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Understanding and promoting treatment-seeking for eating disorders and body image concerns on college campuses through online screening, prevention and intervention

Sarah Ketchen Lipson [a,b,*], J. Megan Jones [c,d], C. Barr Taylor [e,f], Denise E. Wilfley [g], Dawn M. Eichen [h], Ellen E. Fitzsimmons-Craft [g], Daniel Eisenberg [a,i]

[a] University of Michigan School of Public Health, Department of Health Management & Policy, 1415 Washington Heights M3517, SPH II, Ann Arbor, MI 48109, USA
[b] University of Michigan School of Education, Center for the Study of Higher and Postsecondary Education, 610 East University Avenue, Ann Arbor, MI 48109, USA
[c] Lantern, 589 Howard Street, San Francisco, CA 94105, USA
[d] Medical University of Vienna, Spitalgasse 23, 1090, Wien, Austria
[e] Department of Psychiatry, Stanford University, 401 Quarry Road, Stanford, CA 94305, USA
[f] Palo Alto University, 1791 Arastradero Road, Palo Alto, CA 94304, USA
[g] Washington University School of Medicine, Department of Psychiatry, Campus Box 8134, 660 S. Euclid Avenue, St. Louis, MO 6311, USA
[h] University of California, San Diego, Department of Pediatrics, 9500 Gilman Drive, MC 0874, La Jolla, CA 92093, USA
[i] University of Michigan, Population Studies Center, Institute for Social Research, 426 Thompson Street, Ann Arbor, MI 48104, USA

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ABSTRACT

While there have been important recent advances in the development of effective universal prevention and intervention programs, it is not yet clear how to engage large numbers of students in these programs. In this paper, we report findings from a two-phase pilot study. In the first phase, we used a population-level, online survey to assess eating disorder symptom level and habits/attitudes related to service utilization (N = 2180). Using validated screening tools, we found that roughly one in three students has significant symptoms of eating disorders or elevated weight concerns, the vast majority of whom (86.5%) have not received treatment. In the second phase, we referred students to online prevention and selective/indicated intervention programs based on symptom classification (N = 1916). We find that program enrollment is highest for students in the indicated intervention (18.1%) and lowest for students in the universal prevention (4.1%). We find that traditionally-emphasized barriers such as stigma, misinformation, and financial limitations do not appear to be the most important factors preventing treatment-seeking. Rather students report not seeking help for reasons such as lack of time, lack of perceived need, and a desire to deal with the issue "on my own." Findings offer insight into the treatment-seeking habits and attitudes of college students, including those barriers that may be overcome by offering online programs and those that persist despite increased access to and convenience of relevant resources.

1. Introduction

1.1. Background

Colleges and universities represent an ideal setting to implement population-level intervention/prevention programs for eating disorders (EDs). On U.S. campuses, the prevalence of EDs is high—roughly 14% of female and 4% of male students screen positive for clinically significant EDs (Eisenberg, Nicklett, Roeder, & Kirz, 2011)—and the college years coincide with typical age of onset for EDs (Hudson, Hiripi, Pope, & Kessler, 2007). Campuses typically have a wealth of human and organizational resources, offering numerous channels through which to maximize the impact of population-level prevention and treatment approaches.

Unfortunately, this opportunity is largely missed. In college populations, the prevalence of diagnosable EDs is more than three times higher than rates of treatment (Eisenberg et al., 2011). Left untreated, EDs typically become more severe and refractory to treatment (Becker, Franko, Nussbaum, & Herzog, 2004; Fichter, Quadflieg, & Hedlund, 2006).

Efforts to understand and increase treatment-seeking for EDs and other mental health conditions have typically focused on minimizing personal and perceived stigma, improving knowledge about available treatment options, increasing access, and addressing barriers emphasized by traditional theories of health behavior (Becker, Hadley Arrindell, Perloe, Fay, & Striegel-Moore, 2010; Biddle, Donovan, Sharp, & Gunnell, 2007; Evans et al., 2011). Despite these efforts, rates of treatment utilization remain low; the treatment gap is wide: 80% of students

* Corresponding author at: University of Michigan School of Public Health, Department of Health Management & Policy, 1415 Washington Heights, SPH II, Ann Arbor, MI 48109, USA.
E-mail address: sklipson@umich.edu (S.K. Lipson).

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with clinically significant symptoms do not receive care (Eisenberg et al., 2011). This is not surprising given that prior research has revealed that students with untreated symptoms do not have negative attitudes preventing help-seeking, rather the decision to seek treatment does not appear to be a sufficiently urgent or salient priority to engender help-seeking behavior (Eisenberg et al., 2011). As such, "many of the students who simply do not see an urgent need may be very open to counseling once the initial link is established" (Eisenberg et al., 2011, 706). Importantly, lack of perceived need has also been found to be a key barrier in non-college populations (Cachelin & Striegel-Moore, 2006).

There have been important recent advances in the development of effective universal prevention and intervention programs; one meta-analysis found that over half of ED prevention programs reduced risk factors while nearly one-third reduced current or future eating pathology (Stice, Shaw, & Marti, 2007). That said, it is not yet clear how to engage large numbers of students in these programs. There is some evidence that individuals at high-risk for eating pathology are more likely to engage in universal prevention programs than individuals at low-risk (Stice et al., 2007) but there are many unanswered questions in terms of how to engage students across the ED risk spectrum. As such, there is a crucial need to understand students' treatment-seeking attitudes and behaviors.

1.2. Present study

In this paper, we report findings from a two-phase pilot study designed to understand: (1) why students with significant untreated ED symptoms do not seek help (i.e., to identify salient treatment barriers), and (2) engagement in universal intervention and prevention programs. We paired the Healthy Bodies Study (HBS), a population-level survey (phase 1) with the Healthy Body Image (HBI) program, a group of evidence-based online programs for individuals across the ED risk and diagnostic spectrum (phase 2) (Wilfley, Agras, & Taylor, 2013; Jones et al., 2014). The group of HBI programs included an indicated intervention program for students with clinical/subclinical symptoms, a selective intervention for high-risk students, and a prevention program for low-risk students (see Section 2.1). In this way, HBI is able to reach >90% of students making it close to a universal effort in the sense that nearly all students were offered a tailored program (i.e., there is an HBI program appropriate for all students, with the exception of those who meet criteria for probable anorexia nervosa). Each HBI program addressed known universal risk factors such as the thin ideal, positive body image, and healthy weight regulation (Stice, 2002).

2. Methods

2.1. Study administration

During the 2014 spring semester, HBS was administered to a random sample of undergraduate and graduate students on two U.S. campuses. One university ("University A") is a large, public university in the Southwest, and the other ("University B") is a medium-sized, private university in the Midwest. Both campuses offer free, in-person mental health services, including specialized ED resources. To be in the random sample, students had to be at least 18 years old; there were no other exclusion criteria. To begin, 11,828 students—8000 from University A and 3828 from University B—were randomly selected from registrar databases and were recruited to participate via email. All students at both institutions, regardless of HBS participation, were entered into a drawing for one of two $500 prizes. In total, 2180 students completed HBS (response rate = 18.4%). The survey took approximately 15 minutes to complete and was administered using Qualtrics' survey software. Items assessed a range of measures related to EDs and service utilization (see Section 2.2).

An embedded algorithm within HBS was used to classify students according to ED symptoms and students were then offered either a clinical referral or free access to an HBI program. The symptom classifications were as follows: clinical referral, clinical/subclinical, high-risk, and low-risk. Students with a body mass index of <18.5 and "highly elevated weight concerns", as defined below, were identified as likely cases of anorexia nervosa (N = 22) and received a clinical referral. Consistent with DSM-5 standards, clinical/subclinical criteria were: (a) purging six or more times in the last three months; and/or (b) bingeing (accompanied by loss of control) six or more times in the last three months. As part of a separate national trial of HBI, campuses were randomized such that students with clinical/subclinical symptoms at University A (N = 276) received the HBI indicated intervention while students with clinical/subclinical symptoms at University B received a clinical referral (N = 242). Students with "elevated weight concerns", as defined below, were classified as high-risk (N = 477). All other students were classified as low-risk (N = 1163). On the last page of HBS, students who received a clinical referral were presented with a message containing information about available ED treatment options and were encouraged to utilize these resources; these students were not invited into the second phase of the study. Students in the clinical/subclinical, high-risk, and low-risk groups were presented with a message about their assigned HBI program (indicated intervention, selective intervention, or prevention, respectively) and were told to expect a follow-up email about enrollment. Students invited into the indicated intervention were offered a $40 participation incentive. All research was approved by the Institutional Review Boards at participating institutions.

2.2. Measures

In HBS, weight concerns were assessed using the Weight Concerns Scale (WCS) (Killen et al., 1994, 1996). Scores range from 0–100. In the present study, scores >59 were classified as "highly elevated weight concerns" and scores >47 as "elevated weight concerns". Students who did not score >47 but indicated they were "very afraid" or "terrified" of gaining three pounds and/or that weight was "more important" or the "most important thing" in their life were also identified as having "elevated weight concerns" (Jacobi, Abascal, & Taylor, 2004). Our cut-off values and algorithms were based on our prior research in college populations (Jacobi et al., 2004; Taylor et al., 2006). A receiver operating characteristic (ROC) analysis found that using a WCS cut-off point of 59, sensitivity and specificity for DSM-5 diagnoses were as follows: anorexia nervosa (0.90, 0.99), bulimia nervosa (0.82, 0.88), binge eating disorder (0.78, 0.82), subthreshold bulimia nervosa (0.68, 0.84), subthreshold binge eating disorder (0.72, 0.78), and purging disorder (0.55, 0.95). Scores on the WCS of >47 have previously been found to have a sensitivity of 0.79 and a specificity of 0.67 for identifying new partial- or full-syndrome EDs (Jacobi et al., 2004) and thus anyone who scored >47 and did not meet a subclinical or clinical diagnosis was considered at risk.

ED symptoms were assessed using the Eating Disorder Examination-Questionnaire (EDE-Q) (Fairburn, Cooper, & O'Connor, 2008). Global scores range from 0–6. In the present study, scores >4 were classified as a positive EDE-Q screen, this cut-off has been determined to be clinically meaningful (Wilfley, Schwartz, Spurrell, & Fairburn, 2000) and has been used as a cut-off in previous studies with undergraduates students (e.g., Luce, Crowther, & Pole, 2008). That said, other studies have used lower thresholds (e.g., Machado et al., 2014; Rø, Reas, & Stedal, 2015).

Treatment barriers were measured using a single survey item: "Which of the following reasons are most important in explaining why you have not received counseling or therapy for your eating and/or body image concerns?" Students were instructed to select up to three reasons from a list: "I worry about what others will think of me"; "Issues related to eating and body image are normal in college/graduate school"; "I'm not sure how serious my needs are"; "I don't know what resources are available to me"; "I don't have time"; "I prefer to deal with issues on my own"; "I get a lot of support from other