



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

University of Wollongong  
Research Online

---

Faculty of Social Sciences - Papers

Faculty of Social Sciences

---

2002

# Occupational therapy research priorities in mental health

Michelle Bissett

*University of Western Sydney*

Anne Cusick

*University of Wollongong, [acusick@uow.edu.au](mailto:acusick@uow.edu.au)*

Lynne Adamson

*Deakin University*

---

## Publication Details

Bissett, M., Cusick, A. & Adamson, L. (2002). Occupational Therapy Research Priorities in Mental Health. *Occupational Therapy in Health Care*, 14 (2), 1-19.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:  
[research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

---

# Occupational therapy research priorities in mental health

## **Abstract**

This study used a Delphi survey method to identify research priorities of occupational therapists working in mental health. Twenty-two subjects were initially surveyed for their suggestions regarding research topics they thought were important. These 22 subjects represent a random sample of 12.4% of national OT-Australia membership of occupational therapists working in mental health. After three "rounds" of the Delphi methodology, consensus research priorities were obtained in six areas: research of value to clients (5 topics); research of value to occupational therapists working in mental health (4 topics); research related to providing community care for clients (2 topics); research that facilitates health promotion and disease prevention (6 topics); research that is of value to the profession of occupational therapy (6 topics); and research that is of value to occupational therapy education (4 topics). Implications for occupational therapy practice and research are discussed.

## **Keywords**

priorities, research, health, therapy, mental, occupational

## **Publication Details**

Bissett, M., Cusick, A. & Adamson, L. (2002). Occupational Therapy Research Priorities in Mental Health. *Occupational Therapy in Health Care*, 14 (2), 1-19.

# Occupational therapy research priorities in mental health

This paper is an earlier version of the paper that was ultimately published as follows:-

Bissett, M., Cusick, A. & Adamson, L. (2002). [Occupational therapy research priorities in mental health](#). *Occupational Therapy in Health Care, 14 (2), 1-19.*

*Readers are asked to consult the published version and to cite the published version of this study*

## **Occupational therapy research priorities in mental health**

**Michelle Bissett, Anne Cusick and Lynne Adamson**

Abstract: This study used a delphi survey method to identify research priorities of occupational therapists working in mental health. 22 subjects were initially surveyed for their suggestions regarding research topics they thought were important. These 22 subjects represent a random sample of 12.4% of national OT-Australia membership of occupational therapists working in mental health. After three 'rounds' of the delphi methodology, consensus research priorities were obtained in six areas: research of value to clients (5 topics); research of value to occupational therapists working in mental health (4 topics); research related to providing community care for clients (2 topics); research that facilitates health promotion and disease prevention (6 topics); research that is of value to the profession of occupational therapy (6 topics); and research that is of value to occupational therapy education (4 topics). Implications for occupational therapy practice and research are discussed.

Keywords: delphi survey; practitioner views

---

Footnote: Michelle Bissett, BAppSc(OT) is an occupational therapist in the Macarthur Health Service, in Campbelltown Australia. Anne Cusick, BAppSc(OT), MA(Psych), MA (Interdisc Stud), PhD is Associate Professor at the Faculty of Health , University of Western Sydney at Campbelltown, Australia. Lynne Adamson, BAppSci(OT), MAppSc(OT), GradCertUnivTeach&Learn is Senior Lecturer in the Faculty of Health Sciences, University of

Sydney. This study was funded by a University of Western Sydney Foundation Researcher Grant awarded to the second investigator. The authors would like to thank OT-Australia for the organisation's support which enabled the conduct of the study through the national office.

## **Introduction**

Research related to mental health in occupational therapy is scarce (Craik, Austin, Chacksfield, Richards, G. & Schell, 1998; Mountain, 1997). Yet therapists need research to effectively and efficiently meet the needs of consumers and administrators using evidence as a basis for practice (Taylor, 2000). To be accepted and used in the practice setting, research needs to be based on clinical need (Bohannon & Le Veau, 1986). Occupational therapists therefore have a key role in identifying what research is needed to help them justify clinical performance and provide high quality service to clients. One way to share views about what is needed in research, is for occupational therapists themselves to generate research topics (Waine, Magill-Evans & Pain, 1997). This study uses a delphi survey technique to first elicit the views of occupational therapists working in mental health regarding research topics they think are important; and second, to identify those research topics which occupational therapists consider are priorities.

## **Literature Review**

The profession of occupational therapy has its historical beginnings in psychosocial intervention (Barris, Kielhofner, & Hawkins Watts, 1983). From a therapy based more on "art" than science, occupational therapy practice has developed into a profession which aims to use evidence as a foundation for the use of occupation (Taylor, 2000). For many years now however, there has been recognition that more research is needed into occupational therapy in mental health (Craik et. al., 1998; Gibson, 1984). The small amount of occupational therapy mental health literature currently available has limitations, which were identified by Mountain (1997). These included: a

diversity of topics with little repetition or focus on “traditional” occupational therapy practices; little research focussing on occupational therapy with people who have chronic or long term mental health problems; an emphasis on description of issues or programs rather than research or evaluation; a frequent focus on topics of dementia, work rehabilitation, community mental health, and forensic psychiatry; and few articles on activity or occupation (Mountain, 1997).

The need for more research in mental health occupational therapy has been identified not only by authors who publish in scholarly journals, but also by professional associations who represent and consult with their members. In the United Kingdom for example, the College of Occupational Therapists, established a Mental Health Project in the mid to late 1990s to develop a strategy for research, education and practice in mental health which would lead to improved service delivery for people with mental health problems. This group stated that “the need for more research was identified as a major issue for the profession” (Craik et. al., 1998, p. 391).

The need for more occupational therapy mental health research is particularly important now, as this specialty appears to be experiencing a period of uncertainty: fewer therapists elect to work in this area when compared with “physical” settings (Trickey & Kennedy, 1995); and changes in service delivery patterns have raised questions about the long term future of occupational therapy practice in mental health (Paul, 1996; Sladyk, 1994). In a climate where “extinction” of this speciality area is openly discussed (Paul, 1996; Sladyk, 1994) there is an urgent need for more research to support the evidence requirements of those therapists who are working in the field. But more research is not necessarily better. It is only better if the research is clinically useful- and to be clinically useful, research must be relevant to practice (Bohannon & Le Veau, 1986; Nappier, Stanfield, Bennett, & Cowan, 1990). Consequently, it is important to consider mechanisms to provide researchers who are active in mental health with information about what occupational therapists themselves believe is important and of value. One way to do

this that has been extensively used in health professions is the development of “research priorities”.

### *Development of research priorities*

The development of research priorities is a means of producing a professional research strategy where research is encouraged in particular areas which have been identified through a systematic method as important (Abbott, Diomedes, Johnson & MacLraith, 1994; Erler & Thompson, 1995; Fitzpatrick, Sullivan, Smith, Mucowski, Hoffman, Dunn, Trice & Grosso, 1991; Forrest, Lyons, Bross, Gitlin & Kraemar, 1995; Hinds, Quargnenti, Olson, Gross, Puckett, Randall, Gattuso & Wiedenhoffer, 1994; Walker, 1994). When clinician perceptions are used to identify what research areas are important, then this can ensure the development of professional research strategies which are clinically relevant (Fitch, 1996; Tighe & Biersdorff, 1993).

A range of methods can be used to establish research priorities. Methods used in the health professions include: cross-sectional surveys (Stetz, Haberman, Holcombe & Jones, 1995); literature reviews and interviews of relevant health professionals (Fitch, 1996); review of research submissions to funding bodies over a period of time (Rix & Cutting, 1996); and group discussion (Tighe & Biersdorff, 1993). The most commonly used method is the delphi survey (Adler & Ziglio, 1996; Linstroene & Turoff, 1975; Williams & Webb, 1994). In a review of the Cumulative Index of Nursing and Allied Health (CINAHL) database for the years 1990-1999 we identified 30 research priority studies which had used the delphi method in a wide range of areas including nursing, physiotherapy, social work, dental hygiene, and occupational therapy. A description of the method and its previous application in occupational therapy is presented later in this article.

Development and acceptance of research priorities allows professions to promote research into specified or target areas and to address the problem of scattered research interests. The nursing profession is a good example of this, with a large number of research priority studies

which cover a wide range of speciality practice areas including: perioperative nursing (Abbott, et al, 1994); nursing staff development (Bartu, McGowan, Nelson, Ng & Robertson, 1993); clinical nursing (Bartu, Nelson, Ng, McGowan & Robertson, 1991; Hollis, Davis & Reeb, 1995); acute care nursing (Cronin & Owsley, 1993); nurses working with patients with multiple sclerosis (Gulick, 1996); paediatrics (Schmidt, Montgomery, Bruene & Kenney, 1997); paediatric oncology (Hinds, et al, 1994); burn nursing (Marvin, Carrougner, Bayley, Weber, Knigthon, & Rutan, 1991); public health (Misener, Watkins & Ossege, 1994); orthopaedics (Salmond, 1994); and midwifery (Sleep, Bullock, & Grayson, 1995). Research priorities have also been established in mental health nursing (Davidson, Merritt-Gray, Buchanan & Noel, 1997). In the nursing study by Davidson et.al., (1997), nine categories of research topics were identified, with four of these rated highly. These were: preparation of helpers, service systems, caregiver needs and major behaviour problems. The findings of this mental health nursing research priorities study (Davidson et. al., 1997) were used to provide direction for researchers, funding agencies and policy developers.

#### *Research priorities in occupational therapy*

Research priorities are not unknown in occupational therapy, although they are infrequent when compared to nursing literature, and they certainly do not cover the wide range of practice areas in the profession. In 1987, six general priorities were identified for occupational therapy research in the United States of America (Office of Professional Research Services, 1987). These priorities were clustered under the themes of: theory development, development of evaluation and measurement instruments, identification of effectiveness of occupational therapy services, refinement of clinical reasoning, increasing community understanding of occupation, and identification and development of the most appropriate research methods for the profession. More recently, specific studies have appeared which present research priorities of occupational

therapists in particular specialty areas (Daly, Adamson, Chang & Bell, 1997; Davis & Bannigan, 2000). One of these related to mental health (Davis & Bannigan, 2000).

#### *Research priorities in mental health occupational therapy*

Davis and Bannigan (2000), involved occupational therapists in mental health to develop research priorities in this area. The impetus for the study came from the College of Occupational Therapists in the United Kingdom, where it was seen as a way to “guide and support research activity in mental health” (Davis & Bannigan, 2000, p.98). The study process involved the investigators engaging participants at an occupational therapy mental health conference (n=111) in a session where they were asked to identify one intervention they perceived required further research in mental health. These therapists, who were primarily senior therapists who worked in either community or public health settings, wanted research related to “occupational therapists core values and skills” (p. 103), with activity/ occupation , groupwork and occupational performance skills accounting for almost 60% of requested research. Participants were also asked to justify why they selected certain interventions for research with core skills, professional status, effectiveness issues, and client centredness being the four reasons identified. This study, although not rigorous in terms of traditional research approaches, was an important step in presenting contemporary clinician views about areas requiring research investigation in mental health occupational therapy.

#### *The delphi approach to generating research priorities*

The other study into research priorities of occupational therapists (Daly et. al., 1997) used the delphi method to explore the views of clinicians working in rural areas of Australia. This study required participants to generate research themes or topics that were then collated, were sent back to participants for ranking. This approach is a usual delphi procedure (Rudy, 1996) although

there are a number of forms for the approach. Variations occur in delphi procedures depending upon the aim of the particular study. Despite this six characteristics are shared by all delphi techniques. These are: (a) the procedure is conducted in a series of survey “rounds”; (b) a “panel of experts” is used as the respondents with their expert status being determined by the aim of the project; (c) there is an attempt made to produce consensus of results; (d) anonymity of the panel and their statements are guaranteed; (e) there is use of iteration (repetition) and controlled feedback (respondents are given some feedback about their own and others responses); and (f) the members of the panel do not meet in face-to-face discussion (Beretta, 1996; Everett, 1993; Goodman, 1987; McKenna, 1994; Sumsion, 1998; Williams & Webb, 1994).

Use of the delphi method in occupational therapy is relatively new. In 1995, Dawson and Barker used the technique to identify the roles and training needs of occupational therapists working in the area of hospice and palliative care. Occupational therapists have used the technique to plan a research project based on occupational therapy roles after injury (Stokes, 1997). As previously noted, the delphi technique has only been used once to establish research priorities in occupational therapy for rural occupational therapists in Australia (Daly, et al, 1997). The present study applies the method used in the Daly et. al., study to identify research priorities of occupational therapists working in mental health.

## **Methodology**

This study used the delphi technique to generate specific research topics that were viewed as priorities for occupational therapists working in the area of mental health in six key areas of interest: research of value to clients; research of value to occupational therapists working in mental health; research of value to providing community care for clients; research of value to

health promotion and disease prevention; research of value to the occupational therapy profession; and research of value to occupational therapy education.

The study replicated and expanded on the design used by Daly et. al. (1997). Approval to conduct the study was obtained from the university human ethics committees of participating researchers, and the support and approval of the national office of OT-Australia (the national professional association of occupational therapists in Australia) was also gained to conduct the study.

*Design:* The approach for this study was the “policy delphi” which uses a panel of “expert” participants to define and differentiate views (Crisp, Pelletier, Duffield, Adams & Nagy, 1997). In this study the “experts” were those occupational therapists who worked in mental health. As we were interested in the perceptions of “ordinary” occupational therapists we decided to use a random national sample. In this way we anticipated a wide range of views from people who may not usually be consulted as practice experts on issues but whose views about what is needed in research are critical as they are the end-users of any research generated. Their views were the “expert” opinions we needed.

The aim of the policy delphi is not primarily consensus but the production of results upon which key stakeholders (for example professional leaders, administrators) can make decisions. Essentially, respondents serve as advisors, while remaining anonymous and being able to respond to previous contributions through iteration and controlled feedback (Crisp, et. al., 1997; Jairath & Weinstein, 1994). The number of rounds was not predetermined by the investigators prior to data collection. The six delphi technique characteristics described in the literature review section of this article were also maintained.

*Sample:* To be included in the sample participants had to be qualified occupational therapists (degree or diploma), members of the Australian national professional occupational therapy association (OT-Australia) and currently working in Australia in mental health. This study follows the assumption of both Rudy (1996) and Abbott, et. al., (1994) who indicated that 'experts' involved do not necessarily have to have research experience, but rather they are considered informed individuals in the area under study. Random sampling of the national database of OT-Australia allowed inclusion of a wide range of geographic and clinical sites. At the time of sampling 4678 therapists were members of the national professional association. Of these, 170 identified themselves as working in mental health.

A random sample of 40 of the 170 therapists was invited to participate in the study. On return of the responses, it became apparent that there were inaccuracies in the clinical coding of the database as some of the topics generated by therapists did not reflect mental health practice (e.g. paediatric topics generated). Consequently all completed surveys were re-coded by the research team giving a total of 21 participants who were occupational therapists working in mental health (a response rate of 52.5%). This represents 12.5% of the estimated total national population of occupational therapists working in mental health who are members of the national professional association.

*Procedure:* The study comprised three survey 'rounds'. These rounds aimed to generate, refine and prioritize topics in mental health occupational therapy. First round surveys were numerically coded so that respondents could be recontacted for subsequent rounds. All mail-outs were performed by project assistants at the national professional office so responses to investigators were always anonymous. Reminder letters were sent to non-respondents after due return dates. After each round, only those who had responded were sent the next round, this was in keeping with the aim of the study which was to generate a consensus of research priorities. Thankyou

and update letters were sent to respondents after each round, and a summary of findings was sent to all round one participants (the whole original sample) at the completion of the study.

*Instruments:* The first round survey consisted of two sections. The first obtained demographic data (age, years of clinical experience, level of research experience etc). The second section asked participants to identify five questions or problems that they believed needed research in the six areas of: patients/clients; occupational therapists in the mental health specialty area; community care; health promotion and disease prevention; the occupational therapy profession; and occupational therapy education. Participants were directed to draw on their clinical experience to address these questions, and a series of five blank lines was provided in each section for participants to write their topic or problem suggestions.

All legible topics from the first round survey were used as items in the second round survey. Repetitive topics were deleted so the topics appeared only once in each section. The survey was structured under the six areas noted in the first round. The number of items for each section was: patients (n=64); therapists in mental health (n=66); community care (n=57); health promotion and disease prevention (n=54); occupational therapy profession (n=64); and occupational therapy education (n=59). Each section of the survey was printed on different colour paper to help respondents focus on the area of interest which the research topic related to (e.g. research of value to the profession one colour while research of value to occupational therapy was another colour). Within these areas, therapists were asked to rate each problem or question on a seven point Likert scale (1 = low importance to 7 = high importance), to indicate their view about the importance of the question for occupational therapy in mental health. This size scale was used as it has been recognised that seven point scales are considered to offer a “more sensitive means of assessing respondents’ perceptions of the importance of each topic” (Sleep, et al, 1995, p. 442).

The third round survey comprised those items which had been rated as extremely important (6 or 7) by the group in round two. This was identified by those items which had a median score of 6 or 7. This decision was based on several factors including: (a) median scores are used when collating ordinal data; (b) this method was used in the precedent delphi study (Daly & Chang, 1996; Daly, et. al., 1997). The third round survey used the same six sections and use of colours. Only topics rated with a group median of 6 or 7 in the second round were included. The number of items for each section was: patients (n=10); therapists in mental health (n=9); community care (n=2); health promotion and disease prevention (n=10); occupational therapy profession (n=9); and occupational therapy education (n=10). Participants were asked to prioritise topics presented again on a seven point scale (1=low importance, 7 = high importance) This survey differed from the second round survey as it provided participants with the second round group median for each topic as well as their own individual rating to the round two topics. This strategy was used so therapists could compare their view with that of the group as a whole, thus increasing informed decision making (Duffield, 1993). This feedback information also helped in generating consensus views.

**Data analysis:** Quantitative analysis was performed on the first round demographic data which was entered into the computer software package SPSS (Statistical Package for the Social Sciences) for descriptive statistics that profiled subject characteristics. The topic suggestions in the first round were used to produce the second round questionnaire. To maintain consistency in the second round questionnaire, research questions posed by therapists were converted into topic statements. The third round questionnaire was a direct transcription of the second round responses. Respondents' Likert values for each item in round two and three were entered into the SPSS program. Using statistical analysis, descriptive statistics for all topics were produced. The median scores for each topic were used to identify highly rated topics. The median scores

provided greater differentiation amongst items and were also used in the Daly et. al. (1997) study.

## **Results**

*Participant demographic profile:* Table 1 presents demographic information for participants in all three rounds. It is apparent that numbers of participants to each round decreased, with 66.6% of respondents involved in round two, and 78.6% of round two respondents involved in round three (which is 52% of the original round 1 sample). Respondents were overwhelmingly female, the average age and age range changed little over the course of the survey rounds. The average number of years in which participants had worked as occupational therapists changed slightly over the three rounds to more experience (19 years as against 16.7), but the range varied little. The average and range of years of participants working in mental health changed little over the three survey rounds. This was also the case for the number of years participants had worked in their current position.

Most occupational therapists in mental health worked in community based settings, with close to half in each round. The next most common setting was the hospital with close to a quarter of participants in rounds one and three, and close to a third in round two. A few therapists worked in university settings, and one in private industry. Most of the participants had bachelor degree professional entry qualifications, and most had postgraduate qualifications of some sort, although only one of these was a research qualification. The overwhelming majority of participants in all rounds has recent involvement in quality assurance (QA) projects, while a substantial proportion of the participants in all rounds identified that they had recent research involvement (57% round one; 50% round two; 36% round three).

*Priority Topics:* The last survey round of the study resulted in a total of 27 research priorities in mental health in six areas. Each of these is now presented.

*Research that is of value to patients:* Participants generated 64 responses in the first round. Ten topics were rated as important in the second round. In the final round, five were rated as research priorities. There were:

- Effectiveness of occupational therapy intervention in mental health
- Coping styles / strategies of mentally ill clients
- Significant factors in preventing relapse in patients with chronic schizophrenia
- Early psychosis - impact of intervention
- Identifying the most effective means to achieve successful re-engagement in work/occupations and re-integration into community living

*Research that is of value to occupational therapists working in the area of mental health:* Participants generated 66 responses in the first round. Nine topics were rated as important in the second round. In the final round, four were rated as research priorities.

- Strategies to attract occupational therapists to mental health and career motivation of occupational therapists
- Role of occupational therapy in current psychiatry services
- Career structures for mental health occupational therapists
- contribution of meaningful occupation to experiencing improvement in functioning and/or recovery - consumers perspective

*Research that is of value to you in providing community care for your patients:* Participants generated 57 responses in the first round. Only two topics were rated as important in the second round. Both were rated as research priorities in the final round.

- Importance of purposeful activity
- Most effective methods for collaborating with consumers (for goal setting and intervention)

*Research that is of value to you in facilitating health promotion and disease prevention:* Participants generated 54 responses in the first round. Ten topics were rated as important in the second round. In the final round six were rated as research priorities.

- Establishing whether children with mental illness have an increase incidence of mental illness as adults
- Value of early intervention / school programs / educational programs on the early detection of psychiatric issues
- Benefits of meaningful occupation in maintaining health and well being
- Investigating why health funds don't offer more support for occupational therapy intervention
- Occupations that can effectively replace a work role for people who are not employed
- Studies that look at links between occupation and health

*Research that is of value to the occupational therapy profession:* Participants generated 64 responses in the first round. Nine topics were rated as important in the second round. In the final round six were rated as research priorities.

- General outcome studies (demonstrating the effectiveness of occupational therapy interventions)

- Outcome studies relate to occupational therapy practice (all areas)
- Cost effectiveness of occupational therapists in mental health practice
- Therapeutic value of occupation
- Effectiveness of occupational therapy services
- Demonstration of outcomes achieved through occupational therapy intervention in mental health

*Research that is of value to occupational therapy education:* Participants generated 59 responses in the first round. Ten topics were rated as important in the second round. In the final round four were rated as research priorities.

- Methods for more effective collaboration between occupational therapists, consumers and carers
- Application of theory with experienced clinicians currently in the work field
- Identifying the best way to train occupational therapists in mental health practice given the increase generic nature of practice
- Effectiveness of occupational therapy education in providing skills required in the workforce

## **DISCUSSION**

The study used a policy delphi design to identify and prioritize research topics of occupational therapists working in mental health. Participants prioritized research topics of value the six areas of patients, occupational therapists in mental health, community care, health promotion and disease prevention, occupational therapy profession and occupational therapy education. The study had a number of features which may contribute to its usefulness as a sound source of

information regarding occupational therapist views of research priorities in mental health. These are now presented.

The present study sample of 21 therapists was 12.4% of the estimated national population of occupational therapists working in mental health who were members of the professional association. This population percentage corresponds well with larger studies in nursing which have used larger sample sizes but smaller percentages of professional members (Hatton & Nunnelee, 1995; Abbott, et. al., 1994; Salmond, 1994; Marvin, et. al., 1991). It is also larger than the sample used in the precedent study, which had a group of eight occupational therapists (Daly et.al., 1997).

Response rates for the second and third rounds were 67% and 79% respectively. This is a strength of this particular study, as poor response rates and major dropouts with each following round are common features of the technique (Cooney, Stebbings, Roxburgh, Mayo, Keen, Evans & Meehan, 1995; Hatton & Nunnelee, 1995; Rudy, 1996). As previously noted the study also maintained high response rates in the second and third rounds giving a total attrition rate of 47%. These findings compare well with other studies which have displayed vast ranges in response rate, ranging from 8% (Cooney, et. al., 1995) to 100% (Daly, et. al., 1997) and attrition rates ranging from 0% (Daly, et. al., 1997) to 72% (Salmond, 1994). In relation to previous occupational therapy research priority studies, Daly, et. al., (1997) maintained 100% while Davis and Bannigan (2000) were unable to report their response rate. It should, however, be noted that both previous studies did not randomly sample to recruit participants.

The use of an expert panel is also proposed to increase the content validity of the findings. As participants in the study were representative of the group (they were randomly selected), they had knowledge of the area under study (as they were therapists working in mental health and could put forward views about what they thought was important as workers in the area) thus content validity can be assumed (Goodman, 1987). The use of a random national sample was

specifically designed to produce a genuine population with all the diversity in setting, experience and views may entail. Consequently results may be considered representative of research priority topics of occupational therapists working in mental health. The sample did, however report a higher level of recent research activity than other studies have found when investigating research involvement (e.g. Waine, Magill-Evans & Pain, 1997; Cusick, Franklin & Rotem, 1999), where only a third to a quarter of therapists identify research activity. In this study half the participants identified recent research activity in rounds one and two, while just over a third did so on round three- this is higher than would be normally expected. This may be explained in part by a substantial minority of therapists in each round identifying that they worked in university settings (round 1, 19%, round 2, 14%, round 3 9%), and also by the high number of participants who held postgraduate qualifications (although only one of these was a research degree, the remainder were coursework). It may also be that those therapists who had recent research involvement were more interested in research priorities and therefore chose to participate in the study, while those who had little recent involvement did not, on the whole participate.

Review of previous delphi studies has demonstrated that the method is time consuming (Hatton & Nunnelee, 1995; Abbott, et. al., 1994; Heffline, Clark, Hooper, Mamaril, Miller, Norris, Poole, Summers & Younger, 1994, Hinds, et. al., 1994; Marvin, et. al., 1994). All of these studies demonstrated a minimum of one year to complete the delphi process. This was also the case in this study which took over a year to complete.

The topics generated in this study ranged across a wide field of interest. A number of topics would be of interest to any practitioner working in mental health (e.g. preventing relapse in schizophrenia). There were many others that clearly focussed on occupational therapy. When considering all 27 priority topics from the third round using key words to indicate similar and different topics, there appeared to be five themes in the topics presented. These were:

- (1) Research related to mental health issues and topics specifically related to diagnostic groups (e.g. “coping strategies for mentally ill clients”),
- (2) Research which examines the effectiveness of occupational therapy intervention (e.g., “general outcome studies”)
- (3) Research which explores the value of occupation or meaningful activity in maintaining well being (e.g. “importance of purposeful activity”, “therapeutic value of occupation”),
- (4) Research regarding strategies for collaboration with consumers (e.g. “methods for more effective collaboration between occupational therapists, consumers and carers”), and
- (5) Research into mental health occupational therapy practitioners (e.g. “attracting occupational therapists to mental health”, “career structure of mental health occupational therapists”).

These findings suggest that, in comparison with the Davis and Bannigan (2000) study, occupational therapists in mental health were less concerned about groupwork or specific interventions. This may be because they were not specifically asked to generate issues related to interventions which Davis and Bannigan did. But like the Davis and Bannigan (2000) study counterparts, they raised topics related to professional status (the topics about occupational therapists themselves can be considered to relate to this), effectiveness issues, client-centredness, activity/occupation, core values and skills.

### **Implications of the study**

The findings of this study can be used in a number of ways. As previously indicated in this article, there is an urgent need not only for research in mental health to be conducted and published, but also for this research to be useful. This means that the problems, issues and topics investigated by researchers need to be of relevance to occupational therapists in mental health. The research topics generated through this study provide a systematically derived source of information about the things occupational therapists themselves think should be researched. By

following up these topics, researchers will be assisting occupational therapists in this specialty area, and in turn are assisted by having some direction about what is important in the discipline(Lynn & Layman, 1996). There is also the hope that what research activity there is in mental health will have some focus if it is targeted to identified priorities, rather than being scattered across wide ranging topics (Cronin & Owsley, 1993; Erler & Thompson, 1995; Heffline, et.al., 1994). Researchers can also seek to involve occupational therapists in studies which address these topics.

In addition to guiding researcher activity, the findings can also be used by professional and mental health groups to direct research involvement in particular topics. They can do this by linking funding for research to priority topics (Rudy, 1996). Apart from research activity, professional associations, mental health groups , managers and administrators can use the findings of this study to identify priority topics which may be a useful guide for continuing professional development activities. This was proposed by Salmond (1994) in nursing. In occupational therapy in mental health, for example, continuing professional development activities focussed around a theme of the “therapeutic value of occupation in mental health” may meet a need for information, skill and exchange of ideas. Apart from continuing professional development, findings may also be of use to professional preparation programs (Nappier et. al., 1990). Here educators can identify those topics which occupational therapists in mental health perceive are important and which their graduates may therefore need preparation to understand or act on.

### **Conclusion:**

Findings of the study indicate the research topics which occupational therapists working in mental health consider to be priorities. It is hoped that the findings of this study contribute to the development, survival and growth of occupational therapy in mental health through a

focussing of research activity on topics which are needed, clinically useful and priorities in the view of occupational therapists themselves.

**Table 1 Demographic data for participants of rounds I, II and III**

	<i>Round I</i>		<b>Round II</b>		<b>Round III</b>	
<b>Number of Respondents (%)</b>	21		14		11	
<b>Sex (%)</b>						
Female	20	(92.5%)	13	(92.9%)	11	(100%)
Male	1	(4.8%)	1	(7.1%)	0	(0%)
<b>Average age of respondents (range)</b>	41	(27-57)	43.2	(29-57)	45.3	(29-57)
<b>Years working as an OT (range)</b>	16.7	(4-33)	18.1	(5-33)	19.1	(5-33)
<b>Years working in mental health (range)</b>	10	(.75-22)	11	(.75-22)	9	(.75-20)
<b>Years in current position (range)</b>	4.8	(0.5-18)	5	(0.5-18)	4.2	(0.5-18)
<b>Primary work site (%)</b>						
Community based	10	(47.6%)	6	(42.9%)	5	(45.5%)
Hospital	5	(23.8%)	5	(35.7%)	3	(27.3%)
University	4	(19.0%)	2	(14.3%)	2	(9.1%)
Private industry	1	(4.8%)	1	(7.1%)	1	(18.2%)
Not stated	1	(4.8%)	0	(0%)	0	(0%)
<b>Entry level OT qualification (%)</b>						
Bachelor degree	14	(66.7%)	9	(64.3%)	6	(54.5%)
Diploma	6	(28.6%)	4	(28.6%)	4	(36.4%)
Not stated	1	(4.2%)	1	(7.1%)	1	(9.1%)
<b>Post graduate (PG) qualifications (%)</b>						
Yes	15	(71.4%)	11	(78.6%)	8	(72.7%)
No	6	(28.6%)	3	(21.4%)	3	(27.3%)
<b>Types of PG qualifications (%)</b>						
Certificate courses	6	(28.6%)	5	(29.4%)	3	(27.3%)
Masters degrees (OT related field)	4	(19.0%)	4	(23.5%)	3	(27.3%)
Masters degrees (non OT related field)	3	(14.3%)	2	(11.8%)	2	(18.2%)
PG Diplomas (non OT related)	2	(14.3%)	3	(17.6%)	3	(27.3%)
PG Diplomas (OT related)	1	(9.5%)	2	(11.8%)	2	(18.2%)
Masters of OT (Research)	1	(4.3%)	0	(0%)	0	(0%)
Masters of OT (Coursework)	1	(4.3%)	1	(5.9%)	0	(0%)
<b>Recent involvement in QA projects (%)</b>						
Yes	19	(90.5%)	12	(85.7%)	9	(81.8%)
No	2	(9.5%)	2	(14.3%)	2	(18.2%)
<b>Recent research involvement (%)</b>						
Yes	12	(57.1%)	7	(50.0%)	4	(36.4%)
No	9	(42.9%)	7	(50.0%)	7	(63.6%)

## References

- Abbott, C., Diomed, B., Johnson, J., & MacIlraith, N. (1994). AORN priorities for perioperative nursing research. AORN, 60(6) 914-924
- Adler, M. & Ziglio, E. (Eds.). (1996). Gazing into the oracle: The delphi method and its application to social policy and public health. Pennsylvania: Jessica Kingsley Publishers
- Barris, R., Kielhofner, G., & Hawkins Watts, J. (1983). Psychosocial Occupational therapy: Practice in a pluralistic arena. pp.289-311. Laurel, MD : Ramsco Publishing
- Bartu, A., McGowan, S., Nelson, M., Ng, C., & Robertson, J. (1993). A Western Australian Delphi survey of staff development research priorities. Journal of Nursing Staff Development, 9(3) 141-147
- Bartu, A., Nelson, M., Ng, C., McGowan, S. & Robertson, J. (1991). A Delphi survey of clinical nursing research priorities in Western Australia. Australian Journal of Advanced Nursing, 8(3) 29-33
- Beretta, R. (1996). Issues in research. A critical review of the Delphi technique. Nurse Researcher, 3(4) 79-89
- Bohannon, R.W., & Le Veau, B.F. (1986). Clinicians' use of research findings. A review of the literature with implications for physical therapists. Physical Therapy, 66(1) 45-50
- Craik, C. (1998). Occupational therapy in mental health: A review of the literature. British Journal of Occupational Therapy, 61(5), 186-192
- Cooney, Stebbings, Roxburgh, Mayo, Keen, Evans & Meehan (1995). Integrating nursing research and practice: part 2 - a delphi study of nursing practice priorities for research based solutions. Nursing Praxis in New Zealand, 10(1) 22-27
- Craik, C., Austin, C., Chacksfield, J., Richards, G. & Schell, D. (1998). College of occupational therapists: Position paper on the way ahead for research, education and practice in mental health. British Journal of Occupational Therapy, 61(9), 390-392
- Crisp, J., Pelletier, D., Duffield, C., Adams, A., & Nagy, S. (1997). The delphi method? Nursing Research, 46(2) 116-118
- Cronin, S. & Owsley, V. (1993). Identifying nursing research priorities in an acute care hospital. JONA, 23(11) 58-62
- Cusick, A., Franklin, A., & Rotem, A. (1999). Meanings of 'Research' and 'Researcher' - The clinician perspective. The Occupational Therapy Journal of Research, 19, 101-125
- Daly, J., Adamson, L., Chang, E., & Bell, P. (1997). The research and educational priorities of rural Occupational therapists. Australian Health Review, 20(1) 129-138
- Daly, J., & Chang, E. (1996). A study of clinical nursing research priorities of renal specialist nurses caring for critically ill people. Intensive and Critical Care Nursing, 12 45-49

- Daly, J., Chang, E., & Bell, P. (1996). Clinical nursing research priorities in Australian critical care: a pilot study. Journal of Advanced Nursing, 23(1) 145-51
- Davidson, P., Merritt-Gray, M., Buchanan, J., & Noel, J. (1997). Voices from practice: mental health nurses identify research priorities. Archives of Psychiatric Nursing, 11(6) 340-345
- Davis, S. & Bannigan, K. (2000). Priorities in mental health research: The results of a live research project. British Journal of Occupational Therapy, 63(3), 98-104.
- Dawson, S. & Barker, J. (1995). Hospice and palliative care: A delphi survey of occupational therapists roles and training needs. Australian Occupational Therapy Journal, 42 119-127
- Duffield, C. (1993). The Delphi technique: a comparison of results obtained using two expert panels. International Journal of Nursing Studies, 30(3) 227-237
- Eakin, P. (1997). Research: Why we need a strategy. British Journal of Occupational Therapy, 60(11) 469
- Eakin, P., Ballinger, C., Nicol, M., Walker, M., Alsop, A., & Illott, I. (1997). College of occupational therapists: Research and development strategy. British Journal of Occupational Therapy, 60(11) 484-486
- Erler, C. & Thompson, C. (1995). Determining the National Flight Nurses Associations research priorities. Air Medical Journal, 14(1) 16-20
- Everett, A. (1993). Piercing the veil of the future: a review of the Delphi method of research. Professional Nurse, 9(3) 181-185
- Fitch, M. (1996). Creating a research agenda with relevance to cancer nursing practice. Cancer Nursing, 19(5) 335-42
- Fitzpatrick, E., Sullivan, J., Smith, A., Mucowski, D., Hoffman, E., Dunn, P., Trice, M., & Grosso, L. (1991). Clinical nursing research priorities: a Delphi study. Clinical Nurse Specialist, 5(2) 94-99
- Forrest, J., Lyons, K., Bross, T., Gitlin, L., & Kraemer, L. (1995). Reaching consensus on the national dental hygiene research agenda: a delphi study. Journal of Dental Hygiene, 69(6) 261-269
- Gibson, D. (1984). Guest editorial: The dearth of mental health research in occupational therapy. Occupational Therapy Journal of Research, 4, 131-149.
- Goodman, C. (1987). The delphi technique: A critique. Journal of Advanced Nursing, 12 729-734
- Gulick, E. (1996). Research priorities for nurses caring for persons with Multiple Sclerosis. Journal of Neuroscience Nursing, 28(5) 314-21

- Hatton, J. & Nunnelee, J. (1995) Research priorities in vascular nursing. Journal of vascular nursing, 13(1) 1-7
- Heffline, M., Clark, M., Hooper, V., Mamaril, M., Miller, K., Norris, S., Poole, E., Summers, S., & Younger, S. (1994). Research priorities for all phases of postanesthesia nursing: a survey by American Society of Post Anesthesia Nursing Journal of Post Anesthesia Nursing, 9(4) 204-13
- Hinds, P., Quargnenti, A., Olson, M., Gross, M., Puckett, J., Randall, E., Gattuso, J. & Wiedenhofer, D. (1994). The 1992 APON Delphi study to establish research priorities for pediatric oncology nursing. Journal of Pediatric Oncology Nursing, 11(1) 20-30
- Hollis, Davis, & Reeb (1995). Use of a Delphi technique to prioritise clinical nursing research needs. Nursing Connections, 8(4) 65-70
- Jairath, N. & Weinstein, J. (1994). The Delphi methodology (part one): a useful administrative approach. Canadian Journal of Nursing Administration, 7(3) 29-42
- Linstrone, H. & Turoff, M. (1975). Introduction. In H Linstrone & M. Turoff. (Eds.). The delphi method: Techniques and Applications. London: Addison Wesley Publishing Company
- Lynn, M. & Layman, E. (1996). Research priorities. The nature of nursing administration research: knowledge building or fire stomping? Journal of Nursing Administration, 26(5) 9-14
- Marvin, J., Carrougher, G., Bayley, B., Weber, B., Knighton, J. & Rutan, R. (1991). Burn nursing delphi study: setting research priorities. Journal of Burn Care and Rehabilitation, 12(2) 190-197
- McKenna, H. (1994). The Delphi technique: a worthwhile approach for nursing? Journal of Advanced Nursing, 19(6) 1221-1225
- Miles-Tapping, C., Dyck, A., Brunham, S., Simpson, E. & Barber, L. (1990). Canadian therapists' priorities for clinical research: a delphi study. Physical Therapy, 70(7) 448-454
- Misener, T., Watkins, G. & Ossego, J. (1994). Public health nursing research priorities: a collaborative delphi study. Public Health Nursing, 11(2) 66-74.
- Mountain, G. (1997). A review of the literature in the British Journal of Occupational Therapy 1989 - 1996. British Journal of Occupational Therapy, 60(10), 432-435.
- Office of Professional Research Services (1987). Research development committee to meet, Occupational Therapy News, July:5
- Nappier, P., Stanfield, J., Simon, J., Bennett, S., & Cowan, C. (1990). Identifying clinical nursing research priorities. Nursing Connections, 3(2) 45-50

- Paul, S. (1996). Mental health: An endangered Occupational therapy specialty area. American Journal of Occupational Therapy, 50(1), 65-68.
- Rix, G. & Cutting, K. (1996). Research interests: a study of proposals submitted for approval. Nurse Research, 3(3) 71-79
- Rudy, S. (1996). Research forum. A review of delphi surveys conducted to establish research priorities by specialty nursing organisations from 1985-1995. ORL - Head and Neck Nursing, 14(2) 16-24
- Salmond, S. (1994). Orthopaedic nursing research priorities: a delphi study. Orthopaedic Nursing, 13(2) 31-45
- Schmidt, K., Montgomery, L., Bruene, D. & Kenney, M. (1997). Determining research priorities in pediatric nursing: A delphi study. Journal of Pediatric Nursing, 12(4) 201-207
- Sladyk, K. (1994). Are some occupational therapists in physical disability practice settings hastening the extinction of mental health practice. American Journal of Occupational Therapy, 48(2), 174-175.
- Sleep, J., Bullock, I., & Grayson, K. (1995). Establishing priorities for research in education within one college of nurse and midwifery. Nurse Education Today, 15(6) 439-45
- Stetz, K., Haberman, M., Holcombe, J. & Jones, L. (1995). 1994 oncology nursing society research priorities survey. Oncology Nursing Forum, 22(5) 785-789
- Stokes, F. (1997). Using the delphi technique in planning a research project on the occupational therapists role in enable people to make vocational choices following illness or injury. British Journal of Occupational Therapy, 60(6) 263-267
- Sumsion, T. (1998). The delphi technique: An adaptive research tool. British Journal of Occupational Therapy, 61(4) 153-156
- Taylor, M.C. (2000). Evidence-based practice for occupational therapists. Oxford: Blackwell Science
- Tighe, R., & Biersdorff, K. (1993) Setting agendas for relevant research: A participatory approach. Canadian Journal of Rehabilitation, 7(2) 127-132
- Trickey, B.A. & Kennedy, D.B. (1995). Use of occupational therapists in mental health settings in South Carolina. American Journal of Occupational Therapy, 49(5), 452-455.
- Waine, M., Magill-Evans, J. & Pain, K. (1997). Alberta occupational therapists' perspectives on and participation in research. Canadian Journal of Occupational Therapy, 64(2) 82-88
- Walker, A. (1994). A Delphi study of research priorities in the clinical practice of physiotherapy. Physiotherapy, 80(4) 205-207

Williams, P. & Webb, C. (1994). The delphi technique: a methodological discussion. Journal of Advanced Nursing, 19(1) 180-186