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When Does it Cross the Line? College Women's Perceptions of the Threshold Between Normal Eating and Eating Disorders

Megan R. Yost Laura A. Smith

Clinicians rigorously study diseases and disorders so that they can formulate the best set of criteria for diagnosis. However, it is often the case, particularly on a college campus, that a friend would notice changes in physical or mental wellness long before a doctor or psychologist would. Because of this, research on the accuracy of lay diagnosis is needed. Although multiple studies have assessed the accuracy of lay diagnosis for disorders such as depression (e.g., Johnson, Mayanja, Bangirana, & Kizito, 2009), very little research has been conducted on lay diagnosis of eating disorders. With the high prevalence of eating disorders among women at college, this lack of research attention is particularly problematic.

Psychologists conceive of eating disorders as falling on a continuum that places unrestricted eating behaviors and exercise at one extreme and eating disorders, such as anorexia nervosa and bulimia nervosa, at the other. Therefore, clinical diagnoses are a matter of degree rather than of type (Tylka & Subich, 1998). The point at which one crosses the line from dieting to an eating disorder becomes extremely important to identify, because this boundary likely determines the point at which someone would seek help, or would recommend that a friend seek help. Although clinicians have the *Diagnostic and Statistical Manual of the American Psychiatric Association* (DSM; American Psychiatric Association, 2000) available to guide them through diagnosis,

the general public is often not well-versed in diagnostic criteria and relies on their own conceptions of, and experiences with, disorders to assess behaviors of family and friends. If their perceptions are not accurate, people with disorders may not receive the help and support they need to seek treatment.

The purpose of the present study was to introduce a new measure designed to determine how accurate college women are in their judgments about the point at which a target woman has an eating disorder, based on symptoms of being underweight, exercising excessively, limiting caloric intake, and self-induced vomiting. The present research is important because problematic behavior that is diagnosed too late might result in women delaying treatment until symptoms have progressed. With eating disorders, as with many psychological disorders, early intervention provides the best conditions for recovery, so encouraging early detection and referral is crucial.

METHOD

Participants

One hundred twenty-two women (mean age = 19.6 years) from a pool of students enrolled in introductory psychology courses at a small, liberal arts college in Pennsylvania volunteered to participate. Students were able to choose from a variety of research studies or

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complete an alternative reading assignment to receive research credit toward their classes. Of the sample, 42.6% were first-year students, 24.6% were sophomores, 9.8% were juniors, and 22.1% were seniors. The sample was predominantly White: 88.5% of participants were Caucasian, 4.1% were Hispanic, 2.5% were African American, and 1.6% were Asian American.

Measure

Identification of Diagnostic Threshold. A new measure was created for this study, designed to examine the level at which behavior is considered to be disordered. Based on the characterization of eating disorders as existing on a continuum with normal behaviors (American Psychiatric Association, 2000; Tylka & Subich, 1998), we created four vignettes that began with a woman displaying acceptable behavior that becomes increasingly more representative of an eating disorder. The variables that were examined, in separate vignettes, were weight, exercise behavior, caloric intake, and purging habits. In each vignette, one variable was made increasingly severe. At each increasingly severe step, the participants were asked whether the woman has an eating disorder. The point at which an individual participant switched from responding “No” to responding “Yes” was the indicator of the threshold.

For example, the weight vignette began by stating, “Susan is a 19 year-old college student. She is 5’5” and weighs 140 pounds. She takes 4 classes and has an on-campus job. She exercises occasionally.” The first item asked, “Given only this information, would you say that Susan has an eating disorder?” Subsequent items gradually reduced Susan’s weight; item 2 asked, “What if she weighed 133 pounds?” and item 3 dropped to 126 pounds. This continued until Susan weighed only 91 pounds.

In all vignettes, at least 3 steps preceded

and at least 3 steps followed the correct diagnostic threshold, so as to avoid providing any indication to the participants regarding the correct choice. The full vignettes are available from the first author.

Procedure

Women came to a computer lab in groups of approximately 20 participants. They were greeted by the second author, instructed to sit at their own table, and their research credit was recorded. After the researcher read an informed consent document, the women were instructed to use the laptop on their desk to complete the study. An anonymous online system hosted by the college presented all items to the women, and all responses were electronically recorded as they were entered. At the conclusion, a debriefing form was presented online.

RESULTS AND DISCUSSION

Weight Vignette

The point at which, on average, participants diagnosed an eating disorder due to weight was 5.61 ($SD = 1.74$), whereas the correct diagnostic threshold was 6. A single-sample t test showed that participants diagnosed earlier than the diagnostic criteria, $t(112) = -4.32$, $p < .001$; 51 participants were early in their diagnosis (small effect size, Cohen’s $d = .22$).

Thus, although a 5’5” woman would be considered seriously underweight at 105 pounds (American Psychiatric Association, 2000), only 41 participants diagnosed an eating disorder at that step; 51 participants considered the weight of 112 or more pounds to be a potential problem (an early diagnosis), whereas 30 participants delayed diagnosis until the woman weighed 98 pounds or less. These results show that college women were highly sensitive to weight symptoms, so much so that many found reason to diagnose the disorder before it progressed to a clinically diagnostic

level. This early attention could lead to early recognition of an eating disorder if a woman observes a friend who is progressively losing weight and chooses to intervene.

Exercise Vignette

The point at which, on average, participants diagnosed an eating disorder due to exercise was step 7.09 ($SD = 2.35$), and the correct diagnostic threshold was step 7. A single-sample t test revealed that participants diagnosed an eating disorder at the correct threshold, $t(107) = 1.45, p = .151$. In all, 81 participants chose the correct diagnosis (10 were early and 31 were late).

This finding is promising, because it indicates overwhelming accuracy in diagnoses based on exercise. However, the campus at which this study was conducted was hailed by a leading health magazine as one of the most fit campuses in America. All students must take four physical education classes before graduation, 25% of students are varsity athletes, and 85% of students participate in intramural sports. Therefore, this population may be overly aware of healthy exercise behavior, which can explain why participants were so accurate. Students in other contexts (i.e., colleges that do not focus as extensively on physical fitness) might not be so aware. Previous research supports this interpretation: McArthur and Raedeke (2009) found that college students who were aware of the American College of Sports Medicine recommendations (that adults should exercise 5 times per week for 30 minutes) were more active themselves than were college students who were unfamiliar with this recommendation.

Meal Size Vignette

The point at which, on average, participants diagnosed an eating disorder in response to meal size was step 6.02 ($SD = 1.11$) and the correct diagnostic threshold was step 6. A

single-sample t test revealed that participants diagnosed an eating disorder at the correct threshold, $t(107) = 1.45, p = .151$. However, participants were not overwhelmingly accurate: Only 45 participants chose the correct diagnosis; 35 were early and 42 were late.

There was a great deal of variation in which meal size these college women believed indicates excessive caloric restriction, which may be related to several factors of college life. Students on this campus must enroll in a campus meal plan which, similar to many college campuses, offers a buffet-style approach in the cafeteria (Kasperek, Corwin, Valois, Sargent, & Morris, 2008). College students utilizing all-you-can-eat dining halls may be unaware of how many calories they are eating, because this is difficult to accurately judge. In addition, prior research suggests that college students regularly snack between meals and skip meals (Huang, Song, Schemmel, & Hoerr, 1994). This pattern of irregular eating may also make it difficult to accurately estimate appropriate meal size and caloric intake. Finally, although there is little empirical support for its existence, incoming college students are highly aware of the “freshman 15,” which is the belief that first-year students will gain 15 pounds in their first year. This may be related to a tendency by some college students to restrict meal size. These facets of the college lifestyle may have influenced participants’ responses, yielding variability and inaccuracy; this finding points to the need for education and prevention efforts around nutrition and eating habits on college campuses.

Purging Habits Vignette

The point at which, on average, participants diagnosed an eating disorder in response to the purging vignette was step 4.13 ($SD = 1.32$), whereas the correct diagnostic threshold was step 6. A single-sample t test showed that participants diagnosed at an earlier threshold

than the diagnostic criteria, $t(120) = -7.28$, $p < .001$, large effect (Cohen's $d = 1.42$). Sixty participants were early in their diagnosis, 38 were correct, and 13 were late.

Similar to the weight results, these college women were highly sensitive to the purging behavior symptoms of an eating disorder; the step at which the majority diagnosed an eating disorder described a single instance in which the target woman ate too much, felt overfull, and vomited to feel better. For these participants, any attempt to induce vomiting was sufficient to suggest an eating disorder. This is a much more stringent definition than the DSM diagnosis, and shows that college women are highly attuned to purging symptoms of an eating disorder. Again, this heightened attention could lead to early recognition of an eating disorder if a woman observes a friend who is purging and chooses to intervene.

CONCLUSIONS

Campus health and counseling centers have an opportunity to engage young adults in conversations about healthy living. College and university populations can be particularly receptive to education about healthy eating, healthy exercising, and healthy bodies, as these individuals are living independently from their parents for what is most likely the first time in their lives and are developing their own habits and behaviors around eating and exercise. Short seminars in residence halls or interactive campus activities that focus on healthy lifestyles can help to shape these students' ideas of what they should be doing. Campaigns such as the National Organization for Women's *Love Your Body Week*, the National Eating Disorder Association's *Eating Disorder Awareness Week*, and similar movements sponsored by college campuses provide the opportunity to engage the entire campus community in awareness

programming. At the present time, however, many of these campaigns focus on improving student's body image regardless of body size. Although that is an important goal, the present research suggests that education about the warning signs and symptoms of eating disorders is equally important. This type of education would help young adults to recognize problematic behaviors in others. If students become aware of nutritionally-complete meal sizes, the amount of exercise recommended by physicians, healthy body size (recognizing, of course, that there are a range of body sizes that are healthy (see the *Health at Every Size* movement, at <http://www.haescommunity.org>), as well as the warning signs of eating disorders, they would be able to better recognize when a friend begins to engage in disordered and potentially dangerous behaviors.

Campus health and counseling centers should also be available to counsel students about how to approach the subject of eating disorders with friends. Particular attention should be paid to students who have taken on roles in which they have responsibility for their peers, such as Resident Assistants/Advisors (RAs). RAs interact with the students on their floor almost daily and may be among the first to notice an eating disorder in one of their residents. Additionally, they often serve as a confidante for students. Someone with an eating disorder may feel more comfortable speaking with someone they see as a responsible peer, such as an RA. Therefore, RAs should undergo more intense training to give young adults the tools necessary to recognize when someone is on the path to an eating disorder and to intervene in that friend's life, getting them into treatment early. There is evidence that early intervention in anorexia nervosa can lead to a more improved outcome (Steinhausen, 2002); although not conclusive, there is an indication that the same holds true for bulimia nervosa (Steinhausen, 2009).

Women in this study diagnosed an eating disorder before the behavior progressed to a dangerous level when considering weight and purging, which suggests that these women are sensitive to information about anorexia and bulimia. This early diagnosis could lead to early recognition of an eating disorder and intervention, which can help with prognosis.

However, we would caution that there may be negative effects of a premature referral. For women who are naturally thin, athletes who train extensively, or people who eat many small meals, having a friend suggest that she has an eating disorder could be damaging. If untrue, it could affect the woman's emotional well-being and strain the friendship. Furthermore, the label of an eating disorder carries with it stigma. Mond, Roberston-Smith, and Vetere (2006) found that female college students associated a diagnosis of anorexia nervosa to self-centered and "annoying" behavior, and were less willing to consider an individual with anorexia for a job. Thus, education efforts should take care to temper the need to encourage early intervention with the acknowledgment that premature diagnosis by a friend could be hurtful.

The participants in the current study were students enrolled in introductory-level psychology courses. This limits generalizability, because psychology students may have a greater interest in and knowledge of diagnoses than the general population. However, the majority of research participants were in their first year of college, were taking their first psychology course at the time of the study, and may

have been enrolled in a course that included no information on eating disorders (e.g., *Human Sexuality*, or *Perception, Memory, and Thought*). Thus, it is unlikely that they were more knowledgeable as a whole about eating disorders than their peers. If these participants were more knowledgeable, though, that would only provide more evidence of the need for more education about eating disorders to college students. It is possible that a more representative sample (including students outside of psychology classes) would be even less accurate in the diagnostic thresholds.

Future research is needed to validate the measure introduced in the present study. The measure is promising because it can shed light on the accuracy of diagnosis of eating disorders. Use of this measure could help to target populations that need to be educated about eating disorders, and would specify which areas (weight, exercise, food, purging) to focus efforts. Further research should also consider whether this measure reliably predicts who would or would not attempt to help a friend whom they thought was suffering from an eating disorder. Those individuals who are able to recognize that a friend is on the path to an eating disorder, and who actually take the necessary steps to get that friend help, are dramatically improving the chances of recovery.

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REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4 ed., text revision). Washington, DC: Author.
- Huang, Y.L., Song, W.O., Schemmel, R.A., & Hoerr, S.M. (1994). What do college students eat? Food selection and meal patterns. *Nutrition Research, 14*, 1143-1153.
- Johnson, L.R., Mayanja, M.K., Bangirana, P., & Kizito, S. (2009). Contrasting concepts of depression in Uganda: Implications for service delivery in a multicultural context. *American Journal of Orthopsychiatry, 79*, 275-289.
- Kasperek, D.G., Corwin, S.J., Valois, R.F., Sargent, R.G., & Morris, R.L. (2008). Selected health behaviors that influence college freshman weight change. *Journal of American College Health, 56*, 437-444.
- McArthur, L.H., & Raedeke, T.D. (2009). Race and sex differences in college student physical activity correlates. *American Journal of Health Behavior, 33*, 80-90.
- Mond, J.M., Roberston-Smith, G., & Vetere, A. (2006). Stigma and eating disorders: Is there evidence of negative attitudes towards anorexia nervosa among women in the community? *Journal of Mental Health, 15*, 519-532.
- Steinhausen, H.C. (2002). The outcome of anorexia nervosa in the 20th century. *American Journal of Psychiatry, 159*, 1284-1293.
- Steinhausen, H.C. (2009). The outcome of bulimia nervosa: Findings from one-quarter century of research. *American Journal of Psychiatry, 166*, 1331-1341.
- Tylka, T.L., & Subich, L.M. (1999). Exploring the construct validity of the eating disorder continuum. *Journal of Counseling Psychology, 46*, 268-276.