Australian occupational therapists working in adult physical dysfunction settings: What treatment media do they use?

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The use of exercise-based treatment media, which target the underlying basis of physical dysfunction but can overlook the psychological, social, and cognitive aspects of human function, has been criticised as being incongruent with occupational therapy philosophy. This study aimed to explore the treatment choices of Australian occupational therapists in adult physical dysfunction settings, to identify the influences on those choices, and to determine whether the use of client priority assessments impacts on treatment choice. Responses to a mail-out questionnaire were obtained from 147 occupational therapists working in eight specialty areas of physical dysfunction practice. Following descriptive analysis, the five most frequently used treatment media were education and counselling, home visits/modifications, functional mobility, self-care and pure upper extremity exercise. Regardless of the treatment medium chosen, participants identified client-related factors, such as clients’ skill level or special interest in the activity, as the greatest influence on their selection of that medium. Results suggest a trend toward the use of treatments that are functional, client-focused and that address occupational dysfunction. Further exploration of the clinical reasoning associated with decisions about treatment choices is needed.

KEY WORDS client priority assessments, influences, physical dysfunction, treatment media.

INTRODUCTION

In the early part of the twentieth century the profession of occupational therapy was founded. It grew from the belief in the goodness-of-fit between engagement in purposeful activity and health. Based on the precepts of moral therapy, engagement in purposeful activity was seen as holistically beneficial because of the combined cognitive, psychological, social and physical challenges provided (Bissell & Mailloux, 1981). At this fledgling stage in the development of the profession, arts and crafts were considered representations of occupation in human life and were used to improve the manifestations of mental illness (Barris, Cordero & Christiaansen, 1986). When occupational therapy moved into the field of physical rehabilitation, crafts continued to be used; however, in this context, they
were used because of the biomechanical challenges they provided (Bissell & Mailloux, 1981).

In the middle part of the twentieth century, social policy changes, political events and technological advances saw occupational therapy align itself with the tenets of medicine (Turner, 1992). This resulted in what authors have described as reductionist practice (Green, 1989; West, 1984) in which therapy focused on the underlying physical components of dysfunction rather than on the person in his or her entirety, as an occupational being (Fisher, 1998; Hocking & Wilcock, 1997; McLaughlin Gray, 1998).

In the 1970s and early 1980s, practice in physical settings appeared to become dichotomised. Some authors advocated the continued use of traditional treatments including arts, crafts and recreational activities. These activities were seen to offer multidimensional challenges, to provide meaning and to yield a tangible end product. In other words, they were considered to be congruent with the holistic philosophy of occupational therapy (Green, 1989; Shannon, 1977). Conversely, others argued that aiming to exclusively engage in holistic practice was restrictive, impractical and inefficient (Clopton, 1981; English, Kasch, Silverman & Walker, 1982). They contended that using activities like arts and crafts jeopardised reimbursement from funding bodies and failed to acknowledge the levels of specialisation achieved by experienced clinicians (West, 1984). It was also believed that their use perpetuated negative stereotypes about occupational therapy as a profession that lacked credibility and a scientific base (Green). In practice, traditional activities were often abandoned in favour of assessments and treatment media that were reflective of occupational therapy’s increasingly sophisticated knowledge about the biomechanical and neurological basis of physical dysfunction.

Contemporary recommendations for holistic practice centre around the therapeutic use of occupations, which are defined as daily living tasks that are purposeful and meaningful to a person, and that are performed according to individual style and in an appropriate context (Golledge, 1998a). Golledge further differentiated between occupation, purposeful activity and activity. Although purposeful activities may be socioculturally purposeful, they are not necessarily meaningful to the individual or congruent with his or her goals. These activities lack meaning, purpose and relevance to an individual’s life and include remedial techniques, adjunctive methods and preparatory procedures that target the underlying physical performance components of occupations. Golledge’s definition of activity correlates with what Mathiowetz (1993) termed as rote exercise or enablers. Another way of conceptualising occupation is according to Trombly’s (1995) ‘occupation-as-ends’ and ‘occupation-as-means’ definitions. ‘Occupation-as-ends’ are the occupational goals that people seek to achieve as the overarching purpose of therapy. ‘Occupation-as-means’ is the change agent or use of occupation as therapy. Trombly described ‘occupation-as-means’ as simple behaviours used to remediate performance component deficits. In this way, ‘occupation-as-means’ seems similar to Golledge’s definition of activity and Mathiowetz’s use of the term enablers.

Two approaches are available to occupational therapists working with adults who have a physical dysfunction. In the remedial approach, which is heavily influenced by the medical model and therefore reductionism, training in component skills is thought to be necessary to restore function. In the adaptive approach, which is considered to be a more holistic and occupationally embedded approach, restoration of function is achieved by training clients in functional skills (Neistadt & Seymour, 1995). After a review of the literature, Neistadt and Seymour concluded that the adaptive approach is more effective than the remedial approach in facilitating occupational performance.

Although there has been much deliberation over which treatment approaches and media are or are not reflective of the philosophy of occupational therapy in physical dysfunction settings, there have been relatively few studies that have sought to ascertain which treatments are commonly used in practice. Those that have been carried out have predominantly been American endeavours (Barris et al., 1986; Bissell & Mailloux, 1981; Driessen, Dekker, Lankhorst & Van Der Zee, 1996; Eliason & Gohl-Giese, 1979; Kunstaetter, 1988; Neistadt & Seymour, 1995; Pendleton, 1989; Taylor & Manguno, 1991). To date no studies have identified the treatment choices of Australian occupational therapists working in adult physical dysfunction settings.

**LITERATURE REVIEW**

Prompted by philosophically based debates, a decline in the use of traditional treatment media and an increased
use of exercises in therapy, studies aimed at exploring occupational therapists’ use of treatment media emerged. In 1979, Eliason and Gohl-Giese surveyed occupational therapists in 101 physical dysfunction and psychiatric settings to determine the treatment media used in practice (Eliason & Gohl-Giese, 1979). The foremost treatment used by occupational therapists working in physical settings was remediation of activities of daily living. This study also found that traditional media such as arts and crafts were being discarded in favour of treatment modalities traditionally used in physical therapy, such as biofeedback, massage and ultrasound.

Similarly, after surveying 141 American occupational therapists working in the area of physical dysfunction, Bissell and Mailloux (1981) found that, although crafts were still being used, their use only equated to 20% of total occupational therapy treatment time. They concluded that the greatest percentage of treatment time was taken up by therapeutic exercise and self-care activities and that this was concerning because the psychological and social aspects of treatment were being neglected. Difficulty in justifying the use of craft and the need for precise documentation were cited as reasons for the decline in its use. Barris et al. (1986) confirmed that in physical settings, the focus remained on daily living activities and on physical modalities such as passive and active ranging and strengthening exercises. They reported that clinical and classroom education had the greatest influence on occupational therapists’ choice of treatments.

Taylor and Manguno (1991) sought to ascertain the most commonly used treatment media in both physical and mental health settings to inform occupational therapy programme curricula. Although their sample of 83 was small and unrepresentative, results confirmed a move away from the use of craft-based activities in physical settings and toward more functional activities. Eight treatment media filled the top five positions and included (in descending order) joint protection and homemaking, self-care, work simplification and prevocational skills, relaxation and sensory integration, and social skills training. Like Barris et al. (1986), they also found that previous experience was a major influence on occupational therapists’ selection of treatment media.

Two later studies also found that functional and exercise-based activities dominated the treatment choices of occupational therapists working in adult physical settings (Driessen et al., 1996; Neistadt & Seymour, 1995). One of the other research questions explored by Neistadt and Seymour was whether clients’ priorities or goals were being assessed in the treatment process. The premise of asking this question is related to the tenets of client-centred practice, in that assessing clients’ priorities is presumed to be more aligned with the holistic philosophical base of the profession. It is contended that by assessing clients’ priorities, clinicians are more likely to engage patients in treatment media that are both purposeful and meaningful (Mathiowetz, 1993). According to Neistadt and Seymour, although 99% of facilities reported evaluating clients’ priorities, most did so informally. In the facilities that did use formal methods to assess clients’ priorities, a greater use of functional activities was noted.

These six studies confirm a shift away from the use of arts and crafts to a greater use of exercise-based and functional treatment media. Because there was no clear prevalence of remedial (exercise-based) over adaptive (functional) media in these studies, Neistadt and Seymour (1995) suggested that occupational therapists might be reverting to an occupational base and a holistic approach to therapy after the focus on exercise-based media in the 1980s. Research into treatment media preferences of occupational therapists has not extended to an Australian context. For Australian occupational therapists to understand their practice base and the values that underpin it, there is a need to explore these issues at a national level. The specific aims of this study were to explore the treatment media used by Australian occupational therapists in adult physical settings, identify the influences on treatment choices and ascertain whether the use of client priority assessments impacts on treatment choice.

**METHOD**

**Participants**

Participants were Australian occupational therapists, working in the area of adult physical practice, who were members of the Australian Association of Occupational Therapists (OT AUSTRALIA). The OT AUSTRALIA database, which contained members’ names, contact addresses and area of clinical practice (for example, rheumatology, lymphoedema, head injuries and general medical) was accessed to identify potential participants. To obtain a sample of approximately 200, 400 occupational
therapists working in adult physical practice were selected from the database. A proportionate sample was selected to reflect the national distribution of occupational therapists across caseloads. Specifically, more potential participants were targeted from areas of practice in which a larger number of occupational therapists worked. Conversely, fewer were targeted from areas in which smaller numbers worked. Within each area of practice, every fifth name was selected. Areas of practice in which fewer than 10 occupational therapists worked (for example, amputees and multiple sclerosis) were excluded from the sample so that only occupational therapists working in common caseload areas would be included.

**Instrument**

A self-administered, mail-out questionnaire was developed. It contained four questions related to (i) location and area of specialty; (ii) frequency of use of specific treatment media; (iii) influences on choice of treatment media; and (iv) use of client priority assessments. Prior to the questionnaire being sent to potential participants, it was piloted with 10 occupational therapists working in a variety of physical settings in Queensland and revised according to their feedback.

The first subsection on location and area of practice required respondents to indicate in which Australian State or Territory they worked and the clinical area which constituted more than 50% of their caseload. This was an open-ended question that required respondents to describe their caseload. Responses were later categorised.

The subsection on treatment media required participants to rate the frequency of use of 15 treatment media on a five-point fixed response scale ranging from ‘never used’ to ‘used most of the time’ (Table 1). The treatment media included were similar to those used by Neistadt and Seymour (1995), with the inclusion of the additional categories of craft activities, stress management and relaxation training, leisure/recreation tasks, education and counselling, and an ‘other’ category. These were included, in the case of craft and leisure, to allow specific exploration of occupational therapists’ use of these treatment choices, and in the case of the other three categories, on the advice of participants in the pilot phase. Within the categories of craft, pure upper extremity exercises, upper extremity exercise using therapeutic equipment, physical agent modalities, leisure/recreation tasks and other, respondents were asked to list up to five examples of the types of techniques or activities used in order of frequency to provide a more comprehensive exploration of these areas.

The third subsection required participants to indicate the dominant influences on their selection of treatment media by rating 13 potential factors on a five-point fixed response scale ranging from ‘not an influence’ to ‘mostly an influence’ (Fig. 1). These factors were identified from the literature as potentially influencing treatment media choice (Bissell & Mailloux, 1981; Foto, 1997; Green, 1989; Kunstaetter, 1988; McLaughlin Gray, 1998; Mocellin, 1992; Reed, 1986; Trombly, 1995; West, 1984).

The final subsection asked respondents to rate the frequency of use of a number of client priority assessments similar to those included in the study by Neistadt and Seymour (1995), namely, informal interview, Interest Checklist (Matsutsuyu, 1969; Rogers, Weinstein & Figone, 1978), schedule of client’s typical activities before onset (Neistadt & Seymour), Occupational Performance History Interview (OPHI; Kielhofner, Henry & Walens, 1989) and an ‘other’ category.

**Procedure**

Ethical clearance to conduct this study was provided by the University of Queensland. Approval from OT AUSTRALIA to access their database was obtained.

After indicating the numbers of occupational therapists in each area of practice to be sampled and providing a package consisting of the questionnaire, a cover letter, consent form and self-addressed envelope, administrative staff of OT AUSTRALIA sent these to the potential participants. Included in this package was a letter from OT AUSTRALIA assuring members that confidentiality had been maintained. Data collection for this study occurred from the end of 1997 to the beginning of 1998.

**Statistical analysis**

Data were analysed using the Statistical Program for Social Sciences (SPSS). Data from all four subsections were analysed descriptively and are presented as frequencies and percentages. Some categories, for example ‘most’ and ‘often’, and ‘never’ and ‘rarely’, were collapsed for ease of interpretation when reporting descriptive results.
RESULTS

Of the 400 occupational therapists targeted, 164 returned the questionnaire, representing a 41% response rate. Of these, 17 were invalid because the respondents were either not working as occupational therapists any more (n = 4), were working as occupational therapists but not within the area of adult physical practice (n = 11) or were in teaching posts (n = 2). Therefore, 147 participants were included in the final sample, representing a response rate of 36.7%.

Location and specialty area

The largest proportion of respondents, 50 (34%), were from Victoria, followed by 37 (25%) from New South Wales, and 20 (13.6%) from Queensland. Nineteen (12%) were from South Australia and 13 (9%) were from Western Australia. Those from Tasmania (one), Northern Territory (three) and the Australian Capital Territory (four) collectively comprised 5% of the sample.

In terms of their area of practice, 34 (23%) worked in neurological rehabilitation, a category which included rehabilitation of people following acquired and traumatic brain injury and spinal cord injury; 28 (19%) worked in physical rehabilitation, which was a broad category comprising a varied adult physical caseload including rehabilitation for people with orthopaedic conditions and amputations, as well as back schools and pain management programs; 27 (18%) worked in vocational or occupational rehabilitation; and 18 (12%) worked in geriatric

<table>
<thead>
<tr>
<th>Table 1. Frequency of use of treatment media</th>
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<td>Treatment media</td>
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<td>Self-care</td>
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<td>Homemaking</td>
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<td>Community living skills</td>
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<tr>
<td>Vocational retraining/rehabilitation</td>
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<td>Functional mobility</td>
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<tr>
<td>Craft activities</td>
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<tr>
<td>Cognitive/perceptual retraining</td>
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<tr>
<td>Pure upper extremity exercise (coordination, PROM, AROM, muscle strengthening exercises using weights)</td>
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<tr>
<td>Upper extremity exercise using therapeutic equipment (cone stacking, theraputty, overhead counter balanced swing, weighted checkers)</td>
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<tr>
<td>Assistive technology (assistive devices, environmental and communication facilitator device training)</td>
</tr>
<tr>
<td>Physical agent modalities (splinting, icing, pressure garment prescription, casting)</td>
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<tr>
<td>Stress management/relaxation training</td>
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<tr>
<td>Leisure/recreation tasks</td>
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<td>Education/counselling</td>
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<td>Home modifications</td>
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PROM, passive range of motion; AROM, active range of motion.
rehabilitation and aged care. There were 10 (7%) respondents within each of the areas of oncology, hand therapy and community, the latter category including domiciliary and palliative care, home visiting and equipment prescription. There were also 10 respondents in the area of general medicine and surgery that included cardiac, renal and respiratory conditions, musculoskeletal injury and acute orthopaedics.

**Treatment media choice and frequency of use**

**The top five**
The media used ‘never/rarely’, ‘sometimes’ and ‘often/most of the time’ by all respondents are summarised in Table 1. Overall, the top five treatment media used ‘often or most’ of the time were education and counselling (74%), home visits/modifications (74%), functional mobility (58%), self-care (57%) and pure upper extremity exercise (38%). For the treatment media category of pure upper extremity exercise, participants were asked to name up to five examples. Of 19 named, the five most frequently used were passive range of motion, active range of motion, and strengthening, coordination and motor control exercises.

**Use of exercise**
In general, participants chose treatment media that focused on the underlying physical components of dysfunction, such as pure exercise and the use of therapeutic equipment, less often than occupationally based functional activities and more often than more traditional occupational therapy activities such as craft and leisure activities. However, treatment media with functional outcomes such as community living skills and vocational retraining were less frequently used than exercise-based treatments.

For the categories of therapeutic equipment and physical agent modalities, participants listed and ranked the treatment activities they used most often. Twenty-nine examples of commonly used therapeutic equipment were provided and of these, the top five included use of putty, placing activities (using cones/quoits), fine motor activities (using threading, buttoning and writing), table games (such as weighted checkers and solitaire) and use of skateboards. Of the 21 physical agent modalities named, the top five used were splinting, application of pressure, casting, sensory re-education and scar management techniques.

**Use of traditional media**
Fewer than 5% of participants indicated that they used craft ‘often’ or ‘most of the time’. This small percentage of
Treatment media use

121

participants tended to work in neurological rehabilitation, the community and physical rehabilitation. Of 26 examples provided, the top five were painting, needlework, paperwork, pottery and leatherwork.

Leisure-based treatment activities were used by 12% of participants ‘often’ or ‘most of the time’. They comprised small numbers of participants from all caseloads except general medicine and surgery, hand therapy and vocational rehabilitation. When asked to provide examples, participants generated a list of 35 activities with the top five being woodwork, cards, puzzles, snooker and a category termed social activities.

**Treatment choices across caseloads**

Apart from aged care, in which it was ranked sixth, education and counselling was ranked in the top five media chosen by respondents across all caseloads, with respondents working in hand therapy, neurological rehabilitation, general medicine and surgery, vocational rehabilitation and physical rehabilitation ranking it in the top three. Education and counselling was ranked as more important than self-care interventions by respondents working in general medicine and surgery, physical rehabilitation and oncology caseloads. Home visits/modifications and self-care interventions were rated among the top five media by respondents from all caseloads except hand therapy and vocational rehabilitation. Stress management was ranked in the top five by respondents working in oncology, vocational rehabilitation, general medicine and surgery. Table 2 provides the five most commonly used treatment media for each of the caseloads.

**Factors affecting choice of treatment media**

Using a five-point fixed response scale (from ‘not an influence’ to ‘mostly an influence’) participants rated factors according to how much they influenced their treatment media selection. In general, client-related factors had the greatest influence on treatment selection, and factors related to organisational and theoretical aspects of practice were least likely to influence selection of treatment media. The client-related factors considered to be most influential in selecting a treatment were the opportunity for successful achievement by the client (88.5%),

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**Table 2. Ranked order of treatment media by caseload (1 = most used)**

<table>
<thead>
<tr>
<th>Caseload</th>
<th>1</th>
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<th>4</th>
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<tr>
<td>Hand therapy</td>
<td>Pure exercise</td>
<td>Physical agent</td>
<td>Education/counselling</td>
<td>Equipment</td>
<td>Vocational</td>
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<td>(n = 10)</td>
<td></td>
<td>modality</td>
<td>prescription</td>
<td>retraining</td>
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<tr>
<td>Neurology</td>
<td>Home modification</td>
<td>Self-care</td>
<td>Education/counselling</td>
<td>Equipment</td>
<td>Functional mobility</td>
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<tr>
<td>(n = 34)</td>
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<td>prescription</td>
<td>prescription</td>
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<tr>
<td>Community</td>
<td>Home modification</td>
<td>Functional</td>
<td>Self-care</td>
<td>Education/counselling</td>
<td>Homemaking</td>
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<td>(n = 10)</td>
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<td>mobility</td>
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<td>Oncology</td>
<td>Functional</td>
<td>Home modification</td>
<td>Stress management</td>
<td>Education/counselling</td>
<td>Self-care</td>
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<td>(n = 10)</td>
<td>mobility</td>
<td></td>
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<tr>
<td>General med/surg</td>
<td>Education/counselling</td>
<td>Self-care</td>
<td>Home modification</td>
<td>Stress management</td>
<td>Functional mobility</td>
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<td>Aged care</td>
<td>Self-care</td>
<td>Home modification</td>
<td>Functional</td>
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<td>Home making</td>
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<td>(n = 18)</td>
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<td></td>
<td>mobility</td>
<td></td>
<td>Cognition/perception</td>
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<tr>
<td>Vocational rehab</td>
<td>Vocational</td>
<td>Education/counselling</td>
<td>Home modification</td>
<td>Other</td>
<td>Stress management</td>
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<tr>
<td>(n = 27)</td>
<td>retraining</td>
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<tr>
<td>Physical rehab</td>
<td>Home modification</td>
<td>Functional</td>
<td>Education/counselling</td>
<td>Self-care</td>
<td>Pure exercise</td>
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<tr>
<td>(n = 28)</td>
<td></td>
<td>mobility</td>
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suitability for clients’ sensory and motor skill levels (85.1%), and clients’ special interest in the treatment medium (69.4%). Previous experience with the treatment medium was also a major influence on participants’ treatment selection process, with 80.3% indicating that they were influenced by this factor ‘often’ or ‘most’ of the time.

In contrast, factors attributed as being ‘not’ or ‘rarely’ an influence included reimbursement policies of the funding provider (64.6%), documentation requirements and reporting to the rest of the multidisciplinary team (43.5%), the theoretical model from which the treatment was drawn (44.2%) and information from a journal or research article (30.6%).

Additionally, length of clients’ hospital stay was rated by 42.2% of occupational therapists as being ‘not’ or ‘rarely’ an influence.

An ‘other’ category provided the opportunity for participants to indicate any additional factors that might influence the selection of specific treatment media. Twenty additional reasons were given, with the most common including clients’ discharge destination, access to a diversional therapist, and caseload size.

Overall, there was little disparity between reasons for selecting treatment media. To illustrate this point, Fig. 1 shows the factors that most influenced the selection of treatment media for participants who used pure exercise, self-care and craft ‘often’ or ‘most’ of the time. These particular categories were selected as examples of media which were either commonly used by all caseloads (self-care), used by most caseloads but less frequently (pure exercise), or not commonly used (craft). Regardless of the treatment chosen or caseload in which it was used, there was consensus about what influenced those choices. The only major differences in these categories were that those using craft were more likely to have had previous experience with the treatment activity, and were more likely to be influenced by information from a journal or research article. In contrast, those using exercise-based media were slightly more likely to be influenced by having to justify the use of those treatments than those using media such as craft, self-care, and education and counselling.

Assessment of clients’ priorities

A five-point fixed response scale from ‘never used’ to ‘used most of the time’ was utilised to determine whether clients’ priorities were being assessed in a number of ways. Although most participants indicated that they assessed clients’ priorities, they did so either informally (90%) or by obtaining a schedule of the clients’ typical activities prior to the medical event (57.2%). Fewer than 40% of participants used the formal methods listed in the questionnaire to assess clients’ priorities ‘often’ or ‘most of the time’. These included the occupational performance history interview (23.1%; Kielhofner et al., 1989) and the Interest Checklist (13.6%; Matsutsuyu, 1969). In the ‘other’ category provided, a small number of participants indicated that they used either the Canadian Occupational Performance Measure (COPM; 6.1%), liaised with the client’s family (6.1%), or engaged in goal setting with the client (5.4%) to assess his or her priorities.

When comparing the responses of participants who predominantly used exercise-based media or those such as craft, self-care or education, there was little difference in how clients’ priorities were assessed. Informal interview was used by more than 90% of all respondents who used these media. Likewise, participants who used therapeutic equipment (16.7%) and physical agent modalities (18%) were just as likely to use an Interest Checklist as those using craft (14.3%) or education-based interventions (13.8%).

DISCUSSION

The aims of this exploratory study were to ascertain the treatment media preferences of Australian occupational therapists working in adult physical dysfunction settings, to determine the influences on those choices and to investigate whether clients’ priorities were being assessed during the treatment process.

TREATMENT ACTIVITY CHOICE

Education and counselling

The finding that education and counselling was one of the most frequently used treatments was unexpected for two reasons: first, it was not a category explicitly included in any of the previous treatment activity studies; and second, it was added to this study only after feedback from respondents in the pilot phase. The fact that it was rated as a treatment used ‘often’ or ‘most’ of the time by 74% of respondents, and was one of the top five media used by
participants from all caseloads except those working in aged care, attests to its widespread use.

Whether authors of previous American treatment choice studies assumed that education was inherent in some of the treatment categories they included is unclear (Barris et al., 1986; Bissell & Mailloux, 1981; Neistadt & Seymour, 1995; Taylor & Manguno, 1991). Driessen et al. (1996) did include an ‘advice/instruction’ category in their study and found that more than 60% of the patients in their sample \( (n = 944) \) received this intervention. However, it was not a treatment medium used for all areas of dysfunction. For example, it was not chosen as an intervention to achieve goals related to motor and cognitive impairments. What is clear from the results of this study is that education and counselling skills are paramount in the current treatment milieu of Australian occupational therapists. According to Trombly (1993), advice and instruction are fundamental means to facilitate adaptation to dysfunction. Further investigation and documentation of the role that occupational therapists play as educators in the adjustment, remediation and adaptation process of dysfunction is needed.

**Self-care and functional mobility**

The results of this study are consistent with a number of similar studies in which self-care and upper extremity exercise were among the top five media chosen by occupational therapists in physical settings regardless of caseload (Barris et al., 1986; Bissell & Mailloux, 1981; Driessen et al., 1996; Eliason & Gohl-Giese, 1979; Neistadt & Seymour, 1995; Taylor & Manguno, 1991). As with the findings of both Driessen et al. and Neistadt and Seymour, functional mobility was also ranked among the top five. Neistadt and Seymour suggested that the predominance of self-care and functional mobility activities as treatment choices was indicative of a return to the profession’s occupational roots. McLaughlin Gray (1998) cautioned that although self-care activities are occupation-based, ‘they are often reflexively used without analysis of their therapeutic impact’ (p. 356). Self-care activities can only be therapeutically applied if they have been identified as important by the client and if they are performed according to the client’s own personal style and in an appropriate context (McLaughlin Gray). This supposition was not addressed in this paper but it poses interesting theoretical questions regarding how functional activities and the meaning of occupation are conceptualised and how those conceptualisations manifest in practice.

**Use of traditional activities versus exercise-based treatments**

In addition to self-care and functional mobility activities, occupational therapists in this sample focused on media which targeted the underlying physical components of dysfunction rather than on traditional occupational therapy media such as arts, crafts and leisure. This finding is consistent with trends observed in similar studies in both the United States and Holland (Barris et al., 1986; Bissell & Mailloux, 1981; Driessen et al., 1996; Eliason & Gohl-Giese, 1979; Neistadt & Seymour, 1995; Taylor & Manguno, 1991). Exercise-based treatments, also known as ‘occupation-as-means’ (Trombly, 1995) and enablers (Mathiowetz, 1993), are used on the assumption that remediation of component abilities transfers to better occupational performance. However, according to Gray, Kennedy and Zemke (1996), treatment that targets component deficits does little to improve occupational outcomes.

Included in the decline in use of traditional activities is the use of homemaking activities. Neistadt and Seymour (1995) compared the ranking of homemaking in their study to its ranking in an earlier study by Eliason and Gohl-Giese (1979). It had dropped from a ranking of fourth in the earlier study to a ranking of fifth in Neistadt and Seymour’s study. In the present study, homemaking was the sixth activity used ‘often’ or ‘most’ of the time. Barris et al. (1986) postulated that the decline in the use of traditional activities and the increased use of exercise-based treatments might be attributable to a perceived need to use media that have the most ‘face validity’ (p. 683). However, an interesting paradox revealed in the present study was that although occupational therapists predominantly used media that focused on the underlying components of physical dysfunction over the more traditional activities, the major influences on the decision to do so were purported to be directly client-related. This appears to contradict the view that the use of exercise-based treatments indicates a reductionist approach to practice (Golledge, 1998b; Hocking & Wilcock, 1997; McLaughlin Gray, 1998). Participants who used exercise-based activities were more likely to be influenced by having to justify the use of those treatments than those using media such as craft, self-care and education and counselling.
Home modifications and community living skills

Congruent with others’ findings (Neistadt & Seymour, 1995; Pendleton, 1989), the results of the present study suggest that community living and homemaking skills are less likely to be used than exercise-based treatments. In fact, community living skills were rated as the second lowest treatment used ‘often’ or ‘most’ of the time across all caseloads. Furthermore, in neurological rehabilitation, where it might be expected that community living skills would be rated in the top five treatment choices, participants indicated that it was the eighth most likely to be used ‘often’ or ‘most’ of the time, which was below therapeutic equipment (fourth) and pure exercise (sixth). The fact that respondents from all caseloads, except hand therapy, rated home visit/modifications as one of the top three media used, tends to indicate that the primary community reintegration focus of treatment is environmental. Whether this is indicative of organisationally imposed time constraints, in the case of acute care settings, or of a general tendency to conceptualise environmental barriers and underlying components of dysfunction as more important than a lack of community integration or homemaking skills needs further investigation. This investigation needs to focus on the clinical reasoning processes involved in the selection of treatment media.

Factors influencing choice of treatment media

Client-related factors and organisational issues

Much has been written about the fact that evidence-based practice requires the ability to demonstrate and document effective clinical interventions and outcomes (Foto, 1997; Gutman, 1998). The much debated concept of fee for service funding requires the ability to objectively measure improvements and for treatment to be constrained by a patient’s length of stay (Golledge, 1998b). It was assumed therefore, that these factors would have had a major influence on the selection of treatment media. The factors that most influenced the selection of treatment media, across caseloads, were directly client-related and included, in order of influence, opportunity for successful achievement by the client, suitability for the client’s sensory and motor skill levels, and the client’s special interest in the treatment medium. Barris et al. (1986) also found that these factors influenced the selection of treatment media but only for the categories of craft and work. They were less of an influence than previous experience with a treatment medium.

What is not clear from the present study is whether consideration of these client-related factors indicates a true commitment to client-centred practice. For example, the top two influences, suitability for client’s skill level and opportunity for successful achievement by the client, although client-related, could also be indicative of goals which arise from the clinician’s clinical reasoning skills and not directly from the client. This is particularly possible in relation to the use of exercise-based treatment where, as Fisher (1998) stated, ‘the activity may have a purpose or goal, but more often than not, the purpose originated from the practitioner and not the client’ (p. 512). Once again, further study is recommended to explore these issues.

Previous experience

Previous experience with a treatment medium was the primary influence on treatment selection in studies by both Barris et al. (1986) and Taylor and Manguno (1991). Results from the present study confirmed these findings, with 80.3% of participants indicating that previous experience influenced the selection of treatment media ‘often’ or ‘most’ of the time. This factor may partially explain the decline in the use of traditional activities as many occupational therapy schools no longer teach specific craft skills to students (Taylor & Manguno). Asking participants their year of graduation would have allowed this to be explored further. It may also have been useful to provide participants with an opportunity to indicate which setting provided them with the most influential previous experience. For example, were experiences obtained at university, during clinical placements as a student, or at their place of work most influential?

Assessment of clients’ priorities

Although the client’s special interest in a treatment was rated as the third highest reason for using a particular media, both the Interest Checklist and the Occupational Performance History Interview were used infrequently by participants in this study. Instead they assessed clients’ priorities informally (90%). This result is congruent with the findings of Neistadt and Seymour (1995) who also found that very few clinicians used formal methods to assess clients’
priorities, although 99% used informal interviews to do so. They also found that those who used functional activities were more likely to use formal methods to assess clients’ priorities. They interpreted this finding as being indicative of formal assessment being more in line with the holistic philosophy of occupational therapy. Other authors have also contended that by using a formal client-centred assessment, clinicians can ensure an occupationally centred approach to practice (Fisher, 1998; Trombly, 1995). This finding was not supported by the results of this study, with participants who used functional treatment activities assessing clients’ priorities in the same way as those using either exercise-based treatments or traditional treatments like craft.

Limitations

Several limitations of this study need to be acknowledged. First, because of the low response rate (36.7%) and because respondents were all members of OT AUSTRALIA, this sample was not representative of the Australian population of occupational therapists. Second, there were two problems related to categorisation of participants into caseloads. The first was that it is possible for members of OT AUSTRALIA to be listed under more than one caseload; that is, members can indicate more than one area of specialty when they provide this information to OT AUSTRALIA. This means that as well as being listed in the category that comprised the majority of their caseload, members may also have been listed in categories which constituted less than 50% of their caseload. Consequently, the list of members in each caseload that was used to sample participants may not have contained a proportionate number of occupational therapists from the targeted caseloads.

The second problem relates to how participants’ responses to the open ended ‘area of specialty’ question were categorised in this study. For example, participants who indicated that they worked more than 50% of the time in aged care, may have worked in an acute rehabilitation setting with neurological patients. Providing fixed categories for this question would have reduced potential classification error.

Including year of graduation on the questionnaire would have helped to explore the impact of era of education on trends in treatment use. Providing opportunities for participants to indicate the goals attached to the use of treatment media would have clarified a number of issues. Specifically, this would have allowed investigation of whether exercise-based media were used to target underlying physical components or to address the occupational needs identified by the client. Barris et al. (1986) found that the most frequently selected goal in physical settings was to target deficits in the musculoskeletal system. This goal was rated higher than ‘increasing feelings of competence’ and ‘to incorporate, practice, and improve performance in work, home making, parenting or leisure role’ (p. 683). This is indicative of a reductionist approach to practice. The fact that in this study, exercise-based treatment media were used more often than community living skills and homemaking, yet participants indicated that the major influences on treatment selection were client related, requires further investigation.

Future research

Future research into the clinical reasoning processes associated with goal setting and treatment selection is recommended to complement the existing data on treatment use. In addition, extrapolation of the reasons behind the increased use of functional activities is required. Is it, for example, truly indicative of a move toward client-centred practice, or is it a response to organisational pressures for greater functional outcomes? Structured interviews to explore these areas may be appropriate forums for the future investigation of these issues.

The results of this study suggest that education and counselling are commonly used treatment media. The predominant use of these media may be indicative of a move toward more occupationally centred practice. Education provides the opportunity for occupational therapists to help clients cope better with the all-encompassing impact that a medical event has on their life roles and is therefore a treatment medium that is congruent with the holistic philosophy of occupational therapy. Future research is needed to explore the dynamics of the educational process and to identify the specific goals of this intervention. Research is also needed to explore occupational therapy’s expertise in the area.

Conclusion

This study has provided information about the treatment media use of Australian occupational therapists working
in adult physical dysfunction settings. Congruent with the results of studies from both the United States of America and Holland, it has shown a trend toward a decreased use of traditional treatment activities, such as arts and crafts, and an increased use of functional activities such as self-care and functional mobility. Whether this indicates a trend toward an approach to practice that is less reductionist and more occupationally centred requires further investigation.

This study has also highlighted the importance Australian occupational therapists attribute to education and counselling in their practice. Education seems ideally suited as a treatment media which is holistic yet which will fit well with the impact of cost containment measures. It is important to ensure that the content of the occupational therapy literature and training programmes reflect these practice trends.

REFERENCES


