



Exploring the acceptability of online mental health interventions among university teaching staff: Implications for intervention dissemination and uptake



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ABSTRACT

Background: University teaching staff may be a first point of contact for students in need of support for mental health problems. University students report willingness to use online mental health services. However, little is known about the attitudes and behaviours of teaching staff with regard to online mental health resources. Information from this important gatekeeper group is relevant to the development and dissemination of online mental health interventions within a university setting.

Methods: An anonymous online survey was sent via e-mail to staff involved in teaching and/or supervising students at a moderately-sized Australian university. The survey measured the following: demographic information, experiences with student mental health, attitudes about the value and utility of online health resources, and willingness to recommend online mental health resources to students.

Results: A total of 224 university lecturers, tutors, course convenors and research supervisors completed the survey. Approximately half of respondents were aware of online resources for mental health problems. The majority of respondents considered online mental health resources to be helpful for accessing information and facilitating or complementing face-to-face mental health care. However, only 22.3% believed that online services are a credible treatment option and only 4% believed that they offer the same quality of care as face-to-face services. Less than half of participants were willing to recommend online interventions to students, but the majority were willing to learn more about these resources. The most commonly reported concerns about recommending online mental health resources were that it is not part of the role of teaching staff to recommend these resources, and that online resources are low-quality, potentially dangerous, and unsuitable for managing complex mental health problems.

Conclusions: Results of the survey suggest that many university teaching staff are sceptical about the quality and effectiveness of online mental health interventions and don't believe that it is their role to intervene in student mental health. This may affect their willingness to recommend these resources to students. Strategies to increase awareness of the quality and effectiveness of online mental health programmes, as well as opportunities to enable staff to provide input into the development of new online interventions may be beneficial. An important limitation of the study is response bias, in that responders were potentially more likely to have encountered student mental health problems than non-responders. Thus, the findings should be interpreted with caution and may not represent the views and experiences of all teaching staff.

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1. Introduction

Young adults experience a higher rate of mental disorder than any other age group (Australian Bureau of Statistics, 2007). Universities are appropriate settings in which to identify and treat mental health problems, as these are places where young people live, socialise, and

access education and health services (Reavley and Jorm, 2010). There is evidence to suggest that rates of psychological distress and mental disorders are particularly high among university students (Blanco et al., 2008; Eisenberg et al., 2007b; Stallman, 2010), and rates of formal help seeking are low, mainly due to stigma, lack of knowledge about services, lack of time, and lack of perceived need for treatment (Eisenberg et al., 2007a; Givens and Tjia, 2002). University teaching staff (lecturers, tutors, course convenors and high degree research supervisors) are important gatekeepers in terms of student mental health. Teaching staff are well placed to connect students in need of mental

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health care to appropriate resources, as they are often the first point of contact for students experiencing difficulty with their studies, which may be related to underlying mental health problems. However, research suggests that students believe teaching staff are insufficiently prepared for this role. Students have reported that lecturers need to develop an increased awareness of how mental health problems affect students and their academic performance at university, so they can respond sensitively and appropriately (Sanderson, 2011). Students with a disability have also reported feeling 'brushed aside' when approaching lecturers for help, indicating that lecturers did not believe it was their responsibility to provide assistance or connect them to care (Fuller et al., 2004).

There is also evidence to suggest that students hold favourable attitudes toward online interventions for mental health problems (Farrer et al., 2015; Ryan et al., 2010). Online interventions encompass a range of tools including online self-help therapy programmes, online screening tools, information websites, online counselling services, and online peer support groups. Online interventions have demonstrated effectiveness for a range of mental disorders in adults (Andersson and Cuijpers, 2009; Griffiths et al., 2010), children and young people (Ye et al., 2014; Ebert et al., 2015), and students attending university (Farrer et al., 2013). Various models have been proposed for disseminating online mental health interventions, and these interventions have enormous potential to impact mental health care at a population level, given their ability to be delivered en masse (Munoz, 2010). However, despite their strong evidence base, online interventions are unlikely to be used if people in the community are not aware that they exist or hold negative views toward them. Other models involve delivering e-mental health interventions within closed environments, including clinical (Reynolds et al., 2015) and educational settings (e.g. Cleave et al., 2009). In these environments, it is not only critical to understand the views of end users, but also the perspectives of the gatekeepers (e.g. teachers, clinicians) who are largely responsible for recommending or implementing these tools. As with end users in the general community, teachers in the classroom, or clinicians in practise who are unaware or sceptical about using online interventions are unlikely to recommend or use them with their students or patients.

If online mental health interventions are to be successfully targeted to university students, there is a need to understand the views of those who are most likely to be in a position to recommend these programmes to students, such as university lecturers, tutors, course convenors, and research supervisors. Other staff within the university environment (e.g. counselling and health centre staff, administrative staff) are also important gatekeepers, but are not the focus of the current study. Thus, a survey was conducted with teaching staff from a moderately-sized Australian university to ascertain their experiences providing support to students with mental health problems, their awareness and previous use of online mental health resources, and their willingness to recommend these resources to students.

2. Method

2.1. Participants

Participants were 224 academic staff and postgraduate students from The Australian National University (ANU), a moderately-sized university located in Canberra, Australia. The demographic and professional characteristics of the sample are provided in Table 1. The sample was composed of approximately equal numbers of men and women (49.1%) who were on average, 41.6 (SD = 12.45) years of age, and predominantly of Caucasian or European descent (76.2%). The majority of the participants were lecturers (61.2%) and supervisors of higher degree (Masters or PhD) research students (52.2%). The majority of participants taught later year undergraduate students (67.9%), although between 40.6% and 49.1% of the sample taught and/or supervised

Table 1
Demographic and professional characteristics of the sample ($n = 224$).

Characteristic	
Age (M, SD)	41.6 (12.5)
Gender ($n, \%$)	
Male	113 (50.4)
Female	110 (49.1)
Other	1 (0.4)
Teaching role ($n, \%$)	
Lecturer	137 (61.2)
Tutor	96 (42.9)
Course convenor	82 (36.6)
Research supervisor	117 (52.2)
Ethnicity ($n, \%$)	
Caucasian/European	170 (76.2)
Aboriginal/Torres Strait Islander	2 (0.9)
Asian/Indian	40 (17.9)
Latino/South American	6 (2.7)
Multiple/Other	5 (2.2)
Discipline	
Law	15 (6.8)
Engineering and Computer Science	21 (9.5)
Arts and Social Sciences	67 (30.2)
Business and Economics	19 (8.6)
Medicine, Biological and Health Sciences	51 (23.0)
Physical and Mathematical Sciences	47 (21.2)
Multidisciplinary	2 (0.9)
Teaching/supervising level	
First year undergraduate students	84 (37.5)
Higher undergraduate students (second, third, fourth year)	152 (67.9)
Honours students	94 (42.0)
Postgraduate coursework students	91 (40.6)
Postgraduate research students	110 (49.1)
Other	3 (1.4)
Number of years teaching/supervising at university level (M, SD)	10.8 (9.6)
Number of years teaching/supervising at ANU (M, SD)	6.7 (7.1)
Number of hours spent teaching/supervising per week (M, SD)	10.0 (9.4)
Number of students taught/supervised in most recent teaching period (M, SD)	78.7 (115.5)
Number of staff who have received formal training on student mental health ($n, \%$)	26 (11.6)

students at the postgraduate level. The most common disciplines in which participants taught or supervised students were the arts and social sciences (30.2%), medicine, biological and health sciences (23.0%) and the physical and mathematical sciences (21.2%). Participants had, on average, 10.8 (SD = 9.63) and 6.7 (SD = 7.12) years of experience teaching and/or supervising at a university level (at any university), and at the ANU in particular, respectively. Participants spent an average of 10.0 (SD = 9.37) hours per week teaching and/or supervising an average number of 78.7 (SD = 115.46) students.

2.2. Procedure

Ethical approval for the study was obtained from the ANU Human Research Ethics Committee (protocol number 2013/449). During November and December 2013, the Executive Officer to the ANU Vice-Chancellor sent an invitation to participate in an anonymous online survey to the e-mail lists of academic staff and postgraduate students. Staff and students were eligible to complete the survey if they indicated that they were involved in teaching and/or supervision of undergraduate or postgraduate students (e.g., as a lecturer, tutor, course convenor, and/or research supervisor). The survey remained open for a period of 6 weeks.

2.3. Measures

Demographic and professional characteristics: Participants were asked to provide the following demographic and professional information: age, gender, teaching role, ethnicity, discipline of teaching or research supervision, level at which participants teach or supervise students, number of years of teaching and/or supervising at

a university level, number of years of teaching and/or supervising at the ANU, number of hours spent teaching and/or supervising per week, number of students taught and/or supervised in the most recent teaching period, and whether they have received any formal training in responding to student mental health issues.

2.3.1. Experiences with student mental health

Participants were asked the following yes/no questions: (1) 'Have you ever taught a student with a mental health problem?', (2) 'Have you ever initiated a conversation with a student about their mental health problem(s)', (3) 'Has a student ever approached you to discuss a mental health problem?', (4) 'Has a student ever told you that they were having suicidal thoughts?', (5) 'Do you feel sufficiently informed to respond appropriately to a student with a mental health problem?'.

2.3.2. e-Health awareness, behaviours and attitudes

There were 12 questions that assessed participants' previous experience with and attitudes toward online resources for physical and mental health problems. Online resources were defined to respondents as "information websites, online self-help programmes, and online support groups". These questions were adapted from items developed by Luxton and colleagues in a survey examining attitudes and awareness of web-based self-care resources among military service members (Luxton et al., 2011). This survey was chosen as the items were considered particularly relevant for the purpose of examining attitudes toward online resources. Participants were asked five 'yes/no' questions relating to their awareness and prior use of the internet to obtain information on symptoms and service providers for physical and mental health problems (e.g., "Are you aware of any online resources for mental health?" "Have you ever used the internet to learn more about mental health concerns or symptoms?"). Participants were also asked to rate their level of agreement on a five-point Likert scale (ranging from 'strongly disagree' to 'strongly agree') with five statements assessing their attitudes toward online resources (e.g., "Online self-help programmes are a credible treatment option for mental health problems"). Participants were asked to rate their willingness to learn more about and recommend online mental health resources to students on a 5-point Likert scale (ranging from 'strongly disagree' to 'strongly agree'). Participants were also asked to indicate their concerns (if any) about recommending online mental health resources to students using an open-ended question.

2.4. Statistical analysis

All quantitative data analyses were conducted using SPSS Version 22 (IBM Corp., 2013). Binary logistic regression analyses were used to examine the relationship between participant (demographic and professional) characteristics and participants' experiences with student mental health issues and their e-health awareness, attitudes and behaviours. Demographic predictors included: age (years), gender (male = 0, female = 1), teaching experience at a university level (years), teaching role (lecturer, tutor, course convenor, and research supervisor, each coded as yes = 1, no = 0), and discipline taught (0 = medicine, health and behavioural sciences, 1 = physical, mathematical and computer sciences, economics and engineering, 2 = arts, social sciences and law). All predictors were entered simultaneously into the final model for each dependent variable. All dependent variables were coded in a binary fashion (yes = 1, no = 0 or strongly agree/agree = 1, strongly disagree/disagree/neither agree nor disagree = 0).

Responses to the open-ended question regarding concerns about recommending online resources to students were analysed using thematic analysis. Responses to the question were coded using a grounded theory approach (Martin and Turner, 1986), whereby similar 'concerns' within each response were grouped together into themes (some responses contained multiple 'concerns'). The themes that emerged are described in Table 3 and ordered by relative importance, as determined

by the number of reported concerns associated with each theme. Direct quotes are used to illustrate the emergent themes. The analysis was conducted by the primacy author (LF).

3. Results

3.1. Response rate

A full record of all staff and postgraduate students engaged in a teaching role was not available from the university; thus, it was not possible to determine the total number of staff and students who were eligible to complete the survey. However, based on university records it could be determined that at the time that the survey was distributed, 1370 academic staff were engaged in either a teaching or supervision role, or both. Thus, an estimated response rate of 16.4% (224/1370) was achieved.

3.2. Experiences with student mental health

A total of 65.2% ($n = 146$) of participants reported having previously taught a student with a mental health problem. Just over half (55.8%, $n = 125$) reported having been approached by a student to discuss their mental health, and one quarter (25.9%, $n = 58$) reported having initiated a conversation with a student about the students' mental health. Approximately one in ten (10.3%, $n = 23$) participants reported having been told by a student that they were experiencing suicidal thoughts. Those with more years of teaching experience were more likely to have taught a student with a mental health problem ($\beta = .116$, S.E. = .043, $p = .007$, OR = 1.12). Participants teaching physical/mathematical sciences, computing, and engineering were less likely to have initiated a conversation with a student about their mental health ($\beta = -1.06$, S.E. = .457, $p = .021$, OR = .348) and less likely to be approached or confided in by a student wishing to discuss their mental health ($\beta = -.955$, S.E. = .436, $p = .029$, OR = .385), compared with those teaching health and medical sciences. Conversely, course convenors were more likely report that a student with a mental health problem confided in them compared to participants in other teaching or supervision roles ($\beta = 1.12$, S.E. = .440, $p = .011$, OR = 3.05).

Only 32.1% ($n = 72$) of the participants reported that they felt sufficiently informed to respond appropriately to a student with a mental health problem. However, those who had received formal training on how to respond to a student with a mental health problem (11.6%, $n = 26$), were more likely to feel sufficiently informed to respond appropriately to students ($\beta = 2.05$, S.E. = .518, $p < .001$, OR = 7.76).

3.3. e-mental health programme awareness, behaviours and attitudes

Approximately half of the sample (52.7%, $n = 118$) indicated that they were aware of online resources for mental health (e.g. websites, online self-help programmes, and online support groups). Females were more likely to be aware of online resources than males ($\beta = .855$, S.E. = .315, $p = .007$, OR = 2.35). A higher percentage of participants reported having used the internet previously to learn about symptoms of physical health problems (72.8%, $n = 163$) than mental health problems (55.8%, $n = 125$). Similarly, higher rates of participants reported using the internet to seek information about a physical health care provider (60.3%, $n = 135$) than a mental health care provider (38.4%, $n = 86$).

Table 2 reports participants' attitudes toward online mental health resources. The majority of participants believed that online mental health resources are useful in terms of their ability to inform and educate (71.4%, $n = 160$), supplement existing forms of treatment (64.3%, $n = 144$) and improve access to care (71.4%, $n = 160$). However, only 22.3% ($n = 50$) believed that online resources are a credible treatment option, and only 4% ($n = 9$) believed that they are capable of offering

Table 2
Participant attitudes toward online mental health resources ($n = 224$).

Item	n (%) agree or strongly agree
Online mental health resources:	
are valuable as an adjunct to providing care in-person	144 (64.3)
facilitate access to healthcare/self-help	160 (71.4)
are helpful in informing and educating people about their health concerns	160 (71.4)
can provide the same quality of care as face-to-face/traditional care	9 (4.0)
are a credible treatment option for mental health problems	50 (22.3)

the same quality of care as face-to-face services. Females were more likely to believe that online resources are of value as an adjunct to in-person care ($\beta = .978$, $S.E. = .350$, $p = .005$, $OR = 2.66$), and course

convenors were less likely to believe that online resources facilitate access to healthcare ($\beta = -.939$, $S.E. = .412$, $p = .023$, $OR = .391$). Participants teaching physical/mathematical sciences ($\beta = -1.01$, $S.E. = .408$, $p = .013$, $OR = .365$) and arts/social sciences ($\beta = -1.73$, $S.E. = .474$, $p < .001$, $OR = .178$) were less likely to believe that online resources are a credible treatment option, compared to those teaching health and medical sciences.

Less than half (41.1%; $n = 92$) of participants indicated that they would be willing to recommend online mental health resources to students. However, 73.7% ($n = 165$) of participants indicated that they were willing to learn more about online mental health resources. Participants teaching arts/social sciences were less likely to be willing to recommend online resources to students than participants teaching other disciplines ($\beta = -1.06$, $S.E. = .413$, $p = .010$, $OR = .347$). Those who were aware of online interventions were more likely to be willing to recommend them to students ($\beta = 1.23$, $S.E. = .334$, $p < .001$,

Table 3
Thematic categories representing participant concerns about recommending online interventions to students ordered by number of concerns in each theme.

Theme	Number of concerns relating to theme	Example quotes
1. Recommending online resources is not part of an academic role/discomfort in discussing mental health problems with students	$n = 48$	<p>"I would be concerned about making them uncomfortable by indicating or suggesting that I think they would need help"</p> <p>"It might be a bit awkward. I wouldn't want to embarrass the student"</p> <p>"It does not feel appropriate for me in my role as their teacher to take on the responsibility of referring them to mental health websites"</p> <p>"I do not want to deal with any student health issues. I don't want a student to act on my advice, simply because I am in a position of authority, and then later blame me if that advice was inappropriate"</p>
2. No concerns, positive views	$n = 33$	<p>"I would be willing to provide online resources for students as a reference that will assist them in engaging professional support"</p> <p>"No concerns as the students I work with work online - it would in fact make sense to refer them to an online resources in the first instance as well as their own healthcare provider"</p> <p>"Online self-help programmes are valuable if the person has already sought professional assistance and only requires additional assistance to help guide them"</p> <p>"None, if those resources have been approved by the university as valuable resources"</p>
3. Online resources are not as effective as face-to-face care/may prevent students from seeking face-to-face care	$n = 29$	<p>"My concern is that they wouldn't access practitioners in person"</p> <p>"The students have complex problems, and need actual face to face support, not just another website to be directed to"</p> <p>"I do not believe that online courses can substitute for face to face services"</p> <p>"Mental health problems will always have to be dealt with by real people eventually anyway as treatment will involve counselling and/or medication"</p>
4. Concerns about the overall quality of online resources/that students would think that they are not worthy of quality care	$n = 20$	<p>"It seems second-best by definition, and a measure driven by cheapness rather than care for our students"</p> <p>"There is a lot of information on the internet. It is difficult to know what is credible and reliable and what is rubbish"</p> <p>"[I have] concerns about the quality of what I am referring them to as I have no way of telling good from bad"</p> <p>"If I was to suggest going on line to seek help I would think this would in part reinforce the idea that they [students] are not valued"</p>
5. Online resources are insufficient/too generic	$n = 17$	<p>"I would worry that the care might not be sufficient for their needs"</p> <p>"That they [online resources] would be inadequate"</p> <p>"It could be too general and be taken as a quick fix for perhaps what could turn [out] to be serious mental issues"</p> <p>"If there is a real problem, I don't think online resources are especially suitable for ongoing care"</p>
6. Online resources are dangerous/encourage self-diagnosis	$n = 13$	<p>"I would worry it might lead to problematic self-diagnoses and may expose students to harmful online communities"</p> <p>"It is a dangerous tool for people who seek to self-diagnose without professional assistance"</p>
7. Insufficient knowledge about online resources	$n = 9$	<p>"I would need to be informed about the online resources before informing my students"</p> <p>"Not familiar with them"</p> <p>"I don't know anything about them and do not feel qualified to be able to direct students to reputable ones"</p>
8. Online resources encourage isolation	$n = 9$	<p>"I would be more concerned that students would continue to feel isolated whilst seeking online help"</p> <p>"Such a web-based approach would not assist these students in reducing their sense of isolation or mitigating their mental health problems"</p> <p>"I think online resources would just let those with mental health problems continue to escape or work around the problem"</p>

OR = 3.42). Females were more likely to be willing to learn more about online resources (beta = 1.41, S.E. = .409, $p = .001$, OR = 4.09).

3.4. Concerns about recommending online mental health resources to students

Eighty-five (38.0%) participants responded to the open-ended question regarding concerns about recommending online resources to students. Two responses did not constitute concerns and were excluded. The remaining 83 responses were divided into 178 discrete concerns (some participants indicated multiple concerns in their response). These concerns were categorised into 8 themes, as depicted in Table 3.

The most common concerns (27.0%) among participants were that they did not feel qualified to recommend online resources to students, and that they did not believe that it is part of their role as an educator to manage student mental health problems. Participants felt that students might react negatively or feel targeted if they recommended an online mental health resource to them, or that it might be awkward or uncomfortable to have a conversation with them about their mental health. However, the second most common responses (18.5%) were positive comments regarding online interventions. These participants held no concerns and expressed willingness to recommend online resources as long as they are endorsed by the university, and that students use them as a first step toward seeking professional help. Other participants expressed concerns about the quality of online interventions (11.2%), and their ability to provide the same level of care as face-to-face services (16.3%). Some participants believed that recommending online interventions would de-value students and imply that they are not worthy of face-to-face care. Other participants were concerned that online resources are too generic and unable to deliver effective help due to the complex nature of mental health problems (9.6%). Some believed that online resources encourage isolation and may even discourage students from seeking professional help for their mental health problems (5.1%). Finally, other concerns focused on the perceived dangerousness of online interventions (7.3%) and participants' own lack of knowledge about online interventions (5.1%).

4. Discussion

This study examined the acceptability of online mental health interventions among university teaching staff and their experiences with student mental health problems. It should be noted that the results of this study may be vulnerable to response bias and should be interpreted with caution. It is possible that those who responded to the survey were more likely to have encountered student mental health problems or online interventions than non-responders, and thus the reported findings may not be fully representative of the views and experiences of all teaching staff.

The results of the survey suggest that university teaching staff commonly encounter students with mental health problems, and that the majority of staff feel insufficiently informed to respond to these students. 10% of the sample reported having spoken to a student with suicidal thoughts. This is consistent with evidence suggesting that university students are at high risk of developing mental disorders and experiencing suicidal ideation (Arria et al., 2009; Eisenberg et al., 2007b), and highlights the need for effective student-focused interventions and strategies to connect students to timely and appropriate care. Unsurprisingly, those with more years of teaching experience were more likely to have taught a student with a mental health problem, and course convenors were more likely to be approached or confided in by students. This is likely due to the administrative responsibilities of course convenors and their ability to offer academic accommodations to students. Interestingly, differences were found between staff from different disciplines in terms of their experiences with approaching and being approached by students with mental health problems. Further research is needed to elucidate the reasons for these differences,

but it is possible that students may feel more comfortable speaking to academics with a background in health or psychology, as opposed to other disciplines. There is some evidence that staff from non-health related disciplines have poorer mental health literacy than those with a background in health (Lawes and Fiedler, 2012), which may impact on their confidence or ability to support students with mental health problems. This difference may also be due to gender differences in teaching disciplines. In the sample, there were significantly more males than females teaching physical and mathematical sciences. Students may prefer speaking to females and females may also feel more comfortable approaching students to discuss mental health issues. Formal training in student mental health appeared to have a positive impact on how staff perceived their ability to respond to student mental health problems. Although only 11.6% of the sample had received any formal training, these respondents were significantly more likely to feel sufficiently informed to respond to student mental health problems.

Approximately half of the sample was aware of online mental health programmes. While this figure is not insignificant, there is some room for improvement in public and university staff awareness of e-mental health interventions. The first technology-based mental health interventions emerged in the early 2000's and since then, research on these programmes has proliferated (Andersson, 2010). Translation of this research into clinical and public health practice remains a significant challenge for the field. Current research efforts are examining strategies for integrating online mental health services into clinical care. However, little research has examined how to improve awareness of these interventions among members of the general community or within closed, non-clinical environments, such as schools and universities.

Participants held generally favourable views toward online interventions in terms of their ability to inform and educate, facilitate access to care, and complement existing treatment approaches. However, participants were largely sceptical about the credibility of online interventions and their ability to provide the same quality of care as face-to-face services. This is consistent with a study conducted by Musiat and colleagues, who found that although members of the general population viewed online treatments favourably in terms of ease of access, they did not endorse their credibility, appeal, or potential for feedback and personal support (Musiat et al., 2014). It appears that e-mental health interventions have yet to gain enough traction in the wider community to be considered a bona fide treatment option for mental health problems. There appears to be a particular disparity between public perceptions and research evidence regarding the quality of online interventions compared to face-to-face services. A recent meta-analysis found that online and face-to-face cognitive behaviour therapy interventions produce equivalent effects for a range of mental disorders (Andersson et al., 2014), although the number of studies that have examined this is small ($n = 13$). However, the current sample and the wider public may consider other factors to be equally important when judging the quality of online interventions, including safety or the ability for human connection and personalised care.

Less than half of participants were willing to recommend online resources to students. However, the majority of participants were willing to learn more about online mental health resources, highlighting an opportunity for targeting education to this group. The data suggest that increasing awareness of online interventions and their potential to help students is likely to increase willingness among staff to recommend these resources to students.

Participants expressed a variety of concerns about recommending online mental health resources to students. The most commonly expressed concerns may not have been about online interventions per se, but the broader issue of the role of university teaching staff in recommending help to students. Participants were concerned about stepping outside their role or bearing responsibility for the mental health of their students. These concerns may be compounded by uncertainty about how to appropriately respond to students with a mental

health problem, given a general lack of clear university policy concerning this issue (McAuliffe et al., 2012).

Other concerns expressed by participants may possibly be grounded in misinformation or a lack of knowledge about online interventions. In particular, concerns about online interventions replacing face-to-face therapy may be due to a misunderstanding about the intended purposes of self-guided online interventions, which are to provide an additional treatment option for people who might not otherwise seek or benefit from other forms of care, or to form part of stepped care approaches for treating mental health problems (van Straten et al., 2010). Participant concerns about the harmfulness of some online resources may be justified (Rozental et al., 2014), and highlight the need for information or tools to assist people to effectively distinguish between high and low quality websites and interventions (Griffiths and Christensen, 2005). However, it should also be acknowledged that the majority of the sample did not respond to the question regarding concerns (which may or may not indicate a genuine absence of concerns), and that the second most common responses were provided by participants who did not have any concerns about recommending online resources to students.

4.1. Limitations

A major limitation associated with the study is the sampling strategy. Due to a lack of permission to access the e-mail addresses of all staff, the survey invitation was only sent to academic staff and postgraduate students, which may have resulted in some potentially eligible participants not receiving an invitation. We were also unable to accurately determine the response rate for the survey due to a lack of formal records indicating the number of staff and students engaged in teaching roles. A second major limitation is response bias. Staff with an interest in or experience with student mental health may have been more inclined to respond to the survey. This may have resulted in an over-estimation of some results (for example, number of staff who have spoken to a student with suicidal thoughts).

4.2. Implications

Targeted education may assist staff to feel better informed to respond to student mental health problems, and may improve attitudes among university teaching staff toward online interventions. Provision of education regarding the efficacy of these interventions may address specific concerns about their quality and suitability for treating mental health problems. Education about the different types of online interventions and models of online intervention delivery (such as those involving human guidance) may address concerns about student safety and isolation. There may be a specific need for education among staff teaching in non-health fields, as the results suggest that their attitudes toward student mental health and online interventions may be different to those teaching in health fields. Indeed, mental health problems are prevalent among students from all disciplines, not only those studying specific high-demand degrees (see Ibrahim et al., 2013), which highlights the importance for staff teaching in all disciplines to have the skills to recognise mental health problems in their students. Given the propensity for students to approach course convenors, education and/or training should perhaps be particularly targeted to these and other more senior administrators. Evidence-based online or face-to-face educational programmes (e.g., Mental Health First Aid, Jorm and Kitchener, 2011) could be tailored toward the role of teaching staff and address issues such as appropriate staff boundaries.

4.3. Conclusions

Online mental health interventions were developed out of a need to address high demand for services in the community and barriers to receiving help for mental health problems. Education is needed to

communicate to university teaching staff that online interventions can be high quality, evidence-based, engaging, and effective. It is vital that the delivery of this information does not communicate to staff that online interventions are designed to replace face-to-face services, or that there is an expectation for teaching staff to become de-facto mental health professionals. Moreover, if staff are to feel confident recommending online resources to students, these resources require endorsement from relevant levels within the university, such as health and counselling services and the university executive. It is worth acknowledging that there is always likely to be a proportion of staff who do not wish to provide recommendations to students regarding their mental health. Nonetheless, providing staff with clear guidelines, and educating them about the purpose of and evidence for online mental health interventions may go some way to encouraging uptake of these tools in university settings with resulting improved mental health outcomes in the student population.

Conflicts of interest

The authors declare that there are no conflicts of interest.

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