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*Increasing child and adolescent mental health content in undergraduate occupational therapy, social work and nursing programmes: Lessons learnt.*

Authors:

[Correspondence] Mathijs Lucassen, PhD candidate, Werry Centre for Child and Adolescent Mental Health, Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, Private Bag 92019, Auckland Mail Centre, Auckland 1142, NEW ZEALAND. Telephone 0064 9 373 7599 Extension - 84938, email m.lucassen@auckland.ac.nz

Dr Iain Doherty, Director of the Learning Technology Unit, Faculty of Medical and Health Sciences, University of Auckland, Private Bag 92019, Auckland Mail Centre, Auckland 1142, NEW ZEALAND. Telephone 0064 9 373 7599 Extension 89607, email – i.doherty@auckland.ac.nz

Dr Sally Merry, Senior Lecturer in Child and Adolescent Psychiatry, Werry Centre for Child and Adolescent Mental Health, Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, Private Bag 92019, Auckland Mail Centre, Auckland 1142, NEW ZEALAND. Telephone 0064 9 373 7599 Extension 86981, email s.merry@auckland.ac.nz
Abstract:
This paper investigates the perceived usefulness of a CD-Rom based child and adolescent mental health workbook amongst educators from undergraduate nursing, occupational therapy and social work programmes and identifies the barriers to getting specialist mental health content into comprehensive degree-level courses. Specially selected educators from throughout New Zealand responded to a recent questionnaire about the workbook. Results from their feedback indicate that the workbook was generally well received and perceived to be useful. However, three main issues currently appear to be hindering embedding the workbook in the relevant undergraduate programmes: the workbook’s content did not readily integrate into the various existing courses; there are several practical and other barriers that impede the up-take and use of the workbook; and incorporating a self-directed multi-media based teaching resource into a range of degree level programmes was problematic. Recommendations are offered to assist in overcoming these difficulties, with the ultimate aim of increasing the amount of child and adolescent mental health teaching delivered at an undergraduate level.

Keywords
Nursing, occupational therapy, social work - undergraduate education, CD-Rom based teaching.
Introduction

Governments in New Zealand have long recognised the need to address the mental health of children and adolescents to prevent the occurrence of psychiatric problems in later life (Ramage, Bir, Towns, Vague, Cargo & Niumata-Faleafa, 2005). In particular, it is thought that if children and young people are unable to access mental health services, their problems maybe “more complex and difficult to manage by adulthood” (Ramage et al., 2005, p. 77). In recent years funding has increased considerably for child and adolescent mental health services (Mental Health Commission, 2001, 2004). The Blueprint for Mental Health Services in New Zealand (1998) set an access target of 3% of the population under 20 years over six months (Mental Health Commission, 1998, 2001, 2004). However progress toward Blueprint guidelines has been slow, and only 1.1% of those under 20 years of age in New Zealand were reported to have been seen by mental health services in the first six months of 2003 (Mental Health Commission, 2004).

Workforce issues have been identified consistently as being a major constraint on progress towards service provision in child and adolescent mental health (Ramage et al., 2005). For example, many District Health Boards in New Zealand fail to fill their vacant positions (Mental Health Commission, 2004), with staffing being a particular problem in the northern region of the country (Mental Health Commission, 2004). Mental health workforce shortages have also been identified as an area of concern in Australia (Gough & Happell, 2007; Productivity Commission, 2005) and the Department of Health in Great Britain (2004) reported “a significant increase in the workforce” (p. 41) is required in the British child and adolescent mental health sector.
Hence, the sector needs many more skilled health professionals in order to facilitate an improvement in the delivery of services in child and adolescent mental health. The staff that currently make-up the child and adolescent mental health workforce in New Zealand come from a diverse range of professional backgrounds, and include social workers, psychologists, nurses, medical practitioners, psychotherapists, occupational therapists and others (Khin, 2002). These professionals work in multi-disciplinary teams and their numbers (Khin, 2002) and composition (Lambie & Stewart, 2003) vary considerably across areas and teams.

Despite working in a range of child and adolescent mental health services, nurses, occupational therapists and social workers receive minimal (if any) training in the area at an undergraduate level (Peters, 2003). In addition, Peters (2003) suggested that although there is some adult mental health content taught across nursing, occupational therapy and social work programmes there is still a “lack of value placed on mental health [content] by some students and some non-mental health staff” (p. 42). Fortunately, the key stakeholders consulted in Peters (2003) study expressed an interest in increasing child and adolescent mental health training and it was thought that this teaching had the potential to increase students’ theoretical knowledge. It was also assumed that this extra training had the potential to positively influence students’ career intentions as educational experiences are thought to have the ability to change students’ preferences towards certain practice areas (Christie, Joyce & Moeller, 1985; Doyle, Madigan, Cash & Simons, 1998; Happell & Rushworth, 1999; Lewicki et al., 1999 & Wittman, Swinehart, Cahill & Michel, 1989). Thus, increased teaching in the area could make a contribution to reducing workforce shortages in the sector and by
extension potentially improve the mental health of children and young people in New Zealand.

In 2004 the Ministry of Health funded a project through The Werry Centre to provide workshops in the area of child and adolescent mental health for undergraduate nursing, occupational therapy and social work students. The aim of the Werry Centre (Department of Psychological Medicine, University of Auckland) is to improve the mental health of infants, children and adolescents in New Zealand by: providing high quality research into infant, child and youth mental health, advocating for the mental health needs of infants, children and adolescents, and supporting the infant, child and adolescent mental health workforce to provide high quality care. This funded project had two main objectives; to attempt to positively influence students’ career intentions toward the area using workshops and the results of this aspect of the project are reported elsewhere (Lucassen, Robinson & Merry, 2007) and to increase the amount of child and adolescent mental health teaching these students were to receive.

The funding for the original workshops was time-limited and to ensure that this well received child and adolescent mental health teaching could continue once the project came to an end a CD-Rom based workbook was developed in consultation with educators from various polytechnics and universities (Lucassen, Doherty & Merry, 2005) with the aim of making the initial project sustainable in the longer term. The CD-Rom workbook was published and copies were sent to all of the degree level nursing, occupational therapy and social work programmes in New Zealand. This paper investigates the success of this approach by assessing the perceived usefulness of the workbook amongst educators and identifying the barriers to getting specialist
child and adolescent mental health content into comprehensive undergraduate programmes. This research was deemed valuable as the evaluation of e-learning/resources is increasingly being viewed as a crucial issue in higher education (Oliver, McBean, Conole & Harvey, 2002; Underwood, 2004). But historically, this evaluation (if it occurred) has usually been a secondary consideration as funding has been primarily directed at the development of various e-resources (Cotton & Gresty, 2007).

**Method:**

*Design*

In October 2007 a questionnaire was distributed to all the educators that had participated in the 14 original workshops. Where an educator had left the institution another appropriate educator was identified and sent a survey. The questionnaire sought to assess the extent to which the workbook had been used within undergraduate nursing, occupational therapy and social work teaching since 2005 (i.e. after the original workshops had come to an end) and, if used, how valuable the resource had been.

*Study population and recruitment procedure:*

All the educators involved in the original study were sent the questionnaire together with the participant information sheet. Ethical approval for this follow-up study was sought and granted by the University of Auckland Human Participants Ethics Committee prior to the questionnaires being sent out (reference number 2007/Q/041). The information sheet ensured that participants knew that the results of the questionnaire were anonymous and that returning a questionnaire constituted consent.
Questionnaire and its analysis:
The questionnaire incorporated five closed questions (which included an opportunity to expand/explain responses), three statements with visual analogue scales (and spaces to elaborate on ratings); four open questions and a section for additional comments (see Appendix A). The median for each of the three visual analogue scales were converted into a percentage score and the interquartile range reported. All written responses were subjected to thematic analysis. The first author read and re-read the data several times before identifying potential themes. The second author checked the accuracy of the potential themes. Only a few discrepancies in interpretation were identified and these were resolved through discussion. We were not too rigid in making decisions about what constituted a theme, as it is thought that the importance of a theme is less dependent on the prevalence of that theme, and more dependent on whether the theme captures something important in relation to the overall research question (Braun & Clarke, 2006). Hence, for this study a theme was counted as a theme if judged to be an important theme, regardless of its prevalence in the data set.

Workbook development and content:
The workbook was based on the content from the original workshops. Written feedback from 328 students and 15 educators post-workshop helped inform the development of the workbook. To ensure that the resource was appropriately grounded in research and the content matched the needs of a diverse group of undergraduate students, three advisory groups were also consulted. The groups consisted of a group of experts in the field of child and adolescent mental health, a
A ‘matrix format’ was used to help prioritize content used in the workbook. This matrix meant that the teaching could be delivered according to the three sections: development, assessment and treatment (with a CD-Rom accompanying each section) or across disorders: conduct disorder, psychosis, anxiety, depression and attention-deficit hyperactivity disorder. The workbook was multi-media in design, with custom-made video clips, graphics, cartoons and interactive tasks. Learning exercises were designed to encourage students to integrate theoretical knowledge into ‘real life’ or clinical contexts. Suggested answers were provided for the learning exercises.

Section one of the workbook focused on child and adolescent development with a particular emphasis on attachment, temperament, cognitive and emotional development. Section two reviewed child and adolescent mental health assessment (which included simulated clinical interviews and drag and drop exercises). In this section students were asked to do things like “complete the interactive learning exercise on page 14 (CD Two). Which of the factors are advantages and which are disadvantages of using classification systems like ICD-10 and DSM-IV?” (Lucassen, Doherty & Merry, 2005, p.39). Section three addressed child and adolescent mental health treatment across the selected disorders and asked students to define the role of a nurse, occupational therapist or social worker in child and adolescent mental health services.
Results:

Of the eighteen educators contacted, seven were appointed to their positions since the workshops took place in 2004. Ten surveys were returned from eight out of the 14 educational institutions. Completed questionnaires were received from throughout the country, across the three professional groups (five nursing, three occupational therapy and two social work responses) and from both polytechnics and universities.

Nine of the ten respondents taught students about psycho-social or mental health issues. All the respondents said that their institutions’ library had a copy of the workbook and seven had used the workbook with their students. Eight participants rated the resource’s usefulness and the median was moderately favourable at 77% (100% = extremely useful as a teaching resource, interquartile range = 57% to 91%). Seven educators rated the workbook in relation to how well it corresponded to their students’ abilities and the median was rather favourable at 79% (100% = extremely well matched to my students’ abilities, interquartile range = 75% to 98%). Seven participants responded to the statement about the resource’s design and the median was also positive at 78% (100% = extremely well designed to meet student needs, interquartile range = 53% to 83%).

Five themes were identified after analysing the participants’ written responses. The first and most predominant theme was positive feedback and comments about the workbook, for example one educator stated “[The] NZ context, actors, accents – few resources available like this. Role plays with model actions and replies [all perceived strengths of the resource]”. The second theme highlighted that the workbook’s child and adolescent mental health content did not easily fit into the existing programmes,
such that “The design of our programme does not allow for much content directly related to working with children and adolescents with mental health issues” and “It is a great resource and we need to find places in the curriculum for it – not easy due to complexity of curriculum”. The third most common theme was identification and description of additional barriers to the up-take of the workbook, most notably “[I] Did not know about it [the workbook], “Time!!!” and not always having access to a computer with a CD drive. The fourth theme acknowledged that it was challenging for educators to incorporate a different approach to teaching into their existing programmes, for example one educator commented “due to the fact [that] it was predominantly [a] self-directed resource we weren’t able to use the entire resource”. Finally, the workbook was perceived to be useful for students about to go on child and adolescent mental health placements or for staff new to the area. For example one educator said “I have given the resource to students who are going to specialist services in mental health who work with youth” and another responded “Both student feedback and new staff starting in the area of CAMHS [Child and Adolescent Mental Health Services] have found this resource very useful”.

Discussion –

Learning technologies are increasingly being employed in all contexts including higher education (Cotton & Gresty, 2007) and the use of computer technology has expanded and grown in undergraduate health and social work education (Seabury & Maple, 1993; Washer, 2001). We embraced computer-aided learning because it had the potential to be innovative, exciting and educationally beneficial and because it had the capacity to sustain a time-limited project like ours. It also allowed students to learn at their own pace, at times and places of their choosing – so that they were in
control of their learning (Race, 1994). Through evaluating the CD-Rom workbook we have shown that it was perceived to be moderately useful to educators from eight out of the 14 institutions where the original workshops took place. It was also pleasing to hear that a copy of the workbook was available in all eight surveyed institution’s libraries, which means at the very least the workbook is freely available to students motivated to learn more about child and adolescent mental health. Interestingly, despite the fact the workbook was initially developed for the campus-based teaching of undergraduate students, educators responding to the questionnaire commented the workbook was especially useful for students that were about to go on placement or for staff new to the area of child and adolescent mental health.

The results of the questionnaire highlighted three main barriers or issues that currently hinder the up-take of this resource in undergraduate nursing, occupational therapy and social work programmes. Firstly, the content did not readily integrate or ‘fit’ into the various existing programmes. Therefore further integrating the workbook into a range of nursing, occupational therapy and social work programmes would require additional time and extra effort to ensure the content was included in undergraduate education. But educators are pressed for time and they need to prioritise their efforts. As much as the authors of this paper would like to ensure more child and adolescent mental health content is delivered at an undergraduate level, at present there are no requirements that would ensure this content was included. This is understandable considering that the various courses are three to four years in duration and specialist content is necessarily viewed as less important than core skills and knowledge.
The second major barrier was practical and other issues that hinder the up-take of the workbook. One such issue is educators not always having access to a computer with a CD drive. If educators experience technological or practical issues like this then by extension it is highly likely that their students will also face similar challenges. For example, Washer (2001) noted that across educational institutions there are never enough computers to match student demand. Another major barrier was educators not knowing about the resource and this is not surprising given that seven educators were appointed to their positions after the initial workshops had ended. Because there is a relatively rapid turn-over of staff in the field something as simple as a letter with practical suggestions about how to best use the resource would probably help to prompt educators to re-visit using the workbook.

The third barrier for educators was incorporating a different approach to teaching as the workbook was a self-directed multi-media teaching resource, whilst most programmes appear to predominantly involve face-to-face group-based teaching. The fact that the workbook was self-directed meant that it did not naturally lend itself to group based teaching, but as indicated earlier by educators this approach to teaching was probably extremely useful for students about to go on a placement in the field or staff new to the area of child and adolescent mental health.

This study had several limitations; most notably that we did not receive feedback from all the educators that were involved in the original workshops (i.e. responses were not received from six institutions) and the educator’s students were not surveyed for their feedback. In addition, despite the claims of considerable benefits to both students and educators if computer assisted learning strategies are adopted (Cotton &
Gresty, 2007) a fundamental question that we, like many others (Cotton & Gresty, 2007), did not address remains – did the technology when adopted actually enhance students’ learning? Hence, in addition to trying to ensure the workbook is integrated into various undergraduate nursing, occupational therapy and social work programmes in New Zealand, the future focus of evaluations like ours should also determine the student experience and learning that occurs as a result of using a CD-ROM workbook.

This is something that might be achieved through utilising the design research approach championed by Thomas Reeves and colleagues (Herrington, Oliver & Reeves, 2002; Reeves, Herrington & Oliver, 2005). The appropriateness of design research for evaluating a resource of this type is given in the fact that design research focuses on complex problems critical to higher education and involves long-term engagement with a commitment to theory construction in order to improve learning (Blake & Doherty, 2008). The measurement of the improvement is the achievement of the desired learning outcome(s) (Blake & Doherty, 2008). However, a design research approach to educational research requires a considerable commitment from researchers and participants over an extensive period of time (Blake & Doherty, 2008) and as a methodology it is still not widely employed (Reeves, Herrington & Oliver, 2005).

Four main recommendations have emerged from this study, based on educator feedback, they are that:

1. The Werry Centre endeavours to remind relevant educators in nursing, occupational therapy and social work about the resource on an annual basis
and that it continues to offer free copies of the workbook to interested educators, as this will promote and encourage the use of the book.

2. The Werry Centre could develop some practical suggestions to assist educators in integrating the resource into the various undergraduate programmes and offer one-to-one support for educators interested in discussing how to incorporate the workbook into their teaching.

3. The Werry Centre could also up-date, modify and add some additional information to the workbook and investigate alternative and more flexible methods of delivering its content.

4. Certain specialist content (such as child and adolescent mental health) is prioritised for compulsory inclusion in undergraduate nursing, occupational therapy and social work programmes as certain areas need more focused attention.

Conclusion –

A recent survey of nursing, occupational therapy and social work educators established that the child and adolescent mental health workbook was generally well received and perceived to be somewhat useful for most of the undergraduate programmes involved with the original workshops. However, three main issues currently appear to be hindering getting the workbook successfully embedded into the relevant courses in New Zealand. Increasing the amount of child and adolescent mental health teaching delivered in New Zealand is an important component of any strategy to address the chronic shortage of suitably qualified health professionals willing and able to work in the field of child and adolescent mental health which as an area has been historically under-resourced.
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References


Appendix A - QUESTIONNAIRE ABOUT THE UP-TAKE OF “CHILD AND ADOLESCENT MENTAL HEALTH IN AOTEAROA/NEW ZEALAND: AN OVERVIEW.”

YOUR EDUCATIONAL INSTITUTION: ___________________________________________

PROFESSION (please circle): Nursing  Occupational Therapy  Social Work

DATE: _______________

In 2004 and 2005 a teaching resource on child and adolescent mental health was developed through the Werry Centre (Department of Psychological Medicine, University of Auckland) and this project was funded by the Ministry of Health as a workforce development initiative. The teaching resource was disseminated throughout the country at the beginning of the 2005 academic year. We are interested to learn more about the up-take of the resource and how/if it has been useful. Please read the attached “participant information sheet” before completing this anonymous questionnaire.

1. Are you involved in teaching students about psycho-social issues or mental health?
   - [ ] Yes  [ ] No

   If yes, please explain your role. For example, programme coordinator, lecturer or other:

2. Are you involved in teaching students about infant, child or adolescent health and development?
   - [ ] Yes  [ ] No

   If yes, please expand:

3. Has your department or library got a copy of the teaching resource [referenced below]:


   - [ ] Yes  [ ] No

   If yes, how did you hear about it (or get a copy of it)?
4. Have you ever used this teaching resource with your students?

☐ Yes ☐ No

If yes, please explain what content was used:

________________________________________________________________________

________________________________________________________________________

If no, please provide some reasons for not using the resource:

________________________________________________________________________

________________________________________________________________________

5. Please mark (with an “X”) your responses to the statements on the continuums below, if
the statement is not applicable please mark the continuum “N/A”.

- I have found the teaching resource “Child and adolescent mental health in Aotearoa/New Zealand: An overview”:

Not at all useful as a teaching resource  ____________________________
Extremely useful as a teaching resource

Please provide some explanation for your response:

________________________________________________________________________

________________________________________________________________________

- I have found the teaching resource “Child and adolescent mental health in Aotearoa/New Zealand: An overview”:

Badly matched to my students’ abilities  ____________________________
Extremely well matched to my students’ abilities

Please provide some explanation for your response:

________________________________________________________________________

________________________________________________________________________

- I have found the teaching resource “Child and adolescent mental health in Aotearoa/New Zealand: An overview”:

________________________________________________________________________

________________________________________________________________________
6. In your opinion what are the current strengths or advantages of the teaching resource?

7. In your opinion what are the current limitations or disadvantages of the teaching resource?

8. If a new edition was developed what improvements would you like to see?

9. If a new edition was developed would you or your institution purchase a copy/copies if it were available?
   [ ] Yes  [ ] No

10. In your opinion what are some of the barriers/limitations impacting on your up-take of the teaching resource?
11. Please add any additional comments here about this teaching resource and its up-take:


THANK YOU – for completing this questionnaire, please now post it using the pre-paid self-addressed envelope.