They can be identified at the individual, familial, and community levels. Protective factors in an individual include high IQ, high self-efficacy, outgoing personality, and more. High cohesion, stability, and social support protect individuals at the familial level. Finally, schools with counseling and support programs also buffer individuals from negative outcomes. In this study, social support from family and

friends, religion, and positive mental health were considered protective factors that prevent negative outcomes in college students.

(1) Social Support as a Protective Factor

Scholars define social support as "one's social bonds, social integration, and primary group relations," which involves "stable human relationships" (Turner and Brown 2010:200). Many conceptualizations of social support exist. If an individual is certain that he is cared for, loved, esteemed, valued, and/or belongs to a network, he is considered to have social support. Social support can also be categorized into three different dimensions: perceived, structural, and received support. Perceived support is equivalent to the subjective appraisal of emotional support that an individual receives from his network, whereas structural support refers the number of times or the "degree of reciprocity of exchanges" between individuals within a network (Turner and Brown 2010:203). Finally, received support is something more tangible, such as actual "instrumental or informational assistance." In the study of mental health, perceived support has been more strongly correlated with mental health than received support, because individuals make a "psychological adjustment" through perceived support (Turner and Brown 2010:204). In other words, social support is "beneficial if it is perceived to be available."

Previous studies suggest an inverse relationship between social support and depression. During hardships or in the presence of a specific stressor, social resources provide support, or have a buffering effect, on individuals in "close personal social networks" (McLaren and Challis 2009:263). Frequent "social contact with close friends or relatives" can create a sense of belonging, in which "individuals feel valued, needed, and significant within their environment," and have main effects that improve mental well-being with or without the presence of a stressor

(McLaren and Challis 2009:263). The sense of belonging from social supports from family and friends greatly compensate for mental illness (McLaren and Chantal 2009:262). In the third wave of resilience study, strong evidence was found in the correlation of family environment and individual resilience (Masten and Obradovic 2006:16). Communication among family members, their ability to work together, and social support become resilient factors (Jonker and Greeff 2009:826). Based on these many studies that related better physical and mental healths to social support, support from family and support from friends were considered as protective factors.

(2) Religion as a Protective Factor

"Social security" is a resource that is not exclusively responsible by individuals and which organizations provide (Leutloff-Grandits et. al. 2009:2). It includes tangible resources, such as "food, shelter, or health care to people in need," and also the "emotional and spiritual aspects" (Leutloff-Grandits et. al. 2009:3). Religious networks, then, are important organizations that provide spiritual social security. Indeed, religion and spirituality are a couple of the "most commonly cited resilience factors" (Jonker and Greeff 2009:859). Religion helps individuals to develop "adaptive systems in multiple ways, from teaching self-regulation through prayer or meditation, proscribing rules for living and rituals for major life passages, to fostering emotional security through attachment relationships with spiritual figures" (Masten 2007:926). The kinship created by religious networks often "alleviates psychological suffering" (Leutloff-Grandits et. al. 2009:11). Thus, religion can be an effective protective factor that buffers against various risk factors.

According to Astin et. al. (2011), there are five measures of religiousness: religious commitment, religious engagement, religious/social conservatism, religious skepticism, and

religious struggle. Religious commitment refers to the student's perceived religiosity. Religious engagement is an external measure, such as the number of religious services the student attends per week. Religious/social conservatism refers to the extent that the student disagrees with public opinions like casual sex and abortion. Religious skepticism reflects disbelief in religious ideas, such as creation and afterlife. Finally, religious struggle measures whether the student has conflicts with his or her own beliefs.

Furthermore, religiousness involves adhering to a "set of faith-based beliefs" and practices. It usually requires a membership in a religious community and a participation in rituals (Astin 2011:5). Many students consider religiosity and spirituality synonymous. Religion helps us seek "personal authenticity, genuineness, and wholeness" and derive "meaning, purpose, and direction in life" (Astin 2011:4). To many people, religion is a "source of inner strength" that brings "hope, peace, and empowerment" (Astin 2011:4). Finding the meaning and purpose of life, which brings about "inner harmony and self-awareness" helps develop a positive self-identity and psychological well-being (Astin 2011:29). Spiritual individuals also tend to actively deal with issues in life and "find meaning in times of hardship" (Astin 2011:119).

College students are a relatively religious group. According to Astin et. al., more than three-fourths of college students believe in God, more than two thirds believe their religion provide them strength, support, and guidance, and three-fourths of them feel a connection with God or a higher power (2011:3). Eight percent of college students attended religious services before entering college, and about seventy percent pray (Astin 2011:83). These religious characteristics of students rarely change during their college years (Astin 2011:85). According to Astin, these individuals are more likely to have higher GPAs, because they spend less time feeling anxious and stressed about their academic demands (Astin 2011:119).

Increasing the level of religiosity is also positively related with a student's "leadership skills, psychological well-being, and satisfaction with college" (Astin 2011:122). Today's colleges, however, are highly academically-oriented and tend to ignore the students' spirituality. This trend can separate students from their most important core values (Astin 2011:7). By not promoting the religious and spiritual sides of the college students, schools make students become more vulnerable to the negative outcomes, such as mental illness. Because many studies found the evidence for better health being achieved through religious participation, student's religiosity was considered as a protective factor in this study.

(3) Positive Mental health as a Protective Factor

Mental health is another important protective factor. The common definition of mental health categorizes people without mental disorders as mentally healthy. However, the Mental Health Continuum diagnoses mental health as the presence of "something positive rather than merely the absence of psychopathology" (Keyes et. al. in press). It measures mental health in the positive functioning of emotional, psychological and social well-being. An individual is emotionally healthy when he or she displays the "presence of positive affect (e.g., individual is in good spirits), the absence of negative effect (e.g., individual is not hopeless), and perceived satisfaction with life" (Keyes 2002:208). The six dimensions of psychological well-being are "self-acceptance, positive relations with others, personal growth, purpose in life, environmental mastery, and autonomy" (Keyes 2002:208). The social well-being is more public and "consist[s] of social coherence, social actualization, social integration, social acceptance, and social contribution" (Keyes 2002:209). MHC labels individuals who display symptoms of positive mental health as flourishing, and those who do not as languishing.

According to Keyes, mentally healthy individuals (e.g. flourishing) are associated with a positive "psychosocial functioning" (Keyes 2002:207). Individuals who are moderately flourishing are more than twice as likely to suffer from depression as the ones who are flourishing. Individuals who are languishing are almost three times as likely (Keyes 2002:213). Therefore, positive mental health was considered as a protective factor, because college students who are mentally healthy should be less likely to develop mental illnesses, such as depression and anxiety.

Methods

The *Healthy Minds* is a survey questionnaire comprised of 138 items from clinical "screening tools, such as the Patient Health Questionnaire" (Center for Student Studies). The study measures the prevalence of mental disorders, such as depression, anxiety, and eating disorders, among college students in the United States. The number of participating schools increased from 13 in 2007 to more than 25 schools in 2010. Some of the schools are Emory University, Pennsylvania State University, Tufts University, University of Illinois-Urbana Champaign, and University of North Carolina-Chapel Hill. These schools vary in location, size, type, and diversity of students. The survey samples up to 4000 undergraduates and graduate students at random from each school. It is administered online to ensure the participants' convenience. Students receive up to 4 emails for an invitation and reminder to participate in the study. Reminders can also be sent via postal mail. Every participant is entered into a sweepstakes of prizes in order to maximize the response rate. The data is collected annually between January and April. For this study, the data from 2007, in which 5,689 out of 13,000 samples completed the survey, was used. The response rate was relatively high (44 percent).

Mental illness, the dependent variable, was measured by using Patient Health Questionnaire (PHQ) section within the *Healthy Minds* survey. In this section, the students were asked about how often they showed symptoms of mental disorders in the past two or four weeks, depending on the type of mental disorder. Individuals who were diagnosed with major depression, panic disorder, and general anxiety were combined and recoded as individuals with any current mental illness.

Four items from the *Healthy Minds* survey were used to identify students who are at risk, as the independent variables. These items were student's sexual orientation, frequency of unfair treatment due to race and ethnicity, perceived competitiveness between students, and student's current financial situations. The sexual orientation item asked students to describe their sexual orientation by picking either heterosexual, bisexual, gay/lesbian/queer, or other. Only the individuals who answered bisexual, gay/lesbian/queer, or other were recoded to be at risk in "Sexual Risk Factor" variable. We included "other" into the risk factor because an individual who fits in the social norm of heterosexuality is unlikely to respond ambivalently by marking "other." We predicted that respondents who consciously or unconsciously recognize the stigma may have picked "other" as their sexual orientation. The next item measured the perceived frequency of discrimination by asking how many times the respondent has been treated unfairly because of race, ethnicity, or cultural background in the past 12 months. Respondents had a choice of "never," "once in a while," "sometimes," "a lot," "most of the time," "almost all of the time." Only respondents who answered "sometimes" through "almost all of the time" were recoded into to be at risk in the "Discrimination Risk Factor" variable. Respondents were also asked to rate the overall competitiveness between students in their classes. Out of six choices, "very competitive," "competitive," "somewhat competitive," "not competitive," "very

uncompetitive," "not sure/don't know/not applicable," only "very competitive" was considered as a risk factor, and the variable was recoded into the "Competitiveness Risk Factor" variable. Finally, students were asked to characterize their current financial situation. They had a choice of "it's a financial struggle," "it's tight but I'm doing fine," or "finances aren't really a problem." Students who answered, "it's a financial struggle" were considered to be at risk and was thus recoded in the "Financial Risk Factor" variable.

Four items from the survey were used to find the level of protection by mediators. Family support was measured by asking the students that to what extent they agree that they get the emotional help and support they need from their families. Friends' support was measured similarly using the statement 'My friends really try to help me.' Students were also asked to rate their level of religiosity by choosing: "very religious," "fairly religious," "not too religious," or "not religious at all." Finally, mental health was measured using Mental Health Continuum Short Form (MHC-SF) for Adults. MHC-SF contains 14 statements such as 'happy,' 'interested in life,' 'satisfied,' etc., and asks how often the respondent felt such ways during the past month. To be considered flourishing, the respondent must mark "everyday" or "almost every day" in at least one of the hedonic well-being symptoms and at least 6 out of 11 positive functioning symptoms. According to their response, students were categorized into flourishing, moderately flourishing, or languishing. The original codings were maintained for the protective factors.

Hypotheses

The Risk Hypothesis: College students who were at a high risk due to their sexual orientation, racial discrimination, competitiveness at school, and financial difficulty are more

likely to be diagnosed with any mental illness. In other words, a higher level of each risk factor should be positively correlated with mental illness.

The Protective Hypothesis: College students who are more religious, have more social support from family and friends, and are more mentally healthy are less likely to be diagnosed with any mental illness. In other words, protective factors should be negatively correlated with mental illness.)

The Resilience Hypothesis: College students who are at risk will be less likely to be diagnosed with any mental illness despite the high risk if they are more religious, have more social support from family and friends, and are more mentally health. In other words, higher levels of protective factors should be negatively correlated with mental illness even among students exposed to the high level of each risk factor.)

Results

Univariate analysis using SPSS was carried out to find the number of students at risk. Among the total of 5695 respondents (missing 22), 5.5% or 309 respondents were at risk because of their sexual orientation. For racial discrimination, 513 or 9.1% (missing 79) were at risk, and 1000 or 17.6% of the respondents were at risk due to the academic competitiveness at school. Finally, 858 or 15.1% of the respondents were at risk due to their current financial situation (See appendix, Table 1). For the response variable, 748 out of 5695 respondents, or 13.1%, were diagnosed with any current mental illness, including anxiety and depression (see appendix, Table 2).

In the bivariate analysis of Sexual Risk Factor to study the correlation between the student's sexuality and the negative outcome (e.g. mental illness), 61 out of 308 (19.8%) LGBTQ respondents were diagnosed with a mental illness, whereas only 687 out of 4700 (12.8%) heterosexual respondents were diagnosed with a current mental illness. The result was significant at p=.000. Individuals who were at risk due to racial discrimination were more than twice as likely to suffer from mental illness as those who do not face such discrimination. For the Discrimination Risk Factor, 34 out of 83, or 29.1% of the respondents who were at risk were diagnosed with a mental illness, compared to 714 out of 4864, or 12.8%, students who were not. The correlation was also significant at p=.000. For the Competitiveness Risk Factor, 373 out of 2263, or 14.2%, of the respondents at risk were diagnosed with any current mental illness. Only 375 out of 2684, or 12.3%, were diagnosed likewise among the respondents who were not at risk. The result was significant at p=.035. Finally, students with financial problems were almost twice as likely to be diagnosed with depression or anxiety as individuals without such problems. Out of 665 students who were struggling financially, 193 (22.5%) were diagnosed with a mental illness, whereas only 555 out of 4283 (11.5%) without a financial difficulty had any mental illness. The relationship was significant at p=.000 (see appendix, Table 3).

In order to test the protective hypothesis, bivariate analyses using SPSS crosstab between the negative outcome and the protective factors were executed. Students who were not religious at all were almost twice as likely to be diagnosed with any mental illness as students who were very religious. There were only 78, or 8.2% students, who had a mental illness among the 956 very religious students compared to 281 (13.5%) out of 2078 students who were fairly religious, 202 out of 1470 (13.7%) students who were not too religious, and 187 out of 1187 (15.8%) students who were not religious at all. The result was significant at p=.000. The percentage of

students who were diagnosed with a mental illness also increased as the level of their perceived social support from their family decreased. Students who strongly disagreed that they receive the emotional help and support they need from their family were more than three times as likely to be diagnosed with a mental illness as students who strongly agreed. The percentages of the students who were diagnosed with a mental illness increased from 7.4% (194/2633), 14.8% (229/1549), and 17.6% (104/592) when they students strongly agreed, mildly agreed, and felt neutral to the statement to 25.6% (88/344) and 24.2% (102/421) when the students mildly disagreed or strongly disagreed, respectively. The result was significant at p=.000. An overall negative correlation between the students' perceived social support from friends and diagnosis of any mental illness was also observed. Compared to the low percentages of students, such as 8.9% (214/2408) and 13.1% (239/1820), who strongly or mildly agreed, respectively, to the statement that their friends really try to help them, the numbers increased to 19.8% (164/828), 22.1% (53/240), and 18.3% (44/240) when the students felt neutral, mildly disagreed, and strongly disagreed, respectively, to the statement. The result was also significant at p=.000. Finally, there is also a negative correlation between the level of mental health and diagnosis of mental illness. Students who were mentally flourishing were more than ten times less likely to have a mental illness than students who were languishing. Whereas only 5.2% (153/2953) of the students who were flourishing and only 18.9% (480/2537) of moderate students were diagnosed with any current mental illness, more than half, 56.1% (115/205), of the students who were languishing were diagnosed with any current mental illness. The result was significant at p=.000 (see appendix, Table 4).

Finally, three-way crosstabs were executed to test the resilience hypothesis. Among the students who were at risk due to their sexual orientation, only 10.5% (2/19) and 17% (16/94)

students had a mental illness when they were very religious and fairly religious, respectively, compared to 21.3% (19/89) and 23.1% (25/108) with mental illness when the students were not too religious or not religious at all, respectively. However, the result was not significant at p=.502 (see appendix, Figure 1).

Social support from family was not a significant protective factor for students who were at risk due to their sexual orientation, either, with a p-value of .136. The percentages of students who were at risk due to their sexual orientation and had a mental illness were 34.3% (12/35) among the students who strongly disagreed that they get emotional help and support they need from their family, 25.0% (7/28) when somewhat disagreed, 14% (7/50) when felt neutral, 20.4% (21/103) when somewhat agreed, and 15.7% (13/83) when strongly agreed (see appendix, Figure 2).

In contrast, social support from friends was a significant protective factor that helped students become resilient, despite the risk due to their sexual orientation. Students who had the highest level of perceived social support from friends were three times less likely to be diagnosed as mentally ill as the students who had the lowest. The percentages of students with any current mental illness increased from 11.1% (15/135) and 21.3% (20/94) when the student strongly agreed and somewhat agreed, respectively, to 35.4% (17/48), 36.4% (4/11), and 33.3% (4/12) when the student felt neutral, somewhat disagreed, and strongly disagreed, respectively, to the statement. The result was significant at p=.002 (see appendix, Figure 3).

Finally, mental health also protected students who were at a high risk due to their sexual orientation. Students who were mentally flourishing were almost two times and more than seven times less likely than moderately flourishing and languishing students, respectively, to be diagnosed with a mental illness. The percentages of students with any current mental illness were

9.8%, or 13 out of 132, for the flourishing students, 17.9%, or 26 out of 145, for the moderately flourishing, and 71%, or 22 out of 31, for languishing. The p-value was .000 (See appendix Figure 4).

For the students who were at a high risk due to racial discrimination, religiosity was a significant protective factor that helped them become resilient. When discrimination was a risk factor, the percentage of students with mental illness was 9.5% (8/84) when the student was very religious, however, the numbers jump to 25.4% (53/209), 24.6% (32/130), and 27.8% (25/90) when the student was fairly religious, not too religious, or not religious at all, respectively. The result was significant at p=.014 (see appendix, Figure 5).

Social support from family was also a significant protective factor for the students at risk due to racial discrimination with p=.000. Students with the highest level of perceived family support was almost four times less likely to have a mental illness than the students who had the lowest. The percentages of the students who were at risk due to discrimination and had mental illness increased from 11.2% (22/197) when they strongly agreed, 28.9% (41/142) when somewhat agreed, and 26% (19/73) when felt neutral to 35.1% (13/37) when the students somewhat disagreed and 40.4% (23/57) when strongly disagreed (see appendix, Figure 6).

Friends' support also significantly helped students to become resilient despite the racial risk factor. The students who strongly agreed that their friends really try to help them were two times less likely to have a mental illness than the students who strongly disagreed. The percentages of students who strongly agree, somewhat agree, feels neutral, and somewhat disagree to the statement were 19.9% (37/186), 20% (31/155), 31.9% (36/113), and 20% (6/30), respectively, compared to 40% (8/20) of students who strongly disagree to the statement. The result was significant at p=.040 (see appendix, Figure 7).

Finally, mental health also protected students who were at a high risk of facing racial discrimination. The mentally flourishing students were almost three and six times less likely to have any current mental illness than students who were only moderately flourishing and languishing, respectively. Out of 199 flourishing students, only 21, or 10.6%, were diagnosed with any current mental illness, but 82 out of 289, or 28.4%, of the moderately flourishing and 14 out of 24, or 58.3%, languishing students were diagnosed with any current mental illness. The p-value was .000 (see appendix, Figure 8).

Religiosity was a significant protective factor when students faced competitiveness at school with p=.004. As the level of students' religiosity decreased from very religious to fairly religious, not too religious, and not religious at all, the percentage of students who had mental illness increased from 9.2% (41/445) to 14% (150/1075), 15.7% (104/664), and 17.1% (77/450) (see appendix, Figure 9).

Emotional support from family also helps students at risk due to competitiveness to become resilient. Students with higher levels of perceived social support from family were at least two times less likely to have a mental illness. The percentages of students who were at risk due to competitiveness and are diagnosed with a mental illness were only 7.8% (100/1284) and 15.5% (112/723) when the students strongly agreed or somewhat agreed, respectively, but 22.5% (60/267), 33.3% (52/156), and 24% (49/204) when the students felt neutral, somewhat disagreed, and strongly disagreed, respectively, to the statement. The result was significant at p=.000 (see appendix, Figure 10).

Social support from friends was also a significant protective factor with p=.000 for students at risk due to competitiveness. Students who strongly agreed or somewhat agreed with the statement that their friends really try to help them were almost two times less likely to have

mental illness than students who felt neutral, somewhat disagreed, or strongly disagreed to the statement. The percentages of students who were diagnosed with any current mental illness increased from 9.6% (109/1139) and 13.2% (116/876) to 24.1% (92/381), 26.3% (31/118), and 18.8% (22/117) as the level of the students' perceived friends' support increased (see appendix, Figure 11).

Finally, student's mental health also significantly protected students who were at a high risk of competitiveness. Out of 1368 flourishing students, only 71, or 5.2%, were diagnosed with a mental illness. However, 243 out of 1166, or 20.8%, of moderately flourishing students, and 59 out of 102, or 57.8%, languishing were diagnosed with a mental illness. The p-value was .000 (see appendix, Figure 12).

If students were in financial struggle, religiosity did not significantly protect them to become resilient. The percentages of students who were at risk due to financial crisis and had a mental illness were 17.2% (21/122) when very religious, 22.2% (73/329) when fairly religious, 24.6% (57/232) when not too religious, and 24.6% (43/175) when not religious at all. The result was not significant at p=.398 (see appendix, Figure 13).

Emotional support from family was a significant protective factor that helped financially struggling students become resilient at p=.000. The percentages of students who were financially at risk and had a mental illness gradually increased from 11.9% (34/286) when the student strongly agreed to 22.4% (55/245) when somewhat agreed, 25.5% (25/98) felt neutral, 34.1% (29/85) when somewhat disagreed, and 36.6% (41/112) when strongly disagreed to the statement (see appendix, Figure 14).

Friends' support also significantly protected students at risk due to financial struggle. Only 9.6% (109/1139) and 13.2% (116/876) students who strongly agreed or somewhat agreed,

respectively, that their friends really try to help them were diagnosed with any mental illness, compared to 24.1% (92/381), 26.3% (31/118), and 18.8% (22/117) of students who felt neutral, somewhat disagreed, and strongly disagreed to the statement, respectively, had mental illness. The result was significant at p=.000 (see appendix, Figure 15).

Finally, mental health was also a significant protective factor for students with financial difficulties with a p-value of .000. Mentally flourishing students were at least three times less likely than moderately flourishing students and at least seven times less likely than the languishing students to be diagnosed with any current mental illness. Out of 857 mentally flourishing students, only 193, or 7.7%, had a mental illness, whereas 27.3%, or 123 out of 451, and 62.9%, or 44 out of 70, of the moderately flourishing and languishing students, respectively, had a mental illness (see appendix, Figure 16).

Discussion/Conclusion

The risk hypothesis was confirmed with all four risk factors. The students who were exposed to at least one of the sexuality, discrimination, competitiveness, and financial risk factors were more likely to be diagnosed with a mental illness. The protective hypothesis was also confirmed in all four protective factors, because religiosity, perceived social support from family and friends, and the presence of mental health, demonstrated overall negative correlations with the diagnosis of a mental illness. The resilience hypothesis was only partially confirmed. Religiosity was a significant protective factor only against racial discrimination and competitiveness. Social support from family significantly protected students from racial discrimination, competitiveness, and financial struggles, but not from the sexual risk factor. Only

the support from friends and the presence of mental health were the clear protective factors that mediated all risks.

This research was meaningful for its wide scope of studying many risk factors and protective factors together and applying them to the concept of resilience. It was also important that the study focused on a college population in which an increasing number of students are being diagnosed with mental disorders. The findings in this study demonstrate that students who are exposed to various risk factors can still function well with the help of various protective factors. It also helps schools in proposing various methods to promote resilience among college students at risk. Since the findings suggests that social support from friends and mental health are the most effective protective factors, schools should focus more on promoting friend's support and mental health within the campus. Schools can promote peer support by increasing the number of student gatherings, encouraging conversations, and shared leisure time. Although students in general become less engaged in religion during college, they can increase their level of religious commitment by participating in volunteer work or campus religious organizations, donating money, and having religious discussions with others (Astin 2011:124, 87). On the other hand, students can decrease their level of commitment by playing video games, drinking, and partying (Astin 2011:88).

Issues and controversies remain in the study of resilience. Criteria for good adaptation, resilience as positive internal, external, or both adaptations, cultural variations, and the role of neuroscience must be further explored in the study of resilience (Masten and Obradovic 2006:20, 21). Further studies can help find protective factors other than religiosity, social support, and mental health that affect a student's functioning. Moreover, each risk factor and protective factor should be explored in more depth in terms of resilience. For example, a student's religiosity can

be measured in many different ways (Astin 2011:12). Along with a student's perceived religiosity, factors such as his attendance to services and frequency of prayers can be considered to test the level of religiosity of the student. Finally, a longitudinal study is necessary, because the *Healthy Minds* is cross-sectional and my study cannot infer causality from my findings.

Appendix

Table 1: Frequency tables for the presence of the risk factors

Sexual Risk Factor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	5387	94.6	94.6	94.6
	1.00	308	5.4	5.4	100.0
	Total	5695	100.0	100.0	

Discrimination Risk Factor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	5578	97.9	97.9	97.9
	1.00	117	2.1	2.1	100.0
	Total	5695	100.0	100.0	

Competitiveness Risk Factor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	3060	53.7	53.7	53.7
	1.00	2635	46.3	46.3	100.0
	Total	5695	100.0	100.0	

Financial Risk Factor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	4837	84.9	84.9	84.9
	1.00	858	15.1	15.1	100.0
	Total	5695	100.0	100.0	

Table 2: Frequency table for the negative outcome

Any Current Mental Illness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	4947	86.9	86.9	86.9
	Yes	748	13.1	13.1	100.0
	Total	5695	100.0	100.0	

Table 3: Crosstab between the negative outcome and the risk factors

Any Current Mental Illness by the Sexual Risk Factor

Crosstab

			Sexual Risk Factor		
			.00	1.00	Total
Any Current Mental Illness	No	Count	4700	247	4947
		% within sexual_2	87.2%	80.2%	86.9%
	Yes	Count	687	61	748
		% within sexual_2	12.8%	19.8%	13.1%
Total		Count	5387	308	5695
		% within sexual_2	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.700[a]	1	.000		
Continuity Correction[b]	12.089	1	.001		
Likelihood Ratio	11.327	1	.001		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	12.698	1	.000		
N of Valid Cases	5695				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 40.45.

b. Computed only for a 2x2 table

Any Current Mental Illness by the Discrimination Risk Factor

Crosstab

			Discrimination Risk Factor		
			.00	1.00	Total
Any Current Mental Illness	No	Count	4864	83	4947
		% within discrim_2	87.2%	70.9%	86.9%
	Yes	Count	714	34	748
		% within discrim_2	12.8%	29.1%	13.1%
Total		Count	5578	117	5695
		% within discrim_2	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	26.554[a]	1	.000		
Continuity Correction[b]	25.148	1	.000		
Likelihood Ratio	20.931	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	26.549	1	.000		
N of Valid Cases	5695				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.37.

b. Computed only for a 2x2 table

Any Current Mental Illness by the Competitiveness Risk Factor

Crosstab

			Competitiveness Risk Factor		
			.00	1.00	Total
Any Current Mental Illness	No	Count	2684	2263	4947
		% within compet_2	87.7%	85.8%	86.9%
	Yes	Count	375	373	748
		% within compet_2	12.3%	14.2%	13.1%
Total		Count	3059	2636	5695
		% within compet_2	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.439[a]	1	.035		
Continuity Correction[b]	4.275	1	.039		
Likelihood Ratio	4.429	1	.035		
Fisher's Exact Test				.037	.019
Linear-by-Linear Association	4.438	1	.035		
N of Valid Cases	5695				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 346.22.

b. Computed only for a 2x2 table

Any Current Mental Illness by the Financial Risk Factor

Crosstab

	Financial Risk Factor	Total

			.00	1.00	
Any Current Mental Illness	No	Count	4283	665	4948
		% within fincur_2	88.5%	77.5%	86.9%
	Yes	Count	555	193	748
		% within fincur_2	11.5%	22.5%	13.1%
Total		Count	4838	858	5696
		% within fincur_2	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	77.616[a]	1	.000		
Continuity Correction[b]	76.653	1	.000		
Likelihood Ratio	68.217	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	77.602	1	.000		
N of Valid Cases	5696				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 112.67.

b. Computed only for a 2x2 table

Table 4: Crosstab between the negative outcome and the protective factors

Any Current Mental Illness by Religiosity

Crosstab

			Religiosity				
			very religious	fairly religious	not too religious	not religious at all	Total
Any Current Mental Illness	No	Count	878	1797	1268	1000	4943
		% within a10: how religious would you say you are?	91.8%	86.5%	86.3%	84.2%	86.9%
	Yes	Count	78	281	202	187	748
		% within a10: how religious would you say you are?	8.2%	13.5%	13.7%	15.8%	13.1%
Total		Count	956	2078	1470	1187	5691
		% within a10: how religious would you say you are?	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.614[a]	3	.000
Likelihood Ratio	31.044	3	.000
Linear-by-Linear Association	21.513	1	.000
N of Valid Cases	5691		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 125.65.

Any Current Mental Illness by Family Support: I get the emotional help and support I need from my family

Crosstab

			Family Support: I get the emotional help and support i need from my family					
			very strongly disagree	strongly disagree	midly disagree	neutral	mildly agree	Total
Any Current	No	Count	319	256	488	1320	2440	4823

Mental Illness		% within f6a: i get the emotional help and support i need from my family	75.8%	74.4%	82.4%	85.2%	92.6%	87.1%
	Yes	Count	102	88	104	229	194	717
		% within f6a: i get the emotional help and support i need from my family	24.2%	25.6%	17.6%	14.8%	7.4%	12.9%
Total		Count	421	344	592	1549	2634	5540
		% within f6a: i get the emotional help and support i need from my family	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	184.978[a]	4	.000
Likelihood Ratio	177.981	4	.000
Linear-by-Linear Association	172.446	1	.000
N of Valid Cases	5540		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 44.52.

Any Current Mental Illness by Friends Support: my friends really try to help me

Crosstab

			Friends Support: my friends really try to help me					
			very strongly disagree	strongly disagree	mildly disagree	neutral	mildly agree	Total
Any Current Mental Illness	No	Count	196	187	664	1581	2194	4822
		% within f6b: my friends really try to help me	81.7%	77.9%	80.2%	86.9%	91.1%	87.1%
	Yes	Count	44	53	164	239	214	714
		% within f6b: my friends really try to help me: we are interested in how you feel about	18.3%	22.1%	19.8%	13.1%	8.9%	12.9%

Total	Count	240	240	828	1820	2408	5536
	% within f6b: my friends really try to help me	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	94.089[a]	4	.000
Likelihood Ratio	90.175	4	.000
Linear-by-Linear Association	78.981	1	.000
N of Valid Cases	5536		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 30.95.

Any Current Mental Illness by the Mental Health Continuum

Crosstab

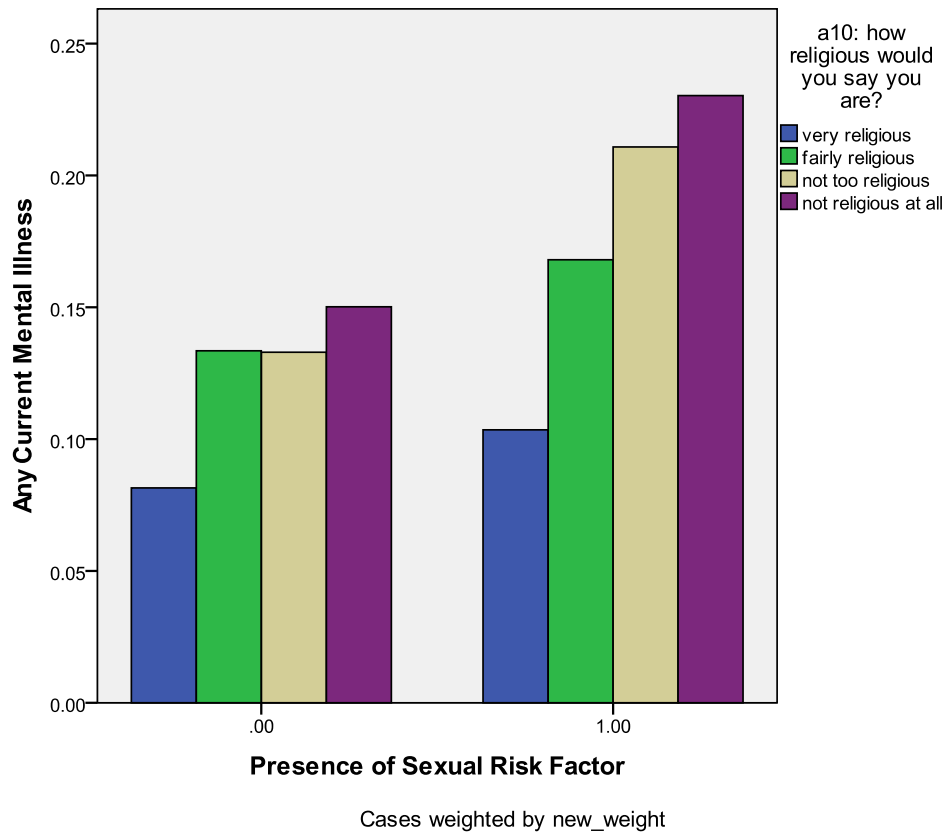
			Mental Health Continuum			
			Languishing	Moderate	Flourishing	Total
Any Current Mental Illness	No	Count	90	2057	2800	4947
		% within Mental Health Continuum Categorical Diagnosis	43.9%	81.1%	94.8%	86.9%
	Yes	Count	115	480	153	748
		% within Mental Health Continuum Categorical Diagnosis	56.1%	18.9%	5.2%	13.1%
Total		Count	205	2537	2953	5695
		% within Mental Health Continuum Categorical Diagnosis	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	569.807[a]	2	.000
Likelihood Ratio	483.872	2	.000
Linear-by-Linear Association	498.838	1	.000
N of Valid Cases	5695		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.93.

Figure 1: Religiosity by Any Current Mental Illness by Sexual Risk Factor



Religiosity * Any Current Mental Illness *Sexual Risk Factor

sexual_2				any_current_mi		
				No	Yes	Total
.00	a10: how religious would you say you are?	very religious	Count	862	76	938
			% within a10: how religious would you say you are?	91.9%	8.1%	100.0%
			% within any_current_mi	18.4%	11.1%	17.4%
			% of Total	16.0%	1.4%	17.4%
		fairly religious	Count	1720	265	1985
			% within a10: how religious would you say you are?	86.6%	13.4%	100.0%
			% within any_current_mi	36.6%	38.6%	36.9%
			% of Total	31.9%	4.9%	36.9%

		not too religious	Count	1198	184	1382
			% within a10: how religious would you say you are?	86.7%	13.3%	100.0%
			% within any_current_mi	25.5%	26.8%	25.7%
			% of Total	22.3%	3.4%	25.7%
		not religious at all	Count	917	162	1079
			% within a10: how religious would you say you are?	85.0%	15.0%	100.0%
			% within any_current_mi	19.5%	23.6%	20.0%
			% of Total	17.0%	3.0%	20.0%
	Total		Count	4697	687	5384
			% within a10: how religious would you say you are?	87.2%	12.8%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.2%	12.8%	100.0%
1.00	a10: how religious would you say you are?	very religious	Count	17	2	19
			% within a10: how religious would you say you are?	89.5%	10.5%	100.0%
			% within any_current_mi	6.9%	3.2%	6.1%
			% of Total	5.5%	.6%	6.1%
		fairly religious	Count	78	16	94
			% within a10: how religious would you say you are?	83.0%	17.0%	100.0%
			% within any_current_mi	31.5%	25.8%	30.3%
			% of Total	25.2%	5.2%	30.3%
		not too religious	Count	70	19	89
			% within a10: how religious would you say you are?	78.7%	21.3%	100.0%
			% within any_current_mi	28.2%	30.6%	28.7%
			% of Total	22.6%	6.1%	28.7%
		not religious at all	Count	83	25	108
			% within a10: how religious would you say you are?	76.9%	23.1%	100.0%
			% within any_current_mi	33.5%	40.3%	34.8%
			% of Total	26.8%	8.1%	34.8%

Total	Count	248	62	310
	% within a10: how religious would you say you are?	80.0%	20.0%	100.0%
	% within any_current_mi	100.0%	100.0%	100.0%
	% of Total	80.0%	20.0%	100.0%

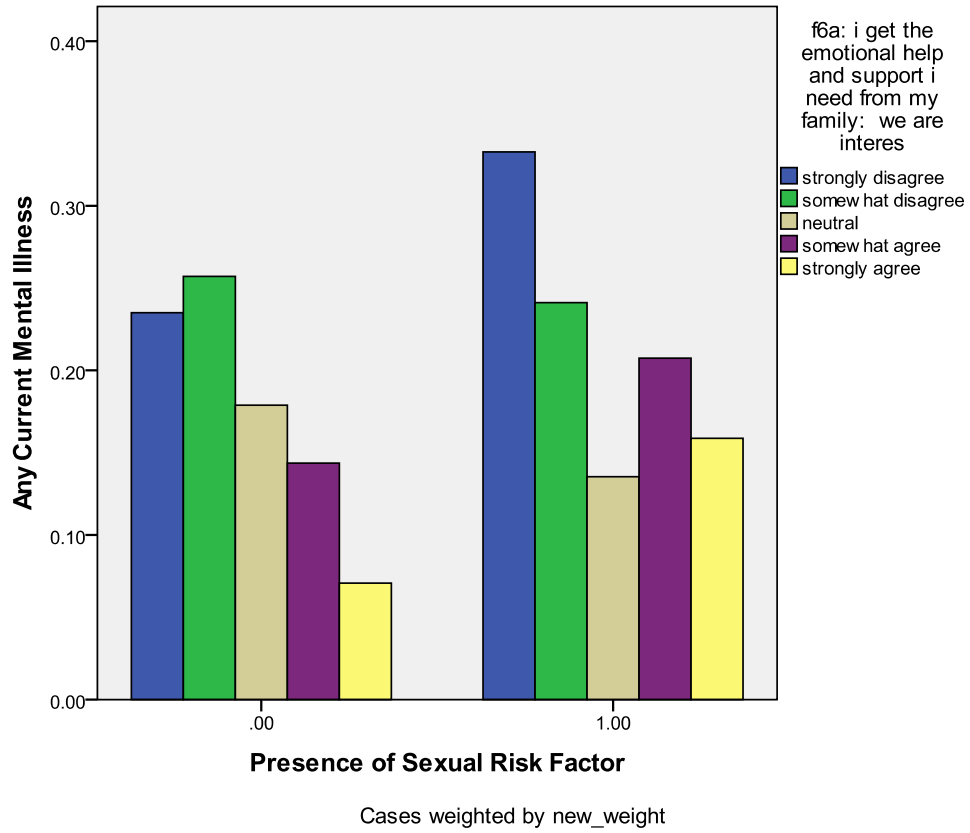
Chi-Square Tests

sexual_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	24.206[a]	3	.000
	Likelihood Ratio	26.323	3	.000
	Linear-by-Linear Association	16.694	1	.000
	N of Valid Cases	5384		
1.00	Pearson Chi-Square	2.357[b]	3	.502
	Likelihood Ratio	2.524	3	.471
	Linear-by-Linear Association	2.167	1	.141
	N of Valid Cases	310		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 119.69.

b. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.80.

Figure 2: Family Support by Any Current Mental Illness by Sexual Risk Factor



Family Support * Any Current Mental Illness * Sexual Risk Factor

sexual_2				any_current_mi		
				No	Yes	Total
.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	296	91	387
			% within f6a: i get the emotional help and support i need from my family: we are interes	76.5%	23.5%	100.0%
			% within any_current_mi	6.5%	13.9%	7.4%
			% of Total	5.6%	1.7%	7.4%
		somewhat disagree	Count	235	81	316
			% within f6a: i get the emotional help and support i need from my family: we are interes	74.4%	25.6%	100.0%
			% within any_current_mi	5.1%	12.3%	6.0%
			% of Total	4.5%	1.5%	6.0%
		neutral	Count	445	97	542

			% within f6a: i get the emotional help and support i need from my family: we are interes	82.1%	17.9%	100.0%
			% within any_current_mi	9.7%	14.8%	10.3%
			% of Total	8.5%	1.9%	10.3%
		somewhat agree	Count	1238	208	1446
			% within f6a: i get the emotional help and support i need from my family: we are interes	85.6%	14.4%	100.0%
			% within any_current_mi	27.0%	31.7%	27.6%
			% of Total	23.6%	4.0%	27.6%
		strongly agree	Count	2370	180	2550
			% within f6a: i get the emotional help and support i need from my family: we are interes	92.9%	7.1%	100.0%
			% within any_current_mi	51.7%	27.4%	48.7%
			% of Total	45.2%	3.4%	48.7%
	Total		Count	4584	657	5241
			% within f6a: i get the emotional help and support i need from my family: we are interes	87.5%	12.5%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.5%	12.5%	100.0%
1.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	23	12	35
			% within f6a: i get the emotional help and support i need from my family: we are interes	65.7%	34.3%	100.0%
			% within any_current_mi	9.6%	20.0%	11.7%
			% of Total	7.7%	4.0%	11.7%
		somewhat disagree	Count	21	7	28
			% within f6a: i get the emotional help and support i need from my family: we are interes	75.0%	25.0%	100.0%
			% within any_current_mi	8.8%	11.7%	9.4%
			% of Total	7.0%	2.3%	9.4%
		neutral	Count	43	7	50

		% within f6a: i get the emotional help and support i need from my family: we are interes	86.0%	14.0%	100.0%
		% within any_current_mi	18.0%	11.7%	16.7%
		% of Total	14.4%	2.3%	16.7%
	somewhat agree	Count	82	21	103
		% within f6a: i get the emotional help and support i need from my family: we are interes	79.6%	20.4%	100.0%
		% within any_current_mi	34.3%	35.0%	34.4%
		% of Total	27.4%	7.0%	34.4%
	strongly agree	Count	70	13	83
		% within f6a: i get the emotional help and support i need from my family: we are interes	84.3%	15.7%	100.0%
		% within any_current_mi	29.3%	21.7%	27.8%
		% of Total	23.4%	4.3%	27.8%
Total		Count	239	60	299
		% within f6a: i get the emotional help and support i need from my family: we are interes	79.9%	20.1%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	79.9%	20.1%	100.0%

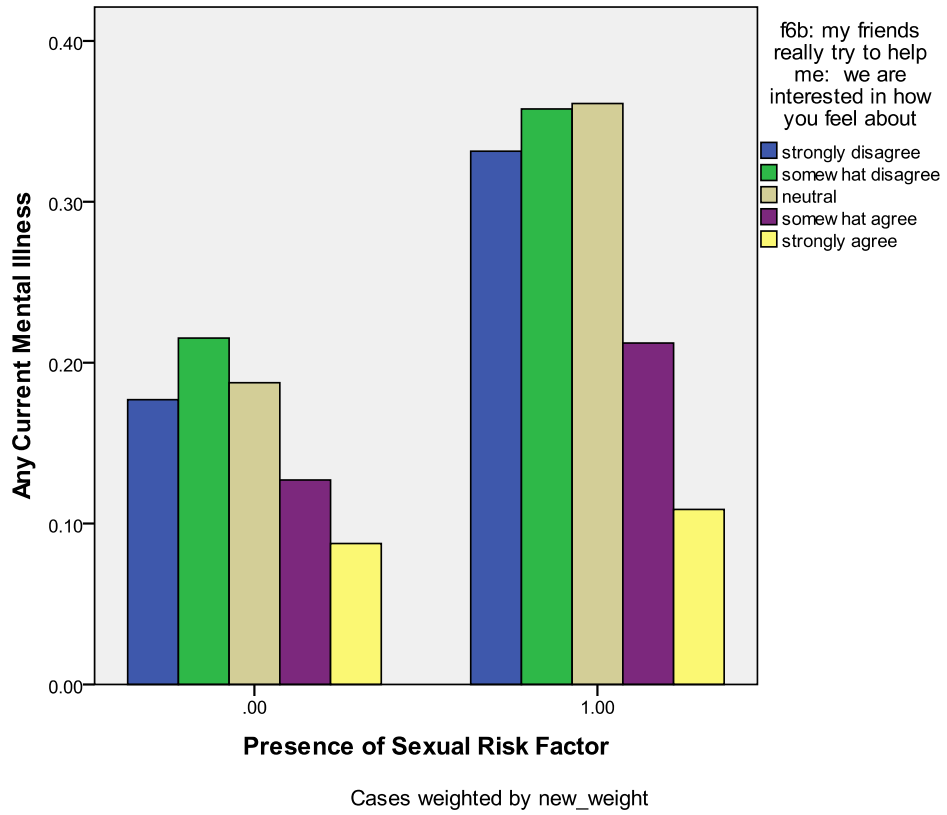
Chi-Square Tests

sexual_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	180.458[a]	4	.000
	Likelihood Ratio	172.964	4	.000
	Linear-by-Linear Association	167.237	1	.000
	N of Valid Cases	5241		
1.00	Pearson Chi-Square	6.994[b]	4	.136
	Likelihood Ratio	6.572	4	.160
	Linear-by-Linear Association	4.125	1	.042
	N of Valid Cases	299		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.61.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.62.

Figure 3: Friends Support by Any Current Mental Illness by Sexual Risk Factor



Friends Support * Any Current Mental Illness * Sexual Risk Factor

sexual_2				any_current_mi		
				No	Yes	Total
.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	188	40	228
			% within f6b: my friends really try to help me: we are interested in how you feel about	82.5%	17.5%	100.0%
			% within any_current_mi	4.1%	6.1%	4.4%
			% of Total	3.6%	.8%	4.4%
		somewhat disagree	Count	179	49	228
			% within f6b: my friends really try to help me: we are interested in how you feel about	78.5%	21.5%	100.0%

			% within any_current_mi	3.9%	7.5%	4.4%
			% of Total	3.4%	.9%	4.4%
		neutral	Count	633	146	779
			% within f6b: my friends really try to help me: we are interested in how you feel about	81.3%	18.7%	100.0%
			% within any_current_mi	13.8%	22.4%	14.9%
			% of Total	12.1%	2.8%	14.9%
		somewhat agree	Count	1507	219	1726
			% within f6b: my friends really try to help me: we are interested in how you feel about	87.3%	12.7%	100.0%
			% within any_current_mi	32.9%	33.5%	33.0%
			% of Total	28.8%	4.2%	33.0%
		strongly agree	Count	2074	199	2273
			% within f6b: my friends really try to help me: we are interested in how you feel about	91.2%	8.8%	100.0%
			% within any_current_mi	45.3%	30.5%	43.4%
			% of Total	39.6%	3.8%	43.4%
	Total		Count	4581	653	5234
			% within f6b: my friends really try to help me: we are interested in how you feel about	87.5%	12.5%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.5%	12.5%	100.0%
1.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	8	4	12
			% within f6b: my friends really try to help me: we are interested in how you feel about	66.7%	33.3%	100.0%
			% within any_current_mi	3.3%	6.7%	4.0%
			% of Total	2.7%	1.3%	4.0%
		somewhat disagree	Count	7	4	11
			% within f6b: my friends really try to help me: we are interested in how you feel about	63.6%	36.4%	100.0%

		% within any_current_mi	2.9%	6.7%	3.7%
		% of Total	2.3%	1.3%	3.7%
	neutral	Count	31	17	48
		% within f6b: my friends really try to help me: we are interested in how you feel about	64.6%	35.4%	100.0%
		% within any_current_mi	12.9%	28.3%	16.0%
		% of Total	10.3%	5.7%	16.0%
	somewhat agree	Count	74	20	94
		% within f6b: my friends really try to help me: we are interested in how you feel about	78.7%	21.3%	100.0%
		% within any_current_mi	30.8%	33.3%	31.3%
		% of Total	24.7%	6.7%	31.3%
	strongly agree	Count	120	15	135
		% within f6b: my friends really try to help me: we are interested in how you feel about	88.9%	11.1%	100.0%
		% within any_current_mi	50.0%	25.0%	45.0%
		% of Total	40.0%	5.0%	45.0%
Total		Count	240	60	300
		% within f6b: my friends really try to help me: we are interested in how you feel about	80.0%	20.0%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	80.0%	20.0%	100.0%

Chi-Square Tests

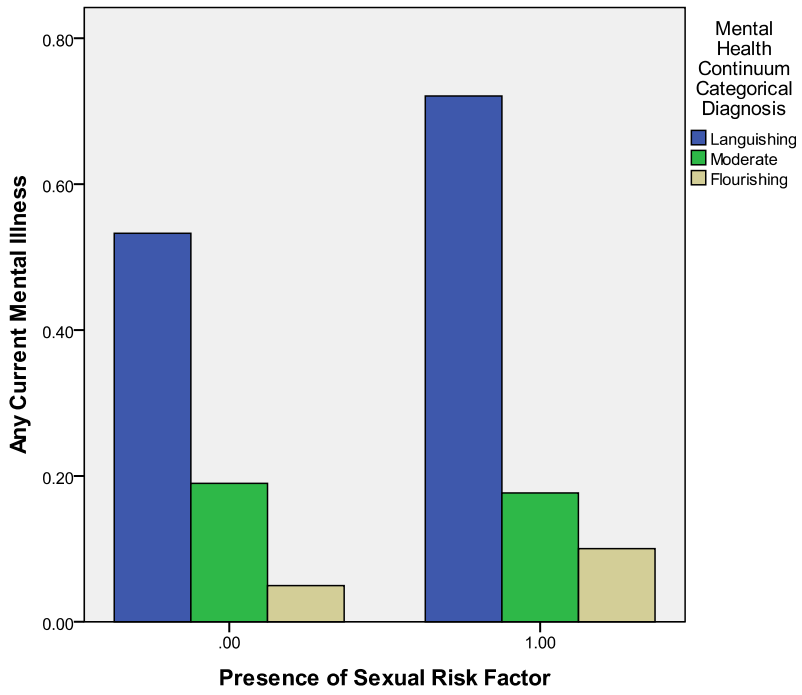
sexual_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	79.236[a]	4	.000
	Likelihood Ratio	75.824	4	.000
	Linear-by-Linear Association	66.852	1	.000
	N of Valid Cases	5234		
1.00	Pearson Chi-Square	17.067[b]	4	.002

Likelihood Ratio	16.653	4	.002
Linear-by-Linear Association	14.492	1	.000
N of Valid Cases	300		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.45.

b. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.20.

Figure 4: Mental Health by Any Current Mental Illness by Sexual Risk Factor



Mental Health Continuum * Any Current Mental Illness * Sexual Risk Factor

sexual_2				any_current_mi		
				No	Yes	Total
.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	81	93	174
			% within Mental Health Continuum Categorical Diagnosis	46.6%	53.4%	100.0%
			% within any_current_mi	1.7%	13.5%	3.2%
			% of Total	1.5%	1.7%	3.2%
		Moderate	Count	1938	454	2392
			% within Mental Health Continuum Categorical Diagnosis	81.0%	19.0%	100.0%
			% within any_current_mi	41.2%	66.1%	44.4%
			% of Total	36.0%	8.4%	44.4%
		Flourishing	Count	2681	140	2821
			% within Mental Health Continuum Categorical Diagnosis	95.0%	5.0%	100.0%
			% within any_current_mi	57.0%	20.4%	52.4%
			% of Total	49.8%	2.6%	52.4%
	Total		Count	4700	687	5387

			% within Mental Health Continuum Categorical Diagnosis	87.2%	12.8%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.2%	12.8%	100.0%
1.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	9	22	31
			% within Mental Health Continuum Categorical Diagnosis	29.0%	71.0%	100.0%
			% within any_current_mi	3.6%	36.1%	10.1%
			% of Total	2.9%	7.1%	10.1%
		Moderate	Count	119	26	145
			% within Mental Health Continuum Categorical Diagnosis	82.1%	17.9%	100.0%
			% within any_current_mi	48.2%	42.6%	47.1%
			% of Total	38.6%	8.4%	47.1%
		Flourishing	Count	119	13	132
			% within Mental Health Continuum Categorical Diagnosis	90.2%	9.8%	100.0%
			% within any_current_mi	48.2%	21.3%	42.9%
			% of Total	38.6%	4.2%	42.9%
	Total		Count	247	61	308
			% within Mental Health Continuum Categorical Diagnosis	80.2%	19.8%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	80.2%	19.8%	100.0%

Chi-Square Tests

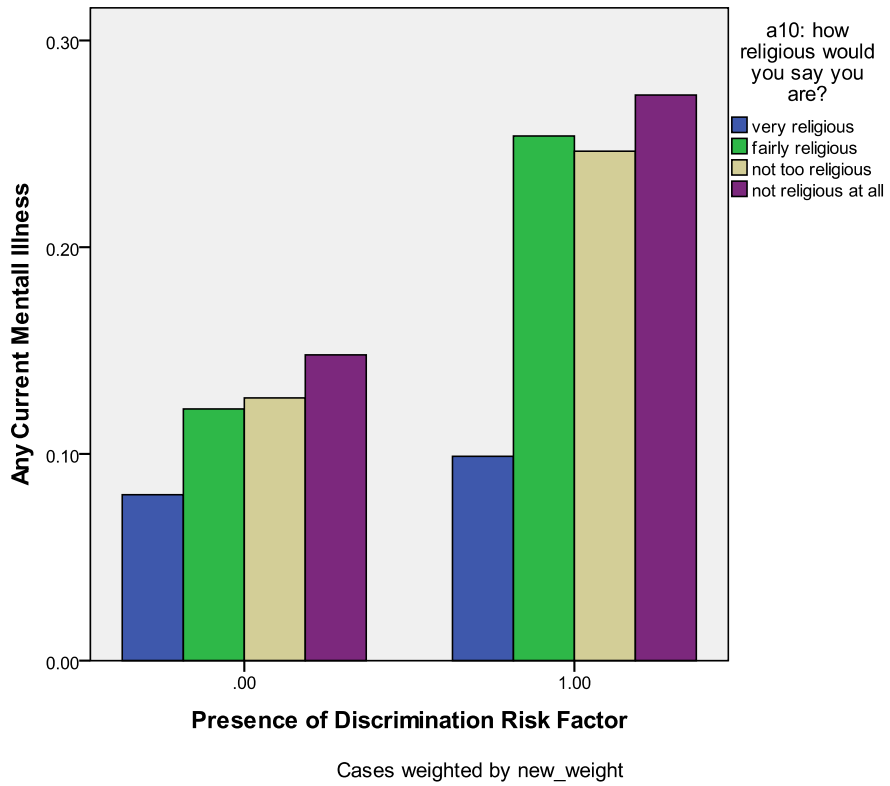
sexual_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	496.210[a]	2	.000
	Likelihood Ratio	433.118	2	.000
	Linear-by-Linear Association	447.772	1	.000
	N of Valid Cases	5387		
1.00	Pearson Chi-Square	59.650[b]	2	.000
	Likelihood Ratio	47.886	2	.000
	Linear-by-Linear Association	40.646	1	.000

N of Valid Cases	308		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.19.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.14.

Figure 5: Religiosity by Any Current Mental Illness by Discrimination Risk Factor



Religiosity * Any Current Mental Illness * Discrimination Risk Factor

discrim_2				any_current_mi		
				No	Yes	Total
.00	a10: how religious would you say you are?	very religious	Count	803	70	873
			% within a10: how religious would you say you are?	92.0%	8.0%	100.0%
			% within any_current_mi	17.7%	11.1%	16.9%
			% of Total	15.5%	1.4%	16.9%
		fairly	Count	1641	227	1868

		religious	% within a10: how religious would you say you are?	87.8%	12.2%	100.0%
			% within any_current_mi	36.1%	36.1%	36.1%
			% of Total	31.7%	4.4%	36.1%
		not too religious	Count	1170	170	1340
			% within a10: how religious would you say you are?	87.3%	12.7%	100.0%
			% within any_current_mi	25.7%	27.0%	25.9%
			% of Total	22.6%	3.3%	25.9%
		not religious at all	Count	935	162	1097
			% within a10: how religious would you say you are?	85.2%	14.8%	100.0%
			% within any_current_mi	20.6%	25.8%	21.2%
			% of Total	18.1%	3.1%	21.2%
	Total		Count	4549	629	5178
			% within a10: how religious would you say you are?	87.9%	12.1%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.9%	12.1%	100.0%
1.00	a10: how religious would you say you are?	very religious	Count	76	8	84
			% within a10: how religious would you say you are?	90.5%	9.5%	100.0%
			% within any_current_mi	19.2%	6.8%	16.4%
			% of Total	14.8%	1.6%	16.4%

	fairly religious	Count	156	53	209
		% within a10: how religious would you say you are?	74.6%	25.4%	100.0%
		% within any_current_mi	39.5%	44.9%	40.7%
		% of Total	30.4%	10.3%	40.7%
	not too religious	Count	98	32	130
		% within a10: how religious would you say you are?	75.4%	24.6%	100.0%
		% within any_current_mi	24.8%	27.1%	25.3%
		% of Total	19.1%	6.2%	25.3%
	not religious at all	Count	65	25	90
		% within a10: how religious would you say you are?	72.2%	27.8%	100.0%
		% within any_current_mi	16.5%	21.2%	17.5%
		% of Total	12.7%	4.9%	17.5%
Total		Count	395	118	513
		% within a10: how religious would you say you are?	77.0%	23.0%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	77.0%	23.0%	100.0%

Chi-Square Tests

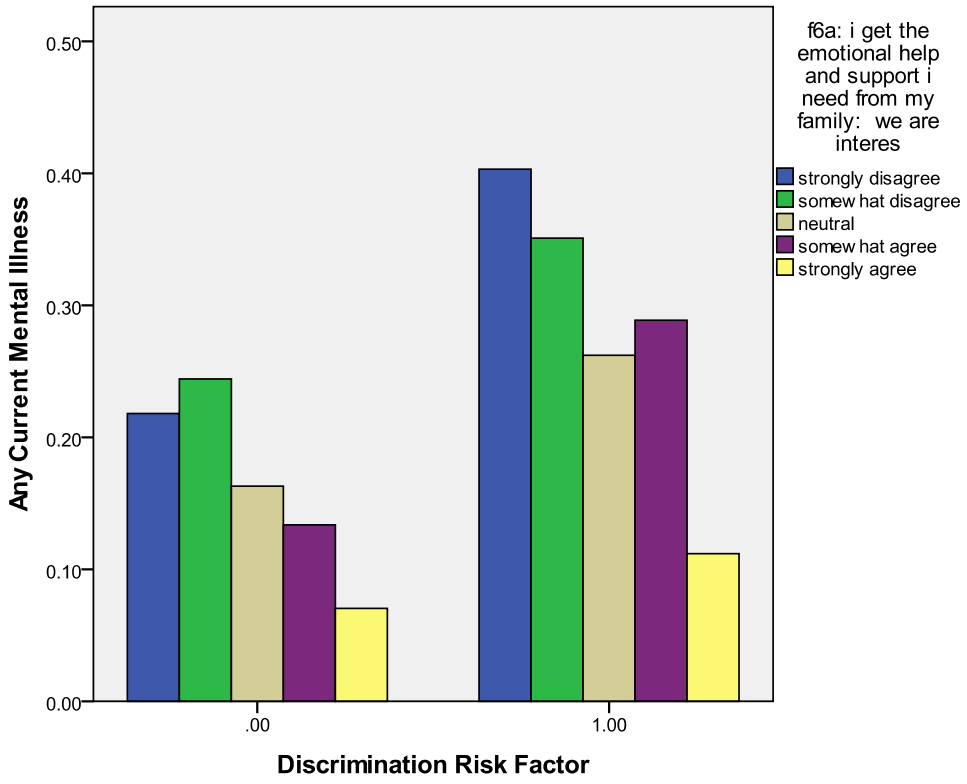
discrim_2	Value	df	Asymp. Sig. (2-sided)

.00	Pearson Chi-Square	21.369[a]	3	.000
	Likelihood Ratio	22.631	3	.000
	Linear-by-Linear Association	18.172	1	.000
	N of Valid Cases	5178		
1.00	Pearson Chi-Square	10.621[b]	3	.014
	Likelihood Ratio	12.347	3	.006
	Linear-by-Linear Association	5.757	1	.016
	N of Valid Cases	513		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 106.05.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 19.32.

Figure 6: Family Support by Any Current Mental Illness by Discrimination Risk Factor



Family Support * Any Current Mental Illness * Discrimination Risk Factor

discrim_2				any_current_mi		
				No	Yes	Total
.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	285	79	364
			% within f6a: i get the emotional help and support i need from my family: we are interes	78.3%	21.7%	100.0%
			% within any_current_mi	6.4%	13.2%	7.2%
			% of Total	5.7%	1.6%	7.2%
		somewhat disagree	Count	232	75	307
			% within f6a: i get the emotional help and support i need from my family: we are interes	75.6%	24.4%	100.0%
			% within any_current_mi	5.2%	12.5%	6.1%
			% of Total	4.6%	1.5%	6.1%
		neutral	Count	434	85	519

			% within f6a: i get the emotional help and support i need from my family: we are interes	83.6%	16.4%	100.0%
			% within any_current_mi	9.8%	14.2%	10.3%
			% of Total	8.6%	1.7%	10.3%
		somewhat agree	Count	1219	188	1407
			% within f6a: i get the emotional help and support i need from my family: we are interes	86.6%	13.4%	100.0%
			% within any_current_mi	27.5%	31.4%	27.9%
			% of Total	24.2%	3.7%	27.9%
		strongly agree	Count	2265	172	2437
			% within f6a: i get the emotional help and support i need from my family: we are interes	92.9%	7.1%	100.0%
			% within any_current_mi	51.1%	28.7%	48.4%
			% of Total	45.0%	3.4%	48.4%
	Total		Count	4435	599	5034
			% within f6a: i get the emotional help and support i need from my family: we are interes	88.1%	11.9%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.1%	11.9%	100.0%
1.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	34	23	57
			% within f6a: i get the emotional help and support i need from my family: we are interes	59.6%	40.4%	100.0%
			% within any_current_mi	8.8%	19.5%	11.3%
			% of Total	6.7%	4.5%	11.3%
		somewhat disagree	Count	24	13	37
			% within f6a: i get the emotional help and support i need from my family: we are interes	64.9%	35.1%	100.0%
			% within any_current_mi	6.2%	11.0%	7.3%
			% of Total	4.7%	2.6%	7.3%
		neutral	Count	54	19	73

		% within f6a: i get the emotional help and support i need from my family: we are interes	74.0%	26.0%	100.0%
		% within any_current_mi	13.9%	16.1%	14.4%
		% of Total	10.7%	3.8%	14.4%
	somewhat agree	Count	101	41	142
		% within f6a: i get the emotional help and support i need from my family: we are interes	71.1%	28.9%	100.0%
		% within any_current_mi	26.0%	34.7%	28.1%
		% of Total	20.0%	8.1%	28.1%
	strongly agree	Count	175	22	197
		% within f6a: i get the emotional help and support i need from my family: we are interes	88.8%	11.2%	100.0%
		% within any_current_mi	45.1%	18.6%	38.9%
		% of Total	34.6%	4.3%	38.9%
Total		Count	388	118	506
		% within f6a: i get the emotional help and support i need from my family: we are interes	76.7%	23.3%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	76.7%	23.3%	100.0%

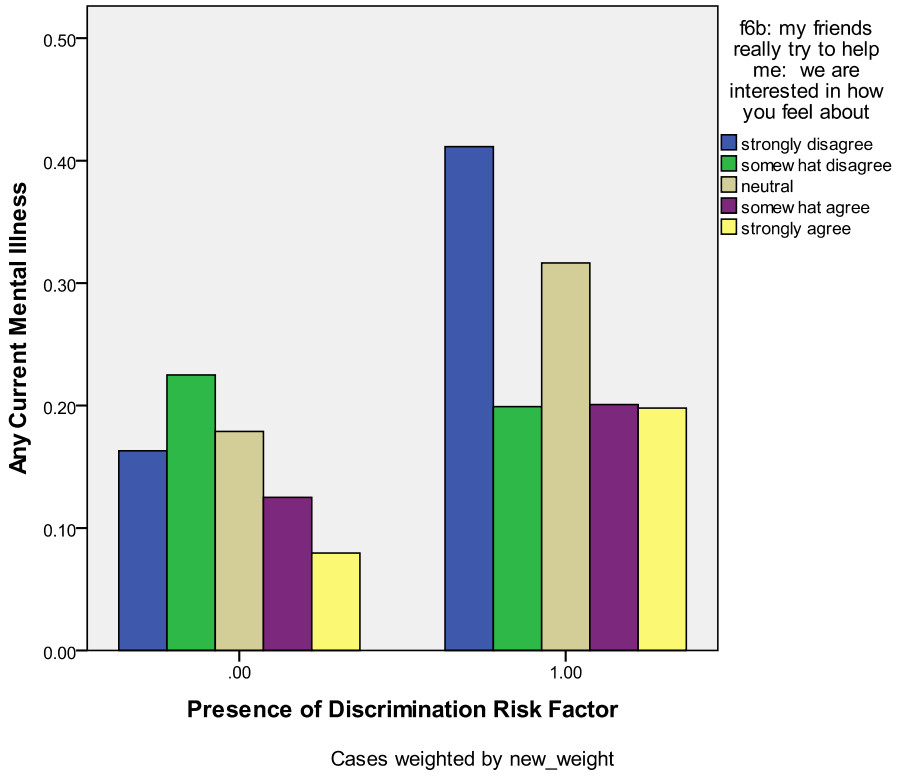
Chi-Square Tests

discrim_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	146.646[a]	4	.000
	Likelihood Ratio	138.874	4	.000
	Linear-by-Linear Association	135.385	1	.000
	N of Valid Cases	5034		
1.00	Pearson Chi-Square	31.152[b]	4	.000
	Likelihood Ratio	32.481	4	.000
	Linear-by-Linear Association	25.171	1	.000
	N of Valid Cases	506		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 36.53.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.63.

Figure 7: Friends Support by Any Current Mental Illness by Discrimination Risk Factor



Friends Support * Any Current Mental Illness * Discrimination Risk Factor

discrim_2				any_current_mi		
				No	Yes	Total
.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	184	36	220
			% within f6b: my friends really try to help me: we are interested in how you feel about	83.6%	16.4%	100.0%
			% within any_current_mi	4.1%	6.0%	4.4%
			% of Total	3.7%	.7%	4.4%
		somewhat disagree	Count	163	47	210
			% within f6b: my friends really try to help me: we are interested in how you feel about	77.6%	22.4%	100.0%
			% within any_current_mi	3.7%	7.9%	4.2%
			% of Total	3.2%	.9%	4.2%
		neutral	Count	587	128	715

			% within f6b: my friends really try to help me: we are interested in how you feel about	82.1%	17.9%	100.0%
			% within any_current_mi	13.2%	21.5%	14.2%
			% of Total	11.7%	2.5%	14.2%
		somewhat agree	Count	1457	208	1665
			% within f6b: my friends really try to help me: we are interested in how you feel about	87.5%	12.5%	100.0%
			% within any_current_mi	32.8%	34.9%	33.1%
			% of Total	29.0%	4.1%	33.1%
		strongly agree	Count	2045	177	2222
			% within f6b: my friends really try to help me: we are interested in how you feel about	92.0%	8.0%	100.0%
			% within any_current_mi	46.1%	29.7%	44.2%
			% of Total	40.6%	3.5%	44.2%
	Total		Count	4436	596	5032
			% within f6b: my friends really try to help me: we are interested in how you feel about	88.2%	11.8%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.2%	11.8%	100.0%
1.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	12	8	20
			% within f6b: my friends really try to help me: we are interested in how you feel about	60.0%	40.0%	100.0%
			% within any_current_mi	3.1%	6.8%	4.0%
			% of Total	2.4%	1.6%	4.0%
		somewhat disagree	Count	24	6	30
			% within f6b: my friends really try to help me: we are interested in how you feel about	80.0%	20.0%	100.0%
			% within any_current_mi	6.2%	5.1%	6.0%
			% of Total	4.8%	1.2%	6.0%
		neutral	Count	77	36	113

		% within f6b: my friends really try to help me: we are interested in how you feel about	68.1%	31.9%	100.0%
		% within any_current_mi	19.9%	30.5%	22.4%
		% of Total	15.3%	7.1%	22.4%
	somewhat agree	Count	124	31	155
		% within f6b: my friends really try to help me: we are interested in how you feel about	80.0%	20.0%	100.0%
		% within any_current_mi	32.1%	26.3%	30.8%
		% of Total	24.6%	6.2%	30.8%
	strongly agree	Count	149	37	186
		% within f6b: my friends really try to help me: we are interested in how you feel about	80.1%	19.9%	100.0%
		% within any_current_mi	38.6%	31.4%	36.9%
		% of Total	29.6%	7.3%	36.9%
Total		Count	386	118	504
		% within f6b: my friends really try to help me: we are interested in how you feel about	76.6%	23.4%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	76.6%	23.4%	100.0%

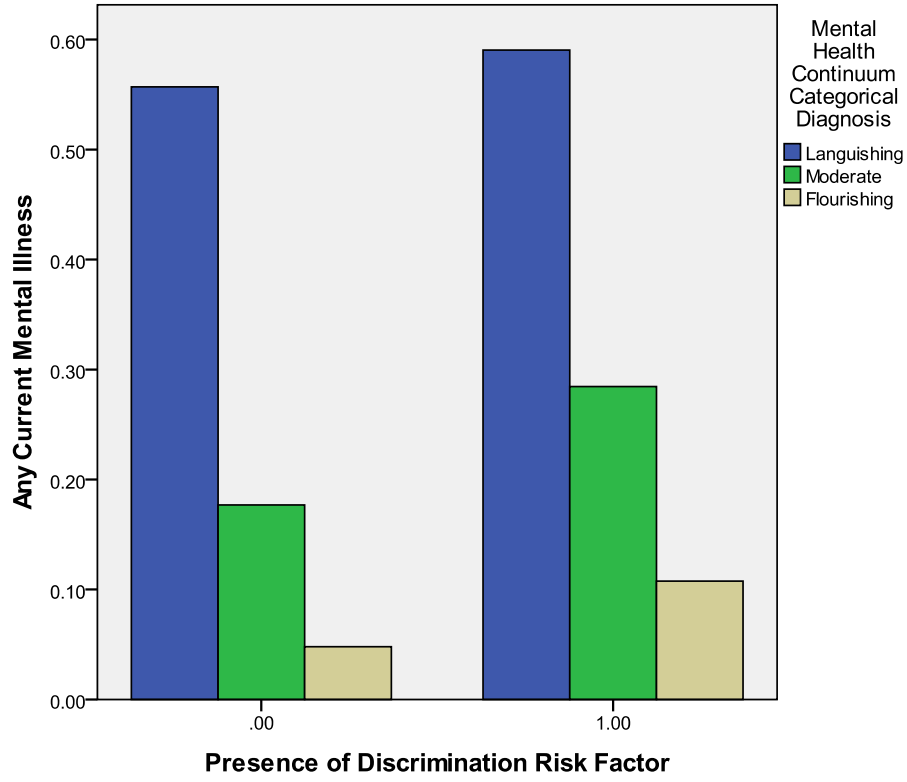
Chi-Square Tests

discrim_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	84.444[a]	4	.000
	Likelihood Ratio	80.722	4	.000
	Linear-by-Linear Association	69.367	1	.000
	N of Valid Cases	5032		
1.00	Pearson Chi-Square	10.051[b]	4	.040
	Likelihood Ratio	9.475	4	.050
	Linear-by-Linear Association	5.390	1	.020
	N of Valid Cases	504		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 24.87.

b. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.68.

Figure 8: Mental Health by Any Current Mental Illness by Discrimination Risk Factor



Cases weighted by new_weight

Mental Health Continuum * Any Current Mental Illness * Discrimination Risk Factor

discrim_2				any_current_mi		Total
				No	Yes	
.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	80	101	181
			% within Mental Health Continuum Categorical Diagnosis	44.2%	55.8%	100.0%
			% within any_current_mi	1.8%	16.0%	3.5%
			% of Total	1.5%	1.9%	3.5%
		Moderate	Count	1851	398	2249
			% within Mental Health Continuum Categorical Diagnosis	82.3%	17.7%	100.0%
			% within any_current_mi	40.7%	63.1%	43.4%
			% of Total	35.7%	7.7%	43.4%
		Flourishing	Count	2622	132	2754
			% within Mental Health Continuum Categorical Diagnosis	95.2%	4.8%	100.0%

			% within any_current_mi	57.6%	20.9%	53.1%
			% of Total	50.6%	2.5%	53.1%
	Total		Count	4553	631	5184
			% within Mental Health Continuum Categorical Diagnosis	87.8%	12.2%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.8%	12.2%	100.0%
1.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	10	14	24
			% within Mental Health Continuum Categorical Diagnosis	41.7%	58.3%	100.0%
			% within any_current_mi	2.5%	12.0%	4.7%
			% of Total	2.0%	2.7%	4.7%
		Moderate	Count	207	82	289
			% within Mental Health Continuum Categorical Diagnosis	71.6%	28.4%	100.0%
			% within any_current_mi	52.4%	70.1%	56.4%
			% of Total	40.4%	16.0%	56.4%
		Flourishing	Count	178	21	199
			% within Mental Health Continuum Categorical Diagnosis	89.4%	10.6%	100.0%
			% within any_current_mi	45.1%	17.9%	38.9%
			% of Total	34.8%	4.1%	38.9%
	Total		Count	395	117	512
			% within Mental Health Continuum Categorical Diagnosis	77.1%	22.9%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	77.1%	22.9%	100.0%

Chi-Square Tests

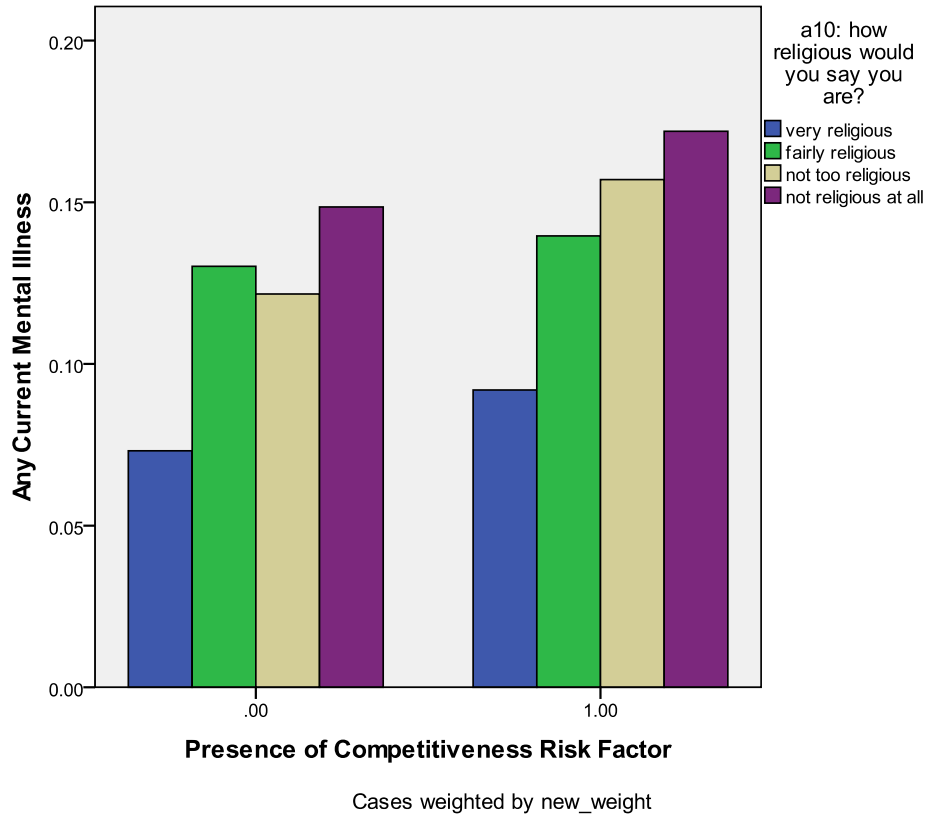
discrim_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	526.761[a]	2	.000
	Likelihood Ratio	432.093	2	.000
	Linear-by-Linear Association	449.188	1	.000
	N of Valid Cases	5184		

1.00	Pearson Chi-Square	39.212[b]	2	.000
	Likelihood Ratio	38.877	2	.000
	Linear-by-Linear Association	37.757	1	.000
	N of Valid Cases	512		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.03.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.48.

Figure 9: Religiosity by Any Current Mental Illness by Competitiveness Risk Factor



Religiosity * Any Current Mental Health * Competitiveness Risk Factor

compet_2				any_current_mi		Total
				No	Yes	
.00	a10: how religious would you say you are?	very religious	Count	474	37	511
			% within a10: how religious would you say you are?	92.8%	7.2%	100.0%
			% within any_current_mi	17.7%	9.9%	16.7%
			% of Total	15.5%	1.2%	16.7%
		fairly religious	Count	872	131	1003
			% within a10: how religious would you say you are?	86.9%	13.1%	100.0%
			% within any_current_mi	32.5%	34.9%	32.8%
			% of Total	28.5%	4.3%	32.8%
		not too religious	Count	708	98	806
			% within a10: how religious would you say you are?	87.8%	12.2%	100.0%

			% within any_current_mi	26.4%	26.1%	26.4%
			% of Total	23.2%	3.2%	26.4%
		not religious at all	Count	627	109	736
			% within a10: how religious would you say you are?	85.2%	14.8%	100.0%
			% within any_current_mi	23.4%	29.1%	24.1%
			% of Total	20.5%	3.6%	24.1%
	Total		Count	2681	375	3056
			% within a10: how religious would you say you are?	87.7%	12.3%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.7%	12.3%	100.0%
1.00	a10: how religious would you say you are?	very religious	Count	404	41	445
			% within a10: how religious would you say you are?	90.8%	9.2%	100.0%
			% within any_current_mi	17.9%	11.0%	16.9%
			% of Total	15.3%	1.6%	16.9%
		fairly religious	Count	925	150	1075
			% within a10: how religious would you say you are?	86.0%	14.0%	100.0%
			% within any_current_mi	40.9%	40.3%	40.8%
			% of Total	35.1%	5.7%	40.8%
		not too religious	Count	560	104	664
			% within a10: how religious would you say you are?	84.3%	15.7%	100.0%
			% within any_current_mi	24.8%	28.0%	25.2%
			% of Total	21.3%	3.9%	25.2%
		not religious at all	Count	373	77	450
			% within a10: how religious would you say you are?	82.9%	17.1%	100.0%
			% within any_current_mi	16.5%	20.7%	17.1%
			% of Total	14.2%	2.9%	17.1%
	Total		Count	2262	372	2634
			% within a10: how religious would you say you are?	85.9%	14.1%	100.0%

	% within any_current_mi	100.0%	100.0%	100.0%
	% of Total	85.9%	14.1%	100.0%

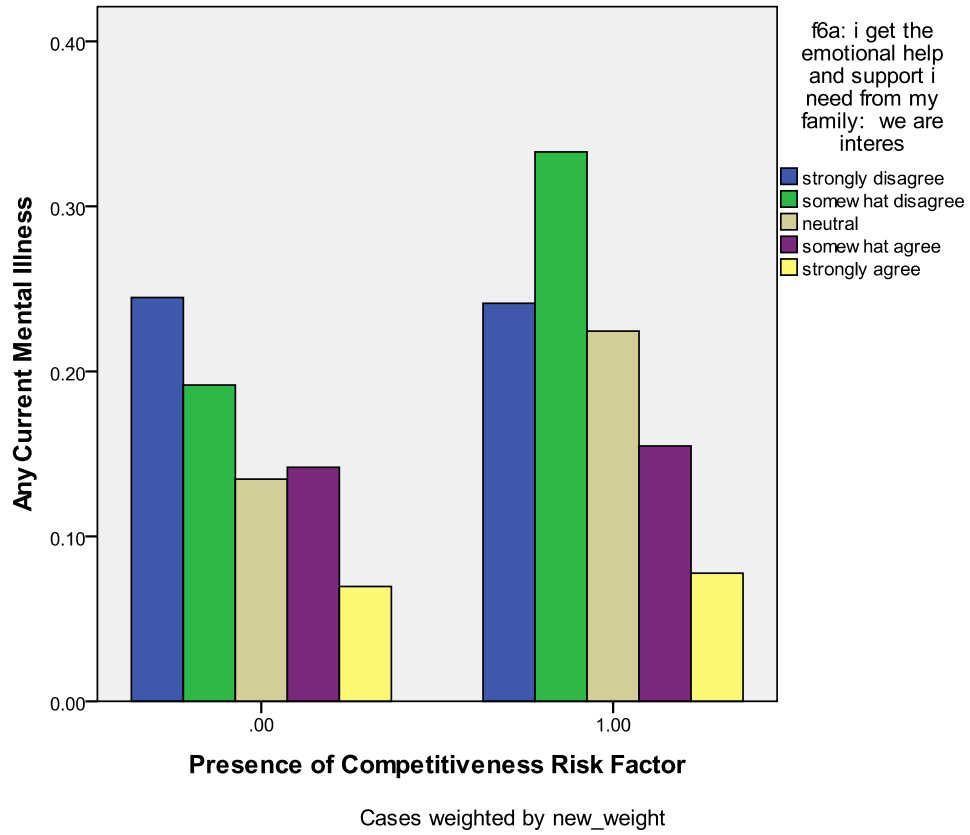
Chi-Square Tests

compet_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	17.008[a]	3	.001
	Likelihood Ratio	18.570	3	.000
	Linear-by-Linear Association	11.081	1	.001
	N of Valid Cases	3056		
1.00	Pearson Chi-Square	13.480[b]	3	.004
	Likelihood Ratio	14.318	3	.003
	Linear-by-Linear Association	11.775	1	.001
	N of Valid Cases	2634		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 62.70.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 62.85.

Figure 10: Family Support by Any Current Mental Illness by Competitiveness Risk Factor



Family Support * Any Current Mental Illness * Competitiveness Risk Factor

compet_2				any_current_mi		
				No	Yes	Total
.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	164	53	217
			% within f6a: i get the emotional help and support i need from my family: we are interes	75.6%	24.4%	100.0%
			% within any_current_mi	6.4%	15.4%	7.5%
			% of Total	5.6%	1.8%	7.5%
		somewhat disagree	Count	152	36	188
			% within f6a: i get the emotional help and support i need from my family: we are interes	80.9%	19.1%	100.0%
			% within any_current_mi	5.9%	10.5%	6.5%
			% of Total	5.2%	1.2%	6.5%
		neutral	Count	281	44	325

			% within f6a: i get the emotional help and support i need from my family: we are interes	86.5%	13.5%	100.0%
			% within any_current_mi	11.0%	12.8%	11.2%
			% of Total	9.7%	1.5%	11.2%
		somewhat agree	Count	709	117	826
			% within f6a: i get the emotional help and support i need from my family: we are interes	85.8%	14.2%	100.0%
			% within any_current_mi	27.7%	34.0%	28.4%
			% of Total	24.4%	4.0%	28.4%
		strongly agree	Count	1256	94	1350
			% within f6a: i get the emotional help and support i need from my family: we are interes	93.0%	7.0%	100.0%
			% within any_current_mi	49.0%	27.3%	46.5%
			% of Total	43.2%	3.2%	46.5%
	Total		Count	2562	344	2906
			% within f6a: i get the emotional help and support i need from my family: we are interes	88.2%	11.8%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.2%	11.8%	100.0%
1.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	155	49	204
			% within f6a: i get the emotional help and support i need from my family: we are interes	76.0%	24.0%	100.0%
			% within any_current_mi	6.9%	13.1%	7.7%
			% of Total	5.9%	1.9%	7.7%
		somewhat disagree	Count	104	52	156
			% within f6a: i get the emotional help and support i need from my family: we are interes	66.7%	33.3%	100.0%
			% within any_current_mi	4.6%	13.9%	5.9%
			% of Total	3.9%	2.0%	5.9%
		neutral	Count	207	60	267

		% within f6a: i get the emotional help and support i need from my family: we are interes	77.5%	22.5%	100.0%
		% within any_current_mi	9.2%	16.1%	10.1%
		% of Total	7.9%	2.3%	10.1%
	somewhat agree	Count	611	112	723
		% within f6a: i get the emotional help and support i need from my family: we are interes	84.5%	15.5%	100.0%
		% within any_current_mi	27.0%	30.0%	27.4%
		% of Total	23.2%	4.3%	27.4%
	strongly agree	Count	1184	100	1284
		% within f6a: i get the emotional help and support i need from my family: we are interes	92.2%	7.8%	100.0%
		% within any_current_mi	52.4%	26.8%	48.7%
		% of Total	45.0%	3.8%	48.7%
Total		Count	2261	373	2634
		% within f6a: i get the emotional help and support i need from my family: we are interes	85.8%	14.2%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	85.8%	14.2%	100.0%

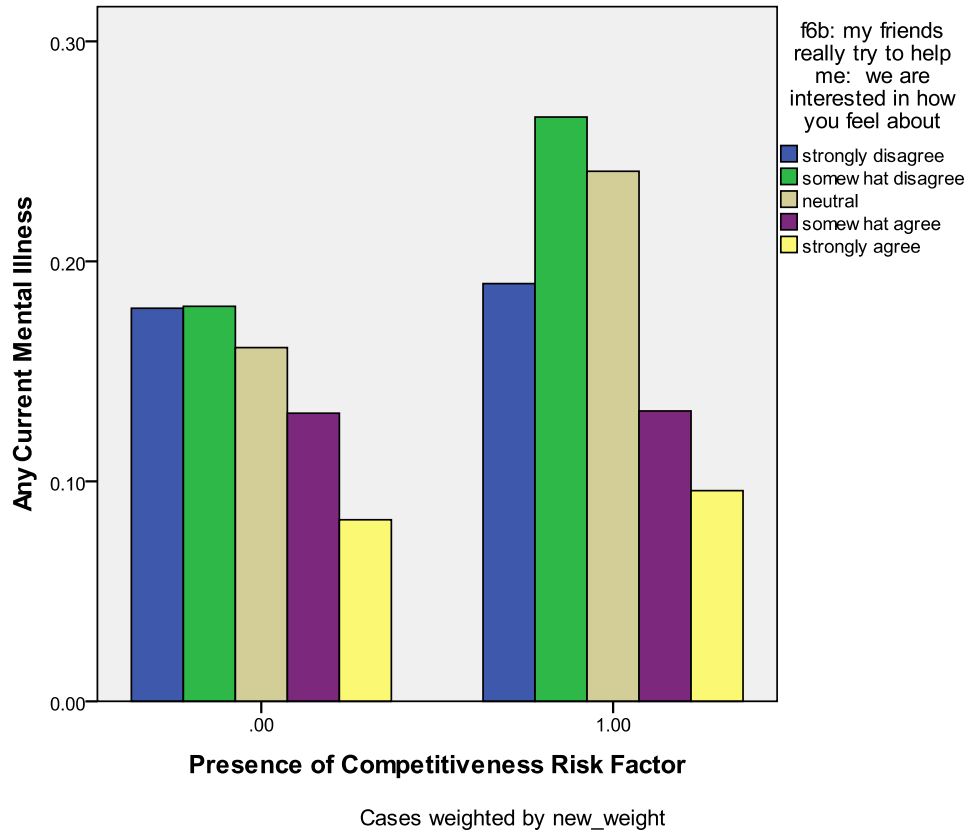
Chi-Square Tests

compet_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	78.493[a]	4	.000
	Likelihood Ratio	74.912	4	.000
	Linear-by-Linear Association	71.458	1	.000
	N of Valid Cases	2906		
1.00	Pearson Chi-Square	122.608[b]	4	.000
	Likelihood Ratio	114.704	4	.000
	Linear-by-Linear Association	103.113	1	.000
	N of Valid Cases	2634		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.25.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.09.

Figure 11: Friends Support by Any Current Mental Illness by Competitiveness Risk Factor



Friends Support * Any Current Mental Illness * Competitiveness Risk Factor

compet_2				any_current_mi		Total
				No	Yes	
.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	101	22	123
			% within f6b: my friends really try to help me: we are interested in how you feel about	82.1%	17.9%	100.0%
			% within any_current_mi	3.9%	6.4%	4.2%
			% of Total	3.5%	.8%	4.2%
		somewhat disagree	Count	100	22	122
			% within f6b: my friends really try to help me: we are interested in how you feel about	82.0%	18.0%	100.0%
			% within any_current_mi	3.9%	6.4%	4.2%
			% of Total	3.4%	.8%	4.2%
		neutral	Count	375	72	447

			% within f6b: my friends really try to help me: we are interested in how you feel about	83.9%	16.1%	100.0%
			% within any_current_mi	14.6%	20.9%	15.4%
			% of Total	12.9%	2.5%	15.4%
		somewhat agree	Count	821	124	945
			% within f6b: my friends really try to help me: we are interested in how you feel about	86.9%	13.1%	100.0%
			% within any_current_mi	32.1%	35.9%	32.5%
			% of Total	28.3%	4.3%	32.5%
		strongly agree	Count	1163	105	1268
			% within f6b: my friends really try to help me: we are interested in how you feel about	91.7%	8.3%	100.0%
			% within any_current_mi	45.4%	30.4%	43.6%
			% of Total	40.0%	3.6%	43.6%
	Total		Count	2560	345	2905
			% within f6b: my friends really try to help me: we are interested in how you feel about	88.1%	11.9%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.1%	11.9%	100.0%
1.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	95	22	117
			% within f6b: my friends really try to help me: we are interested in how you feel about	81.2%	18.8%	100.0%
			% within any_current_mi	4.2%	5.9%	4.4%
			% of Total	3.6%	.8%	4.4%
		somewhat disagree	Count	87	31	118
			% within f6b: my friends really try to help me: we are interested in how you feel about	73.7%	26.3%	100.0%
			% within any_current_mi	3.8%	8.4%	4.5%
			% of Total	3.3%	1.2%	4.5%
		neutral	Count	289	92	381

		% within f6b: my friends really try to help me: we are interested in how you feel about	75.9%	24.1%	100.0%
		% within any_current_mi	12.8%	24.9%	14.5%
		% of Total	11.0%	3.5%	14.5%
	somewhat agree	Count	760	116	876
		% within f6b: my friends really try to help me: we are interested in how you feel about	86.8%	13.2%	100.0%
		% within any_current_mi	33.6%	31.4%	33.3%
		% of Total	28.9%	4.4%	33.3%
	strongly agree	Count	1030	109	1139
		% within f6b: my friends really try to help me: we are interested in how you feel about	90.4%	9.6%	100.0%
		% within any_current_mi	45.6%	29.5%	43.3%
		% of Total	39.1%	4.1%	43.3%
Total		Count	2261	370	2631
		% within f6b: my friends really try to help me: we are interested in how you feel about	85.9%	14.1%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	85.9%	14.1%	100.0%

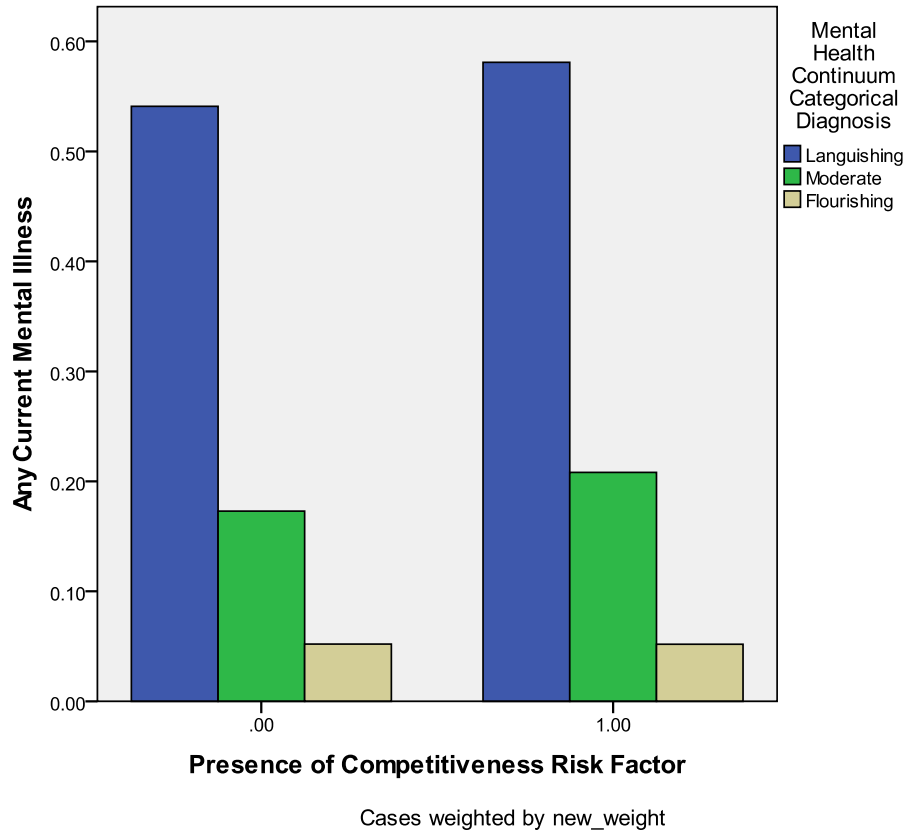
Chi-Square Tests

compet_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	33.373[a]	4	.000
	Likelihood Ratio	33.270	4	.000
	Linear-by-Linear Association	29.983	1	.000
	N of Valid Cases	2905		
1.00	Pearson Chi-Square	68.301[b]	4	.000
	Likelihood Ratio	62.981	4	.000
	Linear-by-Linear Association	49.722	1	.000
	N of Valid Cases	2631		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.49.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.45.

Figure 12: Mental Health by Any Current Mental Illness by Competitiveness Risk Factor



Mental Health Continuum * Any Current Mental Illness * Competitiveness Risk Factor

compet_2				any_current_mi		Total
				No	Yes	
.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	47	56	103
			% within Mental Health Continuum Categorical Diagnosis	45.6%	54.4%	100.0%
			% within any_current_mi	1.8%	14.9%	3.4%
			% of Total	1.5%	1.8%	3.4%
		Moderate	Count	1135	237	1372
			% within Mental Health Continuum Categorical Diagnosis	82.7%	17.3%	100.0%
			% within any_current_mi	42.3%	63.2%	44.8%
			% of Total	37.1%	7.7%	44.8%
		Flourishing	Count	1503	82	1585
			% within Mental Health Continuum Categorical Diagnosis	94.8%	5.2%	100.0%

			% within any_current_mi	56.0%	21.9%	51.8%
			% of Total	49.1%	2.7%	51.8%
	Total		Count	2685	375	3060
			% within Mental Health Continuum Categorical Diagnosis	87.7%	12.3%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	87.7%	12.3%	100.0%
1.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	43	59	102
			% within Mental Health Continuum Categorical Diagnosis	42.2%	57.8%	100.0%
			% within any_current_mi	1.9%	15.8%	3.9%
			% of Total	1.6%	2.2%	3.9%
		Moderate	Count	923	243	1166
			% within Mental Health Continuum Categorical Diagnosis	79.2%	20.8%	100.0%
			% within any_current_mi	40.8%	65.1%	44.2%
			% of Total	35.0%	9.2%	44.2%
		Flourishing	Count	1297	71	1368
			% within Mental Health Continuum Categorical Diagnosis	94.8%	5.2%	100.0%
			% within any_current_mi	57.3%	19.0%	51.9%
			% of Total	49.2%	2.7%	51.9%
	Total		Count	2263	373	2636
			% within Mental Health Continuum Categorical Diagnosis	85.8%	14.2%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	85.8%	14.2%	100.0%

Chi-Square Tests

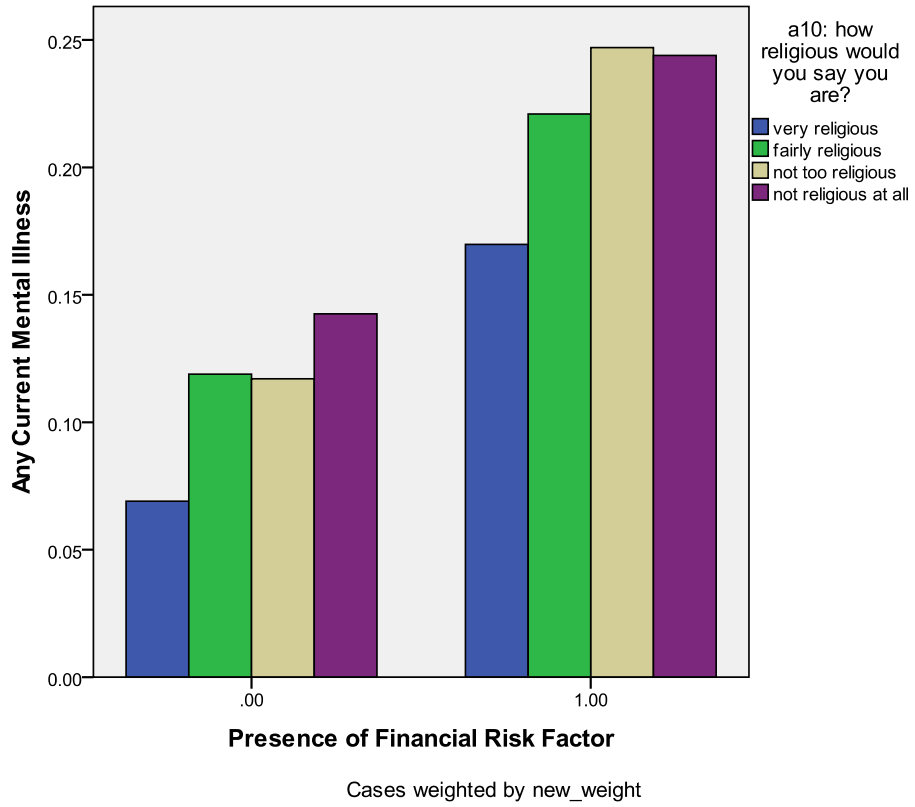
compet_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	275.944[a]	2	.000
	Likelihood Ratio	226.283	2	.000
	Linear-by-Linear Association	232.039	1	.000
	N of Valid Cases	3060		

1.00	Pearson Chi-Square	293.666[b]	2	.000
	Likelihood Ratio	258.467	2	.000
	Linear-by-Linear Association	266.691	1	.000
	N of Valid Cases	2636		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.62.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.43.

Figure 13: Religiosity by Any Current Mental Illness by Financial Risk Factor



Religiosity * Any Current Mental Illness * Financial Risk Factor

fincur_2				any_current_mi		
				No	Yes	Total
.00	a10: how religious would you say you are?	very religious	Count	777	58	835
			% within a10: how religious would you say you are?	93.1%	6.9%	100.0%
			% within any_current_mi	18.2%	10.5%	17.3%
			% of Total	16.1%	1.2%	17.3%
		fairly religious	Count	1541	208	1749
			% within a10: how religious would you say you are?	88.1%	11.9%	100.0%
			% within any_current_mi	36.0%	37.5%	36.2%
			% of Total	31.9%	4.3%	36.2%
		not too religious	Count	1093	145	1238
			% within a10: how religious would you say you are?	88.3%	11.7%	100.0%

			% within any_current_mi	25.5%	26.1%	25.6%
			% of Total	22.6%	3.0%	25.6%
		not religious at all	Count	868	144	1012
			% within a10: how religious would you say you are?	85.8%	14.2%	100.0%
			% within any_current_mi	20.3%	25.9%	20.9%
			% of Total	18.0%	3.0%	20.9%
	Total		Count	4279	555	4834
			% within a10: how religious would you say you are?	88.5%	11.5%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.5%	11.5%	100.0%
1.00	a10: how religious would you say you are?	very religious	Count	101	21	122
			% within a10: how religious would you say you are?	82.8%	17.2%	100.0%
			% within any_current_mi	15.2%	10.8%	14.2%
			% of Total	11.8%	2.4%	14.2%
		fairly religious	Count	256	73	329
			% within a10: how religious would you say you are?	77.8%	22.2%	100.0%
			% within any_current_mi	38.6%	37.6%	38.3%
			% of Total	29.8%	8.5%	38.3%
		not too religious	Count	175	57	232
			% within a10: how religious would you say you are?	75.4%	24.6%	100.0%
			% within any_current_mi	26.4%	29.4%	27.0%
			% of Total	20.4%	6.6%	27.0%
		not religious at all	Count	132	43	175
			% within a10: how religious would you say you are?	75.4%	24.6%	100.0%
			% within any_current_mi	19.9%	22.2%	20.4%
			% of Total	15.4%	5.0%	20.4%
	Total		Count	664	194	858
			% within a10: how religious would you say you are?	77.4%	22.6%	100.0%

	% within any_current_mi	100.0%	100.0%	100.0%
	% of Total	77.4%	22.6%	100.0%

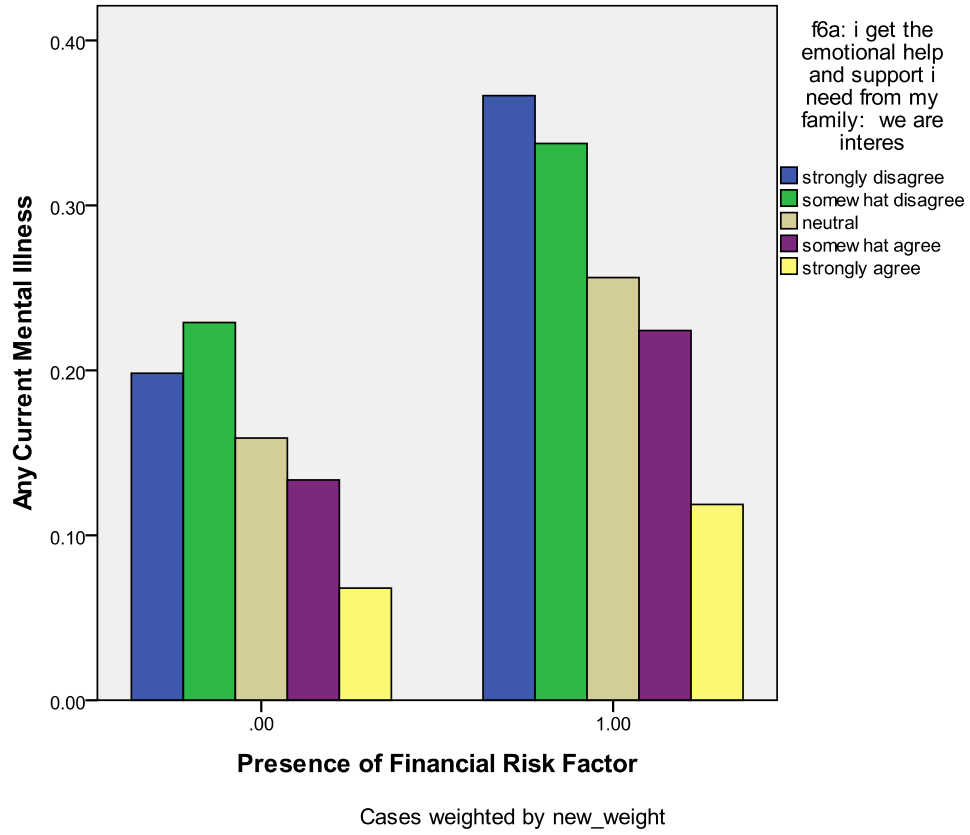
Chi-Square Tests

fincur_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	24.774[a]	3	.000
	Likelihood Ratio	26.757	3	.000
	Linear-by-Linear Association	18.629	1	.000
	N of Valid Cases	4834		
1.00	Pearson Chi-Square	2.958[b]	3	.398
	Likelihood Ratio	3.073	3	.381
	Linear-by-Linear Association	2.288	1	.130
	N of Valid Cases	858		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 95.87.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.59.

Figure 14: Family Support by Any Current Mental Illness by Financial Risk Factor



Family Support * Any Current Mental Illness * Financial Risk Factor

fincur_2				any_current_mi		
				No	Yes	Total
.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	248	61	309
			% within f6a: i get the emotional help and support i need from my family: we are interes	80.3%	19.7%	100.0%
			% within any_current_mi	5.9%	11.5%	6.6%
			% of Total	5.3%	1.3%	6.6%
		somewhat disagree	Count	200	59	259
			% within f6a: i get the emotional help and support i need from my family: we are interes	77.2%	22.8%	100.0%

			% within any_current_mi	4.8%	11.1%	5.5%
			% of Total	4.2%	1.3%	5.5%
		neutral	Count	415	78	493
			% within f6a: i get the emotional help and support i need from my family: we are interes	84.2%	15.8%	100.0%
			% within any_current_mi	9.9%	14.7%	10.5%
			% of Total	8.8%	1.7%	10.5%
		somewhat agree	Count	1130	174	1304
			% within f6a: i get the emotional help and support i need from my family: we are interes	86.7%	13.3%	100.0%
			% within any_current_mi	27.0%	32.7%	27.7%
			% of Total	24.0%	3.7%	27.7%
		strongly agree	Count	2188	160	2348
			% within f6a: i get the emotional help and support i need from my family: we are interes	93.2%	6.8%	100.0%
			% within any_current_mi	52.3%	30.1%	49.8%
			% of Total	46.4%	3.4%	49.8%
	Total		Count	4181	532	4713
			% within f6a: i get the emotional help and support i need from my family: we are interes	88.7%	11.3%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.7%	11.3%	100.0%
1.00	f6a: i get the emotional help and support i need from my family: we are interes	strongly disagree	Count	71	41	112
			% within f6a: i get the emotional help and support i need from my family: we are interes	63.4%	36.6%	100.0%
			% within any_current_mi	11.1%	22.3%	13.6%
			% of Total	8.6%	5.0%	13.6%
		somewhat disagree	Count	56	29	85
			% within f6a: i get the emotional help and support i need from my family: we are interes	65.9%	34.1%	100.0%

		% within any_current_mi	8.7%	15.8%	10.3%
		% of Total	6.8%	3.5%	10.3%
	neutral	Count	73	25	98
		% within f6a: i get the emotional help and support i need from my family: we are interes	74.5%	25.5%	100.0%
		% within any_current_mi	11.4%	13.6%	11.9%
		% of Total	8.8%	3.0%	11.9%
	somewhat agree	Count	190	55	245
		% within f6a: i get the emotional help and support i need from my family: we are interes	77.6%	22.4%	100.0%
		% within any_current_mi	29.6%	29.9%	29.7%
		% of Total	23.0%	6.7%	29.7%
	strongly agree	Count	252	34	286
		% within f6a: i get the emotional help and support i need from my family: we are interes	88.1%	11.9%	100.0%
		% within any_current_mi	39.3%	18.5%	34.6%
		% of Total	30.5%	4.1%	34.6%
Total		Count	642	184	826
		% within f6a: i get the emotional help and support i need from my family: we are interes	77.7%	22.3%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	77.7%	22.3%	100.0%

Chi-Square Tests

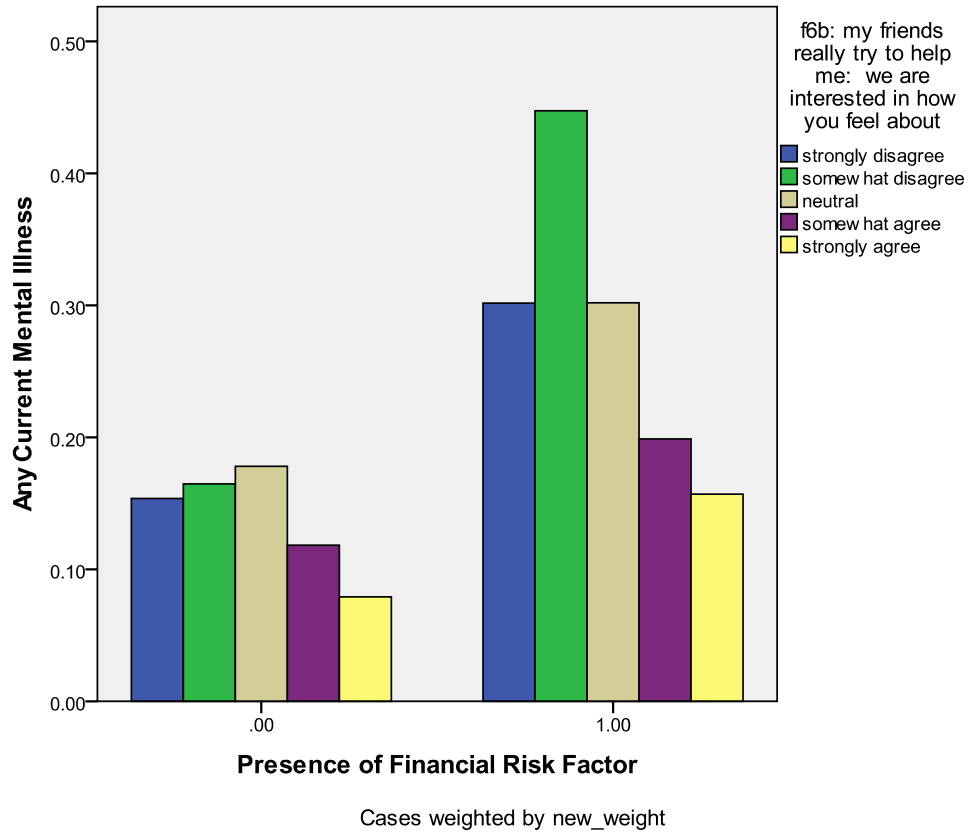
fincur_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	118.756[a]	4	.000
	Likelihood Ratio	114.036	4	.000
	Linear-by-Linear Association	106.099	1	.000
	N of Valid Cases	4713		
1.00	Pearson Chi-Square	38.591[b]	4	.000

Likelihood Ratio	39.102	4	.000
Linear-by-Linear Association	36.678	1	.000
N of Valid Cases	826		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 29.24.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 18.93.

Figure 15: Friends Support by Any Current Mental Illness by Financial Risk Factor



Friends Support * Any Current Mental Illness * Financial Risk Factor

fincur_2				any_current_mi		
				No	Yes	Total
.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	161	29	190
			% within f6b: my friends really try to help me: we are interested in how you feel about	84.7%	15.3%	100.0%
			% within any_current_mi	3.9%	5.5%	4.0%
			% of Total	3.4%	.6%	4.0%
		somewhat disagree	Count	160	31	191
			% within f6b: my friends really try to help me: we are interested in how you feel about	83.8%	16.2%	100.0%
			% within any_current_mi	3.8%	5.8%	4.1%
			% of Total	3.4%	.7%	4.1%
		neutral	Count	573	124	697

			% within f6b: my friends really try to help me: we are interested in how you feel about	82.2%	17.8%	100.0%
			% within any_current_mi	13.7%	23.4%	14.8%
			% of Total	12.2%	2.6%	14.8%
		somewhat agree	Count	1342	180	1522
			% within f6b: my friends really try to help me: we are interested in how you feel about	88.2%	11.8%	100.0%
			% within any_current_mi	32.1%	33.9%	32.3%
			% of Total	28.5%	3.8%	32.3%
		strongly agree	Count	1943	167	2110
			% within f6b: my friends really try to help me: we are interested in how you feel about	92.1%	7.9%	100.0%
			% within any_current_mi	46.5%	31.5%	44.8%
			% of Total	41.3%	3.5%	44.8%
	Total		Count	4179	531	4710
			% within f6b: my friends really try to help me: we are interested in how you feel about	88.7%	11.3%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.7%	11.3%	100.0%
1.00	f6b: my friends really try to help me: we are interested in how you feel about	strongly disagree	Count	35	15	50
			% within f6b: my friends really try to help me: we are interested in how you feel about	70.0%	30.0%	100.0%
			% within any_current_mi	5.4%	8.2%	6.0%
			% of Total	4.2%	1.8%	6.0%
		somewhat disagree	Count	27	22	49
			% within f6b: my friends really try to help me: we are interested in how you feel about	55.1%	44.9%	100.0%
			% within any_current_mi	4.2%	12.0%	5.9%
			% of Total	3.3%	2.7%	5.9%
		neutral	Count	92	40	132

		% within f6b: my friends really try to help me: we are interested in how you feel about	69.7%	30.3%	100.0%
		% within any_current_mi	14.3%	21.9%	16.0%
		% of Total	11.1%	4.8%	16.0%
	somewhat agree	Count	239	59	298
		% within f6b: my friends really try to help me: we are interested in how you feel about	80.2%	19.8%	100.0%
		% within any_current_mi	37.1%	32.2%	36.0%
		% of Total	28.9%	7.1%	36.0%
	strongly agree	Count	251	47	298
		% within f6b: my friends really try to help me: we are interested in how you feel about	84.2%	15.8%	100.0%
		% within any_current_mi	39.0%	25.7%	36.0%
		% of Total	30.4%	5.7%	36.0%
Total		Count	644	183	827
		% within f6b: my friends really try to help me: we are interested in how you feel about	77.9%	22.1%	100.0%
		% within any_current_mi	100.0%	100.0%	100.0%
		% of Total	77.9%	22.1%	100.0%

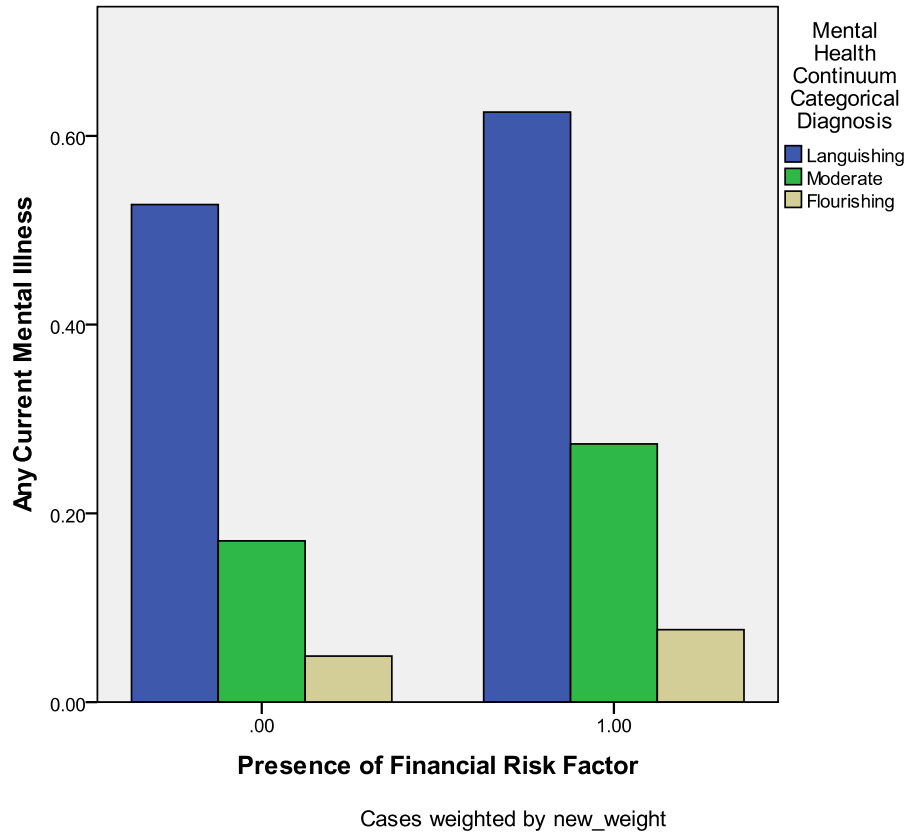
Chi-Square Tests

fincur_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	61.572[a]	4	.000
	Likelihood Ratio	59.374	4	.000
	Linear-by-Linear Association	47.638	1	.000
	N of Valid Cases	4710		
1.00	Pearson Chi-Square	29.586[b]	4	.000
	Likelihood Ratio	27.392	4	.000
	Linear-by-Linear Association	22.132	1	.000
	N of Valid Cases	827		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.42.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.84.

Figure 16: Mental Health by Any Current Mental Illness by Financial Risk Factor



Mental Health Continuum * Any Current Mental Illness * Financial Risk Factor

fincur_2				any_current_mi		
				No	Yes	Total
.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	63	71	134
			% within Mental Health Continuum Categorical Diagnosis	47.0%	53.0%	100.0%
			% within any_current_mi	1.5%	12.8%	2.8%
			% of Total	1.3%	1.5%	2.8%
		Moderate	Count	1730	356	2086
			% within Mental Health Continuum Categorical Diagnosis	82.9%	17.1%	100.0%
			% within any_current_mi	40.4%	64.1%	43.1%
			% of Total	35.8%	7.4%	43.1%
		Flourishing	Count	2490	128	2618
			% within Mental Health Continuum Categorical Diagnosis	95.1%	4.9%	100.0%

			% within any_current_mi	58.1%	23.1%	54.1%
			% of Total	51.5%	2.6%	54.1%
	Total		Count	4283	555	4838
			% within Mental Health Continuum Categorical Diagnosis	88.5%	11.5%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	88.5%	11.5%	100.0%
1.00	Mental Health Continuum Categorical Diagnosis	Languishing	Count	26	44	70
			% within Mental Health Continuum Categorical Diagnosis	37.1%	62.9%	100.0%
			% within any_current_mi	3.9%	22.8%	8.2%
			% of Total	3.0%	5.1%	8.2%
		Moderate	Count	328	123	451
			% within Mental Health Continuum Categorical Diagnosis	72.7%	27.3%	100.0%
			% within any_current_mi	49.4%	63.7%	52.6%
			% of Total	38.3%	14.4%	52.6%
		Flourishing	Count	310	26	336
			% within Mental Health Continuum Categorical Diagnosis	92.3%	7.7%	100.0%
			% within any_current_mi	46.7%	13.5%	39.2%
			% of Total	36.2%	3.0%	39.2%
	Total		Count	664	193	857
			% within Mental Health Continuum Categorical Diagnosis	77.5%	22.5%	100.0%
			% within any_current_mi	100.0%	100.0%	100.0%
			% of Total	77.5%	22.5%	100.0%

Chi-Square Tests

fincur_2		Value	df	Asymp. Sig. (2-sided)
.00	Pearson Chi-Square	403.373[a]	2	.000
	Likelihood Ratio	333.325	2	.000
	Linear-by-Linear Association	346.445	1	.000
	N of Valid Cases	4838		

1.00	Pearson Chi-Square	113.189[b]	2	.000
	Likelihood Ratio	110.384	2	.000
	Linear-by-Linear Association	107.414	1	.000
	N of Valid Cases	857		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.37.

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.76.

References

Astin, Alexander W., Helen S. Astin, and Jennifer A. Lindholm. 2011. Cultivating the spirit: how college can enhance students' inner lives. San Francisco, CA: Jossey-Bass.

Center for Student Studies. *Healthy minds study: a study of mental health among college and university students*. Survey Sciences Group, LLC, 2010-2011. Web. 6 April 2011. < http://www.healthymindsstudy.net/>

Blank, Rebecca M., Marilyn Dabady, and Constance F. Citro, ed. 2004. Measuring racial discrimination. Washington, D.C.: National Academies Press.

Friedman, Carly and Campbell Leaper. "Sexual-minority college women's experiences with discrimination: relations with identity and collective action." Psychology of Women Quarterly 34: 152-164.

Jonker, Liezl and Abraham P. Greeff. "Resilience factors in families living with people with mental illnesses." Journal of Community Psychology. 37(7):859-873.

Kelleher, Cathy. "Minority stress and health: implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people." Counseling Psychology Quarterly 22(4): 373-379.

Keyes, Corey L. M. "Risk and resilience in human development: an introduction." Research in Human Development 1(4):223-227.

Keyes, Corey L. M. "The mental health continuum: from languishing to flourishing in life." Journal of Health and Social Research 43(June):207-222.

Keyes, Corey L. M., Daniel Eisenberg, Geraldine S. Perry, Shanta R. Dube, and Kurt Kroenke (in press). "The relationship of level of positive mental health with current mental

disorders in predicting suicidal behavior and academic impairment in college students." *Journal of American College Health*.

Leutloff-Grandits, Carolin, Anja Peleikis, and Tatjana Thelen, ed. 2009. Social security in religious networks: anthropological perspectives on new risks and ambivalences. New York, NY: Berghahn Books.

Lewis, Robin J., Valerian J. Derlega, Debra Brown, Suzanna Rose, and James M. Henson. "Sexual minority stress, depressive symptoms, and sexual orientation conflict: focus on the experiences of bisexuals." Journal of Social and Clinical Psychology 28(8): 971-992.

Masten, Ann S. "Ordinary magic: resilience process in development." American Psychologist 56(3):227-238.

Masten, Ann S. "Resilience in developing systems: progress and promise as the fourth wave rises." Development and Psychopathology 19:921-930.

Masten, Ann S. and Jelena Obradovic. "Competence and resilience in development." Annals New York Academy of Sciences 1094:13-27.

McLaren, Suzanne and Chantal Challis. "Resilience among men farmers: the protective roles of social support and sense of belonging in the depression-suicidal ideation relation." Death Studies 33:262-276.

Misra, Ranjita and Michelle McKean. "College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction." American Journal of Health Studies 16(1): 41-50.

Turner and Tony N. Brown, ed. 2010. A handbook for the study of mental health: social contexts, theories, and systems. New York: Cambridge University Press.

Schoon, Ingrid, Samantha Parsons, and Amanda Sacker. “Socioeconomic adversity, educational resilience, and subsequent levels of adult adaptation.” Journal of Adolescent Research 19(4):383-404.