

Spring 5-2017

## Understanding Stigma in Pre-Nursing College Students

Claire E. Coxwell  
*University of Southern Mississippi*

Follow this and additional works at: [https://aquila.usm.edu/honors\\_theses](https://aquila.usm.edu/honors_theses)



Part of the [Psychiatric and Mental Health Nursing Commons](#)

---

### Recommended Citation

Coxwell, Claire E., "Understanding Stigma in Pre-Nursing College Students" (2017). *Honors Theses*. 523.  
[https://aquila.usm.edu/honors\\_theses/523](https://aquila.usm.edu/honors_theses/523)

This Honors College Thesis is brought to you for free and open access by the Honors College at The Aquila Digital Community. It has been accepted for inclusion in Honors Theses by an authorized administrator of The Aquila Digital Community. For more information, please contact [Joshua.Cromwell@usm.edu](mailto:Joshua.Cromwell@usm.edu).

The University of Southern Mississippi

Understanding Stigma in Pre-Nursing College Students

by

Claire Coxwell

A Thesis  
Submitted to the Honors College of  
The University of Southern Mississippi  
in Partial Fulfillment  
of the Requirements for the Degree of  
Bachelor of Science  
in the Department of Nursing

May 2017

Approved by

---

Sat Ananda Hayden, PhD, MSN,  
RN, Assistant Professor, Thesis  
Adviser  
College of Nursing

---

Susan Hart, Ph.D., RN, Chair and  
Assistant Professor Collaborative  
Nursing Care  
College of Nursing

---

Ellen Weinauer, Ph.D., Dean  
Honors College

## Abstract

The purpose of this study is to understand patterns of stigma among pre-nursing students. Past research has suggested that college students stigmatize mental illnesses. This study builds upon existing research and looks at how pre-nursing students perceive some mental illnesses. The goal of the study was to find out if there are differences in the way that pre-nursing students stigmatize people with substance use disorders (alcohol and drug abuse) and eating disorders (anorexia nervosa and bulimia nervosa). Using an electronic data collection tool, 523 pre-nursing students were invited to take the Attitudes to Mental Illness Questionnaire (AMIQ) and respond to four vignettes each about a different eating or substance use disorder. The AMIQ uses a scale for each vignette to determine the stigmatizing attitudes towards each condition presented. The results were analyzed to determine if respondents stigmatized conditions differently. Findings indicated that there was a high correlation in the scores of the two eating disorders presented. Using a Mann Whitney U test, the null hypothesis was rejected for differences in stigmatization based on heroin use, bulimia, and anorexia nervosa. A stigmatization effect was identified in respondents who reported having previous exposure to a mental illness and the vignette representing alcohol abuse ( $p = 0.009$ ).

Key Terms: Stigma, Mental Illness, Nursing, College Students

## Dedication

This project is dedicated to my family and friends for their unwavering love and support.

Thank you for all of the encouragement throughout the course of this project.

## Acknowledgements

I would like to thank my thesis advisor, Dr. Sat Ananda Hayden, without whose tireless support and guidance this project would not be possible. Thank you for the tireless hours spent mentoring me throughout the course of this project.

## Table of Contents

List of Tables.....	viii
List of Abbreviations.....	ix
Chapter 1: Introduction.....	1
Chapter 2: Literature Review.....	4
Stigma and Eating Disorders.....	4
Stigma and Drug/Alcohol Addiction.....	4
Stigma Expressed by College Students.....	5
Stigma Experienced by College Students.....	5
Project and Current Research.....	6
Chapter 3: Method .....	8
Population.....	8
Tool.....	8
Data Collection.....	9
Analysis.....	11
Chapter 4: Results/Discussion.....	12
References.....	16

Appendices.....	19
Appendix A: Permission to Use AMIQ.....	19
Appendix B: Demographic Questions.....	20
Appendix C: IRB Approval Letter .....	21



## List of Tables

Table 1: Age of Participants

Table 2: Gender, Fraternity/Sorority Involvement, and Exposure of Participants

## List of Abbreviations

NAMI	National Alliance on Mental Illness
SAMHSA	Substance Abuse and Mental Health Services Administration
SUD	Substance Use Disorder
AN	Anorexia nervosa
BN	Bulimia nervosa
DSM-V	<i>Diagnosics and Statistics Manual of Mental Disorders 5<sup>th</sup> edition</i>
APA	American Psychological Association
NEDA	National Eating Disorder Alliance
NIAAA	The National Institute on Alcohol Abuse and Alcoholism
CAMI	Community Attitudes to Mental Illness
CDC	Center for Disease Control and Prevention
USM	The University of Southern Mississippi
AMIQ	Attitudes to Mental Illness Questionnaire
IRB	Institutional Review Board

## Chapter 1

### **Introduction**

Mental illness is a prevalent issue that is poorly understood by the general public. The National Alliance on Mental Illness (NAMI) is the largest organization in the United States (U.S.) that is dedicated to educating and advocating for public awareness of mental illness. According to NAMI, approximately one in five adults, age eighteen and older in the U.S. have a mental illness. One of the challenges that individuals with mental illness face is stigma. In *The President's New Commission on Mental Illness*, stigma is defined as “a cluster of negative attitudes and beliefs that motivate the general public to fear, reject, avoid, and discriminate against people ... “(“President’s New Commission”, 2002, p.4). For those with mental illnesses, feeling stigmatized can lead to humiliation and shame, and social isolation. Stigma can interfere with an individual’s ability to get an education, a job, and quality healthcare. The goal of this study is to find out if there are differences in the way that pre-nursing students stigmatize their peers with substance use disorder (SUD) or eating disorders (anorexia nervosa and bulimia nervosa). For the purposes of the study, SUD includes drug and alcohol addiction.

In 2014, the Substance Abuse and Mental Health Services Administration (SAMHSA) reported that 20.2 million adults ages 18 and over had a substance use disorder (“Mental and Substance Use Disorders”). Diagnosis of an SUD is determined by the criteria set forth in *The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition* (DSM-5). The DSM-V is a publication of the American Psychological Association (APA) and is used by mental health physicians to diagnose mental illnesses.

The DSM-5 lists eleven criteria each for alcohol and drug abuse. The number of criteria an individual meets determines the severity of the disorder: mild, moderate, or severe.

In the U.S., 30 million people suffer from an eating disorder at some point in their lives (Wade, Keski-Rahkonen, & Hudson, 2011). An eating disorder is an extreme disturbance in the eating patterns of an individual. According to the National Eating Disorders Association (NEDA), two of the most prevalent eating disorders are anorexia nervosa (AN) and bulimia nervosa (BN). The DSM-V lists three diagnostic criteria for AN and five criteria for BN. These disorders are most common in young adult and adolescent women, but can also occur in men too.

The presence of stigma towards those with an eating or substance abuse disorder is important to the field of nursing because stigma can act as a barrier to treatment. Mental illnesses often have a low treatment rate. According to the NEDA, only one out of every ten people who suffer from eating disorders will seek treatment (“Prevalence and Correlates”). The National Institute on Alcohol Abuse and Alcoholism (NIAAA) reported that 16.3 million adults over the age of eighteen suffered from an alcohol abuse disorder in 2014, however only 1.5 million received treatment at a specialized treatment facility (“Mental Health by the Numbers”). Patients who feel ashamed about their eating or substance use disorder are more likely to delay treatment or to not seek treatment at all because they fear being judged or stereotyped (Corrigan, Druss, & Perlick, 2014). It is important for nurses to realize that there are conditions for which patients are less willing to seek treatment for than others. Of those who do seek treatment for their eating disorder or substance abuse disorder, victims of stigma are more likely to relapse and not experience a therapeutic benefit from their treatment (Shrivastava, Bureau, & Johnston,

2012). When treatment is delayed, the eating disorder or substance abuse disorder will continue get worse and the individuals quality of life will suffer. This also puts strain on the healthcare system because the more debilitating the disorder is, the more resources (time and money) will be required to treat it. If the illness is severe enough, institutionalization may be required.

Nurses and other healthcare professionals may be among those who are stigmatizing, which can impact the quality of care that they are able to provide. Stigma among pre-nursing students is important because these are the future nurses who will be providing care to patients with mental illnesses. An integral piece of nurse education is values clarification. It is important for pre-nursing students to be aware of their own values and to be sure that they are compatible with the values of nursing as a profession. Nursing is considered a caring profession, therefore a non-judgmental attitude when interacting with patients is necessary in order to establish a therapeutic relationship.

This study explores the relationship of nursing as the declared major and stigmatization of substance abuse and eating disorders. If stigmatization of substance abuse and eating disorders is prevalent, do all pre-nursing students stigmatize equally or are some disorders considered to be more or less acceptable?

## Chapter 2

### **Stigma and Eating Disorders**

In a 2011 study conducted by Wingfield et al., 235 students from a university responded to vignettes that described individuals with AN and BN. The study reported that 38.1% of respondents believed that an individual with an eating disorder could “pull themselves together” (Wingfield et al., 2011). Between AN and BN, the individual with BN was viewed as more destructive and responsible for their own condition than the individual with AN (Wingfield et al., 2011). Respondents also attributed responsibility to the victims of eating disorders for their condition. Results showed that the respondents believed eating disorders have a high rate of recovery (Wingfield et al., 2011). This study suggests that negative attitudes are associated with perceived responsibility for eating disorders.

### **Stigma and Drug/Alcohol Addiction**

Drug and alcohol abuse disorders are also commonly stigmatized disorders. In their 2014 study, Makert et al. designed a survey to assess for increased stigma towards a drug addiction over other mental illnesses, and found that there were more negative attitudes towards drug addiction than other mental illnesses. The respondents were also more tolerant and supportive of discrimination towards those with a drug addiction than those with a mental illness (Makert et al., 2014). However, a limitation of this study is that the authors classified drug addiction as separate from mental illness. In 2012, Lowinger assessed how college students perceived the severity alcohol abuse disorder and their willingness to seek treatment. Out of the sample of 201 students surveyed, the

majority of them did not perceive the seriousness of alcohol abuse as an issue and would not be willing to seek treatment for themselves (Lowinger, 2012).

### **Stigma Expressed by College Students**

Stigma expressed by college students can have a negative impact on their peers who suffer from a mental illness. In 2014, a study by Feeg et al. assessed the presence of stigma, through social distance, among college students. Social distance is defined as willingness to be close to someone with a mental illness (Feeg et al., 2014). The students read a vignette about a mentally ill individual and then answered questions about different ways they would be willing to interact with the person in the scenario. The results of the study showed an increase in negative attitudes towards mental illness among the younger students and also those who had less familiarity with mental illness (Feeg et al., 2014).

In 2011, Schafer, Wood, and Williams looked specifically at nursing students. The sample of student nurses was administered the Community Attitudes to Mental Illness (CAMI) questionnaire to assess their attitudes towards mental illness. The results showed that the students who had been impacted by mental illness at some point in their lives had more positive attitudes towards mental illness than those who had not (Schafer, Wood, & Williams, 2011). This is important because stigma among health care professionals can affect the quality of care that patients with mental illnesses receive.

### **Stigma Experienced by College Students**

In a 2012 study published by NAMI, an increase in the number of mental illnesses experienced by students nationwide was reported. However, the study found that only 50% of the students who suffered with a mental illness actually disclosed their illness

(Gruttadaro & Crudo, 2012). This is a problem, because the first step to getting help is disclosure (“Finding Help”, 2016). The most commonly reported reason among the students for not disclosing was a fear of being stigmatized (Gruttadaro & Crudo, 2012).

Fear of being stigmatized is not uncommon. A study published by the Centers for Disease Control and Prevention (CDC) in 2012 found that the majority of people who exhibited symptoms of mental illness did not agree that the public was caring and sympathetic towards individuals with mental illnesses (Kobau et al., 2012). This perceived stigma can create a barrier to healthcare. Only about 20% of people over 18 years of age with a diagnosable mental disorder or with a self-reported mental health condition saw a mental health provider in the previous year (Kobau et al., 2012). Because of negative attitudes towards mental illness, people affected by mental illnesses find it harder to get access to health care (Corrigan, Druss, & Perlick, 2014).

### **Project and Current Research**

A common theme that emerged in the literature was a disconnect between what the public thinks about substance use and eating disorders and the reality of living with these disorders. The findings of Wingfield et al. 2014, in which the public believed eating disorders to have a high rate of recovery, contradicts the reality that there is actually a low rate of recovery with many victims relapsing after treatment. This study followed existing research and looked at how pre-nursing students perceived mental illnesses, specifically drug addiction, alcohol addiction, anorexia nervosa, and bulimia nervosa. The study assessed for differences in attitudes and levels of acceptability towards these four disorders. Past research suggested that pre-nursing students stigmatize these disorders, so in my research I looked for a variation in stigma expressed towards these



mental illnesses. Additionally, the level of stigmatization was assessed based on students' demographic information such as age, gender, involvement in a Greek organization, and past exposure to mental illness.

## Chapter 3

This study was a quantitative study that aimed to explore how pre-nursing students stigmatize substance abuse disorders and eating disorders among their peers. I looked at various demographic variables to assess for relationships between these variables and the degree of stigma expressed by college students.

### **Population**

For this study, the target population was undergraduate pre-nursing students. The accessible population was matriculating pre-nursing students at The University of Southern Mississippi (USM). As of February 2017, there were 523 undergraduates enrolled at the University of Southern Mississippi who declared nursing as their major, but who have not yet been accepted into the program. The sampling method used was a non-probability convenience sample. This study was limited to pre-nursing students enrolled at The University of Southern Mississippi. Because the sample was self-selected, there is potential for bias because there is no way to ensure diversity of the respondents. The respondents may have characteristics or traits that could cause the data to be skewed (Patten, 2000). There is also the issue that not all students check their emails regularly, which might have affected the number of responses.

### **Tool**

The data for this study was collected using an online version of the Attitudes to Mental Illness questionnaire (AMIQ). Permission to use and amend the AMIQ was received from the Royal College of Psychiatrists, who holds the copyright for the AMIQ. Permission to use the AMIQ can be found in Appendix A.

The AMIQ is a set of four vignettes, each describing a fictional individual with a different mental illness. After reading the short vignette, the participant answered 5 questions regarding their perception of the subject of the vignette and their willingness to interact with the individual. Each question is answered with a 5-point Likert scale response. The response choices are “*strongly agree, agree, neutral, disagree, strongly disagree, and I don’t know*”. The possible scores for each response range from a +2 which represents no stigma to a -2 which indicates the highest level of stigma. The scores for all five questions are added to give a maximum score of +10 and a minimum score of -10 for each vignette. Two of the existing vignettes on alcohol abuse and drug abuse were used, and the remaining two were modified to include one vignette on AN and one vignette on BN. To assure the validity of the newly constructed vignettes, two subject matter experts, Dr. Susan Hart and Dr. Chin-Nu Lin were consulted. Both Dr. Hart and Dr. Lin reviewed and approved the modifications to the tool.

In their 2006 study, Luty et al. confirmed the validity, stability, re-test reliability, and alternative test reliability of the AMIQ. The Cronbach’s alpha score for the original tool was 0.933 (Ikeme, 2012). In addition to the AMIQ, respondents were asked to provide demographic information such as age, gender, whether the respondent is a member of a sorority or fraternity, and exposure to a substance abuse/eating disorder. A copy of the demographic questions can be found in Appendix C.

### **Data Collection**

This study utilized the Qualtrics™ software program to format the survey. An online survey design was chosen for several reasons. The main reason is that it is significantly cheaper, faster, and more convenient for both the researcher and the

respondents than a paper survey (Fricker & Schonlau, 2002). The online survey also helped to prevent respondents from skipping items by not allowing them to continue with the survey until they complete all questions. Collecting the data online also helped to minimize the potential for errors that occur while manually entering data, since the data collected was downloaded directly from the survey (Hedges & Williams, 2014).

After obtaining approval from The USM Institutional Review Board (IRB), a copy of which can be found in Appendix C, subjects were invited to participate in the study through an email announcement from the College of Nursing. An introductory email was sent with the link to the survey to introduce the study and invited the students to participate in a study that has been approved by the USM IRB. Respondents were informed that through their participation they are helping to expand the understanding of stigma in pre-nursing students. An informed consent statement was placed prior to the start of the survey and reminded respondents about the purpose of the study, informed respondents of the amount of time participation will take, and informed consent. There was a disclaimer that no personal information will be shared. If participants choose to proceed, their consent will be implied; however, they may withdraw from the study at any time. Completion of less than 50% of the vignettes indicated withdrawal of consent. The survey was left open for a two weeks to allow adequate opportunity for response, and a reminder was sent through the College of Nursing Mailing list at the one week mark. To guard against duplicates, the link to the survey was only included in the original email. After the data was collected it was downloaded to Excel and prepared for analysis.

## **Analysis**

After the data was collected, I performed a pre-analysis screening of the data. I examined for patterns of missing responses and cleaned the data using Excel. The surveys where at least two vignettes had not been completed were not included in this study. Additionally two outliers who reported ages over 28 were discarded to prevent skewing of the data. Initially the data analysis plan called for the use of a one way ANOVA to identify differences in mean score for vignette stigma scores. The ANOVA analysis was retained to analyze the relationship between age and stigma scores. The Mann Whitney *U* test was used to determine the rank order of stigma between vignettes for nominal independent variables. All data met the assumptions for the statistically analysis used.

## Chapter 4

### Results

A total of 48 responses were received. Eight of these responses were not included because they did not meet the inclusion requirements of completing at least 50% of the vignettes. Two of the participants put multiple answers for the same questions, so those responses within the vignette were disregarded. The mean age of the population was 19 years old. Eight participants did not give an age. There were two outliers, aged of 29 and 32. These responses were excluded to improve the distribution of scores. The total number of responses included in the study was 40. Of the 40 respondents, 80% were female, 32.5% of the population reported being a member of a Greek Life organization, and 27.5% of the population reported having been exposed to a mental illness. Tables 1 and 2 (below) display data for independent variables.

Table 1: Age of Participants in Years

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>
18	6	15%
19	15	37.5%
20	10	25%
21	1	2.5%
22	1	2.5%
<b>Total</b>	33	100%

Table 2: Gender, Exposure, and Fraternity/Sorority Involvement of Participants

<b>Gender</b>	<b>N</b>	<b>Percent</b>
Male	8	20%
Female	32	80%
<b>Exposure</b>		
Yes	11	27.5%
No	29	72.5%
<b>Fraternity/Sorority Involvement</b>		
Yes	13	32.5%
No	27	67.5%
<b>Total</b>	40	100%

Cronbach's alpha for the tool was 6.83 using the 24 variables in all vignettes.

Data were examined for bivariate correlations. Correlations between AN and BN were .892 ( $p < .001$ ). This indicated that these variables may not be independent, violating an assumption for the ANOVA analysis. I elected to follow Luty et. al and performed non-parametric ranking between the groups. A Mann Whitney  $U$  test was run for independent samples for all nominal variables. Using the Mann Whitney  $U$  test I failed to reject the null hypothesis for a relationship between past exposure to mental illness and stigma score for the alcohol vignette.

There are a few limitations that should be acknowledged. A disadvantage of using a convenience sample is that the results found in this study may only reflect the views of

the sample and not be generalizable to the entire population (Hedges & Williams, 2014). Another potential problem is that because an online survey method was used, there is no way to be certain that the student who was invited to participate will be the one to complete the survey, or that they did not receive help while completing the survey. With an online survey, there is also the possibility that the participants have not been truthful in answering the questions. One of the demographic questions in the survey is whether or not the respondent has been exposed to a mental illness, which may produce uncomfortable feelings and might deter respondents from answering. This question did not specify which mental illness the participant was exposed to. In the future, that would be beneficial to add to the questionnaire to better describe the population.

## **Discussion**

In this population of pre-nursing students, a stigmatizing relationship was found between alcohol abuse and a previous exposure to mental illness. This finding indicates that there is a relationship between exposure to a substance abuse disorder or an eating disorder and stigmatization of alcohol abuse. Of notable importance was the extremely high correlation between the two eating disorders, suggesting that this sample may think of them as being the same, whereas they did not perceive heroin addiction and alcohol addiction to be the same. In the future, it would be interesting to explore this finding. It would also be interesting to repeat the study with this population after having completed the nursing program in order to see if there are any changes in their responses after having completed the nursing program. If their responses after completion of the nursing program were less stigmatizing than their responses before completing the nursing program, then this could mean that the program could possibly have an effect on how



students perceive mental illness. It is important for nursing educators to understand the implication of their program on stigmatizing attitudes of pre-licensure nursing students. If nursing education programs do not address the issue, of stigma, then nursing students who stigmatize people with mental illnesses could potentially go on to become nurses who stigmatize patients with mental illnesses. Most nursing education programs include a mental health clinical experience. If there is the relationship between exposure to a mental illness and how students perceive the mental illness, then requiring mental health clinical experiences could help to reduce the presence of stigmatizing attitudes among nursing students. In addition to improving the quality of nursing care the students provide, it can also help to improve patient outcomes. Overall, this understanding the patterns of stigma among pre-nursing students is a step in the right direction towards reducing the harmful effects of stigmatization. Mental illness is something that nurses will be exposed to regularly, so by gaining insight into the stigma process, hopefully its impact on patients can be minimized.

## References

- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest, 15*(2), 37-70. doi:10.1177/1529100614531398
- Diagnostic and statistical manual of mental disorders: DSM-5.* (2013). Washington, D.C.: American Psychiatric Association.
- Feeg, V. D., Prager, L. S., Moylan, L. B., Smith, K. M., & Cullinan, M. (2014). Predictors of mental illness stigma and attitudes among college students: Using vignettes from a campus common reading program. *Issues in Mental Health Nursing, 35*(9), 694-703. doi:10.3109/01612840.2014.892551
- Finding Help: When to Get It and Where to Go. (2016). Retrieved July 20, 2016, from <http://www.mentalhealthamerica.net/conditions/finding-help-when-get-it-and-where-go>
- Fricker, R. D., & Schonlau, M. (2002). Advantages and disadvantages of internet research surveys: Evidence from the literature. *Field Methods, 14*(4), 347-367. doi:10.1177/152582202237725
- Gruttadaro, D., & Crudo, D. (2012). College students speak: A survey report on mental health. Retrieved June 25, 2016, from [https://www.nami.org/About-NAMI/Publications-Reports/Survey-Reports/College-Students-Speak\\_A-Survey-Report-on-Mental-H.pdf](https://www.nami.org/About-NAMI/Publications-Reports/Survey-Reports/College-Students-Speak_A-Survey-Report-on-Mental-H.pdf)
- Hedges, C., & Williams, B. (2014). *Anatomy of research for nurses*. Indianapolis, IN: Sigma Theta Tau International.

- Ikeme, C. O. (2012). *The stigma of a mental illness label attitudes towards individuals with mental illness* (Unpublished master's thesis, 2012). The University of Dayton. Retrieved July 28, 2016, from [https://etd.ohiolink.edu/rws\\_etd/document/get/dayton1335613307/inline](https://etd.ohiolink.edu/rws_etd/document/get/dayton1335613307/inline)
- Kobau, R., Zack, M., Luncheon, C., Barile, J., Marshall, C., Bornemann, T., Otey, E., Davis, R., Garraza, L., Walrath, C., Mandersheid, R., Palpant, R., & Morales, D. (2012). "Attitudes toward mental illness: Results from the behavioral risk factor surveillance system." *Center for Disease Control and Prevention*. Center for Disease Control and Prevention. Retrieved June 19, 2016, from [http://www.cdc.gov/hrqol/Mental\\_Health\\_Reports/pdf/BRFSS\\_Full%20Report.pdf](http://www.cdc.gov/hrqol/Mental_Health_Reports/pdf/BRFSS_Full%20Report.pdf)
- Lowinger, R. J. (2012). College students' perceptions of severity and willingness to seek psychological help for drug and alcohol problems. *College Student Journal*, 46(4), 829-833. doi:10.1037/e541652013-032
- Luty, J. (2006). Validation of a short instrument to measure stigmatised attitudes towards mental illness. *Psychiatric Bulletin*, 30(7), 257-260. doi:10.1192/pb.30.7.257
- Mackert, M., Mabry, A., Hubbard, K., Grahovac, I., & Steiker, L. H. (2014). Perceptions of substance abuse on college campuses: Proximity to the problem, stigma, and health promotion. *Journal of Social Work Practice in the Addictions*, 14(3), 273- 285. doi:10.1080/1533256x.2014.936247
- Mental and substance use disorders. (n.d.). Retrieved July 23, 2016, from <http://www.samhsa.gov/disorders>

- Mental health by the numbers. (n.d.). Retrieved June 18, 2016, from <https://www.nami.org/Learn-More/Mental-Health-By-the-Numbers>
- Patten, M. L. (2000). *Proposing empirical research: A guide to the fundamentals*. Los Angeles, CA: Pyczak Publishing.
- President`s new freedom commission on mental health. (2002). Retrieved June 17, 2016, from <http://govinfo.library.unt.edu/mentalhealthcommission/index.htm>
- Prevalence and correlates of eating disorders in adolescents. (n.d.). Retrieved July 23, 2016, from [https://www.nationaleatingdisorders.org/prevalence-and-correlates-eating](https://www.nationaleatingdisorders.org/prevalence-and-correlates-eating-disorders-adolescents) disorders-adolescents
- Schafer, T., Wood, S., & Williams, R. (2011) A survey into student nurses' attitudes towards mental illness: Implications for nurse training. *Nurse Education Today*, 31(4), 328-332. doi:10.1016/j.nedt.2010.06.010
- Shrivastava, A., Bureau, Y., & Johnston, M. (2012). Stigma of mental illness-1: Clinical reflections. *Mens Sana Monogr Mens Sana Monographs*, 10(1), 70-84. doi:10.4103/0973-1229.90181
- Wingfield, N., Kelly, N., Serdar, K., Shivy, V. A., & Mazzeo, S. E. (2011). College students' perceptions of individuals with anorexia and bulimia nervosa. *International Journal of Eating Disorders*, 44(4), 369-375. doi:10.1002/eat.20824

## Appendix A

### Permission to Use AMIQ

Dear Claire

Thank you for your email. You may use the AMIQ in the manner you describe and there is no copyright release fee for this usage. Please ensure you include a full reference and link to the original.

Please do not include the full AMIQ in any reports/results that are published online.

With kind regards  
Lucy

Lucy Alexander  
Rights & Permissions Manager  
The Royal College of Psychiatrists  
21 Prescot Street  
London E1 8BB  
[www.rcpsych.ac.uk](http://www.rcpsych.ac.uk)  
Direct dial: +44 (0)20 3701 2728

The Royal College of Psychiatrists Registered Charity No: 228636

## Appendix B

### Demographic Questions

1. What is your age?
2. What is your gender?
3. Are you a member of a fraternity or sorority?
4. Have you ever been exposed to an eating disorder or a substance abuse disorder?

## Appendix C



### **INSTITUTIONAL REVIEW BOARD**

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | [www.usm.edu/research/institutional.review.board](http://www.usm.edu/research/institutional.review.board)

#### NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.  
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 16121501

PROJECT TITLE: Understanding Stigma in College Students

PROJECT TYPE: New Project

RESEARCHER(S): Claire Coxwell

COLLEGE/DIVISION: College of Nursing

DEPARTMENT: Nursing

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Exempt Review Approval  
PERIOD OF APPROVAL: 03/14/2017 to 03/13/2018

**Lawrence A. Hosman, Ph.D.**  
**Institutional Review Board**