Literature Review

Occupational therapy and obesity: An integrative literature review

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Background/aim: Obesity is a significant public health concern globally. It is associated with poor physical health, mental health and subjective well-being and limitations on occupational participation. With its focus on the relationship between occupation, health and well-being, occupational therapy would appear to be well placed to address both the causes and consequences of obesity. The aim of this review was to explore the scope of the role of occupational therapy practice in this field and the supporting evidence base.

Methods: Searches were conducted in four online databases and nine occupational therapy journals. Articles were included if they were theoretical, quantitative or qualitative research, explicitly related to occupational therapy and obesity, published in peer-reviewed journals, in English between 2002 and 2012. All research articles were critically reviewed and thematic analysis was conducted across all of the articles in the review.

Results: Eight theoretical articles, 12 quantitative and two qualitative research studies were included. Only three were outcome studies. Thematic analysis identified four categories of focus of occupational therapy intervention: health promotion and prevention, increasing physical activity participation, modifying dietary intake and reducing the impact of obesity. Four categories of intervention strategies were also identified; assessment, modifying the environment, education and introducing and adapting occupations.

Conclusion and significance: The findings of this review suggest a comprehensive role for occupational therapy in addressing obesity. However, the paucity of outcome studies mean that significantly more research is required to further define and provide a strong evidence base for occupational therapy practice in this emerging field.

KEY WORDS: obesity, review.

Introduction

Obesity has been described as a global epidemic with the number of people affected worldwide doubling in the years between 1980 and 2008 (WHO, 2012). In Australia, 25% of people over the age of 18 and 8% of children between the ages of seven and 15 are obese with another 37% of adults and 17% of children overweight (ABS, 2010). The World Health Authority (WHO) defines overweight and obesity as, ‘abnormal or excessive fat accumulation that may impair health’ (WHO). The global obesity epidemic is a significant public health concern with increased body mass index (BMI) identified as a risk factor for a range of physical and mental health issues.

Obesity is associated with poor physical health and is a major risk factor for several non-communicable diseases, including diabetes, ischaemic heart disease and some cancers (Cameron et al., 2009; WHO, 2012). Obesity is also associated with poor mental health and lower perceived quality of life. Studies with both adults and children and adolescents with obesity have found lower health-related quality of life (Cameron et al., 2012; Griffiths, Parsons & Hill, 2010; Keating, Moodie & Swinburn, 2011). Direct links have also been identified with low self-esteem (Griffiths et al.) and poor mental health (Morris, Koehn, Happell, Dwyer & Moxham, 2010; Sanderson, Patton, McKercher, Dwyer & Venn, 2011; Thomas, Hyde, Karunaratne, Herbert & Komesaroff, 2008). The impact of BMI on health-related quality of life and mental health may be, at least in part, attributable to the experience of stigma (Lillis, Levin & Hayes, 2011).

People with obesity have also been found to have reduced occupational participation which is attributed to the effects of stigma and discrimination, as well as barriers in the physical environment and reduced physical capacity. Three types of stigma related to obesity...
have been described: direct, environmental (which includes such things as not being able to fit into seats) and indirect (Lewis *et al.*, 2011). Experience of stigma and internalisation of stigmatising attitudes has been found to lead to avoidance of activities and situations in which stigma is anticipated, and not pursuing work and lifestyle goals (Lewis *et al.*, Thomas *et al.*, 2008). Population studies in both America and Australia have demonstrated an association between obesity and reduced functional capacity in older adults, independent of chronic conditions (Bannerman *et al.*, 2002; Chen & Guo, 2008; Wee *et al.*, 2011).

Australian Clinical Practice Guidelines for the Management of Overweight and Obesity (NHMRC, 2003) cite lifestyle change, specifically around food intake and physical activity, as being core to successful interventions for obesity. Occupational therapy focuses on the relationship between occupation, health and well-being and would appear to be well placed to address both the factors contributing to, and the occupational effects of obesity. The American Occupational Therapy Association (AOTA) published a position article about the role of occupational therapy in obesity in 2007 (AOTA, 2007). Whereas this article outlined a range of possibilities for occupational therapy intervention related to obesity, it was only supported by two references about obesity from the occupational therapy literature. The purpose of this review was to explore the scope of the role and evidence base for occupational therapy practice in relation to obesity as represented in peer-reviewed publications.

Methods

Design

An integrative literature review design was employed, based on the procedures described by Whittemore and Knafli (2005). Integrative literature reviews are a form of research that, ‘reviews, critiques and synthesises representative literature on a topic in an integrated way’ (Torraco, 2005, p. 356). Integrative reviews have been used previously in occupational therapy (Pettersson, Pettersson & Frisk, 2012). They are an appropriate means of forming a holistic conceptualisation of the literature on new or emerging topics (Torraco). Integrative reviews have also been identified as useful for evidence-based practice (Whittemore & Knafli).

Search strategy

Searches were conducted in four online databases: CINAHL, Medline, AMED and PsycInfo, using the search terms: “occupational therapy” and “obesity” or “weight”. These search terms were considered most likely to yield articles that specifically addressed occupational therapy intervention in relation to obesity. Searches of the following occupational therapy journals were also conducted using the same search terms: *American Journal of Occupational Therapy, Australian Occupational Therapy Journal, British Journal of Occupational Therapy, Canadian Journal of Occupational Therapy, Swedish Journal of Occupational Therapy, Occupational Therapy in Health Care, Occupational Therapy International, Occupational Therapy in Mental Health and Occupational Therapy Journal of Research.

Selection criteria

Inclusion criteria included articles explicitly relating to occupational therapy practice and obesity. Integrative reviews are the broadest type of review methods allowing for the inclusion of empirical literature as well as theoretical literature (Whittemore & Knafli, 2005). Accordingly, this review includes articles describing both qualitative and quantitative research as well as theoretical articles, including program descriptions or evaluations. Letters, conference abstracts and unpublished theses were excluded. Only articles published in peer-reviewed journals, in English, between 2002 and 2012 were included. Decisions regarding the inclusion and exclusion of articles were reviewed by all authors of this review. Articles were excluded if they did not meet the above criteria. For example, due to the use of the search term *weight*, the initial searches included a large number of articles on low-birth weight infants that were excluded. The number of articles included and excluded at each stage of the selection process is illustrated in Figure 1.

![Modified PRISMA flowchart](Moher, Liberati, Tetzlajf & Altman, 2009).
Analysis

Critical appraisal

Each of the research studies included in the review was critically appraised by the first author using the McMaster University Guidelines and Appraisal Forms for Quantitative and Qualitative Research (Law et al., 1998a,b). These tools were designed for use in evidence-based practice in occupational therapy and have been used in other occupational therapy reviews, in some cases with the application of a scoring system (Alexandratos, Barnett & Thomas, 2012; Barras, 2005; Thomas, Gray & McGinty, 2011). However, the scoring system was not implemented in this review due to the varied nature of the research articles included; issues regarding quality which were identified through the critical appraisal process were reported in the findings and taken into consideration in the discussion and implications for practice.

Thematic analysis

Inductive thematic analysis, following the procedures outlined by Braun and Clarke (2006), was conducted across all of the articles included in the review. Firstly all papers were reviewed and notes made of initial ideas. Initial coding involved ascribing codes to sections of text in the articles that described aspects of occupational therapy practice in relation to obesity. The text relating to each of the codes was compiled using a spreadsheet. The codes were then reviewed and collated into themes. Themes were refined through a process of comparing them back to the codes and the original articles. Finally definitions and names for each of the themes were defined as was their relationship with each other. The thematic analysis was conducted by the first author with peer review of decision-making at each stage by the other authors.

Results

A total of 22 articles were included in the review, 12 quantitative or mixed method research articles, two qualitative research articles and eight theoretical articles. The majority of articles (15) focused on children and young people. Four articles were about people with mental illness, and four specifically about people who were obese. Two of the articles focussed on the knowledge and attitudes of occupational therapists and finally there was one article about African-American women. Three articles were represented in two of these groups as they were about children or young people who also either had a mental illness or obesity.

Critical appraisal

Quantitative studies

The critical analysis of the 12 quantitative and mixed methods studies is summarised in Table 1. Only three of these studies evaluated outcomes of interventions. Two studies evaluated the effectiveness of the introduction of Nintendo Wii Fit on increasing physical activity participation. Bacon, Farnworth and Boyd (2012) introduced the Wii Fit to patients in a forensic mental health setting using group sessions as well as access in between these sessions. Jacobs et al. (2011) provided the Wii Fit to university students for use in four weekly sessions. Both studies found some improvement in attitude to and engagement in physical activity. However, they were both identified as pilot studies and had less than ten participants limiting the generalizability of their findings. The third outcome study evaluated the effectiveness of games in increasing knowledge and changing dietary habits in children who were obese (Munguba, Valdés & Da Silva, 2008). Whereas there was some evidence of increased knowledge this did not translate into behaviour change. The small sample size was also identified as a limitation. Other limitations common to all of the intervention studies included short time frames, use of convenience sampling and lack of established reliability and validity of data collection tools.

The majority of the papers in the quantitative analysis (eight) were cross-sectional studies with a focus on describing specific needs of identified population groups, including children (McMullan, Chin, Froude & Imms, 2012; Ziviani, Kopeshke & Wadley, 2006; Ziviani, Poulsen & Hansen, 2009; Ziviani et al., 2008), people with mental illness (Northey & Barnett, 2012), people with severe obesity (Forhan, Law, Vrkljan & Taylor, 2011) and African-American women (Blanchard, 2009). One was a validation study of an assessment tool (Stanley, Boshoff & Dollman, 2007). Many of these studies also had limitations related to their sampling, including small sample sizes and decreased generalizability due to the use of convenience sampling resulting in homogenous samples from discrete locations.

Qualitative studies

The critical analysis of the qualitative studies is summarised in Table 2. Both of the articles included in the qualitative synthesis explored experiences of participation, identifying needs and strategies to support increased participation. Forhan, Law, Vrkljan and Taylor (2010) explored the participation in everyday occupations of people with extreme obesity whereas Ketteridge and Boshoff (2008) explored the perceptions of adolescents regarding why they participated in physical activity. In both cases, transferability of findings was limited due to the characteristics of sampling and neither study identified reaching redundancy in data analysis.

Thematic analysis

Two themes, each with four categories, emerged during thematic analysis (Fig. 2). The first theme was the focus of occupational therapy intervention, which had four
Table 1: Quantitative studies

<table>
<thead>
<tr>
<th>Reference</th>
<th>Purpose</th>
<th>Study design</th>
<th>Participants</th>
<th>Intervention</th>
<th>Findings</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacon et al. (2012)</td>
<td>Evaluate use of Nintendo Wii Fit to change physical activity engagement in forensic mental health</td>
<td>Cohort, mixed methods. Data included energy expenditure, time playing and interviews</td>
<td>n = 2 forensic mental health BMI range 25-32</td>
<td>Encouragement to use the Wii Fit in bi-weekly group sessions and individually over an eight week period</td>
<td>More time spent in physical activity and changed attitudes. Wii Fit is an accessible, motivating and meaningful tool to help improve engagement in physical activity</td>
<td>Only two participants. Short time frame – five to eight weeks. Convenience sampling</td>
</tr>
<tr>
<td>Blanchard (2009)</td>
<td>To determine links between age, education and socio-economic status and obesity, and depression and obesity in African-American women</td>
<td>Cross sectional survey. Data collected face to face using the African American Female Health Survey. Height, weight and waist size were measured and BMI calculated</td>
<td>n = 378 African-American women</td>
<td>No intervention</td>
<td>African-American women in Omaha have a higher rate of obesity and obesity is correlated with depression as well as increased age and income</td>
<td>Sampling/selection bias. Generalisability may be limited due to recruitment from church community. Under reporting due to social acceptability</td>
</tr>
<tr>
<td>Forhan et al. (2011)</td>
<td>To describe time use among individuals with class III obesity, including satisfaction, enjoyment and importance</td>
<td>Cross sectional survey. Demographic information. The Occupational Questionnaire and a question about the impact on occupations</td>
<td>n = 129 adults, class III obesity, in obesity treatment programs</td>
<td>No intervention</td>
<td>75% reported obesity limited their occupations. More time spent in personal care and less time in work and recreation than general population</td>
<td>All had class III obesity. Response bias, all in treatment for obesity. Occ Questionnaire didn’t cover entire 24 hours</td>
</tr>
<tr>
<td>Jacobs et al. (2011)</td>
<td>To determine if Wii Fit is effective in establishing an exercise routine for university students, effect of group participation and changes in BMI</td>
<td>Single case design. Data included BMI, weight and online questionnaires regarding activity level, readiness and behavioural regulation</td>
<td>n = 5 female undergraduate students</td>
<td>Typical activity (n = 1) Experimental condition one (n = 2) – weekly, individual 45 minutes Wii exercises, x4 Experimental conditions two (n = 2) – with partner</td>
<td>Participants in the singles group experienced significant weight loss and increase in motivation. Doubles group did not experience significant weight loss, and experienced decrease in motivation</td>
<td>Very small sample size. Doubles met for shorter times and less frequently. Limited data points. Overall duration was short – only three months</td>
</tr>
<tr>
<td>McMullen et al. (2012)</td>
<td>To investigate participation in activities outside school, effects of gender and year levels, of grade 6 and year 8 students</td>
<td>Cross sectional survey. Demographic questionnaire, Childrens Assessment of Participation and Enjoyment (CAPE) and Preferences for Activities of Children (PAC)</td>
<td>n = 54, 41 year eight and 43 grade 6, overall age range 11-14</td>
<td>No intervention</td>
<td>Informal - formal activities. Older students had less recreational and active physical activities. Girls did more skill based and self-improvement activities. No gender differences in active physical activities</td>
<td>Small sample size. High number of rural students and low numbers born outside Australia. Variable administration methods for questionnaires</td>
</tr>
<tr>
<td>Munguba et al. (2008)</td>
<td>To compare educational-nutritional play activities to prevent childhood obesity, implemented by occupational therapists</td>
<td>Cohort. Semi-structured interview, direct and structured observation, and focus group</td>
<td>n = 200 children aged from 8 to 10 years</td>
<td>A video game and a board game based on the food pyramid. Each focuses on the students organising their daily diet</td>
<td>More students preferred the video game. Children reported learning while playing. Children demonstrated increased knowledge but not behaviour change</td>
<td>Small sample size. Lack of information regarding data reliability and validity of data collection tools</td>
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<tr>
<td>Northey and Barnett (2012)</td>
<td>To explore the physical health parameters and physical activity levels of people with SMI compared to the general population</td>
<td>Cross sectional comparative study. International Physical Activity Questionnaire, anthropometric and physiological measures, BMI and waist to hip ratio</td>
<td>n = 41, 21 with SMI (men 10 and women 11) and 20 general population (men 8 and women12)</td>
<td>No intervention</td>
<td>BMI was higher in SMI group. General population were more engaged in leisure physical activity, overall moderate physical activity and total vigorous physical activity compared with the participants with SMI</td>
<td>Small sample size. Samples not matched for demographics. People with SMI had completing the questionnaire (recall and literacy levels)</td>
</tr>
<tr>
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<td>Stanley et al. (2007)</td>
<td>To provide evidence of the validity coefficients for the 3dPAR questionnaire in a South Australian female population</td>
<td>Cross sectional. Concurrent validity was measured by the strength of the association between the 3dPAR questionnaire data and the corresponding CSA accelerometer data</td>
<td>$n = 20$ female students from a private school aged 12–14 years, from years 7, 8 and 9</td>
<td>No intervention</td>
<td>Evidence of moderate validity for the 3dPAR questionnaire in assessing vigorous and overall physical activity in women aged 12–14 years. Not valid for assessing moderate physical activity for the same population</td>
<td>Small sample size. Limited generalizability as all from the same private school. Single criterion measurement</td>
</tr>
<tr>
<td>Vroman and Cote (2011)</td>
<td>To explore prejudicial attitudes and stereotypical beliefs about obesity among occupational therapy students</td>
<td>Cohort, quasi experimental</td>
<td>$n = 189$ (122 undergrad, 67 grad, 181 women, 8 men). Age 20–52 years. BMI 17.5–35.7</td>
<td>Participants were given a case scenario accompanied by a photo either normal weight or morbidly obese client. Completed self-report measures.</td>
<td>Many students had prejudicial attitudes and stereotypical beliefs about persons with obesity</td>
<td>Potential social desirability bias in responses. Homogenous sample. Small sample size from one locality</td>
</tr>
<tr>
<td>Ziviani et al. (2009)</td>
<td>To clarify the association between functional motor skills and physical activity in primary school aged children, and the contribution of gender, BMI and family socio-economic status</td>
<td>Cross sectional. Secondary data analysis from a longitudinal study, survey information. Movement Assessment Battery for Children, BMI, steps per day as measured by a pedometer</td>
<td>$n = 124$ primary school aged children</td>
<td>No intervention</td>
<td>No significant association between FMS and steps taken. Children from lower socio-economic families had lower levels of physical activity. Boys with higher BMI had poorer movement skills. Boys from lower socio-economic families had higher BMI</td>
<td>Low number of participants who were overweight or obese</td>
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<tr>
<td>Ziviani et al. (2008)</td>
<td>To explore socio-environmental factors contributing to physical inactivity and growing levels of obesity in children</td>
<td>Cross sectional, survey</td>
<td>$n = 318$ parents of primary school aged children</td>
<td>No intervention</td>
<td>Children from low SES spent more time playing at home and in their neighbourhoods less in commercial facilities. They were less likely to participate in structured activities and sampled a smaller range of activities</td>
<td>Sample was drawn from metropolitan areas only. No consideration of socio-cultural factors that may influence activity levels in different SES groups</td>
</tr>
<tr>
<td>Ziviani et al. (2006)</td>
<td>To determine if the presence of a walk to school program affected the number of children in a school who walked to and from school</td>
<td>Cross sectional survey</td>
<td>$n = 63$ parents of primary school children</td>
<td>No intervention</td>
<td>There was no difference in the number of days children walked to school between the two schools. Most children went to school by car</td>
<td>Small sample size. Voluntary – possible selection bias. Estimates rather than accurate measurement of some variables. Lack of benchmarking information with other schools</td>
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</table>
Focus of occupational therapy intervention

Health promotion and prevention. The articles described interventions across the spectrum of prevention activities. The term ‘health promotion’, was primarily used in the articles about children and young people and in describing interventions at a primary level. The goal of intervention in these articles was generally increasing levels of physical activity. Some of these articles suggested intervention at population level through influencing policy and public health agendas (Pont, Ziviani, Wadley & Abbott, 2011; Poulsen & Ziviani, 2004) and urban design and transport planning (Ziviani et al., 2006, 2008). Others described occupational therapy intervention at a community level or in schools (Cahill & Suarez-Balcazar, 2009; Dwyer, Baur, Higgs & Hardy, 2009; Ziviani, Desha, Poulsen & Whiteford, 2010; Ziviani et al., 2009). Secondary prevention activities were also evident in the articles about children and young people (Munguba et al., 2008) as well as those addressing the needs of people living with a severe mental illness (Bacon et al., 2012; Knis-Matthews, Richard, Marquez & Mevawala, 2005; Lloyd, Sullivan, Lucas & King, 2003; Northey & Barnett, 2012). A tertiary prevention role, was also identified in working with adults with severe obesity, to support occupational balance (M. Forhan et al., 2011; Forhan et al., 2010) and to optimise motor adaptation in children with obesity (Gill, 2011).

Increasing physical activity participation. Sixteen of the articles focussed on increasing participation in physical activity to prevent obesity or achieve weight loss. The occupational therapy role in helping to increase participation in physical activity was generally framed in terms of the profession’s focus on the relationship between occupation and health and the use of occupations to promote health and well-being (Ketteridge & Boshoff, 2008; Pont et al., 2011). Some authors also drew on the International Classification of Functioning (ICF) (World Health Organisation, 2001) and physical activity as a component of participation as described in this framework (McMullan et al., 2012; Northey & Barnett, 2012; Ziviani et al., 2010). Others were more specific in framing physical activity in the context of leisure participation or recreation (Lloyd et al., 2003; McMullan et al.).

An occupational therapy role was advocated at a population, or community level to help increase the physical activity level of children and young people (Ketteridge & Boshoff, 2008; McMullan et al., 2012; Pont et al., 2011; Poulsen & Ziviani, 2004; Stanley et al., 2007; Ziviani et al., 2006, 2010). Interventions were also described which targeted the needs of groups identified at increased risk of obesity, such as children from low socio-economic and urban areas who may have decreased access to opportuni-

TABLE 2: Qualitative studies

| Reference          | Purpose                          | Study design                      | Participants | Intervention | Findings                                                                 | Limitations                                                      |
|--------------------|----------------------------------|-----------------------------------|--------------|--------------|---------------------------------------------------------------------------|                                                                |
| Forhan et al. (2010) | To describe the experience of participation in everyday occupations for people with class III obesity undergoing treatment | Descriptive phenomenology. Data gathering via semi-structured interviews | n = 10 (7 women and 3 men) with class III obesity | No intervention | Tension caused by disconnect between values, opportunities and abilities. Barriers identified in the built environment and due to stigma. Described persevering and making use of physical and emotional supports | Participants were all seeking treatment for obesity and therefore might have specific characteristics as a subgroup who have decided to address their situation |
| Ketteridge and Boshoff (2008) | To investigate the perceptions of adolescents as to why they participate in physical activity and strategies that facilitate engagement | Interpretive qualitative design using three focus groups | n = 13 adolescents aged 11-15, six women and seven men | No intervention | Reasons for participating included, physical health benefits, emotional benefits, socialising, and psychological benefits and self-development. Factors that facilitate involvement were, activities being fun and interesting, having choice, encouragement and support and reducing the competitive element | Limited generalisability as participants were all from private schools. Limited contribution from less active adolescents. Data saturation not reached |
ties for participation (Cahill & Suarez-Balcazar, 2009; Knis-Matthews et al., 2005; Ziviani et al., 2008), university undergraduates who are identified as being prone to gaining weight (Jacobs et al., 2011) and people living with severe mental illness, who are at risk of obesity as a result of a range of factors, including decreased physical activity, medication side effects and reduced access (Lloyd et al., 2003; Northey & Barnett, 2012) and those held in forensic settings, for whom access is an issue (Bacon et al., 2012).

Modifying dietary intake. A less prevalent focus of intervention was changing dietary intake. Only one of the articles had this as its primary focus. Munguba et al. (2008) described the outcomes of a nutrition education program for children affected by obesity. Diet was a consideration in broader lifestyle-focused interventions described in four other articles for children (Cahill & Suarez-Balcazar, 2009; Ziviani et al., 2010), people with mental illness (Lloyd et al., 2003) and people affected by weight gain and obesity (Lloyd et al.).

Reducing the impact of obesity. The final focus of intervention was on reducing the impact on those already affected by obesity. Forhan et al. (2010) and Blanchard (2009) advocate a role in enabling participation for adults with obesity. More specifically, based on their finding that adults with extreme obesity are affected by occupational imbalance, Forhan et al. (2011) suggest occupational therapy interventions should aim to reduce the energy expenditure and increase the efficiency of time use in self-care and participation in work and leisure activities. Gill (2011), also identified a specific role in improving motor adaptation in the context of occupational performance to reduce injuries in children with obesity.

Occupational therapy intervention strategies

Assessment. Assessment was only discussed in the context of interventions to prevent obesity among children, and specifically in relation to physical activity participation. Assessment to identify children at risk of not meeting adequate levels of participation was advocated as a key role and responsibility of occupational therapists working with children (Dwyer et al., 2009; Poulsen & Ziviani, 2004). A number of strategies and tools for assessing both patterns of participation and factors influencing participation were described. Dwyer et al. advocated self-report, with reporting by parents for children under the age of nine or ten years. They also advocated the need to consider contextual factors, such as parental attitudes, access to safe play areas, climatic conditions and socioeconomic status. The SCOPE-IT model of time use was suggested by Poulsen and Ziviani, whereas Stanley et al. (2007) provided evidence for the validity of the Three Day Physical Activity Recall (3dPAR) with women aged 12–14. Both of these tools provide information not only on the amount of physical activity but the activity context and distribution throughout the day which assist in developing occupation focussed interventions. An occupational focus was also evident in the Children’s Assessment of Participation and Enjoyment (CAPE) and the Preferences for Activities of Children (PAC) (McMullen et al., 2012) and the Model of Children’s Active Travel (M-CAT) (Pont et al., 2011).

Environmental modification. Modifying the environment was advocated in nine of the reviewed articles. In most cases, the goal of environment modification was to increase physical activity participation. A number of the articles suggested a role for occupational therapists at population level to help modify environments through influencing policy (Pont et al., 2011; Poulsen & Ziviani, 2004) and bodies responsible for urban design, transport and traffic planning, to increase accessibility of facilities for leisure time physical activity as well as active travel options. Access was also the target of some interventions which aimed to alter the social environment. Two of the articles described programs which aimed to increase access to community-based facilities for leisure-based physical activity by altering social environments in those organisations. Lloyd et al. (2003, p. 20) described reducing stigma and facilitating community integration of people with severe mental illness through ‘building partnerships’ with a mainstream gym. Similarly Ziviani et al. (2009, p. 264) described ‘scaffolding participation’ in community-based recreation activities for children with some of the strategies addressing the ‘motivational climate’ of organisations. Changing the social environment in schools and families was also a target for intervention addressing childhood obesity (Cahill & Suarez-Balcazar, 2009; Ziviani et al., 2010).

Education. Providing education for families or communities was suggested as a core prevention strategy. This was most frequently described in relation to combatting the rise in childhood obesity through increasing physical activity participation. This involved providing information to parents and community groups about the importance of children’s physical activity participation and facilitation of this (Cahill & Suarez-Balcazar, 2009; Dwyer et al., 2009; Poulsen & Ziviani, 2004). Education was also identified as part of direct service provision by occupational therapists for client groups identified at risk of obesity, with the aim of changing behaviours. Munguba et al. (2008) trialled nutritional education programs for children who were obese. Education about diet and exercise was part of a multifaceted fitness and lifestyle program for people with severe mental illness described by Lloyd et al. (2003). Northey and Barnett (2012) also advocated education about physical activity for people with severe mental illness. Education of occupational therapists, and students about obesity was also described in two of the papers (Forhan & Law,
interventions that gave greater consideration to the five health promotion actions recommended in the Ottawa Charter (World Health Organisation, 1986). Previous studies have suggested that occupational therapy has tended to focus on the action of developing personal skills (Flannery & Barry, 2003; Quick et al.). In contrast, studies in this review also described activities consistent with three other of the five actions, building healthy public policy, creating supportive environments and strengthening community action. Interventions described in this review primarily focussed on increasing physical activity participation and, to a lesser extent modifying dietary intake which are identified as key to success in addressing obesity in the Australian clinical guidelines on obesity for both adults (National Health and Medical Research Council, 2003) and children (NHMRC, 2003) and having good evidence for effectiveness in systematic reviews of interventions for obesity (Oude Luttikhuis et al., 2009; Shaw, Gennat, O’Rourke & Del Mar, 2006). However, there was strong evidence of an occupation focussed approach and recognition of the need to consider the interaction between person, environment and occupation in supporting sustainable behaviour change. This occupation focussed approach to health promotion is argued for by Wilcock (1998, 2006), who has long been an advocate for occupational therapists’ contribution to health promotion. This is also reflected in the suggestion by Parnell and Wilding (2010, p. 346) that occupational therapy, ‘apply an occupational perspective to many of the challenges that plague contemporary life’, citing as an example the increasing incidence of obesity.

Limitations

Due to the small number of outcome studies included in the review much of the content of the discussion in each of the themes draws on discussion and recommendations for practice rather than study findings. Where outcomes of interventions are reported they should be interpreted with caution due to the small number of studies on which they are based and the limitations of these studies.

Conclusion

The papers examined in this review provide a framework for a comprehensive role for occupational therapy in addressing the challenges posed by the current obesity epidemic. The scope of the role identified is broad, and the potential contribution of occupational therapy exciting, however, the body of literature on which this picture is built is limited, both in size and in quality. The findings of this review must therefore be considered in this context and seen as indicators for further research and development rather than an evidence base for practice. The suggestions for an occupation focussed health promotion approach, moving beyond a focus on diet
and exercise to a consideration of behaviour change in the context of a person’s overall occupational participation provides a clear direction for research that would support a well-defined occupational therapy role in this field. In addition, the shift beyond our traditional focus on developing personal skills to other health promotion actions such as building healthy public policy and strengthening community action has implications for the education of future occupational therapists to ensure they are equipped to manage these roles. There is considerable scope for development of occupational therapy in this emerging practice area.

References


