Mental health professional online development (MHPOD): Pilot testing of an online training package for Australian specialist mental health services

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Abstract

Introduction: Australia's National Practice Standards for the Mental Health Workforce ("The Standards") outline the values, attitudes, knowledge and skills required to work in Australian mental health services. Mental health professionals are encouraged to meet these standards within 2 years of commencing practice. Mental health professional online development (MHPOD) is a multidisciplinary, self-directed, online learning resource focused on increasing the knowledge, skills and confidence of professionals across Australia related to The Standards. This paper outlines the evaluation of the MHPOD pilot, which aimed to identify changes in self-rated knowledge, skills and confidence as a result of using MHPOD, and actions to improve implementation of MHPOD nationally.

Methods: Eleven Australian specialist mental health services engaged on-site project teams to assist 392 learners to complete 10 MHPOD topics. At three time points (baseline, topic completion, follow-up), learners completed surveys regarding completion of topics, barriers and facilitators to completion and before- and after-completion levels of perceived knowledge, skills and confidence. Statistical analyses included matched samples t-tests and comparisons of confidence intervals related to mean level of knowledge at the three survey points.

Results: Learners who completed post-completion surveys reported significant increases in self-rated knowledge, skills and confidence related to The Standards following MHPOD completion. Lack of organisational support, no time release and technological difficulties contributed to greater difficulties with completion.

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Discussion: The evaluation results illustrate self-directed online learning can be a useful multidisciplinary educational tool when a standardised body of knowledge is required. The identified barriers to completion illustrate that instrumental organisational support is essential to completion of such professional development.

Keywords: learning; mental health; nurses; occupational therapy; online; professional education; psychologists; psychiatrist; social workers.

Introduction

Australia's Fourth National Mental Health Plan is a national framework for ongoing mental health reform that highlights the need for improvement of the quality and effectiveness of mental health service delivery across Australia. Australia's public specialised mental health services are divided into those providing acute clinical and crisis services as well as community-based treatment to people with mental illness (the clinical sector) and those primarily providing recovery and support services (the non-government community mental health sector). The National Practice Standards for the Mental Health Workforce ("The Standards") (National Mental Health Education and Training Advisory Group, 2002) are one component of the Mental Health Workforce Strategy (Mental Health Workforce Advisory Committee, 2011) developed to ensure growth of an appropriately trained mental health workforce to provide "effective" and "appropriate" clinical and community support services (Mental Health Workforce Advisory Committee, 2011), consistent with the goals of the National Mental Health Plan.

The Standards outline "the values, attitudes, knowledge and skills required" when working in an Australian mental health service and aim to promote a "coordinated and consistent approach to professional development and service improvement" (National Mental Health Education and Training Advisory Group, 2002, p. 4). The Standards are primarily aimed at nurses, occupational therapists, psychiatrists, psychologists and social workers, but are also relevant to others working in mental health services. The Australian Government intends for all mental health professionals to meet the requirements of The Standards within their first 2 years of mental health practice (National Mental Health Education and Training Advisory Group, 2002). Therefore, workplaces face the challenge of providing training suitable to professionals with varied pre-existing knowledge within the time, workload and financial constraints of public mental health services.

Mental Health Professional Online Development (MHPOD) is a multidisciplinary, self-directed, evidence-based online learning resource based on The Standards. MHPOD forms an integral part of the implementation strategy for The Standards, with all states and territories and the Australian Government contributing funding for its development (Mental Health and Drug Treatment Division—Department of Health, 2009). The purpose of its development was to provide mental health professionals with easy access to training focused on increasing their knowledge, skills and confidence in order to progress towards meeting the requirements of The Standards, regardless of their existing knowledge or their profession. MHPOD topic content was created by the Psychosocial Research Centre (PRC) at the University of Melbourne, working in collaboration with academics, clinicians, field experts, consumers and carers. Instructional designers actively contributed to the design of MHPOD.

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PILOT TESTING OF MHPOD

MHPOD comprises 45 topics (about 70 hours of material), but due to time constraints, the pilot study involved only 10 pre-selected topics. Each topic consists of an introduction, one or more learning plans and knowledge check questions that assess learners' topic knowledge. Each learning plan consists of an overview, one or more interactive activities, an in practice section (in which an expert shows how MHPOD content can be applied in practice) and related references and resources. Successful completion of the knowledge check at the beginning of a topic enables learners to skip that topic. Table 1 outlines the names of, and learning objectives for, the 10 topics included in this pilot study. Further details about MHPOD can be found at http://www.mhpod.gov.au/.

Table 1
MHPOD Topics and Learning Objectives

Topic	Learning Objectives
Legislation	Describe key aspects of mental health legislation. Identify other relevant legislation and sections in relation to specific professional responsibilities.
Dual disability	Be aware of the interactions between intellectual/developmental disorders and mental disorders and the consequent implications for practice in collaboration with specialist services.
Recovery 1—Concepts	Define the concept of "recovery". Identify principles that would both support and hinder the processes of individual recovery.
Recovery 2—Hope and self-determination	Differentiate between the concepts of recovery, recovery-based practice, rehabilitation and biomedical support or intervention and understand the evidence for recovery. Describe different practices that can either enable or disable the personal efforts of recovery.
Formulation	Understand the process of creating a formulation, and when and how formulation can be used to optimise outcomes for consumers in the public mental health system.
Pharmacology	Describe how commonly prescribed pharmacological treatments work through a common schema for classes of mental health drugs. Describe how to monitor the impact of medications and collaborate to maximise effectiveness.
Mental health histories and mental status examination	Describe the components of a detailed mental status examination. Describe relevant components of a mental health history.
Classification	Identify the structure of the DSM-IV and ICD-10 classification systems and the principles of multi-axial coding of mental disorders. Recognise the benefits and limitations of a classification system for consumers, families and professionals.
Networks of care (partnerships)	Identify strategies that contribute to effective partnerships in the broad system of care, and consequently good outcomes for consumers. Identify the services that comprise a comprehensive health and welfare system and outline their purpose.
Cultural awareness	Describe how broad aspects of culture influence the clinical relationship, the understanding of mental disorder and the impact of disorders on individual, families and communities.

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Professionals are able to accrue continuing professional development (CPD) points for time spent in completing the MHPOD topics. MHPOD is endorsed by a number of professional bodies for CPD purposes, although the conditions of that endorsement, such as how many CPD points can be claimed and which topics are accredited, varies by organisation (see http://www.mhpod.gov.au/cpd-accreditation for details). Such endorsement has the potential to increase participation in MHPOD and to enhance completion rates.

In addition to demonstrated efficacy in improving confidence, and self-rated and externally-rated knowledge and skills related to mental health content (Hill, 2002; Jorm, Kitchener, Fischer, & Cvetkovski, 2010), online training has a number of advantages over face-to-face formats, including greater flexibility of delivery and reduced delivery costs (Reupert, Foster, Mayberry, & Fudge, 2001). This is particularly true of multidisciplinary training such as MHPOD, which provides standardised training to a range of professionals. However, online training is also more likely than face-to-face methods to result in non-completion (Lee & Choi, 2011). Therefore, success of online training depends not only on the quality and relevance of the learning tool but also on the ability of the implementation model to promote completion.

Lee and Choi's (2011) review of online course dropout research showed that dropout is increased by *student factors*, such as learners' poor computer skills; *program factors*, such as limited perceived relevance of the content, low participation in simultaneous face-to-face learning sessions and limited support from teachers; and *environmental factors*, such as other work commitments and lack of a supportive environment. Therefore, to promote completion of MHPOD, sites engaged an on-site team to support learners and were encouraged to provide complementary face-to-face group learning activities, time release to complete MHPOD and easy access to computers and MHPOD. The effects of these factors on completion were analysed during the evaluation, as were the relevance and usefulness of the MHPOD content and components, and student factors such as computer literacy and previous online learning experience.

This paper outlines results from an MHPOD pilot evaluation aimed at testing the resource with a sample of professionals before its launch within the broader clinical mental health sector. Specifically, this multi-method pilot study evaluation of MHPOD primarily aimed to:

- identify changes in self-rated health worker knowledge and understanding as a result of using MHPOD
- identify actions to improve the implementation of MHPOD in mental health services nationally.

Methods

Recruitment of services, learners and educators

Fourteen specialist public mental health services from all Australian states and territories responded to an expression of interest to participate in the MHPOD pilot. Eleven sites were chosen to participate based on four criteria, including commitment to professional development, practice improvement and online learning, and the sites' ability to implement the project requirements. Each site was paid AUD $7000 to support implementation and agreed to recruit a set number of "learners" (professionals

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enrolled to complete MHPOD) and an on-site project team, including a coordinator, a clinical leader and a team of six to eight personnel to undertake education and training activities with MHPOD learners ("educators"). This team was responsible for assisting and engaging learners and ensuring MHPD completion. Educators were supplied with a facilitator guide for five MHPOD topics to encourage provision of non-mandatory, site-based "blended learning" activities in which learners could participate in face-to-face small group learning sessions in addition to completing the online MHPOD content. The pilot took place from April to June 2010.

Surveys

"Respondents" (those learners who opted to complete any given survey) completed three types of surveys, estimated to take less than 15 minutes each. Response formats for each scale are provided in the results section.

Baseline surveys: Completed by all learners on registration to MHPOD, baseline surveys comprised 32 items assessing learners' demographics and professional background, self-rated prior knowledge of MHPOD-related content and perceived relevance of the topics.

Topic completion surveys: Completed at the end of each topic (potentially 10 in total), the topic completion survey asked about completion of topics, topic components and blended learning activities; login difficulties; relevance of content; and self-rated knowledge of the topic before and after completion.

Follow-up survey: Administered at the end of the data collection period, the follow-up survey asked respondents about level of difficulty experienced in completing MHPOD and reasons for this ease or difficulty, self-rated level of knowledge of MHPOD content before and after completion, and perceived impact of MHPOD on level of knowledge, skills and confidence.

Data analysis

Data analysis was completed using SPSS v17.02. Descriptive statistics were generated to describe learners' demographic and professional characteristics and the respondents' survey responses. Chi-square analyses were used to determine significant relationships between level of difficulty of completing MHPOD and several barriers to completion. To compare respondents' self-rated level of knowledge of topics at baseline, topic completion and follow-up, confidence intervals for each of the three means were compared and determined to be statistically significant if they did not overlap.

Ethics approval for the study was granted by the Health Research Ethics Committee, The University of Melbourne.

Results

Survey response rates

The numbers of complete survey responses are shown in Table 2. These responses suggest that 108 registered learners completed no topics (27.6% dropout), and total baseline to follow-up dropout was up to 44%.

Since not all survey respondents completed all survey questions, the *n* for each question is provided in the following section.

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Table 2
Survey Completion

Survey	No. Completed	% of Learners Completed
Baseline	392	100
Topic 1 (Legislation) completion	130	33.2
Topic 2 (Recovery 1) completion	117	29.8
Topic 3 (Recovery 2) completion	81	20.7
Topic 4 (Networks) completion	94	24.0
Topic 5 (Classification) completion	77	19.6
Topic 6 (Histories & MSE) completion	82	20.9
Topic 7 (Formulation) completion	59	15.1
Topic 8 (Pharmacology) completion	65	16.6
Topic 9 (Cultural awareness) completion	68	17.3
Topic 10 (Dual disability) completion	57	14.5
Follow-up	218	55.6
(Matched to baseline)	(191)	(48.7)
(Unmatched)	(27)	(6.9)

Participants

Table 3 shows the demographic characteristics of learners enrolled in MHPOD. Over half of learners were nurses (216/377, 57%), while only 2% were psychiatrists, reflecting the overall workforce in which nurses are most numerous and psychiatrists are fewest. A large portion of learners (41%) had less than 2 years of experience as a mental health clinician, suggesting that MHPOD is being completed early in their careers. More than half (220/380, 58%) rated their computer literacy as above or well above average, and 46% rated their previous online learning experience as above or well above average (139/304) (scale: 1—*not at all experienced/well below average* to 5—*very experienced/well above average*); therefore, for a large number of learners, inexperience with computers and online learning should not have posed a barrier to MHPOD completion.

Completion of MHPOD

Setting

About three-quarters of topics (823/1086, 76%) were completed at work and in less than 60 minutes (771/1053, 73%) (Table 4). One-quarter were completed in more than one sitting due to work interruptions (52%), multiple attempts at completing knowledge check questions (13%), time constraints (11%), technical difficulties (7%) and navigation difficulties (5%).

Participation in blended learning

Very few learners participated in blended learning activities (n = 41), and 84% of respondents (27/32) rated these as "somewhat" to "very important" (scale: 1—*not at all important* to 5—*very important*) because they allowed for those who preferred

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Table 3
Sociodemographic Characteristics of MHPOD Learners

Characteristic	Number	Percentage
Age group (n = 377)		
20–30	98	26
31–40	76	20
41–50	107	28
>51	96	26
Profession (n = 377)		
Nurse	216	57
Occupational therapist	44	12
Psychiatrist or psychiatric registrar	8	2
Psychologist	33	9
Social worker	58	15
Other	18	5
Years of experience in clinical capacity in mental health (n = 385)		
<1 year	96	25
1–2 years	62	16
2–3 years	37	10
3–5 years	39	10
5–10 years	36	9
10–15 years	37	10
>15 years	78	20
Computer literacy (n = 380)		
Below average	22	6
About average	138	36
Above average	143	38
Well above average	77	20
Online learning experience (n = 304)		
Below average	43	14
About average	122	40
Above average	101	33
Well above average	38	13

face-to-face learning and promoted interdisciplinary discussion and reinforcement and clarification of material. Some learners, however, completed MHPOD in a computer laboratory with others, and this also provided similar opportunities for interdisciplinary discussion and clarification of materials as experienced through blended learning activities. Because of the limited number of learners who completed blended learning activities, it was not possible to complete statistical analysis of the contribution of blended learning to post-MHPOD self-rated knowledge, skills or confidence.

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Barriers to completion of modules

Less than half of respondents to the follow-up survey (92/216, 43%) had technological difficulties with MHPOD (Yes/No option). While 39% (86/218) were granted time release to complete MHPOD, 77% of these (n = 66) experienced difficulty in actually taking the time (3-point scale from *not at all* to *extremely difficult*). Over half of respondents rated their organisation as "supportive" (105/184, 57%), 32% as "somewhat supportive" and 11% as "not at all or minimally supportive" (scale: 1—*not at all supportive* to 5—*very supportive*). Of those who completed the follow-up survey (n = 218), 42% had difficulties fulfilling their obligations to the MHPOD pilot (Table 4) (scale: 1—*extremely difficult* to 5—*extremely easy*).

Table 4
Completion of Modules

Completion Characteristic	Number	Percentage
Location of completion (n = 1086)		
Home	263	24
Work—own computer	542	50
Work—ward computer	206	19
Ward—computer lab or similar	43	4
Work—other location	32	3
Average time taken to complete a module (n = 1053)		
<30 minutes	320	30
30–59 minutes	451	43
60–89 minutes	196	19
90 minutes or more	86	8
Level of difficulty in fulfilling MHPOD duties		
Extremely easy	14	6
Easy	20	9
Ok/no major difficulties	92	43
Somewhat difficult	24	11
Extremely difficult	68	31

Chi-square analyses showed that experiencing technological difficulties [$X^2(3, N = 216) = 8.106$, $p = 0.044$], a lower level of organisational support [$X^2(3, N = 184) = 13.204$, $p = 0.004$] and no time release [$X^2(3, N = 216) = 13.204$, $p = 0.004$] were associated with greater difficulties in fulfilling MHPOD obligations. Those who rated their previous online learning experience as "average" (ranging from *not at all experienced/well below average* to *very experienced/well above average*) were more likely to rate completion of MHPOD as "difficult", and less likely to rate it as "easy", than those with "below" or "above" average experience [$X^2(6, N = 157) = 15.931$, $p = 0.014$]. This pattern of findings is difficult to interpret but might relate to respondents providing different responses for a similar level of online experience.

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Usefulness of MHPOD

Perceived relevance of topics

When asked to rate on a scale from 1 *(irrelevant)* to 5 *(extremely relevant)* the relevance of the MHPOD learning plan content to their current position, 84% (1238/1483) of respondents to the topic surveys across all topics and learning plans (most topics comprised two learning plans) responded with either "4" or "5", while 11% (162/1483) responded with "1" (Table 5).

Table 5
Relevance and Helpfulness of MHPOD Components

Rating	Number of Responses	Percentage of Total Responses
Relevance of all learning plans		
Irrelevant	162	10.9
Relevant	520	35.1
Extremely relevant	718	48.4
Not sure	83	5.6
TOTAL	1483	100.0
Helpfulness of the in practice component		
Unhelpful	142	10.7
Helpful	595	45.0
Extremely helpful	340	25.7
Not sure	246	18.6
TOTAL	1323	100.0

Usefulness and enjoyment of the MHPOD components

The topic surveys asked respondents to rank how enjoyable and useful the various parts of the topics were from 1 (*most enjoyable)* to 6 (*least enjoyable)*, and 1 (*most useful)* to 6 (*least useful)*. The knowledge checks were most frequently indicated as "most useful" (i.e., 60% rated as 1 or 2) and the references and resources as "most enjoyable" (52% rated as 1 or 2) (Figure 1). The in practice was most frequently rated as being the "least useful" component (40% rated as 5 or 6) and the knowledge check questions as "least enjoyable", equal with the activities component (20% rated as 5 or 6).

Helpfulness of the in practice component

Overall, 71% of responses (935/1323: some topics contained two in practice components) rated the in practice as either "helpful" or "very helpful" on a scale from 1 (*extremely unhelpful)* to 5 (*extremely helpful)*, and 11% (n = 142) rated them as "unhelpful" (Table 3). These ratings occurred despite the in practice component being rated as the least useful of all MHPOD components.

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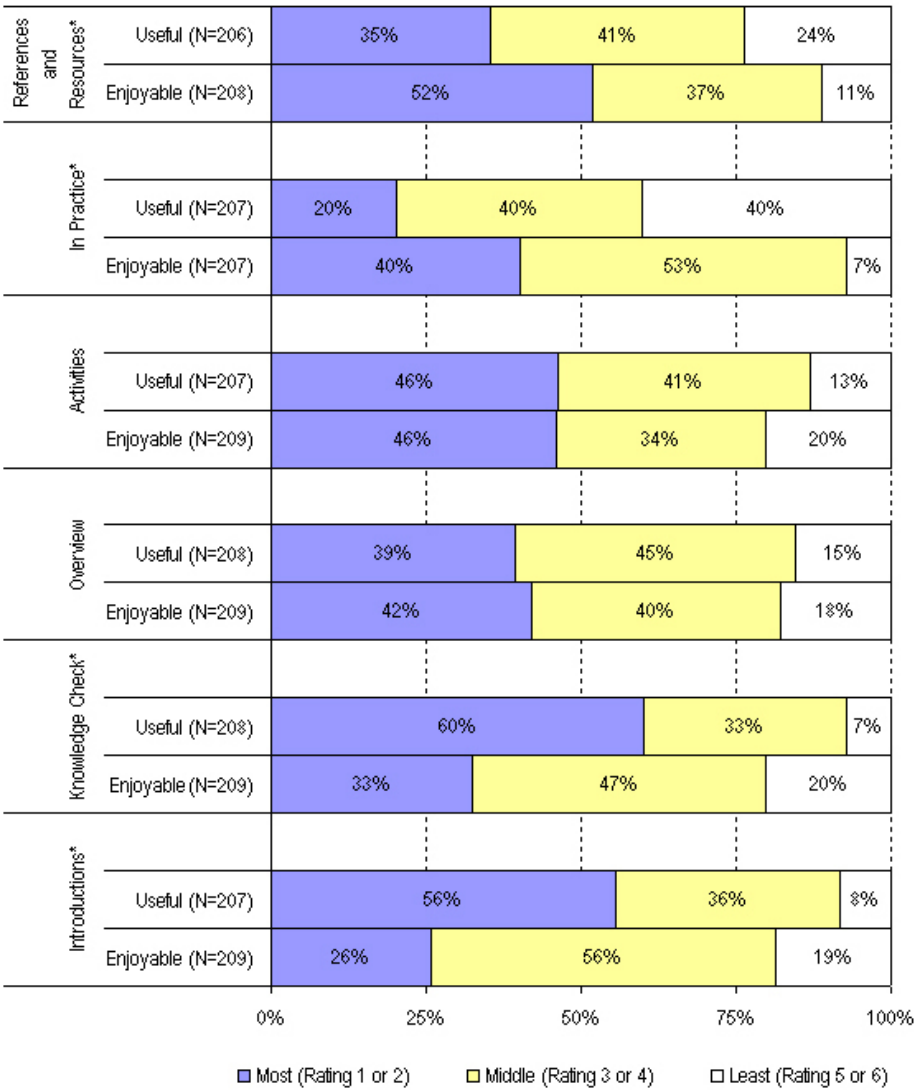

* Indicates differences between usefulness and enjoyment are statistically significant ($p = 0.000$ in all cases)

Figure 1. Enjoyment and usefulness ratings of the MHPOD components.

Outcomes

Baseline to follow-up changes in self-rated knowledge

Figure 2 shows the mean self-rated knowledge ratings for all MHPOD topics at baseline and follow-up (scale: 1—*extremely poor–well below average* to 10—*extremely good–well above average*) with the corresponding 95% confidence intervals. Mean self-rated

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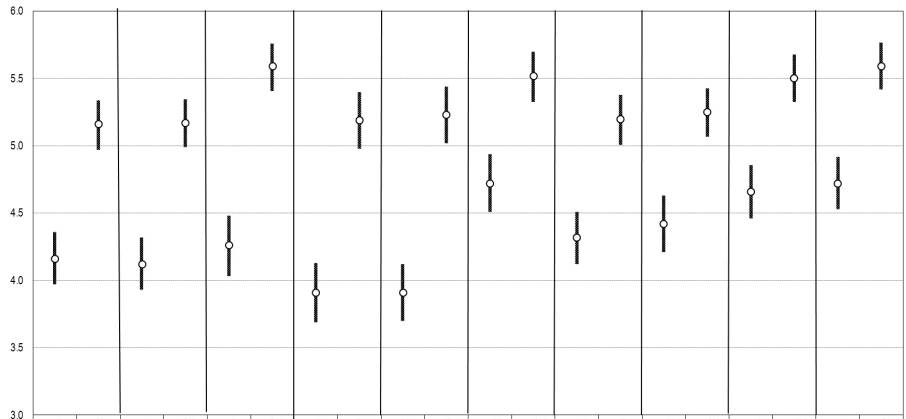

	1	2**	1	2**	1	2**	1*	2**	1**	2**	1*	2**	1*	2**	1*	2**	1*	2**	1*	2**
	LEGISLATION		CO-OCCURRING CONDITIONS		RECOVERY BASED PRACTICE		FORMULATION		PHARMACOLOGY		MENTAL STATE EXAMINATION		CLASSIFICATION		HISTORIES		PARTNERSHIPS		CULTURAL AWARENESS	
95% CI Upper Bound	4.4	5.3	4.3	5.4	4.5	5.8	4.1	5.4	4.1	5.4	4.9	5.7	4.5	5.4	4.6	5.4	4.9	5.7	4.9	5.8
95% CI Lower Bound	4.0	5.0	3.9	5.0	4.0	5.4	3.7	5.0	3.7	5.0	4.5	5.3	4.1	5.0	4.2	5.1	4.5	5.3	4.5	5.4
○Mean	4.2	5.2	4.1	5.2	4.3	5.6	3.9	5.2	3.9	5.2	4.7	5.5	4.3	5.2	4.4	5.3	4.7	5.5	4.7	5.6

Figure 2. Self-rated knowledge of MHPOD topics before and after completion of topics.

1—Before topic completion
2—After topic completion
**statistically significant

baseline knowledge for all respondents and all topics was approximately 5 (*ok–average*) or below (scale: 1—*extremely poor–well below average* to 10—*extremely good–well above average*), illustrating potential for increased knowledge on all topics.

Differences between these mean self-rated knowledge ratings at baseline and follow-up were statistically significant for all topics ($p < .05$), increasing from between 3.9 and 4.9 (at or below *okay–average*) to between 5.2 and 5.6 (at or above *okay–average*) (Figure 2). Differences in self-rated knowledge means between the topic completion and follow-up surveys were not statistically significant ($p < .05$), and are therefore not shown in Figure 2, suggesting self-rated knowledge change had been retained at follow-up. Over 90% of participants indicated an increase in their perceived knowledge (Figure 3), and on a recoded scale from 1 or 2 (*no or minimal change)* to 5 *(increased a lot)*, over 80% indicated that the increase was more than minimal (i.e., *increased a little*, *more than a little* or *a lot*) (Figure 3).

Changes in perceived skills and confidence

Over three-quarters of respondents to the follow-up survey indicated that completing MHPOD resulted in an increase in their perceived level of skills and confidence. On the same recoded scale as above, nearly two-thirds indicated that the increase in their perceived level of skill had been more than minimal, and just over two-thirds indicated that the increase in their confidence had been more than minimal (Figure 3).

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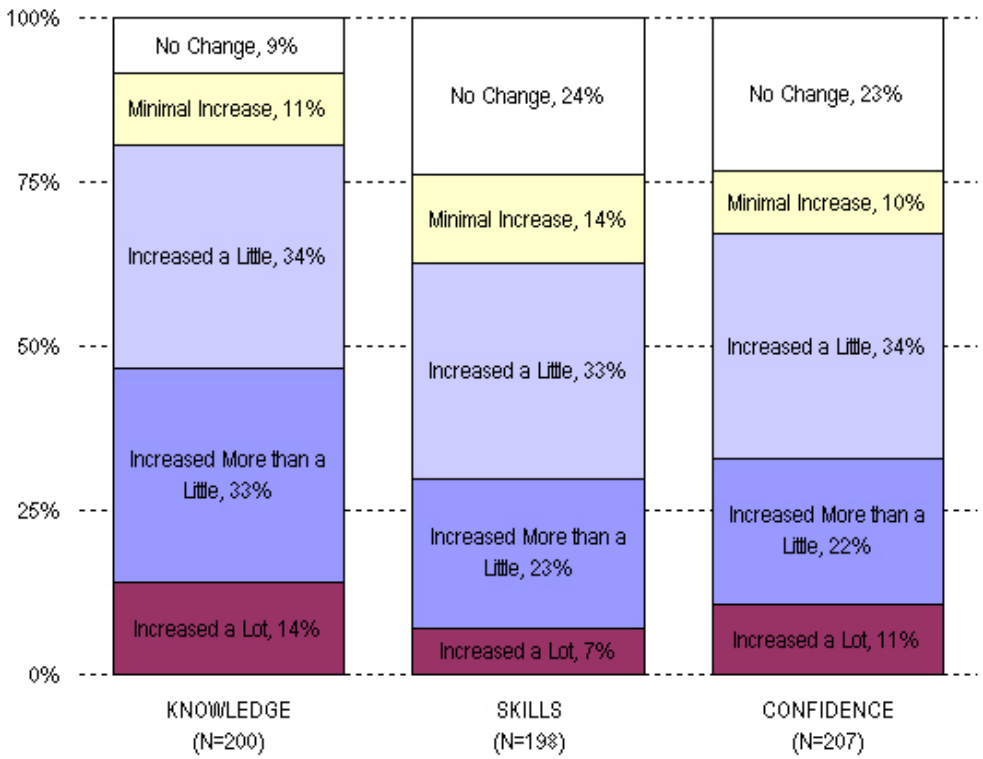

Figure 3. Ratings of increases in self-rated knowledge, perceived level of skill and confidence.

The difference between the increase in their perceived level of skill and the increase in confidence was not statistically significant ($p = 0.552$), but this difference was statistically significant for self-rated knowledge versus perceived skill level ($p = 0.000$) and self-rated knowledge versus confidence ($p = 0.008$), with knowledge showing the greatest increase.

Discussion

For the majority of learners who completed it, MHPOD facilitated an increase in self-rated knowledge, perceived level of skill and confidence related to mental health practice consistent with The Standards (National Mental Health Education and Training Advisory Group, 2002), with the greatest change occurring for self-rated knowledge. This widespread learning occurred despite variations in learners' self-rated baseline knowledge, illustrating that standardised multidisciplinary training can be provided online where a standard knowledge base is required. Learners who completed the topic surveys also largely rated MHPOD content as relevant and useful to their work. It is also interesting to note that while learners did not always enjoy certain components of each topic (such as the knowledge check questions), they could often see their utility, rating them as particularly useful.

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Although significant effort was exerted to ensure MHPOD was implemented with supports such as an on-site project team and structured blended learning opportunities, dropout from the MHPOD pilot was substantial. Access to non-completers was not part of this evaluation, and dropout can result from uncontrollable factors such as learners leaving that place of work. However, the difficulties experienced by those who did complete MHPOD may provide some indication of barriers to completion and contributors to dropout. Despite formal organisational commitment to the MHPOD pilot, many learners encountered considerable barriers to completing the online training. Lower levels of organisational support, not being provided with time release to complete the training and greater technological difficulties made a significant contribution to completion difficulties. These findings are in line with those of Lee and Choi (2011), who noted that organisational support is essential to learners' completion of online learning, and Song, Singleton, Hill and Koh (2004), who identified time constraints and technical problems as major challenges to online course completion. A large proportion of learners also faced difficulties in taking allocated time release to complete MHPOD due to work commitments and experienced interruptions that took them away from MHPOD. Lee and Choi (2011) also cited work commitments that reduce time available to complete online learning and an unsupportive study environment as significant contributors to dropout. These findings emphasise that organisations cannot simply "mandate" training but must also provide instrumental support for learning. It is of some concern that despite the pilot sites being selected in part for their commitment to ongoing learning and for their capacity to support the implementation of MHPOD, organisational barriers were still commonly reported. This is consistent with broader understandings of implementation science and the many and diverse barriers to implementation that typically operate at the organisational level (Damschroder et al., 2009). This could suggest that implementation of MHPOD at other sites could face even greater barriers to organisational support than those observed in this pilot study.

Minimal uptake of blended learning activities by the pilot sites might also have contributed to dropout and reduced potential for greater learning effects, particularly in relation to skills and confidence. Lee and Choi (2011) noted the importance of team-based learning to increase student motivation, and Childs, Blenkinsopp, Hall and Walton (2005) identified "blended teaching" as one solution to barriers common to online learning.

Nonetheless, as a result of this pilot, funding was gained to add further topics, such that MHPOD now comprises 58 topics. Other improvements were also made based on learner feedback, such as moving the knowledge check questions to the end of each topic, rather than have them available at the beginning. Based on the substantial positive learning outcomes identified from this evaluation, MHPOD was also trialled within the Australian non-government community mental health sector. MHPOD is now also available nationally for a variety of audiences via various pathways, including via The University of Melbourne, which offers a 1-year Professional Certificate in

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Mental Health Practice comprising MHPOD completion and regular group learning activities. Uptake is significant, and in June 2016 there were 26,607 learners registered to use MHPOD across all jurisdictions.

Technical difficulties with the learning management system housing MHPOD prevented us from examining more closely how many topics were actually completed, therefore, we relied on self-report data. It is thereby possible that more learners completed topics than completed topic surveys and that the completion rate might be higher than reported here. Levels of knowledge and skills were also self-assessed, and there is substantial research evidence suggesting that health professionals tend to overrate their skills and knowledge in comparison with other assessment sources (Davis, 2006; Sears et al., 2014). Use of self-assessment therefore limits our conclusions as to the effects of MHPOD on self-rated knowledge, skill and confidence. Use of objective pre-post testing (e.g., via validated standardised tests) of learners' knowledge and skills would make a useful inclusion for further evaluation of MHPOD. Notwithstanding these limitations, the relative increase in self-rated skills, knowledge and confidence pre- to post-completion of MHPOD topics suggests that use of MHPOD did facilitate positive change towards learners meeting The Standards, even if that exact level of knowledge and skill is overestimated.

Furthermore, our inability to follow-up with non-completers also limits conclusions we can make about causes of dropout. Limited uptake of blended learning activities rendered us unable to analyse the effects of participation in these activities on learning outcomes.

Despite these limitations, evaluation of the MHPOD pilot allowed the identification of a number of barriers to completion, which can be subsequently communicated to sites implementing MHPOD for their staff's professional development. It also demonstrated that completion of MHPOD topics can increase mental health professionals' perceived knowledge, skills and confidence in relation to mental health practice consistent with the National Practice Standards for the Mental Health Workforce (National Mental Health Education and Training Advisory Group, 2002).

This evaluation of the MHPOD pilot also illustrates that online learning can be effective in improving professionals' perceived knowledge, skills and confidence for professional practice across a range of professions, but it requires organisational support to facilitate effective learner participation.

Lessons

- Online multidisciplinary training can promote an increase in perceived levels of knowledge, skills and confidence for all professions when standard competencies are required.
- Organisational support is essential to learners mandated to undertake training as a condition of their employment. In particular, employees value time release to complete online training as well as general organisational support.
- Blended learning activities were found to be a valuable adjunct to online learning by the majority of those who undertook them.

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