

With the emergence of occupational science, there has been renewed interest in the health benefits of occupational engagement and a call for more research into the occupational nature of humans. Engaging in occupations is known to have a positive effect on an individual's health and sense of wellbeing. A common feature of people with schizophrenia, however, is a decrease in volition and a reduction in the occupations performed. This study explored some of the influences on occupational engagement for people with schizophrenia living in the community.

A qualitative approach was chosen, using semi-structured interviews. Four male and four female participants, aged 23 to 49 years, described the influences on their occupational engagement. Content analysis, primarily using coding and memoing, was employed to categorise the data. Four main themes emerged: health, routine, external factors and internal factors. Some specific factors identified within these themes were medication, daily schedules, staff, family, work, self-concept and challenges. The implications of the results are discussed, with particular reference to assisting occupational therapists to enable clients with schizophrenia to engage more successfully in occupations.

Some Factors influencing Occupational Engagement for People with Schizophrenia Living in the Community

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Introduction

It appears that humans have an innate need to engage in occupations which is related to their health and survival (Wilcock 1993a,b, 1995, 1998, Wood 1998). For the purpose of this article, occupations will be defined as 'all purposeful human activity' (Wilcock 1998, p22). Christiansen and Baum (1997) described the entire chronology of a person's life from birth to death as a series of occupations, which differed according to various influences. These influences were both internal, such as a person's degree of arousal or internal motivation, and external, such as the location of or the social demands for performing the occupations. They concluded, therefore, that when time use was discussed, the structure of individuals' lives was described.

Much has been written about schizophrenia and, increasingly, occupational scientists and occupational therapists are writing about the occupational nature of humans. Little, however, has been written, and even less research has been carried out, concerning the occupational nature, and in particular the factors influencing the occupational engagement, of people with a diagnosis of schizophrenia. A comprehensive literature search was carried out using occupational therapy, occupational science and other related texts and the following search terms: occupation, occupational therapy, schizophrenia,

motivation, personality and self-efficacy. The literature search highlighted the areas given below as influences on occupational engagement.

Literature review

Health

The concept that a person's engagement in activity is important for health was proposed to be occupational therapy's great hypothesis by Reilly (1962). Occupations are performed to overcome physiological, psychological and social discomfort and to maintain the well-working of the organism (Christiansen 1994, Polatajko 1994, Wilcock 1998).

Studies have shown that increasing disability is related to activity patterns characterised by diminishing diversity and frequency, slower tempo, greater proportions of time spent on personal care and fewer activities outside the home (Kielhofner 1977, Yerxa and Baum 1986, Pentland et al 1998). Brown (1998) found in her research with people with schizophrenia that as disability increased fewer occupations were performed. The disorganisation of time and difficulty using time are also common features of mental illness (Kielhofner 1977, Trombly 1995, Williams 1997). Jackson (1996) argued, however, that when forced into safe existences people with disabilities actively struggle to reintroduce elements of arousal into their daily practices.

Sociocultural and environmental factors

Wilcock (1993a,b, 1995, 1998) has suggested that because our occupational brain enables us to override biological needs with socioculturally valued initiatives, our occupational behaviour is, in large part, socioculturally determined. The environment provides physical, social, cultural, psychological and spiritual demands and resources, which individuals use to put their occupations into context (Wilcock 1995, Rebeiro 1998).

People actively select and change their environments in a dynamic way and the environment both demands certain things of the performer and provides the conditions that are necessary to support performance (Levine 1984, Christiansen 1994, Kielhofner 1997). For example, it has been suggested that the main reason for consistency of time use across adult populations is employment and the daily routines into which we are socialised during childhood (Christiansen 1996, Christiansen and Baum 1997). Employment for people with schizophrenia is known to provide economic benefits (Oxley 1995), inspire hope (Strong 1998) and decrease negative symptoms (Bell et al 1993). Warner (1987) noted that hospital admissions increased for people with schizophrenia during economic slumps and working patients had a better prognosis.

Meaning

Humans seem to attach meaning to occupations in order to make sense of their experiences (Breines 1989, Hasselkus and Rosa 1997). What a person chooses to do with his or her time has social, symbolic, cultural and spiritual significance (Canadian Association of Occupational Therapists 1991). Hannam (1997), in a small-scale qualitative study which investigated the meaning of tea-drinking, concluded that everyday occupations played a dynamic part in holding the individual in a meaningful social world.

The concept of narrative has added a new dimension to understanding how individuals interpret, find meaning and choose their occupations (Mattingly and Fleming 1994, Christiansen and Baum 1997, Kielhofner 1997). Narrative refers to the autobiographical stories through which lives are described and interpreted to the self and others (Kielhofner 1997). Trombly (1995) proposed that motivation derived from a person's sense of the importance of participating in certain occupations or performing in a particular manner; from the person's estimate of reward in terms of success or pleasure; or perhaps from a threat of negative consequences if the occupation was not performed. In a study of people with a long history of mental illness, Strong (1998) found that individuals reported that their efforts were often activated and supported by external relationships, for example with a keyworker or friend, in addition to other factors such as financial resources and crisis situations.

Chronobiology and patterns of daily occupation

Chronobiology is the study of the biological factors that influence daily routine and zeitgeber is the name given to outside influences on our internal clocks (Christiansen and

Baum 1997). Daylight and noise are examples of physical zeitgebers, while mealtime and bedtime rituals constitute social zeitgebers. The continuing interaction between the physical and social environments is important in maintaining synchrony between rhythms within the individual and the environment (Christiansen 1996). This synchrony may be vulnerable to disharmony in individuals with schizophrenia, who find it difficult to have routines in their lives. Drawing from the social psychological literature, Carlson (1996) stated that repetition was extremely important in raising the probability that a person would persevere in a particular occupation. He argued that the act of participating in an occupation often tended to increase future involvement with the same or similar occupations. He suggested that a powerful key to promoting motivation was helping the client to get started in the first place; once he or she had started, further perseverance was likely to have its own momentum.

Part of the predictability of life from day to day reflects the consistency of occupations. Obligatory occupations, such as self-care and sleep, are typically repeated as part of daily routines (Christiansen 1996). Viewed over extended periods, habits and routines comprise important dimensions of lifestyle which have been shown to influence health and wellbeing (Jackson 1996, Christiansen and Baum 1997). They serve the purpose of conserving the energy needed for attention and decision making, while enabling people to do the things that they must do regularly without requiring high levels of motivation or energy (Christiansen and Baum 1997). Routines provide an orderly structure for daily living and studies have supported the idea that certain occupations tend to take place at certain times of the day (Ludwig 1997). Since the 1930s, there has also been evidence that people can be distinguished by their tendency to function better either earlier or later in the waking period (Kleitman 1937, cited in Christiansen 1996) and choose occupations accordingly. Studies have demonstrated that there are measurable physiological, psychological and performance-related differences linked to time of day between these two diurnal types (Kerkhoff 1985, cited in Christiansen 1996).

Flow

Csikszentmihalyi (1992, 1997) has developed a theory about a source of intrinsic motivation called 'flow', which is a subjective psychological state that occurs when one is totally involved in an activity. When a person is in flow, a positive affective state, high motivation, high cognitive efficiency and high activation are experienced (Emerson 1998). Activities that bring about flow are called 'autotelic activities'. These activities must provide a set of clear challenges and also provide opportunities for action that match the person's skills (Csikszentmihalyi 1992, 1997, Emerson 1998). The 'autotelic personality or self' is one that can transform potentially mundane, boring or anxiety-provoking situations into flow (do Rozario 1994). Csikszentmihalyi (1992, 1997) described four basic processes or rules that together can lead individuals to an experience of flow: setting goals, being immersed in the activity, paying attention to what is

happening and learning to enjoy the immediate experience. Emerson et al (1998), prompted by Csikszentmihalyi's assertion that people with schizophrenia do not experience flow, carried out a qualitative study exploring the enjoyment experiences of individuals with schizophrenia. They concluded that people with schizophrenia have the ability to experience flow and enjoyment.

The aim of the study was to explore some of the factors influencing occupational engagement for people with schizophrenia.

Method

In order to achieve the aim of the study, the researcher interviewed people with schizophrenia about the influences on 'the things that they do'.

For the purpose of this study, the individuals' subjective feelings about the influences on their occupational engagement needed to be explored and, therefore, a qualitative methodology was chosen. Polgar and Thomas (1995, p109) described qualitative research as a 'disciplined enquiry examining the personal meaning of individuals' experience and actions in the context of their social environment'.

Gibson (1998) stated that researchers were not agreed on which method of interviewing was most appropriate for people with serious mental illness, in terms of both the quality of the data produced and sensitivity to the client group. Based on the literature, a semi-structured interview was designed to provide a guide within which the interviewer was able to explore, probe and ask questions. A cue sheet was used, which was broadly divided into five areas with 11 questions and ideas for prompting. Patton (1990, p238) defined a probe as 'an interview tool used to go deeper into the interview responses'.

The five areas of inquiry in the interview were how time is spent; perceived influences on occupational engagement; routines; challenges; and flow. The questions were worded in non-technical language to enhance participants' responses. An interview schedule can be obtained from the first author.

Ethical approval and procedure

Initially, the proposal was scrutinised by the university ethics committee and, after some recommendations were addressed, the proposal was submitted to the local National Health Service trust ethics committee. The proposal was approved conditional on minor changes, which were incorporated.

The principle behind informed consent is that participants are told about the study before it occurs (Seale and Barnard 1999). This ensures that individuals participate in the research through their own choice, without any element of deceit, duress, fraud, unfair inducement or manipulation (Berg 1998).

On receiving ethical approval, permission was obtained from the researcher's managers, the potential participants'

general practitioners and the community mental health team managers to conduct the study with clients known to them. The occupational therapists within the community mental health team were asked to assist in the research and were given an information sheet about the study. On agreeing to participate, the occupational therapists identified clients on their caseload who met the inclusion criteria of being between the ages of 18 and 65 years, having a diagnosis of schizophrenia and speaking English. The occupational therapists explained the study to their clients and if a client was willing to meet the researcher she then made contact with him or her.

On meeting a potential participant, the researcher again explained the method, purpose and what was expected to be done with the findings of the research. A written copy of this information was also given. A statement was included explaining that the client would be free to withdraw from the study at any time without any adverse consequences on his or her treatment. In addition, questions were invited before the client was asked to sign a consent form and offered a photocopy.

Two pilot interviews were conducted and, in doing so, two minor alterations to the interview format were made. These were incorporated into the final format and, therefore, the pilot interviews were included in the results. Prior to the interviews, permission to tape them was gained and the option given of the interviews being written down as they occurred if the participants did not want them taped; this applied on two occasions.

Data analysis

The interviews were transcribed verbatim as soon as possible after they had occurred. The process of analysing the data initially took place whilst simultaneously collecting and transcribing them and no predetermined categories were searched for. Content analysis allowed themes to develop and more detailed analysis of the data to occur. This was done primarily by using coding and memoing (Bailey 1991). To increase the reliability of the analysis, a senior occupational therapist with experience of working in this clinical area and of the research method also analysed the transcripts (Mays and Pope 1995). She identified themes and these were found to match those identified by the researcher.

Confidentiality

Confidentiality was ensured throughout the research process by using pseudonyms, storing the information on computer and keeping the transcripts in a secure, locked location (Seale and Barnard 1999). All names of people and places mentioned in the study were changed to ensure anonymity.

Findings and discussion

Eight interviews were carried out, lasting on average between 35 and 40 minutes, with four men and four

women. Four main themes emerged, relating to influences on occupational engagement. The themes were health, routines, external factors and internal factors. The sequence of the themes does not indicate any order of importance. Sections of the text which are unrelated to the theme are omitted, indicated by [].

Health

The participants were asked in what ways they thought their illness influenced what they did. All the participants were able to describe the influence of health on their occupational engagement. Of all the themes identified, this was probably the one that seemed easiest for the participants to discuss and was often mentioned prior to prompting by the researcher. The participants indicated that their occupational engagement was affected by their mental and physical health, in terms of both not feeling able or confident enough to do certain things and being aware that if they did too much it could cause them to feel unwell:

- I do less because when I'm unwell I don't know what I'm doing, I'm in a trance. I get up to 'mischief'. (*Bob.*)
- I think, I think I probably try not to do too much in the day and you know I try, and I try to avoid things which would be too stressful. [] So I try to do things that won't trigger it off. Like I won't walk in the hot weather for very long, I won't do six million things in one day, although it's tempting. (*Eve.*)

As both actual and perceived disabilities increased due to their illness, fewer occupations were performed by the participants, thus mirroring the study of Brown (1998). She found that despite people with schizophrenia doing fewer activities, there was no evidence that they were dissatisfied with this. In this study, however, the participants gave the impression that they felt restricted by their illness:

Well, because I suffer from schizophrenia I find going to the shops to get a carton of milk very difficult. (*Charlie.*)

Several participants felt strongly about their medication. Most felt that it contributed to keeping them well but did have side effects, such as making them feel tired and causing them to sleep more than they would like to. Fred talked about sleeping when he had nothing better to do:

It's just something to do ... I get tired, it's just something to do.

At the same time, feeling tired and sleeping a lot restricted engagement in occupations:

If I feel bad I would probably go to bed and have a lay down, especially if I'm mentally feeling bad. (*Eve.*)

In some instances, paranoia prevented occupational engagement, for example:

Whenever I do the hoovering, I think that someone is talking outside my door and then I don't do the hoovering. (*Charlie.*)

In other cases, however, 'doing things' was used as a means of managing the symptoms of the illness:

Yea, even watching the telly sometimes can be quite helpful. (*Eve.*)

Physical health was frequently mentioned as a major issue affecting occupational engagement. In some instances, it was seen as more limiting than mental health problems, with Eve attributing most of her difficulties to physical health problems. She mentioned that until a recent diagnosis of diabetes her lack of motivation had been attributed to her mental health problems and medication, but since being treated for diabetes she had become more active.

Routines

The participants often performed certain occupations on specific days of the week, which were frequently related to receiving their benefits. These daily or weekly routines influenced what they did and were generally viewed positively. Ingrid, when talking about routines, said:

I suppose it helps me carry on, without worrying too much about how I'm feeling inside.

Charlie, in particular, felt that if he did not have a routine or timetable he would not do the things that he needed to:

In case it's hard to think what to do every week.

Eve, however, felt that her everyday routines were sometimes unhelpful, because they did not involve her interacting with other people and did not vary greatly from day to day. Evenings and weekends were also considered to be a difficult time by some of the participants, owing to their lack of structure and fewer social contacts:

Well Monday to Friday I'm busy, but when it gets to the weekend, I don't know what to do at the weekend. (*Charlie.*)

In contrast, some participants used avoiding routines as a way to minimise stress:

Well I get up when I wake up, the fact is when you're ill you don't need to be under pressure and the last thing I do is put myself under pressure, I do what I want, that's one way of easing the burden of this illness. (*Hannah.*)

The environment was also important in terms of influencing what an individual engaged in and Charlie described how, since moving, he had more access to different activities:

Well, where I used to live before I didn't do anything really, it's only since I've been at Maple Lodge that these things have taken off, because when I was in Hollacombe the staff, the things I do now weren't on offer then, not the cinema group or the art group, ever since I've come to Maple Lodge, these things have been happening.

The participants were generally able to recognise that they functioned differently at different times of the day and the week and tended to organise their time so that they were doing most when they felt that they functioned at their best. In some instances, the participants planned their days in order to engage in occupations at these times:

I think I'm an afternoon and early evening person [], I take until about 12 o'clock to be myself yea ... (Eve.)

External factors

The current study found, like Strong (1998), that individuals often attribute their occupational engagement to the influence of others. Such themes can be noted in the literature as far back as 1914 (Nelson 1988). For many participants, having someone with them was an important issue in terms of providing support and confidence:

I tend to function better when I'm with people, like if my friend comes round, or my Mum's there or something, it tends to motivate me a bit more, when I'm with someone. (Eve.)

Several accounts have been written about what it is like to have schizophrenia (Jonsson 1986, cited in Pejler et al 1995). Individuals reported that they longed for warmth, honesty and human kindness from their care providers, but what they often got was falseness and dishonesty (McGonagle and Gentle 1996). In contrast, in this study, most participants talked positively about their community workers and their importance in encouraging them to engage in a variety of occupations. Eve also felt that they did not have ulterior motives, unlike some of her family members, and because of this she listened to them and their advice:

They won't manipulate me.

Several ordinary everyday things were considered by the participants to influence what they did. Donna and Eve talked about drinking coffee symbolising the start of a new day and the caffeine stimulating them:

I like coffee, that is really good, it's true, when I do that in the morning it changes my life. When I have no coffee everything is bad. (Donna.)

The participants were also able to identify factors that they felt helped them to continue doing things and, in particular, Charlie felt that after having a shower he was more motivated to do things:

When I've had a shower it makes me feel better.

Monroe (1983, cited in Clark et al 1991) concluded that mundane, everyday experiences affect psychological wellbeing to a greater extent than major life events and are often enormously health promoting (Ornstein and Sobel 1989, cited in Clark et al 1991).

Similarly, Charlie and Donna specifically mentioned caring for their pets as influencing what they did. In response to the question, 'What do you think is the most important thing that has an effect on what you do?', Charlie replied:

I think looking after the cat.

Charlie stated that he washed the kitchen and ensured that it was clean because of his cat. Studies clearly demonstrate that there is a positive relationship between the presence of suitable animals and the sociability, health, behaviour and self-esteem of offenders, elderly people and mentally and physically disabled people (Fick 1993, Zisselman et al 1996,

Scott 1997, Whiteford 1997, Allen et al 2000). The influence of pets on motivation and engagement appears to be important.

Work and training opportunities were viewed as highly meaningful and positive by the participants. The provision of suitable work and retraining activities remains important for this client group (Bell et al 1993). The inability to work was a significant issue for most of the participants. They reported that they would like to work but felt unable to do so. In response to, 'You, you said that you felt you didn't have a purpose?', Eve said:

Yea, you see because, because I'm ill right, it's difficult for me to work.

Hannah described how unemployment had limited her social life:

Well I did have, I haven't got a social life, I haven't got a social life 'cause I left my job.

Internal factors

Self-efficacy, although difficult to measure, was also an important influence on occupational engagement. Perceived self-efficacy 'determines which activities people engage in, the amount of effort they expend before terminating the activity, and how long they will persevere in the face of adversity' (Bandura 1981, cited in Gage and Polatajko 1994, p455). People are confronted with evidence of their ability to function competently and take control of their lives as far as they are able through 'doing' (Fidler 1981, Gage and Polatajko 1994). Many participants appeared to have a poor sense of self-concept and often gave the impression that they expected little of themselves. As a result, they performed fewer occupations and did not attempt to test their capacities:

Sometimes I join them [friends] and we go out places but that's only very occasionally. [And why is that?] Um ... it's just because they're so busy, they've got their own lives to lead, they don't really need me there for anything, there's no point in me even being there. (Ingrid.)

Eve stated that as she did more she was more likely to feel better about herself and in turn do more:

I feel quite stupid and thick, but when I've done something then I feel really good.

The participants responded in a variety of ways to the question regarding challenge. For some it was vital and they wanted more of a challenge in their lives, while for others it was seen as more unnecessary pressure and was generally something to be avoided:

– I don't think it is important to have a challenge. (Ingrid.)
– ...having a challenge. I think it's probably, it's probably good, because if I've done it I feel good about myself, I feel more positive, I feel like I could tackle anything you know, give me the next challenge. (Eve laughs.)

Even if the participants did view challenges positively, they were often unable to identify what a suitable one might

be; for example, Hannah reported that she liked to have a challenge but did not feel that she had one currently. On further questioning, however, she said that she did not feel that she was well enough to be challenged.

It is often stated that people with schizophrenia have difficulty in experiencing pleasure (Cook and Simukonda 1981, Krupa and Thornton 1986). Emerson et al (1998), however, found in their study with people with schizophrenia that enjoyment could be experienced. Similarly, in this study several participants were able to identify occupations that they enjoyed and pleasure was an important factor influencing occupational engagement. Flow could not be comprehended by all the participants and in several instances it was seen as a past experience. However, in identifying occupations that gave them pleasure, some participants described flow experiences:

If I'm on the computer, then I might lose track of time. I used to be like that in college. I used to be on the computer for hours. (Eve.)

Emerson et al (1998) concluded from their study concerning pleasure and schizophrenia that if enjoyment is experienced by people with schizophrenia, the conditions that influence its occurrence should be studied. The result is likely to be both an increase in engagement level and an increased sense of wellbeing and enjoyment.

Limitations of the study

When carrying out qualitative research of this nature, the researcher inevitably has an influence on the participants. To minimise this effect, the participants did not know the researcher but they were aware that she was an occupational therapist which might have influenced their responses. It is also noteworthy that the study was conducted in London and, because of this, the participants included in the sample may not be representative of other areas of the United Kingdom. The researcher was dependent on the occupational therapists within the area to select appropriate clients for the research. It was assumed that because these individuals were known to a community mental health team they had a severe and enduring mental health problem but were not acutely unwell. There was, however, dependence on the occupational therapists to determine which of their clients were suitable to be involved in the research.

The literature search proved to be helpful in developing the interview format; however, several findings from the results indicate that some important areas were not identified, such as medication. A literature search that had included literature in addition to occupational therapy and occupational science may have been more wide ranging and assisted the researcher in devising a more comprehensive interview schedule. The interview schedule, although useful, did guide the participants and it might have given richer data if the researcher had spent several occasions with the participants talking informally with them. It is recognised that the interview schedule did in some way influence the results, despite the researcher attempting to identify themes independent of it.

Implications for occupational therapy

The results of this study have important implications for occupational therapy and mental health practice in relation to addressing the needs of individuals with schizophrenia living in the community. This study indicates that there are many factors that influence occupational engagement, but that they are largely poorly understood and, therefore, may not always be considered consistently by occupational therapists when working with their clients. It is important for occupational therapists to allow their clients to tell their stories in order to build up a picture of the influences on what they do (Mattingly and Fleming 1994, Christiansen and Baum 1997, Kielhofner 1997).

Brown (1998) suggested that occupational therapists often assessed whether a client could perform a particular occupation but paid less attention to whether the individual actually performed that occupation in, for example, his or her home environment. Perhaps occupational therapists do not pay enough attention to why people do what they do. The challenge, therefore, is first to encourage clients to identify the factors influencing what they do and understand more fully why they do what they do. Secondly, occupational therapists should be creative in their interventions by considering, for example, the timing of their individual and group therapy sessions and the provision of evening and weekend activities to maximise the opportunities for successful occupational engagement for their clients (Department of Health 1999). Thirdly, strategies to strengthen an individual's self-concept are also important in terms of successful occupational engagement.

Engagement in occupations has been shown to have a positive influence on health; therefore, if occupational therapists become more skilled at enabling their clients to engage in a range of occupations, it should have positive health implications for them. Occupational therapists believe in the therapeutic power of occupation but it is still clearly an area that is poorly understood. This study has provided a deeper understanding of the influences on occupational engagement and highlighted the need for occupational therapists to continue to research the tool at the heart of their profession.

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References

- Allen JM, Hammon Kellegrew D, Jaffe D (2000) The experience of pet ownership as a meaningful occupation. *Canadian Journal of Occupational Therapy*, 67(4), 271-78.
- Bailey DM (1991) *Research for the health professional: a practical guide*. Philadelphia. FA Davis.

- Bell MB, Milstein RM, Lysaker PH (1993) Brief reports. Pay and participation in work activity: clinical benefits for clients with schizophrenia. *Psychosocial Rehabilitation Journal*, 17(2), 171-77.
- Berg BL (1998) *Qualitative research methods for the social sciences*. Boston: Allyn and Bacon.
- Breines EB (1989) The issue is: Making a difference: a premise of occupation and health. *American Journal of Occupational Therapy*, 43(1), 51-52.
- Brown C (1998) Comparing individuals with and without mental illness using the daily activities checklist. *Occupational Therapy Journal of Research*, 18(3), 84-98.
- Canadian Association of Occupational Therapists (1991) *Occupational therapy guidelines for client-centred practice*. Toronto: CAOT Publications.
- Carlson M (1996) The self-perpetuation of occupations. In: R Zemke, F Clark, eds. *Occupational science: the evolving discipline*. Philadelphia: FA Davis, 143-57.
- Christiansen C (1994) Classification and study in occupation, a review and discussion of taxonomies. *Journal of Occupational Science: Australia*, 1(3), 3-21.
- Christiansen C (1996) Three perspectives on balance in occupation. In: R Zemke, F Clark, eds. *Occupational science: the evolving discipline*. Philadelphia: FA Davis, 431-51.
- Christiansen C, Baum C (1997) Understanding occupation: definitions and concepts. In: C Christiansen, C Baum, eds. *Occupational therapy: enabling function and well-being*. 2nd ed. Thorofare: Slack, 3-25.
- Clark FA, Parham D, Carlson ME, Frank G, Jackson J, Pierce D, Wolfe RJ, Zemke R (1991) Occupational science: academic innovation in the service of occupational therapy's future. *American Journal of Occupational Therapy*, 45(4), 300-10.
- Cook M, Simukonda F (1981) Anhedonia and schizophrenia. *British Journal of Psychiatry*, 139, 523-25.
- Csikszentmihalyi M (1992) *The psychology of happiness*. London: Rider.
- Csikszentmihalyi M (1997) *Living well: the psychology of everyday life*. London: Weidenfeld and Nicolson.
- Department of Health (1999) *National service framework for mental health: modern standards and service models*. London: DH.
- do Rozario L (1994) Ritual, meaning and transcendence: the role of occupation in modern life. *Journal of Occupational Science: Australia*, 1(3), 46-53.
- Emerson H (1998) Flow and occupation: a review of the literature. *Canadian Journal of Occupational Therapy*, 65(1), 37-44.
- Emerson H, Cook J, Polatajko H, Segal R (1998) Enjoyment experiences as described by persons with schizophrenia: a qualitative study. *Canadian Journal of Occupational Therapy*, 65(4), 183-92.
- Fick KM (1993) The influence of an animal on social interactions of nursing home residents in a group setting. *American Journal of Occupational Therapy*, 47(6), 529-34.
- Fidler G (1981) From crafts to competence. *American Journal of Occupational Therapy*, 35(9), 567-73.
- Gage M, Polatajko H (1994) Enhancing occupational performance through an understanding of perceived self-efficacy. *American Journal of Occupational Therapy*, 48(5), 452-61.
- Gibson C (1998) Semi-structured and unstructured interviewing: a comparison of methodologies in research with patients following discharge from an acute psychiatric hospital. *Journal of Psychiatric and Mental Health Nursing*, 5, 469-77.
- Hannam D (1997) More than a cup of tea: meaning construction in an everyday occupation. *Journal of Occupational Science: Australia*, 4(2), 69-74.
- Hasselkus B, Rosa SA (1997) Meaning and occupation. In: C Christiansen, C Baum, eds. *Occupational therapy: enabling function and well-being*. 2nd ed. Thorofare: Slack, 362-77.
- Jackson J (1996) Living a meaningful existence in old age. In: R Zemke, F Clark, eds. *Occupational science: the evolving discipline*. Philadelphia: FA Davis, 339-61.
- Kielhofner G (1977) Temporal adaptation: a conceptual framework for occupational therapy. *American Journal of Occupational Therapy*, 31(4), 235-42.
- Kielhofner G (1997) *Conceptual foundations of occupational therapy*. 2nd ed. Philadelphia: FA Davis.
- Krupa T, Thornton J (1986) The pleasure deficit in schizophrenia. *Occupational Therapy in Mental Health*, 6(2), 65-78.
- Levine R (1984) The cultural aspects of home delivery. *American Journal of Occupational Therapy*, 38, 734-38.
- Ludwig FM (1997) How routine facilitates wellbeing in older women. *Occupational Therapy International*, 4(3), 213-28.
- McGonagle IM, Gentle J (1996) Reasons for non-attendance at a day hospital for people with enduring mental illness: the clients' perspective. *Journal of Psychiatric and Mental Health Nursing*, 3, 61-66.
- Mattingly C, Fleming MH (1994) *Clinical reasoning: forms of inquiry in a therapeutic practice*. Philadelphia: FA Davis.
- Mays N, Pope C (1995) Qualitative research: rigour and qualitative research. *British Medical Journal*, 311, 109-12.
- Nelson DL (1988) Occupation: form and performance. *American Journal of Occupational Therapy*, 42(10), 633-41.
- Oxley C (1995) Work and work programmes for clients with mental health problems. *British Journal of Occupational Therapy*, 58(11), 465-68.
- Patton MQ (1990) *Qualitative evaluation and research methods*. 2nd ed. Newbury Park: Sage.
- Pejlert A, Asplund K, Norberg A (1995) Stories about living in a hospital ward as narrated by schizophrenic patients. *Journal of Psychiatric and Mental Health Nursing*, 2, 269-77.
- Pentland W, Harvey AS, Walker J (1998) The relationships between time use and health and well-being in men with spinal cord injury. *Journal of Occupational Science*, 5(1), 14-25.
- Polatajko HJ (1994) Dreams, dilemmas and decisions for occupational therapy practice in a new millennium: a Canadian perspective. *American Journal of Occupational Therapy*, 48(7), 590-94.
- Polgar S, Thomas SA (1995) *Introduction to research in health sciences*. Edinburgh: Churchill Livingstone.
- Rebeiro KL (1998) Occupation-as-means to mental health: a review of the literature and a call for research. *Canadian Journal of Occupational Therapy*, 65(1), 12-19.
- Reilly M (1962) Occupational therapy can be one of the great ideas of 20th century medicine. The 1961 Eleanor Clarke Slagle Lecture. In: American Occupational Therapy Association (1984) *A professional legacy: the Eleanor Clarke Slagle Lectures in Occupational Therapy, 1955-1984*. Reprinted from *American Journal of Occupational Therapy*, XI(1). Rockville, MD: AOTA.
- Scott S (1997) Horses as a healing influence. *Farmers Weekly*, 7 February, 8-9.
- Seale JK, Barnard S (1999) Ethical considerations in therapy research. *British Journal of Occupational Therapy*, 62(8), 371-75.

- Strong S (1998) Meaningful work in supportive environments: experiences with the recovery process. *American Journal of Occupational Therapy*, 52(1), 31-38.
- Trombly CA (1995) Occupation: purposefulness and meaningfulness as therapeutic mechanisms. *American Journal of Occupational Therapy*, 49(10), 960-72.
- Warner R (1987) *Recovery from schizophrenia: psychiatry and political economy*. London: Routledge and Kegan Paul.
- Whiteford G (1997) Occupational deprivation and incarceration. *Journal of Occupational Science: Australia*, 4(3), 126-30.
- Wilcock AA (1993a) A theory of the human need for occupation. *Occupational Science: Australia*, 1(1), 17-24.
- Wilcock AA (1993b) Keynote paper: Biological and sociocultural aspects of occupation, health and health promotion. *British Journal of Occupational Therapy*, 56(6), 200-203.
- Wilcock AA (1995) The occupational brain: a theory of human nature. *Journal of Occupational Science: Australia*, 2(1), 68-73.
- Wilcock AA (1998) *An occupational perspective of health*. Thorofare, NJ: Slack.
- Williams N (1997) Time is their enemy. *Therapy Weekly*, 17 July, 8.
- Wood W (1998) Biological requirements for occupation in primates: an exploratory study and theoretical analysis. *Journal of Occupational Science*, 5(2), 66-81.
- Yerxa EJ, Baum S (1986) Engagement in daily occupations and life satisfaction among people with spinal cord injuries. *Occupational Therapy Journal of Research*, 6, 271-83.
- Zisselman MH, Rovner BW, Shmueli Y, Ferrie P (1996) A pet therapy intervention with geriatric psychiatric inpatients. *American Journal of Occupational Therapy*, 50(1), 47-51.

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