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ASSESSMENT OF EATING DISORDER KNOWLEDGE AMONG COLLEGE STUDENTS AND THE EFFECTIVENESS OF A PRIMARY PREVENTION PROGRAM

By

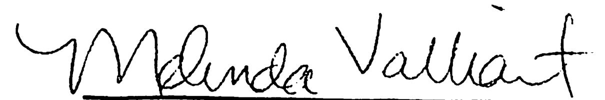
Patricia Edwards

A thesis submitted to the faculty of the University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

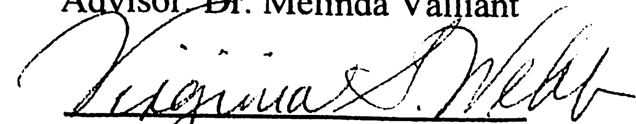
Oxford

May 2009

Approved by



Advisor: Dr. Melinda Valliant



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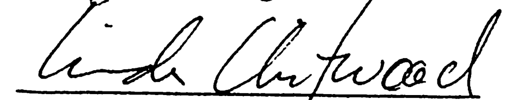

Reader: Dean Linda Chitwood

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Patricia Edwards

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This thesis is dedicated to my dearest Alec.

The LORD is my light and my salvation—
whom shall I fear?
The LORD is the stronghold of my life—
of whom shall I be afraid?

Psalm 27:1

Thank you so very much for your 21 years of love. Never forget how much I love you and how much I miss you. I cannot wait for the day to be in your arms again. Until then, keep shining down on us.

Sleep sweetly my Angel.

ACKNOWLEDGEMENT

My foremost acknowledgement and thanks goes to my thesis advisor, Dr. Valliant. Thank you for all your support, advice, encouragement, and guidance. Thank you also for you statistical contribution. I could not have asked for a better advisor.

I thank my thesis committee: Dean Linda Chitwood and Ms. Webb. Your valuable feedback helped me in numerous ways.

I thank Ms. Parkes for your patience and participation in my research.

I gratefully thank my friends. Your laughter and encouragement made this more manageable.

GiGi, I thank you for being my motivation to exceed in all that I do.

I lovingly thank my family. Your support through my college career has been invaluable and means the world to me.

ABSTRACT

Assessment of eating disorder knowledge among college students and the effectiveness of a primary prevention program.

Objective: To assess the current knowledge of eating disorders among college students and to determine the effectiveness of a prevention program in increasing eating disorder knowledge.

Participants: College students enrolled in the University of Mississippi and in a Family and Consumer Sciences (FCS) 311 Nutrition course.

Methods: Participants in attendance of an FCS 311 Nutrition course were administered a 21 question survey to assess a baseline knowledge level of eating disorders. Participants were later educated on eating disorders through a primary prevention program "Eating Disorders 101". The previous survey was administered again to assess the knowledge gained and the effectiveness of the program.

Results: No significant difference was evident between the mean score of correct answers of 12.8 for the pre-survey group and 13.1 for the post-survey group. The mean score of 12.8 corresponds to a 61% overall average of the pre-survey group.

Conclusions: College students have poor eating disorder knowledge. The program used to educate participants on eating disorders did not result in a significant increase of eating disorder knowledge among participants. Although there was a slight gain in mean scores between pre-survey and post-survey groups, it was not a significant change. Results support further research needed on primary prevention programs for eating disorders.

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LIST OF ABBREVIATIONS

AN	Anorexia Nervosa
APA	American Psychiatric Association
BN	Bulimia Nervosa
BED	Binge Eating Disorder
DSM-TR-IV	Diagnostic and Statistical Manual of Mental Disorders
EDNOS	Eating Disorder Not Otherwise Specified
FCS	Family and Consumer Sciences

CHAPTER I

INTRODUCTION

The obesity problem in the United States is well documented. According to results from the 2003-2004 National Health and Nutrition Examination Survey, more than one-third of adults in the United States were obese in 2005-2006 (Ogden et al., 2006). Not only is America facing an increasing problem with obesity, but also an increasing problem with eating disorders and disordered eating. Research suggests that about 1% of the population, or 10 million females and 1 million males are struggling with the eating disorders (Hoek & van Hoeken, 2003) Anorexia Nervosa (AN) or Bulimia Nervosa (BN). Over a million more males and females have been diagnosed with Binge Eating Disorder (BED) (Crowther, Wolf, & Sherwood, 1992; Fairburn, Hay, & Welch,1993; Gordon, 1990; Hoek, 1995; Shisslak, Crago, & Estes, 1995). Most people with eating disorders try to hide their disease and many people do not seek help for eating disorders and therefore it is highly likely that these numbers are severely underreported. Commonly, researchers investigating the prevalence of eating disorders have used self-reported data versus clinical data to confirm whether the individual has an actual eating disorder (Fairburn & Beglin, 1990).

Causes of eating disorders are not yet known and consequently it is difficult to find an effective treatment program. Therefore, identifying knowledge and providing a prevention program is key to reduce incidence of eating disorders. It is not known if primary prevention programs, early interventions, or

specific delivery techniques of programs prevent the development of eating disorders however, primary prevention programs have shown to increase awareness and knowledge of eating disorders (Austin, 2000). This study aims to assess knowledge in college students, provide a primary prevention program, and evaluate its effectiveness.

CHAPTER II

REVIEW OF LITERATURE

Eating disorders are a medical illness and the American Psychiatric Association (APA) sets specific diagnostic criteria for each type of eating disorder. The *Diagnostic and Statistical Manual of Mental Disorders*, TR-IV (DSM-TR-IV) defines an eating disorder as the refusal to maintain body weight at or above a minimally normal weight for age and height. According to the APA, there are three categories of an eating disorder; AN, BN, eating disorder not otherwise specified (EDNOS), and BED.

To be diagnosed with AN, a person must meet the APA diagnostic criteria found in Appendix 1. The DSM-TR-IV also diagnoses two subtypes of AN, a restricting type and a binge eating/purging type. In addition, the APA sets specific diagnostic criteria for BN, EDNOS, and BED found in Appendices 2, 3, and 4 respectively which do not have subtypes. Similar to AN, BN has two subtypes: purging type and non purging type. To be diagnosed with any of the mentioned eating disorders, you must meet all of the APA criteria. For example, if you have all of the criteria for BN, but the behaviors do not occur for at least twice a week for three months, you do not have BN and may be diagnosed as EDNOS.

Causes of eating disorders are not yet known. Research has suggested that early childhood feeding practices, media and marketing, dieting, young dieting, and depression are all risk factors of eating disorders (Birch & Fisher, 1998).

Current theoretical models range from purely biological, (Kaye, et al., 2005) to the biopsychosocial (Connan, Campbell, Katzman, Lightman, & Treasure, 2003) to the cultural (Bordo, 1995). However, research has not investigated comprehensive etiological models that integrate the biological, biopsychosocial, and also cultural causes (Bulik, Reba, Siega-Riz, Reichborn-Kjennerud, 2005; Jacobi, Hayward, de Zwann, Kraemer, & Agras, 2004; Striegel-Moore & Cachelin, 2001).

Central symptoms or features of eating disorders include: body image disturbance such as weight and shape concerns or increased evaluation of thinness, over or under control of eating such as binge eating or dietary restriction, and extreme behaviors to control weight such as purging, laxative use, and over exercising (Striegel-Moore & Bulik, 2007). The APA sets the diagnostic criteria based on observed signs and symptoms (Striegel-Moore & Builk, 2007). While some patients are categorized as EDNOS, they are often thought as subclinical or a mild case of an eating disorder (Fairburn & Garner 1986). However, there are many patients who have a clinically significant eating disorder, but do not meet all the criteria for that specific disorder, and are placed into the residual EDNOS category (Hoek & van Hoeken, 2003; Hudson, Hiripi, Pope, & Kessler, 2005; Striegel-Moore et al., 2005). For the reason that known causes of eating disorders have not been identified and that symptomology varies greatly, it is complicated to create effective treatment. Primary prevention programs have been able to change awareness and knowledge about eating

disorders (Austin, 2000). It is not known if primary prevention programs or early interventions prevent the development of eating disorders however; research suggests early detection and shorter duration of eating disorders are linked to more favorable outcomes (Shoemaker, 2008). Because of this, the purpose of this investigation is to assess the current knowledge of eating disorders among college students and to determine the effectiveness of a prevention program in increasing eating disorder knowledge.

The following hypotheses were made and tested during this investigation:

H_1: College age students have adequate knowledge of eating disorders.

H_2: A primary prevention program would increase knowledge of eating disorders.

CHAPTER III

METHODS

A survey (Appendix 7) was developed based on the common misunderstandings about eating disorders, which were identified by the National Eating Disorder Association, to assess current knowledge of eating disorders among college aged students. This study was approved by the Institutional Review Board of the University of Mississippi (Appendix 6). Informed consent was obtained prior to administration of survey from all participants (Appendix 5).

Participants

The survey was administered to college aged students enrolled in FCS 311 Nutrition, during the fall semester of 2008 and winter intersession of 2009. This specific course was chosen because of its large enrollment and lack of a prerequisite; therefore, it provides a wide variation of the subjects assessed. On the days chosen to administer the pre-survey, the education program, and post-survey, each student was offered a survey. Depending on which day students were in attendance, they participated in a pre-survey, or an education program and post-survey. If students were in attendance on both pre and post-survey days, they may have participated in the pre-survey, education program, and post-survey. Student's participation was categorized into a pre-survey group or a post-survey group. Students may have participated in both groups. Participants must have

been enrolled as a student at the University of Mississippi and also enrolled in the FCS 311 course. All participants were over the age of 18.

Procedure

All students in attendance of the selected FCS 311 courses were given packets containing: an explanation of research, an informed consent page with IRB approval (Appendix 5 and 6, respectively), a survey (Appendix 7), and a scantron. After the professor communicated a synopsis of the research and answered any questions pertaining to the study, the students then chose whether or not to participate. Students choosing to participate in the pre-survey were categorized into a pre-survey group. A twenty one question multiple choice survey was then administered to participants by the professors of the course. The survey consisted of questions pertaining to common misunderstandings of eating disorders which were identified by the National Eating Disorder Association. The survey was reviewed by a registered dietitian prior to implementation. The survey was administered during a normal course meeting and participants were not required to take the survey outside of normal course meeting hours.

In a subsequent course meeting, a PowerPoint presentation was given the same FCS 311 courses. All students present were given the opportunity to participate in the education program and take a post-survey. Those students choosing to participate in the presentation and post-survey were categorized into the post-survey group. It is likely that students that participated in the pre-survey

group also participated in the post-survey group. The presentation was administered by the professor of the course. The presentation titled, "Eating Disorders 101" was created based on general knowledge of eating disorders and tailored to the education level of college students. After participating in "Eating Disorders 101" the subjects were administered the same twenty one question survey the pre-survey group received. Results from the pre-survey group and post-survey group were compared to see if the "Eating Disorder 101" presentation was an effective tool in increasing the knowledge of eating disorders among college aged students. Participants received no compensation for participation in this study as well as no consequences within their FCS 311 course for choosing to not participate.

Statistical Analysis

An Independent *t*-test was conducted to determine whether there was a significant difference between the overall mean of correct answers of the pre-survey administration and the post-survey using SPSS software (version 17.0, SPSS, Inc. Chicago, IL) with significance set at $p < 0.05$.

CHAPTER IV

RESULTS

This study included a total 143 (n=143) participants in the pre-survey group and 124 (n=124) participants in the post-survey group. Approximately 64% of eligible participants participated in the pre-survey and 55% participated in the education program and post-survey. All participants were enrolled at the University of Mississippi and no participants were under the age of 18.

An Independent *t*-test was conducted to determine whether there was a significant difference between the results of the pre and post-survey groups. It was concluded that there was no significant difference evident between the mean score of 12.8 for the pre-survey group and 13.1 for the post-survey group, ($p<0.05$).

The hypotheses considered in this investigation and their outcomes are discussed in the following sentences. H_1 stated that college age students have adequate knowledge of eating disorders. Students' pre-survey scores averaged 61% of answers correct which corresponds to a failing grade based on the University of Mississippi grading policy. Therefore, H_1 was rejected. H_2 stated that a primary prevention program would increase knowledge of eating disorders. An independent *t*-test between the pre and post-survey response resulted in no significant difference among groups. Therefore, H_2 was rejected.

CHAPTER V

DISCUSSION

In this study of knowledge assessment of eating disorders among college students, a prevention program was shown to be not effective in increasing the overall score on an eating disorder knowledge questionnaire. Although there was an increase in the mean score of the pre and post-survey groups, 12.8 and 13.1 respectively, results did not reflect a significant difference.

The mean score of the pre-survey group was 12.8 or 61%. According to the University of Mississippi grading policy, a 61% would equal the lowest passing grade, a "D." A "D" grade constitutes eligibility for the Forgiveness Policy in which a student may repeat the course for a higher grade which will not be factored into their GPA. Therefore, students with a 61% in a course would be eligible to repeat the course due to unsatisfactory completion and knowledge deficit.

An overall score of 61% concludes that there is little knowledge of eating disorders among college students. However, college students have a higher prevalence of eating disorders compared to any other age group. Thus, suggesting there is a high need for education programs for this population. Increasing awareness and knowledge may in turn decrease the prevalence of eating disorders among college students.

When asked what an eating disorder was 53.84% (n=143) of participants answered incorrectly in the pre-test group and 43.55% (n=124) answered incorrectly in the post-survey group. Participants were asked what are the eating habits of a person with AN and 37% of pre-survey participants answered incorrectly. While biological factors such as genetics and physiology play a role in the development of an eating disorder, there is no known cause (Ericsson, Poston, & Foreyt, 1996). Because the medical and scientific worlds do not know the cause of an eating disorder, it is a possibility that the college student may not understand exactly what an eating disorder is as well. Additionally, most participants incorrectly reported that an eating disorder is a personal choice however, if it is not a choice then is it a psychological or biological cause, and if it is cultural then are people with eating disorders *choosing* to be part of a cultural norm? Furthermore, treatment and prevention is most effective when we know the cause of the specific disorder. Not knowing the cause leads to uncertainty in effective treatment program development.

High percentages of incorrect answers among the pre and post survey group were found for questions 1, 4, 6, and 12 (Appendix 7). This may suggest that there was not a significant increase in knowledge among participants. However, there may have been an increase in the awareness of eating disorders. Questions 1, 4, 6, and 12 are related to the characteristics of eating disorders, how eating disorders are described, and among whom eating disorders are most common. These questions had the most significant percent increase between the

pre and post survey groups with differences of 10.29%, 11.20%, 13.74% and 9.58% respectively.

Although there were high percentages of incorrect answers when asked if an eating disorder was a personal choice (question 4), there was a significant improvement in the number of correct answers (10% or more) between the pre-survey group and post-survey group after the education program. This suggests that students may have a better understanding or may be more aware that an eating disorder is not a choice but an actual disease that needs to be medically treated. Furthermore, it is possible that an increase in the number of correct responses for question 4 may be related to the increase in correct responses for question 1. When asked what an eating disorder was (question 1), there was an increase of correct answers by 10.29%. Similarly, when asked if an eating disorder was a personal choice, there was an increase in correct answers between pre and post survey group of 11.20%.

Of the 21 questions, questions 3 and 5 had the highest percentage difference of correct answers between the pre and post survey groups (14.62% and 13.74% respectively). These questions were statistical questions asking about percentages of girls with bulimia and percentages of males diagnosed with anorexia. There are two possibilities why these percentages of correct answers may be higher than the others. First, questions 3 and 5 were the only two questions pertaining to numbers; other questions were mainly true and false responses. A recency factor may contribute to the high percentage numbers.

Throughout the education program there were few statistics presented. Since the post-survey was administered right after the education program it is possible that participants were more likely to remember numbers rather than factual information, thus increasing the amount of correct answers in the post-survey. Second, the percentages of correct responses may have been higher than other questions because awareness may have been increased. Participants may not have known how prevalent bulimia is among females or how common eating disorders are among males and therefore the high prevalence may have significantly increased their awareness.

There was a significant difference of percentages of correct answers between the pre and post-survey groups when asked a question pertaining to the dangerous nature of AN. Participants were asked if anorexia is the most harmful and dangerous eating disorder (question 7) and responded with a decrease in the percentages of correct answers of 12.05% between the pre and post-survey groups. It is a common misconception that to have an eating disorder means that you have AN, which is a possible explanation of why the percentages of incorrect answers were higher in the post-survey group compared to the pre-survey group. In the education program that was presented to the participants, it stated that people with bulimia are often of normal weight. This may have suggested to participants in the post-survey group that because people with BN may be of normal bodyweight, that BN must not be as dangerous as AN.

Overall 12 of the 21 questions showed higher percentages of correct answers in the post-survey group compared with the pre-survey group and 9 questions showed a decrease in the percentages of correct answers. The percentage of correct answers decreases as you come to the end of the survey suggesting that students recalled information from the education more readily in the beginning of the survey as opposed to the end of the survey. This suggests that in the future it may be more beneficial to extend the length of the education program over a period of a few weeks. Each week's session would have a different topic covered and also a review over the previous information. This may be more beneficial to college students because it is a similar learning style to what they may be accustomed to in their normal course settings.

Adherence in prevention programs is an important component to an effective program. Research has shown that adherence to eating disorder prevention programs improves outcome (Winzelberg et al., 2005). In the pre-survey of this study there were 143 participants whereas in the post test there were only 124 participants. Reasons for non completers are unknown but may be due to absence in the course on the day the eating disorder education and post survey were given, or if present, participants could have decided to complete the pre-survey but not the post survey. Adherence may be improved by stressing the importance of adherence to the program at the beginning of participation or during recruitment of participants.

Further limitations of this study include the inability to assess demographical information. To keep absolute confidentiality, no information was asked about the participants; therefore, the instructor could not link survey answers to specific students. However, there could be a relationship between education level and outcome of the program. It is a possibility that a majority of the students were underclassmen with a smaller knowledge base than upperclassmen. Also, the specific incorrect responses correlated to specific people were unable to be determined. This information could help tailor the program to include information which could prove more effective to future participants.

In this study, we were unable to determine if adherence had an effect on outcomes. Because the pre-survey and post-survey were offered in two different course times, we are unable to determine if the same persons who participated in the pre-survey are the same persons who participated in educational program and the post-survey.

The professor of the FCS 311 course also administered the survey and educational program, which may have been a limitation to the study. The education program was integrated into normal class flow, meaning that when the subject of eating disorders came up on the agenda for normal class meetings, the survey and educational program was incorporated. Because of this, students may not have taken the study seriously and may have thought of it as a routine class activity. A follow-up survey was not administered which could possibly show that knowledge may increase over time, or that the small amount of knowledge gained

after the education course was sustained. Furthermore, two different persons administered the prevention program. It is possible that they have different teaching techniques which could affect the attentiveness of students as well as knowledge gained.

While significant results were not seen among the pre-survey and post-survey, it is likely that Eating Disorders 101 did increase awareness among participants. Eating disorders can be life threatening diseases which affect millions of people. The Centers for Disease Control and Prevention has neglected to accumulate epidemiological data on eating disorders and the World Health Organization has failed to bring awareness to the disability adjusted life years for eating disorders (Striegel-Moore & Bulik, 2007). Awareness of eating disorders is important because it clarifies misconceptions and brings attention to needed research. Furthermore, awareness may be able to reduce risk factors and behaviors associated with the development of eating disorders.

Identification of risk factors is critical for determining high-risk groups for designing prevention program content and informing the public (Striegel-Moore & Bulik, 2007). Future research may be conducted on identifying risk factors of college students for developing eating disorders. After those specific risk factors have been identified, a prevention program could be created, tailored to the specific needs of college students, and knowledge gain and effectiveness could then be assessed appropriately. Furthermore, to increase the effectiveness of educational programs, research may be done to assess specific program

components to the overall outcomes of such program (Manwaring et al., 2008). For instance, this study used a Powerpoint Presentation as a medium for education. Better outcomes may occur by using a manual, lecture style presentation, or a program with more interactive components such as cartoons or noises.

Research suggests that as many as 30% of college aged women with partial syndrome eating disorders (EDNOS) may go on to develop a full eating disorder (AN or BN) (Taylor, et. al 2006). Because college age women and men have a high frequency of eating concerns and the potential to develop eating disorders research suggests that it is constructive to develop eating disorder prevention and education programs geared toward this population (Becker, Bull, Schaumberg, Cauble, & Franco, 2008). It is imperative that an effective prevention program be developed to reduce the occurrence of eating disorders in society. Further research must be done to create effective and efficient programs to increase awareness and decrease the prevalence of this disease.

Appendix 1
APA Diagnostic Criteria for Anorexia Nervosa and Subtypes

I. Refusal to maintain body weight at or above a minimally normal weight for age and height (weight loss leading to maintenance of body weight <85% of that expected or failure to make expected weight gain during period of growth, leading to body weight less than 85% of what is expected.

II. Intense fear of gaining weight or becoming fat, even though underweight.

III. Disturbance in the way one's body weight or shape are experienced, undue influence of body weight or shape on self evaluation, or denial of the seriousness of the current low body weight.

IV. Amenorrhea (the absence of three consecutive menstrual cycles) in postmenarchal females.

Anorexia Nervosa Subtypes

I. *Restricting Type-* during the current episode of AN, the person has not regularly engaged in binge-eating or purging behavior to include; self-induced vomiting or misuse of laxatives, diuretics, or enemas.

II. *Binge-Eating/Purging Type-* during the current episode of AN, the person has regularly engaged in binge-eating or purging behavior to include; self-induced vomiting or misuse of laxatives, diuretics, or enemas.

Adapted from the American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed 2000; Washington, DC.

Appendix 2
APA Diagnostic Criteria for Bulimia Nervosa and Subtypes

I. Recurrent episodes of binge eating. Binge eating is characterized by both the following:

1. Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.

2. A sense of lack of control over eating during the episode, identified by a feeling that one cannot stop eating or control what or how much one is eating (e.g., a feeling that one cannot stop eating or control how much on is eating).

II. Recurrent inappropriate compensatory behavior in order to prevent weight gain, to include: self –induced vomiting, misuse of laxatives, diuretics, enemas, fasting, and excessive exercise.

III. The binge eating and inappropriate compensatory behavior occurs both, on average, at least twice a week for three months.

IV. Self evaluation is influenced by body shape and weight.

V. The disturbances do not occur exclusively during episodes.

Adapted from the American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed 2000; Washington, DC.

Bulimia Nervosa Subtypes

I. *Purging Type*-during the current episode of BN, the person has regularly engaged in self induced vomiting or the misuse of laxatives, diuretics, or enemas.

II. *Nonpurging Type*- during the current episode of BN, the person has used other inappropriate compensatory behaviors such as fasting or excessive exercise, but not regularly engaged in self induced vomiting or the misuse of laxatives, diuretics, or enemas.

Adapted from the American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed 2000; Washington, DC.

Appendix 3
APA Diagnostic Criteria for Eating Disorder Not Otherwise Specified

Appendix 4
APA Diagnostic Criteria for Binge Eating Disorder

I. Recurrent episodes of binge eating in the absence of the regular use of inappropriate compensatory behaviors characteristic of BN.

II. Binge episodes must occur at least 2 days per week for a period of 6 months.

Adapted from the American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed 2000; Washington, DC.

Appendix 5
Informed Consent

Consent to Participate in an Experimental Study

Title: Current Knowledge and Sociocultural Relationships of Eating Disorders

Investigator
Patricia Edwards, Student
Department of Family and Consumer Sciences
The University of Mississippi
(662) 915-1505

Sponsor
Dr. Melinda Valliant Faculty, Ph.D.
Department of Family and Consumer Sciences
222 Lenior Hall
The University of Mississippi
(662) 915-1437

Description

We want to know how much factual knowledge a person knows about eating disorders and their symptoms. From this, we would like to create and educational tool on eating disorders to better inform individuals about eating disorders. In order to develop this educational tool, we are asking you to take one short survey. The survey is a few questions about general knowledge pertaining to eating disorders. It will take you about 20 minutes to finish this survey. We will explain the research to you and you can ask any questions you have about the research or survey.

Risks and Benefits

There are no risks with taking this survey. This survey could actually help many of you who have questions about eating disorders, have a friend who you think may have an eating disorder, and also help people who have eating disorders and are unaware.

Cost and Payments

The survey will take about 20 minutes to finish. There are no other costs for helping us with this study.

Confidentiality

We will not put your name on any of your tests. The only information that will be on your test materials will be your gender (whether you are male or female) and your age. Therefore, we do not believe that you can be identified from any of your tests.

Right to Withdraw

You do not have to take part in this study. If you start the study and decide that you do not want to finish, all you have to do is write "incomplete" on your answer sheet. Whether or not you choose to participate or to withdraw will not affect your standing with the Department of Family and Consumer Sciences, or with the University, and it will not cause you to lose any benefits to which you are entitled. The researchers may terminate your participation in the

study without regard to your consent and for any reason, such as protecting your safety and protecting the integrity of the research data. If the researcher terminates your participation, any inducements to participate will be prorated based on the amount of time you spent in the study.

IRB Approval

This study has been reviewed by The University of Mississippi's Institutional Review Board (IRB). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.

Statement of Consent

I have read the above information. I have been given a copy of this form. I have had an opportunity to ask questions, and I have received answers. I consent to participate in the study.

____

Signature of Participant Date

____

Signature of Investigator Date

NOTE TO PARTICIPANTS: DO NOT SIGN THIS FORM

IF THE IRB APPROVAL STAMP ON THE FIRST PAGE HAS EXPIRED.

Appendix 6
Institutional Review Board Approval

The
University of Mississippi
Oxford • Jackson • Tupelo • Southaven

Office of Research and
Sponsored Programs
100 Barr Hall
Post Office Box 907
University, MS 38677
(662) 915-7482
Fax: (662) 915-7577

August 27, 2008

Ms. Patricia Edwards
1304 Private Road 3097
Oxford, MS 38655

Dr. Melinda Valliant
Family & Consumer Sciences
University, MS 38677

Dear Ms. Edwards and Dr. Valliant:

This is to inform you that your application to conduct research with human participants, ***Current Knowledge and Sociocultural Relationships of Eating Disorders*** **(Protocol No. 09-015)** has been approved as Exempt under 45 CFR 46.101(b)(2).

Please remember that all of The University of Mississippi's human participant research activities, regardless of whether the research is subject to federal regulations, must be guided by the ethical principles in *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.*

It is especially important for you to keep these points in mind:

- You must protect the rights and welfare of human research participants.
- Any changes to your approved protocol must be reviewed and approved before initiating those changes.
- You must report promptly to the IRB any injuries or other unanticipated problems involving risks to participants or others.

If you have any questions, please feel free to call me at (662) 915-7482.

Sincerely,

Diane W. Lindley

Diane W. Lindley
Coordinator, Institutional Review Board

Appendix 7
Eating Disorder Knowledge Assessment Survey

Please DO NOT write your name or student ID on this page. Answer the questions to your best ability. Thank you for your time and participating in this research.

1. An eating disorder is
    a. A mental illness
    b. A biological illness
    c. A chronic illness
    d. All of the above
    e. None of the above, an eating disorder has not been medically or scientifically proven as an illness.

2. Eating disorders are uncommon, only a small portion of the population have an eating disorder
    a. True
    b. False

3. Studies show that ______% of American girls have had Bulimia at any given point in their lifespan.
    a. 1%
    b. 7%
    c. 13%
    d. 20%

4. An eating disorder is a personal choice that someone decides whether or not to have.
    a. True
    b. False

5. Approximately 25% of anorexia cases are diagnosed among males.
    a. True
    b. False

6. Eating Disorders are most common among:
    a. Males
    b. Females
    c. Athletes
    d. None of the above

7. Anorexia is the most harmful and dangerous eating disorder?
    a. True
    b. False

8. People do not die from eating disorders
    a. True
    b. False

9. People who live a healthy lifestyle by dieting that show symptoms of eating disorders should not be concerned.
    a. True
    b. False

10. Dieting is normal but should be monitored.
    a. True
    b. False

11. An eating disorder is "extreme dieting".
    a. True
    b. False

12. Anorexics
    a. Never eat
    b. Only drink liquids
    c. Eat very small amounts of food

13. You can look at someone to tell if they have an eating disorder.
    a. True
    b. False

14. Taking laxatives longer then directed or needed is not a form of an eating disorder
    a. True
    b. False

15. Sociocultural factors (magazines, celebrities, tv, movies) are the main factor in causing eating disorders.
    a. True
    b. False

16. People with higher income levels are more likely to develop at eating disorder.
    a. True
    b. False

17. You can never fully recover from an eating disorder.
    a. True
    b. False

18. Throwing up food, also known as purging, is the quickest, and most effective way to lose weight.
    a. True
    b. False

19. When an individual purges his or her food, only approximately half the food ingested is evacuated.
    a. True
    b. False

20. People are not at risk of developing an eating disorder until they are in their pre-teen and teen ages (12-18)
    a. True
    b. False

21. It is likely to be anorexic and bulimic at the same time, or to go back and forth between the two.
    a. True
    b. False

Appendix 8
Survey Answer Analysis

Question Number	Incorrect Answers Pre-Survey (n=143)	Percent Incorrect Pre-Survey	Incorrect Answers Post-Survey (n=124)	Percent Incorrect Post-Survey	Difference Between pre and post percentage
1	77	53.84%	54	43.55%	10.29%
2	8	5.59%	10	8.06%	-2.47%
3	127	88.81%	92	74.19%	14.62%
4	53	37%	32	25.80%	11.20%
5	60	42%	35	28.22%	13.74%
6	14	10%	28	22.59%	-12.80%
7	82	57.30%	86	69.35%	-12.05%
8	4	2.80%	5	4.03%	-1.23%
9	16	11.19%	11	7.70%	3.49%
10	136	95.10%	118	95.16%	-0.06%
11	85	59.44%	77	62.10%	-2.66%
12	53	37%	34	27.42%	9.58%
13	27	19%	21	16.94%	1.94%
14	32	22%	32	25.81%	-3.43%
15	122	85.31%	104	83.87%	1.44%
16	67	46.85%	57	45.97%	0.88%
17	83	58.04%	70	56.45%	1.59%
18	28	19.58%	20	16.13%	3.45%
19	41	28.67%	40	32.25%	-3.58%
20	31	21.69%	24	19.35%	2.34%
21	16	11.19%	21	16.94%	-5.75%

CHAPTER VII

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