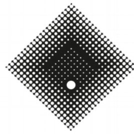

Reach Out and Recover: intentions to seek treatment in individuals using online support for eating disorders

This is the Supplemental Material version of the following publication

McLean, Sian, Caldwell, Belinda and Roberton, Michelle (2019) Reach Out and Recover: intentions to seek treatment in individuals using online support for eating disorders. International Journal of Eating Disorders. ISSN 0276-3478

The publisher's official version can be found at
https://onlinelibrary.wiley.com/doi/full/10.1002/eat.23133
Note that access to this version may require subscription.

Downloaded from VU Research Repository https://vuir.vu.edu.au/39116/

Reach Out and Recover: Intentions to Seek Treatment in Individuals Using Online Support for Eating Disorders

Siân A. McLean[abc]*, Belinda Caldwell[c], & Michelle Roberton[c]

[a]Institute for Health and Sport, Victoria University, Melbourne, Australia

[b]School of Psychology and Public Health, La Trobe University, Melbourne, Australia

[c]Victorian Centre of Excellence in Eating Disorders, Melbourne, Australia

*Corresponding author: Siân A. McLean, Institute for Health and Sport, Victoria University, Melbourne, Australia 8001

Email: sian.mclean@vu.edu.au

Phone: +61 3 9919 5867

Declarations of interest: none

Word counts

Abstract: 250 words

Main text: 6,780 words

Acknowledgements

None.

Data Availability Statement

The data that support the findings of this study are not available due to ethical restrictions.

Abstract

Objective: The aim of this study was to explore characteristics and treatment-seeking intentions of consumers accessing an online resource for eating disorders support, *Reach Out And Recover* (ROAR). Factors associated with treatment-seeking intent among visitors to ROAR were also examined. **Method**: Participants were 200 visitors to the website aged 18 to 60 plus. The majority of participants (93.5%) identified as female. Responses to self-report questions assessing treatment-seeking intention, eating disorder symptoms and their impact on health, and attitudes to treatment were collected. **Results**: Participants experienced a range of eating disorder symptoms, yet the majority (86.0%) were not receiving treatment. Importantly, of those not in treatment, the majority (82.6%) indicated that they planned to get treatment. In addition, more than half of participants (52.9%) downloaded a report to present to their health practitioner to facilitate communication with a health professional. Intention to seek treatment, and download of the report were positively associated with motivation to change, confidence to achieve change, greater frequency of binge eating, and greater recognition of the impact of eating disorder symptoms on relationships and well-being but not with stigma or ambivalence. **Discussion:** Study findings indicated that the ROAR website was accessed by individuals for whom it was designed, namely those experiencing eating disorder symptoms who are not receiving treatment. Encouragingly, participants had strong intentions to seek treatment, and the majority downloaded a report that could be used to facilitate the first step towards treatment. Greater focus on enhancing motivation and confidence to change may further promote treatment-seeking.

Keywords: eating disorders, treatment-seeking, online support, motivation to change, stigma, ambivalence

Reach Out and Recover: Intentions to Seek Treatment in Individuals Using Online Support for Eating Disorders

The majority of individuals with eating disorders do not receive appropriate treatment, that is, mental health or medical treatment designed to alleviate symptoms of disordered eating (Hart, Granillo, Jorm, & Paxton, 2011). Hurdles along the treatment pathway include low levels of treatment-seeking, lack of access to appropriate services, non-attendance at eating disorder treatment following referral, and drop-out during treatment (Hart et al., 2011; Kazdin, Fitzsimmons-Craft, & Wilfley, 2017; Striegel Weissman & Rosselli, 2017). Although these broad hurdles have been identified, little attention has focused on reducing barriers that impede, or building facilitators that enhance, *treatment-seeking* specifically. Scholars have recently suggested that expanding access to treatment for eating disorders may be achieved via implementation of digital technologies and internet delivered treatments (Kazdin et al., 2017). In a similar manner, technology may be used to enhance treatment-seeking by individuals in need of treatment. This study aimed to explore the characteristics and treatment-seeking intent of users of *Reach Out And Recover* (ROAR), a web-based tool designed to enhance treatment-seeking in individuals with eating disorder symptoms by addressing barriers and facilitators of treatment-seeking. A further aim of the study was to determine if barriers and facilitators of treatment-seeking identified in the literature were also relevant for community-based individuals seeking online support for eating disorder symptoms.

Factors that contribute to low levels of treatment-seeking include systemic barriers such as lack of recognition, diagnosis, and appropriate management of eating disorders by health professionals (Currin, Waller, & Schmidt, 2009; Jones, Saeidi, & Morgan, 2013) and difficulty accessing appropriate services due to cost or other practical obstacles (Regan, Cachelin, & Minnick, 2017). Individual level barriers also contribute to low treatment-seeking. Frequently identified barriers are perceived stigma for having a mental illness, low mental health literacy regarding recognition of eating disorder symptoms and their seriousness, and fear of change due to anticipated negative consequences of treatment or reluctance to relinquish perceived functional

aspects of the eating disorder, such as feelings of control (Ali et al., 2017; Griffiths, Rossell, Mitchison, Murray, & Mond, 2018; Hepworth & Paxton, 2007; Innes, Clough, & Casey, 2017). Similarly, qualitative research has identified ambivalence about change as an important barrier to treatment engagement in specialist services. Specifically, eating disorder symptoms were perceived to provide benefits including control, comfort, and a sense of identity (Leavey, Vallianatou, Johnson-Sabine, Rae, & Gunputh, 2011). Additionally, factors that may facilitate treatment-seeking have also been identified. These include increased symptom severity and associated distress, and interference with other domains of life, including health and social support (Hepworth & Paxton, 2007; Regan et al., 2017; Reyes-Rodríguez, Ramírez, Davis, Patrice, & Bulik, 2013).

The factors that inhibit or promote treatment-seeking have been identified by investigating experiences of individuals who have previously received treatment for an eating disorder, or who are not presently engaged in treatment-seeking. However, we are not aware of any studies that have investigated factors that facilitate or impede treatment-seeking concurrent with individual's specific attempts to seek support for their eating disorder, such as through use of a website like ROAR. This study aimed to address that gap in the literature by examining responses of individuals regarding factors that may be associated with treatment-seeking *whilst* using the ROAR website. Due to the nature of the study, whereby the data were collected from responses to an online resource, rather than the study having been designed from an a priori research framework, factors considered in the study were limited to those for which data were available from interaction with the online resource. These were recognition of symptomatology, impact of symptoms in other domains, motivation and confidence to change, ambivalence about change, and concerns about stigma.

A number of digital and online interventions for eating disorders have been evaluated in the literature (Melioli et al., 2016). Examples of these include the online Student Bodies program for at-risk young women which has shown reductions in weight concerns and reduced onset of eating disorders in those with initially elevated body mass index (Taylor et al., 2006), and Media Smart-Targeted, an online adaptation of the Media Smart intervention for at-risk young adult women

which was found to lead to improved quality of life and reductions in disordered eating in those with elevated disordered eating at baseline (Wilksch et al., 2017). These programs demonstrate beneficial outcomes for those who access them, however, they are primarily designed for prevention and treatment and are delivered in modular form with requirements for participants to access multiple modules in a pre-determined order. Interim options that offer flexibility, and low intensity intervention may be required for those who are not ready to commit to an ongoing, structured therapeutic intervention.

Recently, online platforms have been developed to fill this need; these include Appetite for Life (Bauer, Moessner, Wolf, Haug, & Kordy, 2009; Lindenberg, Moessner, Harney, McLaughlin, & Bauer, 2011), Featback (Aardoom et al., 2016) , and ProYouth (Bauer et al., 2013). These programs have reported positive outcomes for eating disorder symptoms, demonstrated acceptability among users, and appear to fill an important function in frequently being the first point of contact for individuals to address their eating disorder symptoms (Aardoom et al., 2016; Lindenberg et al., 2011). As well as containing psychoeducation, group chat, and self-monitoring activities, ProYouth also includes features that prompt treatment-seeking for users with elevated symptoms. Moessner, Minarik, Özer, and Bauer (2016) examined treatment-seeking intentions of users of ProYouth and reported that approximately 10% of users took up treatment during their use of the site, 8% intended to start treatment, and 43% of users indicated that they would seek treatment if it were needed. Although these findings are promising in suggesting that online resources can facilitate treatment-seeking from traditional sources, it was unclear whether those who did not intend to seek treatment were or were not experiencing elevated levels of eating disorder symptomatology. Furthermore, initiatives are also required for individuals who do not fit the “youth” category and more targeted resources may be required to specifically prompt formal treatment-seeking from health professionals. In light of this recognition, ROAR was developed to support adult men and women experiencing eating disorder symptoms to facilitate symptom recognition and subsequent treatment-seeking.

The aim of this research was to describe the characteristics of visitors to ROAR in relation to their eating disorders symptoms, to examine the proportion of visitors who indicated an intention to seek treatment and who used the resources of ROAR to facilitate interactions with health practitioners during treatment-seeking exchanges, and to examine factors that were positively and negatively associated with treatment-seeking intentions. In relation to the latter aim, we hypothesised that stronger intentions to seek treatment would be positively associated with motivation and confidence to achieve change and inversely associated with perceptions of stigma and ambivalence. In addition, greater recognition of eating disorder symptoms and their impact on health and well-being were also expected to be associated with stronger treatment-seeking intention.

Method

Participants

Participants were individuals who visited the ROAR website and provided consent for their data to be collected for research purposes. The ROAR site is publically available and users found the site through multiple means. These included referral from state (Eating Disorder Foundation Victoria) and national help-lines (Butterfly Foundation) and brochures distributed in community and health settings. The site was also promoted via cost-neutral means, including through the program developers' website, social media accounts (Twitter and Facebook) and newsletters, and to health professionals and health promotion officers at state-wide workshops, meetings, and symposiums conducted by the program developers. ROAR was promoted as an online tool for exploring eating disorder symptoms and facilitating treatment-seeking from a health professional for eating disorders.

Following removal of duplicates, consent was provided by 225 participants. During the data collection period, 3 March 2017 to 14 November 2018, data from Google Analytics showed that 2,391 new users accessed ROAR and 902 individuals visited the page containing the survey questions and consent form, representing a consent rate of 9.4% of total new users and 24.9% of those who

viewed the survey page. From a population perspective, reach of the resource relative to the population of Australia was 0.01%. This is somewhat lower than the population reach of 0.02% reported in a US study of an online screen for eating disorders conducted over a shorter period of time (Fitzsimmons-Craft et al., 2019). More specifically, considering the size of the population of 18-60 year olds in Victoria (Australian Bureau of Statitstics, 2018), where most promotion for ROAR took place, and estimates of point prevalence of eating disorders in Australian data (Hay et al., 2017), the reach of ROAR during the data collection period to those potentially in need of the resource was 0.9%.

Of participants who provided consent, one did not provide any data and a further 20 participants were excluded due to high quantities of missing data (> 30 percent missing). Data from four participants who indicated that they answered the question for someone else were excluded. Following exclusion, data from 200 participants were included in analyses.

Participants predominantly identified as female (*n* = 187, 93.5%). Eight participants (4.0%) identified as male and five participants (2.5%) did not indicate their gender. Just under half of participants were aged 20-29 years (*n* = 88, 44.0%). Smaller proportions were aged 18-19 (*n* = 42, 21.0%), 30-39 (*n* = 31, 15.5%), 40-49 (*n* = 25, 12.5%), and 50-59 (*n* = 11, 5.5%). One participant (0.5%) was aged 60 or over. Two participants (1.0%) did not indicate their age. The age and gender profile of participants who consented to participate was similar to the demographic profile of individuals who accessed the website during the study period for which data were available through Google Analytics.

ROAR Resource

The ROAR resource was developed by the Victorian Centre of Excellence in Eating Disorders (CEED) in Melbourne, Australia. The Centre is a state-wide program whose purpose is to build quality and sustainable eating disorder treatment responses within public specialist mental health services and in all sectors of health care. The CEED team provide leadership and support to healthcare services through clinical consultation, training, and resource and service development. The

development of ROAR was based on research literature regarding treatment-seeking barriers and facilitators, consumer consultation through an online survey (results not reported here), and in consultation with an advisory committee of clinical and research experts in eating disorders. The resource was designed to address barriers to, and facilitate appropriate treatment-seeking for eating disorders.

Reach Out And Recover is based on the stages of change framework (Prochaska & DiClemente, 1982). The application of this framework supports individuals to move through the stages of change, starting with pre-contemplation, where eating disorder symptoms may not be recognised as indicative of a serious mental health problem and individuals are thus not intending to seek treatment. The second stage is contemplation, in which individuals recognise the presence of eating disorder symptoms and the negative impact on their health and well-being but may feel ambivalent about seeking treatment or making changes. The preparation stage characterises individuals who wish to seek treatment and make changes but for whom low self-efficacy may interfere with treatment-seeking efforts. Finally, ROAR addresses individuals who are in the action stage to assist them to maintain their efforts in seeking treatment.

To help individuals move through the stages of change towards treatment-seeking, ROAR does the following. First, consumers are assisted to recognise problems with eating and body concerns and their impact on health and well-being, and identify if they are at risk of developing an eating disorder, as symptom recognition and problem identification have been found to prompt treatment-seeking (Ali et al., 2017; Hepworth & Paxton, 2007). In addition, recognising the impact of eating disorder symptoms on other aspects of life increases motivation for recovery (Pettersen & Rosenvinge, 2002). Second, ROAR supports and promotes treatment-seeking by enhancing mental health literacy to ensure that eating disorder symptoms are considered to be serious and deserving of treatment (Cachelin & Striegel-Moore, 2006). In addition, treatment-seeking is promoted by acknowledging difficulties that individuals face in seeking treatment, such as stigma, ambivalence, and low self-efficacy for change (Pinto, Heinberg, Coughlin, Fava, & Guarda, 2008).

Negative health care experiences have also been reported to impede future treatment-seeking (Evans et al., 2011; Leavey et al., 2011). Thus, ROAR also facilitates consumer-health professional collaboration to help guide health professional responses. Consumers using ROAR have the opportunity to complete a survey regarding their eating behaviours, body dissatisfaction, impact on health and well-being, motivation to change, and concerns about seeking treatment. Responses generate two reports. The first is a personalised report that summarises responses and based on the severity of symptoms makes recommendations about the need to seek treatment. The personal report was informed by the results of the consumer consultation survey. Written feedback on the report received from the advisory committee indicated high level approval of the length, language, and recommendations of the report. The second report is a health professional report that consumers can use to support interactions with and symptom disclosure to health professionals, with users encouraged to see a general practitioner (GP) as the first step towards receiving treatment. A GP, or family doctor, is the first health professional individuals see for health care in the Australian system and public funding is available for GPs with additional mental health training to provide assessment, early intervention, and ongoing management for mental health problems. Furthermore, a publically funded program whereby individuals can access mental health treatment by an allied mental health professional (e.g., psychologist, social worker, occupational therapist) is available for consumers through GP referral (Parslow, Lewis, & Marsh, 2011).

The Health Professional Report was pilot tested with a small number of GPs to test the credibility, ease of use, length, likelihood of GPs taking recommended action, and helpfulness of key messages. Written feedback was received by two GPs and strong endorsement of the report was received. Of note, although the report was considered to be long, the feedback from the GPs indicated that the length was appropriate to convey the necessary information. The report summarises the consumer's symptoms, impact on health and well-being, motivation to change, and concerns about change, and provides recommendations for immediate actions and next steps for health care. The report also contains key messages to facilitate eating disorder recognition and

referral to treatment by the health professional, including that eating disorder symptoms occur in adults of all genders, ages, and body sizes, that people experience shame or embarrassment about disclosing their problems, they are often ambivalent about seeking treatment or making changes, and that past treatment-seeking experiences may have been negative. In this way, the intention of the report is to reduce the likelihood of adverse health care experiences.

The main features of ROAR are detailed in Table 1. Briefly, ROAR consists of a homepage with connections to other parts of the website (see Figure 1). Four main pages with interactive features aim to promote symptom recognition; enhance recognition of symptom impact on health and promote treatment-seeking as helpful and required for all experiences of eating disorder symptoms; and reinforce the potential need for multiple treatment attempts while normalising concerns regarding negative past treatment experiences (see Figure 2). As described above, consumers can also complete a survey to generate a personal and a health-professional report. In addition, the site has a dedicated resources page that lists a range of options to find information, access free telephone and online support from anywhere in the country from foundations that specifically support people experiencing eating disorders, and professional health care options that are accessible through public funding. This page emphasises that the most appropriate pathway to treatment is via consultation with a GP. For example, “The best place to start to explore these options will be with your local GP”.

Measures

Participants were asked respond to 57 items to indicate their age and gender, their plans for treatment-seeking, eating disorder symptoms (dietary restraint, binge eating, body dissatisfaction, and eating- and body image-cognitions), body control and change behaviours, impact of symptoms on health and well-being, and motivation, confidence, stigma, and ambivalence related to seeking treatment and making changes. The questions formed part of the ROAR resource and were included to facilitate symptom recognition, treatment-seeking, and consumer-health professional collaboration, rather than being designed for the purposes of research from an a priori research

framework. An important consideration for inclusion of the items was for the survey to be brief to enhance the likelihood of users responding to all items. Thus, established measures could not be used in full as many factors were required to be included. Questions to assess eating disorder symptoms were adapted from validated eating disorder self-report measures. All items and the scales from which they were adapted are shown in Supplementary Material 1.

Treatment-seeking intention. Participants were asked to respond to one item to assess their treatment-seeking status. Responses ranged from 0 (*I don't plan to get help*) to 5 (*I am already receiving help*).Note, the term "help" was frequently used on the website to refer to professional treatment. Interim options indicated planned treatment-seeking ranging from sometime after three months through to plans to seek treatment in the next week. Responses of "other" were coded as missing. Participants' generation of the health professional report was used as an additional index for treatment-seeking intention as the report was intended to be used to facilitate communication with health practitioners during treatment-seeking encounters. Data were binary and coded as 0 (*report not produced*) or 1 (*report produced*).

Disordered eating. The survey included items to assess frequency of engagement with disordered eating behaviours, namely dietary restraint and binge eating. Four items assessed dietary restraint, focusing on restriction, fasting, food exclusion, and food rules. A sample item is "I have been trying to limit the amount of food I eat to influence my weight, shape, or size". Binge eating was assessed with three items, focusing on overeating, loss of control, and overeating accompanied by loss of control. A sample item is "I have eaten really large amounts of food in one go (what others would think is unusually large)". Participants responded to items on a four-point scale from 1 (*never*) to 4 (*most or all of the time*). Means were calculated for total scale scores and higher scores reflected greater dietary restraint and greater binge eating. Cronbach's alphas were acceptable (α = .84 and α = .90, respectively).

Body control and change behaviours. Seven items assessed participants' body control/change behaviours including vomiting, use of laxatives and/or diuretics, use of pills or

supplements, use of anabolic steroids, and exercise, including guilt for missing exercise and continuing to exercise despite illness or injury (exercise interference). A sample item is “I have tried to control my weight, shape, or size by making myself sick (vomit)”. Participants responded to items on vomiting, laxatives and/or diuretics, pills and supplements, and anabolic steroids on a four-point scale from 1 (*never*) to 4 (*most or all of the time*). Participants responded to items on exercise on a four point scale from 1 (*not at all true for me*) to 4 (*very true for me*). A mean was calculated for the total scale score, whereby higher scores reflected greater engagement in body control behaviours. The pills and supplements item and anabolic steroids item were excluded due to low inter-item correlations and improvement in internal consistency following their omission. Cronbach’s alpha was acceptable (α = .78).

Body dissatisfaction. Three items assessed dissatisfaction with appearance, and desire to be thinner/smaller and desire to be more muscular. A sample item is “I am dissatisfied with my weight, shape, or size.” Item responses were made on a four-point scale from 1 (*not at all true for me*) to 4 (*very true for me*). A mean was calculated for the total scale score, whereby higher scores reflected greater body dissatisfaction. The desire for muscularity item was excluded due to low inter-item correlations and improvement in internal consistency following its omission. Spearman-Brown coefficient was acceptable (α = .81).

Cognitions. The survey assessed dysfunctional, rigid, or inflexible thoughts about both eating and food and about body image. Eating disorder-related cognitions were assessed with three items, including “I feel like food, eating, and/or trying to control my eating rules my life”. Five items assessed body image-related cognitions. A sample item is “My weight, body shape, or size is very important for how I think and feel about myself as a person”. Responses were obtained on a four-point scale from 1 (*not at all true for me*) to 4 (*very true for me*). Means were calculated for total scale scores. Higher scores reflected higher endorsement of eating disorder cognitions and of body image-related cognitions. One body image item, “I am afraid of losing weight or becoming thin”, was

excluded due to low inter-item correlations and improvement in internal consistency following its omission. Cronbach's alphas were acceptable (α = .73 and α = .79, respectively).

Symptom impact. Impact of eating disorder symptoms on mental health, relationships, and well-being was assessed with five, three, and seven items, respectively. Sample items included "Have your eating, body concerns, and behaviours to try and control your weight, shape or size made you feel distressed/caused problems with your relationships with others/got in the way of doing things you used to enjoy". Response options for mental health items ranged from 1 (*not at all*) to 4 (*very*). Response options for relationships and well-being items ranged from 1 (*never*) to 4 (*most or all of the time*). Mean scores were calculated for each scale with higher scores reflecting greater impact on mental health, relationships, and well-being. Cronbach's alphas were acceptable (mental health α = .86; relationships α = .75, and well-being α = .82).

Attitudes to treatment-seeking and making change. Motivation, confidence, stigma, and ambivalence about change were measured with two, one, three, and two items, respectively, to assess barriers and facilitators of treatment-seeking. Sample items included "How important is it for you to change?; How confident are you in your ability to change?; I worry that health professionals would judge me if I revealed my eating and body concerns; and If I got help for my eating and body concerns I would be afraid of losing control". Response options for motivation and confidence items, potential facilitators of change, ranged from 1 (*not at all important/confident*) to 4 (*very important/confident*). Response options for stigma and ambivalence items, potential barriers to change, ranged from 1 (*not at all true for me*) to 4 (*very true for me*). Mean scores were calculated for each scale except the single item for confidence, with higher scores reflecting greater motivation to change, and greater stigma and ambivalence about change. Cronbach's alpha/Spearman-Brown coefficients were acceptable (motivation α = .76; stigma = .73, and ambivalence α = .79).

Procedure

The study was approved by the La Trobe University Human Ethics Committee (S16-212). Individuals who responded to the embedded questions within ROAR were provided with a copy of

the research participation information statement and were asked for consent for their responses to be collected for the purpose of research prior to completing the questions.

Data Analysis

Due to the non-normal distribution of the data, non-parametric tests were used for data analyses. The Friedman test explored differences in levels of symptomatology and significant chi-square tests were followed up with pairwise comparisons, corrected for multiple comparisons with Bonferroni adjustments. Comparisons were made between levels of eating disorder symptoms (10 comparisons; adjusted $\alpha = .005$) and separately between body change and compensatory behaviours (6 comparisons; adjusted $\alpha = .008$). Spearman correlation coefficients were computed to examine relationships among treatment-seeking, perceptions of treatment, and eating disorder symptoms and their impact. Participants who were currently receiving treatment were omitted from correlation analyses as these were primarily intended to understand relationships with treatment-seeking intention.

Results

Reported Symptoms

Means and 95% confidence intervals for eating disorder symptoms are shown in Figure 3. On average, participants reported high levels (in relation to the response options on the assessment scales) of eating and body image concerns, including cognitions. Comparison of symptom levels with the Friedman test revealed a statistically significant difference in levels of symptoms, X^2 (4, n = 189) = 135.04, $p < .001$. Highest symptom levels were reported for body dissatisfaction and Dunn pairwise post hoc tests with Bonferroni adjustments showed these to be significantly higher than reported levels of dietary restraint (adj. $p < .001$), binge eating (adj. $p < .001$), and both eating disorder- (adj. $p = .003$), and body image-related cognitions (adj. $p < .001$). Reported levels of eating disorder cognitions were higher than both dietary restraint (adj. $p < .001$) and binge eating (adj. $p < .001$), and levels of body image-related cognitions were higher than reported levels of binge eating (adj. $p < .001$). Reported levels of dietary restriction and binge eating did not significantly differ (adj. $p =$

.331), nor did levels of body image-related cognitions differ from either eating disorder cognitions (adj. p = .331) or dietary restriction (adj. p = .331).

The Friedman test also found significant differences in levels of engagement in body change and compensatory behaviours, X^2 (3, n = 197) = 119.66, p < .001. The steroids item was omitted from the analysis as only four participants indicated any use. Exercise was the most highly endorsed behaviour, as shown in Figure 4, and differed significantly from each of use of vomiting (adj. p < .001), laxatives/diuretics (adj. p < .001), and pills/supplements (adj. p < .001). Laxative/diuretic use was significantly lower than both vomiting (adj. p = .009) and use of pills/supplements (adj. p = .003), whereas levels of vomiting and use of pills/supplements were equivalent (adj. p = 1.00).

Treatment-seeking Intentions

In relation to treatment-seeking, the majority of participants (n = 142, 71.0%) indicated that they planned to get treatment for their eating and body image concerns, with 28 participants (14.0%) stating they were already receiving treatment, seven participants (3.5%) stating that they did not plan to get treatment, 21 participants (10.5%) selecting “other”, and two participants (1.0%) not responding. Of those who indicated they planned to get treatment, 68 (34.0%) were planning to do so in the next week, 47 (23.5%) in the next month, 20 (10.0%) in the next three months, and seven (3.5%) sometime after three months.

Participants’ choice to download the health professional report was also used as an indicator of treatment-seeking intention. Due to a change in the website data retention policy, data for the reports was not available for 14.0% of participants. Approximately half of participants for whom data were available downloaded the health professional report (n = 91, 52.9%). The personal report was downloaded by 72 participants (36.0%) and just under a third (n = 62, 31.0%) downloaded both reports.

Table 2 shows the pattern of correlations between treatment-seeking intentions and eating disorder symptoms and impact, and attitudes to treatment-seeking and making change. Data from participants who were already receiving treatment were omitted from analyses. Few significant

correlations were observed for treatment-seeking. Stronger treatment-seeking intention was related to higher motivation and greater confidence to change, to greater engagement in binge eating, and to greater recognition of the impact of eating disorder symptoms on relationships and well-being. Generating the health-professional report was related to higher motivation to change and to greater self-perceived confidence to change. Effect sizes for these relationships were mostly small. No significant correlations were observed between treatment-seeking and stigma and ambivalence. Treatment-seeking intention and the generation of the health-professional report were positively correlated such that those with stronger intention to seek treatment were also more likely to generate the health-professional report.

In relation to potential barriers and facilitators of treatment-seeking, greater motivation was associated with higher binge eating symptoms (medium effect size) and greater mental health impact (small effect size). Confidence to change had a small inverse association with body dissatisfaction such that higher body dissatisfaction was associated with lower levels of confidence to change. Motivation and confidence were positively correlated, at medium effect size. Multiple significant, positive correlations of small to medium effect size were observed between stigma and ambivalence and eating disorder symptoms and health impact such that higher stigma and higher ambivalence towards change were related to greater levels of symptomatology and greater health impact. Relationships appeared to be stronger for ambivalence than for stigma. Both motivation and confidence had small inverse correlations with ambivalence but not with stigma. Stigma and ambivalence were strongly positively correlated.

As expected, eating disorder symptoms were mostly positively correlated with one another and were positively associated with impact on mental health, relationships, and well-being. Correlations were of medium to large effect size.

Discussion

The aim of this study was to describe the responses of visitors to the ROAR website, a platform to support individuals with eating disorder symptoms to seek treatment for their problems,

in relation to their symptom profile, and their treatment-seeking intentions. Additionally, we aimed to explore factors that were associated with treatment-seeking intentions. Visitors to ROAR reported experiencing eating disorder symptoms and engaging in body change and compensatory behaviours. Encouragingly, most participants indicated that they were planning to seek treatment in the near future for their body and eating concerns, and more than half of participants downloaded the health professional report to facilitate their treatment-seeking efforts. These responses suggest that ROAR was accessed by individuals for whom it was designed, although reach was low, likely due in part to low resources for promotion, but also due to known challenges in dissemination of resources, even through online methods (DeBar et al., 2009; Lindenberg et al., 2011). Furthermore, ROAR appeared to meet the needs of users in terms of facilitating steps towards treatment-seeking.

The hypothesis that stronger intentions to seek treatment would be positively associated with motivation and confidence to achieve change was supported. Individuals who indicated they would seek treatment in the near rather than distant future had higher motivation to change and greater confidence to achieve change. Higher motivation and greater confidence were also associated with higher likelihood of generating the health professional report. In contrast, the hypothesis that treatment-seeking intention would be inversely associated with stigma and with ambivalence was not supported. Furthermore, with the exception of a small positive correlation between binge eating and treatment-seeking intention, treatment-seeking was not associated with eating disorder symptoms. It was, however, observed that stronger treatment-seeking intention was associated with recognition of greater negative impact of eating disorder symptoms on relationships and on well-being.

In relation to participants' treatment engagement, we observed that although participants had high levels of eating disorder symptomatology, relative to the scale on which symptoms were assessed, only a small proportion of participants (14%) were receiving treatment. This is in accord with previous research indicating a large treatment gap for eating disorders (Hart et al., 2011; Striegel Weissman & Rosselli, 2017). Although the treatment gap is highly concerning, encouragingly,

among visitors to the ROAR website, a high proportion intended to seek treatment in the near future. The lack of available comparable literature makes it difficult to ascertain whether this represents a particularly high endorsement of future treatment-seeking or if this were to be expected from users of a web resource where the intention of the resource is to promote treatment-seeking. Other research examining online eating disorders support found somewhat lower levels of endorsement of future treatment-seeking in a younger sample (Moessner et al., 2016), however, the purpose of the online program in that study was not specifically for prompting additional treatment-seeking.

Furthermore, it was a promising finding in the current research that more than half of participants downloaded the health professional report that was designed to be used to facilitate interactions with a health professional. Interestingly, although both reports can be viewed on the website without being downloaded, a higher proportion of participants downloaded the health professional report than the personal report. Thus, we tentatively speculate that the higher proportion of downloads for the health professional report is due to the need of users to keep a copy of the report for other purposes, perhaps for future use for presenting to a health professional. However, it should be noted that no data is available to confirm participants' treatment-seeking steps following download of the report so we offer this explanation with caution. It is possible that participants downloaded the report for a range of reasons, some of which may, and may not have been relevant for treatment-seeking.

These cross-sectional findings appear to be consistent with research showing that engagement with online support may facilitate access to traditional treatment (Moessner et al., 2016). Importantly, the resources of ROAR are designed not only to facilitate treatment-seeking by consumers, but also to enhance the likelihood that initial steps towards treatment are handled appropriately by health professionals through the provision of information for the health professional regarding the seriousness of eating disorder symptoms and consequent treatment needs. Such approaches have the potential to reduce stigma and negative health care experiences

and facilitate appropriate referral (Striegel Weissman & Rosselli, 2017) to minimise non-attendance following referral to eating disorder specific treatment (Leavey et al., 2011).

The observed positive associations between treatment-seeking intention and motivation and confidence, and lack of associations between treatment-seeking and stigma and ambivalence provide mixed support for past research in eating disorders. Our findings were consistent with research in which low motivation has been observed to be a barrier to treatment-seeking (Ali et al., 2017; Evans et al., 2011) and in which low confidence, or self-efficacy, for change has been shown to predict drop-out from eating disorder treatment (Keshen, Helson, Town, & Warren, 2017). In contrast, the null findings for stigma and ambivalence found in the present study differed from previous findings whereby those factors have emerged as barriers to treatment-seeking (Cachelin & Striegel-Moore, 2006; Griffiths et al., 2018; Hepworth & Paxton, 2007; Leavey et al., 2011). However, the observed pattern, whereby positive factors, motivation and confidence, but not negative factors, stigma and ambivalence, were related to treatment-seeking-intentions is consistent with previous research that has examined intentions to seek treatment from the framework of the health belief model. O'Connor, Martin, Weeks, and Ong (2014) found that in young adults, perceived benefits of treatment-seeking accounted for greater variance in treatment-seeking intention than perceived barriers. Taken together, these findings suggest that focusing on factors that draw people to, rather than obstruct treatment-seeking, may be a more useful approach in promoting treatment-seeking. Future research examining the applicability of facilitators of treatment-seeking across different types of treatments and services would further inform the generalisability of the findings reported here.

The discrepancy between findings in the current and previous research for stigma and ambivalence could also be explained by considering complexities in the relationships between these variables and treatment-seeking. It is possible that stigma and ambivalence may be indirectly related to intentions to seek treatment rather than directly related, as proposed in the current study. In light of the correlations observed in the current research, ambivalence and stigma may interact with eating disorder symptoms and perceptions of health impact to influence treatment-seeking. Future

research using larger samples could examine path models in which moderating or mediating relationships could shed further light on these potentially indirect relationships.

Alternatively, the inconsistent findings may be due to methodological differences. In the present study, participants were individuals who were seeking support for current symptoms, whereas some past research has utilised samples of individuals retrospectively reporting on their treatment-seeking experiences (e.g., Hepworth & Paxton, 2007; Leavey et al., 2011). In addition, in contrast to the present study, other studies directly asked participants to identify barriers to treatment-seeking (e.g., Cachelin & Striegel-Moore, 2006; Griffiths et al., 2018). It may also be the case that in relation to stigma, a greater focus on self-stigma, rather than public stigma as was the focus of assessment in the present study, may have revealed different outcomes. In support of this, some (Jennings et al., 2015; Wade et al., 2015), but not all (Conner et al., 2010; Jennings et al., 2017) studies in other fields have shown that self-stigma is more strongly related to treatment-seeking for mental health problems than concern about stigmatising reactions from others.

Although research has indicated that lack of recognition of symptoms presents a barrier to treatment (Ali et al., 2017; Grillot & Keel, 2018), in the present study few relationships were observed between treatment-seeking and reported levels of eating disorder symptoms. Higher treatment-seeking intentions were associated with greater frequency of binge eating and recognition of greater negative impact of eating disorder symptoms on relationships and on well-being, the latter findings on symptom impact providing support for past research (Regan et al., 2017). Similarly, higher levels of binge eating and higher impact on mental health were associated with higher motivation to change. The observation that severity of eating disorder symptoms, with the exception of binge eating, were not related to treatment-seeking intentions, but negative impact on well-being and relationships were, raises the possibility that this pattern may be unique to eating disorders, due to the ego-syntonic nature of eating disorder symptoms (Vitousek, Watson, & Wilson, 1998). However, research on other mental health problems, such as depression and anxiety, also indicates that level of subjective distress and impairment in other domains, more than levels of

symptomatology, were related to treatment engagement (Angst et al., 2010; Hengartner, Angst, Ajdacic-Gross, Rössler, & Angst, 2016). Thus, the pattern of findings in the current study does not appear to be characteristic of eating disorders specifically.

The finding in the current study that binge eating was the only eating disorder symptom related to treatment-seeking intention is perhaps unsurprising in light of the inhibiting effect that fear of change and denial of the seriousness of symptoms have on treatment-seeking (Griffiths et al., 2018; Hepworth & Paxton, 2007). In particular, dietary restraint and body control behaviours, which may impart a sense of control (Leavey et al., 2011), may be not be related to treatment-seeking in a straightforward manner. Underlying this point, dietary restraint, body dissatisfaction, and body control behaviour symptoms, but not binge eating, were related to ambivalence about change, and although the temporal sequence of associations was not assessed here, the cross-sectional relationships suggest that certain symptoms may reinforce ambivalence and fear of change, in turn, deterring individuals from seeking treatment.

The present study has a number of limitations that must be considered. Very few men took part in the study, limiting generalisability of findings. The self-report data were cross-sectional in nature and although the assessment questions are positioned at the end of the website materials, we cannot determine at what stage participants completed the questions and if use of ROAR impacted participant responses. In addition, although the items used in the assessment for the study were based on established questionnaires, they were adapted for use in the online resource and scores from the specific items have not been validated. This represents a major methodological limitation. Further to this, responses to these items were not able to inform probable diagnoses of eating disorders. It would be important for future work to categorise users, and their treatment-seeking responses, according to diagnostic and risk level. Future work would also benefit from assessing from whom users of ROAR intended to seek help. Such information may allow a more nuanced understanding of barriers and facilitators of treatment-seeking intentions. Furthermore, in this paper we have indicated that participant responses to questions asking about their plans to seek

help were indicative of treatment-seeking from professional sources, due to the regularity with which the ROAR materials couched treatment- or help-seeking as being from a professional, particularly a GP. However, it is possible that participants may have been considering less formal types of support. Important future directions would be to provide a formal definition of treatment-seeking in assessment materials, to conduct a follow-up study to examine actual treatment-seeking behaviour, perhaps using novel technological solutions to facilitate tracking of treatment-seeking and access to professional treatment to determine if downloading the health professional report is associated with seeking formal treatment from a health professional.

The findings of the present study add to the literature on treatment-seeking for eating disorders by collecting participant responses whilst they were seeking support for eating disorders. Individuals using ROAR had high levels of symptoms but few were receiving treatment. The ROAR website provides a resource that assists consumers to move through stages of change, identify and address barriers to treatment-seeking, and provides practical support in the form of a health professional report to facilitate treatment-seeking efforts. Notably, the majority of users indicated they were planning to seek treatment and half of users downloaded the health professional report to assist in communicating with health professionals. Given perceived stigma surrounding seeking treatment for eating disorders, the anonymous nature of the online resource may support the important first step towards appropriate treatment.

References

Aardoom, J. J., Dingemans, E. A., Spinhoven, P., van Ginkel, R. J., de Rooij, M., & van Furth, F. E. (2016). Web-based fully automated self-help with different levels of therapist support for individuals with eating disorder symptoms: A randomized controlled trial. *Journal of Medical Internet Research, 18*, e159. doi:10.2196/jmir.5709

Ali, K., Farrer, L., Fassnacht, D. B., Gulliver, A., Bauer, S., & Griffiths, K. M. (2017). Perceived barriers and facilitators towards help-seeking for eating disorders: A systematic review. *International Journal of Eating Disorders, 50*, 9-21. doi:doi:10.1002/eat.22598

Angst, J., Gamma, A., Clarke, D., Ajdacic-Gross, V., Rössler, W., & Regier, D. (2010). Subjective distress predicts treatment seeking for depression, bipolar, anxiety, panic, neurasthenia and insomnia severity spectra. *Acta Psychiatrica Scandinavica, 122*, 488-498. doi:10.1111/j.1600-0447.2010.01580.x

Australian Bureau of Statitstics. (2018). Australian demographic statistics (3101.0). Retrieved from https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Sep%202018?OpenDocument

Bauer, S., Moessner, M., Wolf, M., Haug, S., & Kordy, H. (2009). ES[S]PRIT – an Internet-based programme for the prevention and early intervention of eating disorders in college students. *British Journal of Guidance & Counselling, 37*, 327-336. doi:10.1080/03069880902957049

Bauer, S., Papezova, H., Chereches, R., Caselli, G., McLoughlin, O., Szumska, I., . . . Moessner, M. (2013). Advances in the prevention and early intervention of eating disorders: The potential of Internet-delivered approaches. *Mental Health & Prevention, 1*, 26-32. doi:10.1016/j.mhp.2013.10.003

Cachelin, F. M., & Striegel-Moore, R. H. (2006). Help seeking and barriers to treatment in a community sample of Mexican American and European American women with eating disorders. *International Journal of Eating Disorders, 39*, 154-161. doi:doi:10.1002/eat.20213

Conner, K. O., Copeland, V. C., Grote, N. K., Koeske, G., Rosen, D., Reynolds, C. F., & Brown, C. (2010). Mental health treatment seeking among older adults with depression: The impact of stigma and race. *The American Journal of Geriatric Psychiatry, 18*, 531-543. doi:10.1097/JGP.0b013e3181cc0366

Currin, L., Waller, G., & Schmidt, U. (2009). Primary care physicians' knowledge of and attitudes toward the eating disorders: Do they affect clinical actions? *International Journal of Eating Disorders, 42*, 453-458. doi:doi:10.1002/eat.20636

DeBar, L. L., Yarborough, B. J., Striegel-Moore, R. H., Rosselli, F., Perrin, N., Wilson, G. T., . . . Lynch, F. (2009). Recruitment for a guided self-help binge eating trial: Potential lessons for implementing programs in everyday practice settings. *Contemporary Clinical Trials, 30*, 326-333. doi:10.1016/j.cct.2009.02.007

Evans, E. J., Hay, P. J., Mond, J., Paxton, S. J., Quirk, F., Rodgers, B., . . . Sawoniewska, M. A. (2011). Barriers to help-seeking in young women with eating disorders: A qualitative exploration in a longitudinal community survey. *Eating Disorders: The Journal of Treatment & Prevention, 19*, 270 - 285. doi:10.1080/10640266.2011.566152

Fitzsimmons-Craft, E. E., Balantekin, K. N., Graham, A. K., Smolar, L., Park, D., Mysko, C., . . . Wilfley, D. E. (2019). Results of disseminating an online screen for eating disorders across the U.S.: Reach, respondent characteristics, and unmet treatment need. *International Journal of Eating Disorders*, Advance online publication. doi:10.1002/eat.23043

Griffiths, S., Rossell, S. L., Mitchison, D., Murray, S. B., & Mond, J. M. (2018). Pathways into treatment for eating disorders: A quantitative examination of treatment barriers and treatment attitudes. *Eating Disorders: The Journal of Treatment & Prevention, 26*, 556-574. doi:10.1080/10640266.2018.1518086

Grillot, C. L., & Keel, P. K. (2018). Barriers to seeking treatment for eating disorders: The role of self-recognition in understanding gender disparities in who seeks help. *International Journal of Eating Disorders, 51*, 1285-1289. doi:doi:10.1002/eat.22965

Hart, L. M., Granillo, M. T., Jorm, A. F., & Paxton, S. J. (2011). Unmet need for treatment in the eating disorders: A systematic review of eating disorder specific treatment seeking among community cases. *Clinical Psychology Review, 31*, 727-735. doi:10.1016/j.cpr.2011.03.004

Hay, P., Mitchison, D., Collado, A. E. L., González-Chica, D. A., Stocks, N., & Touyz, S. (2017). Burden and health-related quality of life of eating disorders, including Avoidant/Restrictive Food Intake Disorder (ARFID), in the Australian population. *Journal of Eating Disorders, 5*, 21. doi:10.1186/s40337-017-0149-z

Hengartner, M. P., Angst, F., Ajdacic-Gross, V., Rössler, W., & Angst, J. (2016). Treated versus non-treated subjects with depression from a 30-year cohort study: Prevalence and clinical covariates. *European Archives of Psychiatry and Clinical Neuroscience, 266*, 173-180. doi:10.1007/s00406-015-0646-5

Hepworth, N. S., & Paxton, S. J. (2007). Pathways to help-seeking in bulimia nervosa and binge eating problems: A concept mapping approach. *International Journal of Eating Disorders, 40*, 493-504.

Innes, N. T., Clough, B. A., & Casey, L. M. (2017). Assessing treatment barriers in eating disorders: A systematic review. *Eating Disorders, 25*, 1-21. doi:10.1080/10640266.2016.1207455

Jennings, K. S., Cheung, J. H., Britt, T. W., Goguen, K. N., Jeffirs, S. M., Peasley, A. L., & Lee, A. C. (2015). How are perceived stigma, self-stigma, and self-reliance related to treatment-seeking? A three-path model. *Psychiatric Rehabilitation Journal, 38*, 109-116. doi:10.1037/prj0000138

Jennings, K. S., Goguen, K. N., Britt, T. W., Jeffirs, S. M., Wilkes III, J. R., Brady, A. R., . . . DiMuzio, D. J. (2017). The role of personality traits and barriers to mental health treatment seeking among college students. *Psychological Services, 14*, 513. doi:10.1037/ser0000157

Jones, W. R., Saeidi, S., & Morgan, J. F. (2013). Knowledge and attitudes of psychiatrists towards eating disorders. *European Eating Disorders Review, 21*, 84-88. doi:doi:10.1002/erv.2155

Kazdin, A. E., Fitzsimmons-Craft, E. E., & Wilfley, D. E. (2017). Addressing critical gaps in the treatment of eating disorders. *International Journal of Eating Disorders, 50*, 170-189. doi:doi:10.1002/eat.22670

Keshen, A., Helson, T., Town, J., & Warren, K. (2017). Self-efficacy as a predictor of treatment outcome in an outpatient eating disorder program. *Eating Disorders, 25*, 406-419. doi:10.1080/10640266.2017.1324073

Leavey, G., Vallianatou, C., Johnson-Sabine, E., Rae, S., & Gunputh, V. (2011). Psychosocial barriers to engagement with an eating disorder service: A qualitative analysis of failure to attend. *Eating Disorders, 19*, 425-440. doi:10.1080/10640266.2011.609096

Lindenberg, K., Moessner, M., Harney, J., McLaughlin, O., & Bauer, S. (2011). E-health for individualized prevention of eating disorders. *Clinical Practice and Epidemiology in Mental Health, 7*, 74-83.

Melioli, T., Bauer, S., Franko, D. L., Moessner, M., Ozer, F., Chabrol, H., & Rodgers, R. F. (2016). Reducing eating disorder symptoms and risk factors using the internet: A meta-analytic review. *International Journal of Eating Disorders, 49*, 19-31. doi:10.1002/eat.22477

Moessner, M., Minarik, C., Özer, F., & Bauer, S. (2016). Can an internet-based program for the prevention and early intervention in eating disorders facilitate access to conventional professional healthcare? *Journal of Mental Health, 25*, 441-447. doi:10.3109/09638237.2016.1139064

O'Connor, P. J., Martin, B., Weeks, C. S., & Ong, L. (2014). Factors that influence young people's mental health help-seeking behaviour: A study based on the Health Belief Model. *Journal of Advanced Nursing, 70*, 2577-2587. doi:10.1111/jan.12423

Parslow, R. A., Lewis, V., & Marsh, G. (2011). The general practitioner's role in providing mental health services to Australians, 1997 and 2007: Findings from the national surveys of mental health and wellbeing. *Medical Journal of Australia, 195*, 205-209. doi:10.5694/j.1326-5377.2011.tb03282.x

Pettersen, G., & Rosenvinge, J. H. (2002). Improvement and recovery from eating disorders: A patient perspective. *Eating Disorders, 10*, 61-71.

Pinto, A. M., Heinberg, L. J., Coughlin, J. W., Fava, J. L., & Guarda, A. S. (2008). The Eating Disorder Recovery Self-Efficacy Questionnaire (EDRSQ): Change with treatment and prediction of outcome. *Eating Behaviors, 9*, 143-153. doi:10.1016/j.eatbeh.2007.07.001

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research & Practice, 19*, 276-288. doi:10.1037/h0088437

Regan, P., Cachelin, F. M., & Minnick, A. M. (2017). Initial treatment seeking from professional health care providers for eating disorders: A review and synthesis of potential barriers to and facilitators of “first contact”. *International Journal of Eating Disorders, 50*, 190-209. doi:doi:10.1002/eat.22683

Reyes-Rodríguez, M. L., Ramírez, J., Davis, K., Patrice, K., & Bulik, C. M. (2013). Exploring barriers and facilitators in eating disorders treatment among Latinas in the United States. *Journal of Latina/o Psychology, 1*, 112-131. doi:10.1037/a0032318

Striegel Weissman, R., & Rosselli, F. (2017). Reducing the burden of suffering from eating disorders: Unmet treatment needs, cost of illness, and the quest for cost-effectiveness. *Behaviour Research and Therapy, 88*, 49-64. doi:10.1016/j.brat.2016.09.006

Taylor, C., Bryson, S., Luce, K. H., Cunning, D., Doyle, A. C., Abascal, L. B., . . . Wilfley, D. E. (2006). Prevention of eating disorders in at-risk college-age women. *Archives of General Psychiatry, 63*, 881-888.

Vitousek, K., Watson, S., & Wilson, G. T. (1998). Enhancing motivation for change in treatment-resistant eating disorders. *Clinical Psychology Review, 18*, 391-420. doi:10.1016/S0272-7358(98)00012-9

Wade, N. G., Vogel, D. L., Armistead-Jehle, P., Meit, S. S., Heath, P. J., & Strass, H. A. (2015). Modeling stigma, help-seeking attitudes, and intentions to seek behavioral healthcare in a

clinical military sample. *Psychiatric Rehabilitation Journal, 38*, 135-141. doi:10.1037/prj0000131

Wilksch, S. M., O'Shea, A., Taylor, C. B., Wilfley, D., Jacobi, C., & Wade, T. D. (2017). Online prevention of disordered eating in at-risk young-adult women: A two-country pragmatic randomized controlled trial. *Psychological Medicine*, 1-11. doi:10.1017/S0033291717003567

Table 1

Outline of the content and main features of ROAR

Section	Content and Features
Home page	Overview of the website, links to each section, prompts to take action towards treatment-seeking and prompts to use the ROAR pages to facilitate treatment-seeking.
Main interactive pages	Content and interactive elements focused on:
Do I have a problem	• Symptom recognition, including that eating and body concerns can affect people of all ages, sizes, and genders, and that symptoms should be taken seriously due to their high potential for harm • Emphasising that eating disorder symptoms can be harmful, despite being reinforcing in other ways, i.e., feeling of control, praise from others for weight loss/dieting
Should I get help	• Enhancing recognition of the impact of symptoms on physical and mental health and for relationships • Promoting positive attitudes to treatment by emphasising the potential positive outcomes of treatment • Promoting early treatment-seeking, and treatment-seeking at all levels of symptomatology
I want and need help	• Normalising distress or anxiety that may have emerged from symptom recognition, and that accompanies consideration of treatment-seeking • Addressing ambivalence about change • Promoting persistence in seeking treatment from health professionals
I've tried to get help	• Encouraging repeated treatment-seeking if past attempts were aversive, either due to negative experiences with health professionals or to poor outcomes • Reinforcing the importance of small gains towards recovery • Emphasising that recovery is possible at any stage of an eating disorder
Did you know	Information on eating disorders including bulimia nervosa, binge eating disorder, and anorexia nervosa. Information on dieting and exercise, body dissatisfaction, and muscle dysmorphia.
I need a report	Survey questions that can be completed to generate the personal report and health professional. Reports can be can be downloaded or printed and consumers are encouraged to present the health professional report to a general practitioner.
Resources	Information and links to resources for accessing local and national treatment services for eating disorders with recommendations to start the pathway to treatment via consultation with a general practitioner.
Repeat features	***True/false quiz questions*** with "pop-up" feedback attuned to treatment-seeking are present on the homepage and each of the main interactive pages. ***Key messages*** are included for each of the main pages. These summarise the main messages regarding symptom recognition, understanding that eating disorder symptoms are serious and require

Section	Content and Features
	treatment, appropriate treatment-seeking pathways, and reinforcing commitment to treatment efforts. ***Videos*** depicting the stories of four individuals (3 females, 1 male) recovered from eating disorders are available for viewing. The full videos can be accessed on the homepage, and snippets of each video relevant to the topics of the main interactive pages are featured on those pages. ***Quotes*** from people with lived experience of eating disorders are interspersed on each of the pages of the website and reflect the theme of the page. The aim of the quotes is to prompt symptom recognition, provide hope, encouragement, and normalise fears. An example is “If your first experience is negative, don’t give up”.

Table 2

Spearman's Correlations between Treatment-seeking, Attitudes to Treatment-seeking and Making Change, Eating Disorder Symptoms, and Impact on Health and Well-being

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Treatment-seeking intention	-	**.32*****	**.33*****	**.26****	.01	-.05	.04	**.22****	.04	-.01	.04	.02	.09	**.22****	**.21***
2. Report generated[a]		-	**.24****	**.26****	-.06	-.09	.10	.02	.01	-.06	-.03	.11	.11	.12	.11
3. Motivation			-	**.33*****	-.02	**-.19***	.003	**.42*****	-.05	.11	.08	.06	**.30*****	.12	.12
4. Confidence				-	-.08	**-.23****	.04	.06	-.03	**-.21***	-.10	-.10	-.01	-.11	-.008
5. Stigma					-	**.54*****	.07	.05	**.21***	**.23****	**.19***	**.22****	.15	**.28****	**.29*****
6. Ambivalence						-	**.26****	-.02	**.39*****	**.22****	**.39*****	**.34*****	.16	**.40*****	**.37*****
7. Dietary restraint							-	-.02	**.53*****	**.34*****	**.54*****	**.51*****	**.24****	**.36*****	**.44*****
8. Binge eating								-	.05	**.25****	**.26****	**.20***	**.37*****	**.23****	**.32*****
9. Body change and compensatory behaviours									-	**.29*****	**.57*****	**.52*****	.12	**.27****	**.28****
10. Body dissatisfaction										-	**.47*****	**.54*****	**.39*****	**.36*****	**.27****
11. Eating disorder cognitions											-	**.68*****	**.46*****	**.42*****	**.54*****
12. Body image cognitions												-	**.47*****	**.42*****	**.45*****
13. Mental health impact													-	**.36*****	**.46*****
14. Relationship impact														-	**.67*****
15. Well-being impact															-

[a] Health professional report; *p<.05, **p<.01, ***p<.001

Significant correlations are bolded. Sample size ranged from 134 to 149.