

Could health care workers determine the occupational performance priorities of people with disability living in a developing community?

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ABSTRACT

The client-centred approach may be best suited to determine the occupational performance priorities of a developing community, but occasionally the health care worker has to anticipate the occupational performance priorities of an individual in order to render effective services. The Canadian Occupational Performance Measure (COPM) was used to determine the occupational performance priorities of a developing community from the perspective of the People with Disability residing in that community as well as from the perspective of the health care workers responsible for their care.

After their responses were coded according to the International Classification of Functioning, Disability and Health (ICF), the data obtained from both groups were ranked and compared. The results indicated that although both groups of participants proposed similar priorities, some variations in the ranking existed. Valuable insight into the occupational performance priorities of the people with physical disabilities in a developing community was obtained

Key words: occupational performance priorities, Canadian Occupational Performance Measure (COPM), International Classification of Functioning, Disability and Health (ICF), client-centered

Introduction

Exploration of the concept of human occupation and the interaction between the individual and his community is central to the expansion of theories in occupational therapy. Occupational performance is generally used to describe the “doing” of these human occupations in order to satisfy one’s needs in life.^{1,2,3,4}

Occupational therapists believe that occupational performance consists of more than engaging in self-care, productivity and leisure occupations. The interaction between the individual and the environment in which he lives also influences occupational performance. This poses the challenge that our services should remain relevant to the individual and the communities that make up any society.^{3,4,5} Therefore any assessment or measure of occupational performance should view each client as a unique individual within a particular environment.

A review of the literature revealed that a number of studies have been done to determine the occupational performance priorities of people with disabilities (PWD) in the developed world based on pre-determined lists.^{6,7,8,9,10} Some research projects have also attempted to explore occupational well-being and the impact of occupation on life satisfaction.^{11,12,13,14,15} A limited number of studies have been conducted in South Africa and neighbouring countries to explore occupational performance priorities and occupational well-being.^{16,17,18,19} Most of these only address specific occupational performance areas and do not comprehensively include self-care, productivity and leisure. They provide some insight into the complexity of establishing occupational performance priorities for PWD, however, as inferred from the preceding paragraph, occupational performance priorities should be researched from a client-centred perspective.

The client-centred approach provides the client with opportunities to determine his own occupational performance priorities in negotiation with the therapist, as opposed to objective observations drawn from a predetermined list of occupational performance

activities. The therapist who makes use of the client-centred approach allows the client to identify his own unique occupational performance priorities and assumes that the occupational therapist can uncover them through negotiation with the client. The occupational therapist can not always fully comprehend the client’s values, beliefs and experiences and therefore accepts the client’s report of his occupational performance priorities as the most relevant source of information.³ The concepts of autonomy or choice, partnership and responsibility, contextual congruence, accessibility and flexibility and respect for diversity seem to embody the characteristics of the client centred approach as conceptualised by Law and her co-workers in 1995.⁴

In recent years an attempt has been made by the WHO to address and arrange the unique, but complex interaction between the client and the environment with the publication of the International Classification of Functioning, Disability and Health (ICF).²⁰ The purpose of the ICF is, however, to establish a common global language for the components of health, additionally it allows the assessment of the client’s unique functioning and relevant environmental factors.^{20,21,22} Continuous and worldwide collaboration resulted in a comprehensive classification of the Body component, the Activity and Participation component and Contextual component, yet the ICF still consists of a predetermined list of domains, albeit a comprehensive one. However, ongoing research by Cieza and co-workers reveals the emergence of linking rules that provide an opportunity to link or compare meaningful concepts from other health and functional status measures to the ICF as it is increasingly becoming more commonly used. The linking rules require a fundamental knowledge of the ICF and a clear understanding of the concepts and data obtained from the measuring instrument.^{23,24,25}

An open-ended assessment that allows the client the opportunity to convey his rich unedited, uncensored experience of occupation is more suitable to determine occupational performance priorities



from a client centred perspective.³ The Canadian Occupational Performance Measure (COPM), offers an exceptional opportunity to accomplish this as it was designed to assist therapists to clearly establish the individual client's occupational performance goals based on his perceptions of need and to measure change objectively in the defined priority areas.²⁶

South Africa has restructured the provision of health care services to improve access to health care for all. The restructuring was aimed at changing the emphasis of health provision from the urban hospitals to a primary health care approach where selected health care services, including rehabilitation services, would be available in the community where individuals live.²⁷ The end-user clients may initially be unknown during the development of rehabilitation services within a previously disadvantaged community, which may be an obstacle in employing the client-centred approach. Therefore the Health Care Worker (HCW) may to some extent have to predict the occupational priorities of a given community. This may be a particular challenge to the HCW who does not hail from the same community than where she renders her services.

As one may expect, this poses the question of what are the occupational performance priorities of a particular developing community in South Africa and could the Health Care Workers predict these priorities? To answer this question, the occupational performance priorities as determined by a number of clients residing in a specific community should be compared with the priorities as predicted by the Health Care Workers allocated to the same community.

Methodology

Purpose

The purpose of this study was to determine whether the HCW could successfully identify the occupational performance priorities of adult People with Disabilities (PWD) living in Kwaguqua community in the Mpumalanga province of South Africa.

This was achieved in three phases, as explained in the flow-diagramme of the research process (*Figure 1*)

(Insert figure 1)

Design

A non-experimental descriptive design, using descriptive surveys by means of questionnaires, in which quantitative and qualitative data were captured, was used in this study.²⁸

Measuring Instrument

The Canadian Occupational Performance Measure (COPM) was selected as the most appropriate measure to determine occupational performance priorities from a client-centred perspective. The original COPM requires the client to assign a value between one and ten to all the occupational performance priorities he considers of importance. This scoring of "Importance" is followed by assigning a value between one and ten to the "Performance" and "Satisfaction" scores for the five most important priorities only.²⁶ This allows the opportunity for therapy to commence with the most important priorities according to the client. An adapted COPM that allowed the participants to indicate their values for the "Importance", "Performance" and "Satisfaction" scores of all their occupational performance priorities, not only for the most important ones, was used to gather the data. A pilot study was conducted to confirm the suitability of the adapted COPM for use in the Kwaguqua community. The adapted COPM was also translated into Afrikaans, allowing all HCW to complete the COPM in their first language

Setting

The Kwaguqua community, a developing community where the PWD have been identified and with an established health care team providing services to the community was selected for the purposes of this research. The Kwaguqua community is situated next to the town of Witbank, in the Mpumalanga province, South Africa. The

Health Care Workers that provide services to Kwaguqua, are based in the town of Witbank.

Mpumalanga province is considered to be a disadvantaged province with a limited number of HCW and this research should contribute towards focussing healthcare delivery to this community on their relevant needs, which ought to result in improving the quality of health care.²⁹

Ethical Clearance

Ethical permission to do research in the area was obtained from Mpumalanga Provincial Government, the Mpumalanga District Health Services, the assistant director for occupational therapy services in the Mpumalanga Province's Highveld Region and the City Council of Witbank. The University of Pretoria allocated the ethical clearance number 215/97 to this research. Upon explanation, all participants signed a voluntary consent form prior to their participation in this project.

Participants

At the time of the study between 60 and 70 members with various disabilities were registered at Tembelihle Self Help Centre and at the Kwaguqua Association for Disabled's Workshop. In Phase 1 (*Figure 1*) a sample of convenience was selected from these two workshops comprising of all 25 adults who had a physical disability which, for the purposes of this study, were defined as those who had mobility or dexterity problems.

A sample of convenience of seven HCW representing the health-care professions responsible for service delivery in the Kwaguqua area was selected to participate in Phase 2.

Data Collection

Phase 1

The researcher, assisted by a translator, conducted a semi-structured interview, with each PWD according to the original COPM process. The translator, who was a member of one of the workshops in Kwaguqua, received training beforehand. The interviews were mostly conducted in English, with some Sesweti, the mother tongue of most of the residents of Kwaguqua. The researcher recorded their responses on the adapted COPM. From these interviews, the occupational performance priorities from the perspective of the PWD were obtained, including their "Importance", "Performance" and "Satisfaction" ratings for each priority.

The occupational performance priorities, as listed by the participants in Phase 1, were converted into the categories of the Activities and Participation component of the ICF by using the CD ROM version of the ICF browser.³⁰ This contains the classification, coding and descriptions of all the parts, components, domains and categories of the ICF. The search function of the ICF browser was used to select the correct ICF category and terminology for every word or phrase as listed by each participant, e.g. "washing dishes" was classified as "doing housework (d640)"

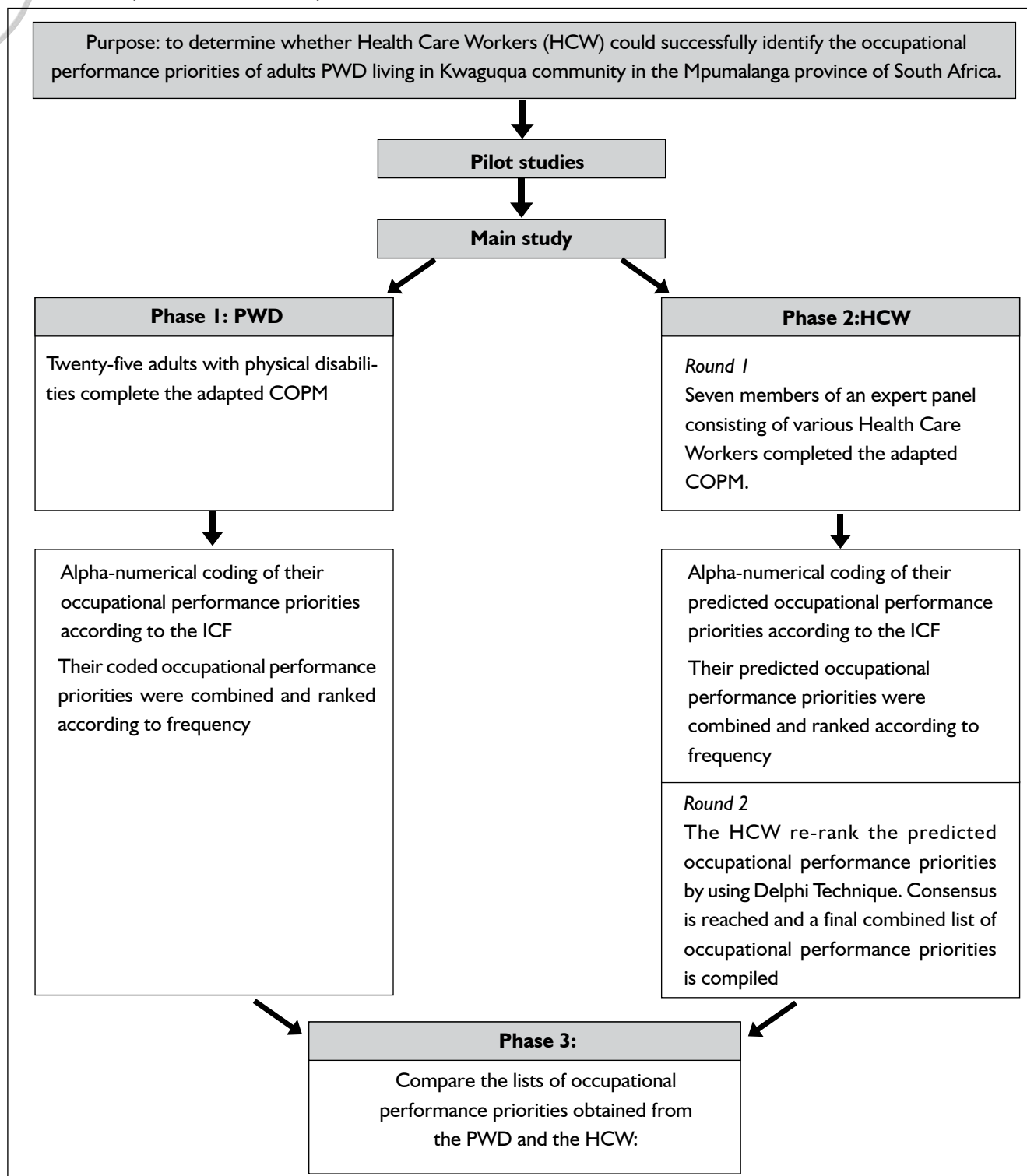
The researcher initially attempted to include all four digits of the ICF's alphanumeric system in categorising the occupational performance priorities, but could not convert all priorities into such detailed numerical categorisation. It was therefore decided to use only the first three levels of categories in order to ensure equality of results. As a result of the categorisation a participant could have listed more than one occupational performance priority under one ICF category, e.g. the ICF category of "Walking (d450)" is defined as walking long as well as short distances.³⁰ Some of the participants listed both aspects of walking and therefore both were categorised under the single category of "Walking (d450)" and their mean score was allocated to that category.

The purpose of the conversion to the ICF coding was to establish a framework for classifying the occupational performance priorities in order to compare data. The "Importance", "Performance" and "Satisfaction" scores of the COPM were used to qualify the occupational performance priorities listed by the participants.²⁶

These coded priorities obtained in Phase 1 were combined and ranked according to the range of their COPM "Importance" score



Figure 1: Schematic explanation of the research process



to establish a ranked list of occupational performance priorities from the perspective of the PWD

Phase 2

In Round 1 of Phase 2, (Figure 1) the seven HCW who participated in Phase 2 were invited to complete the adapted COPM questionnaire by indicating what they perceived as the most important occupational performance priorities of the PWD of Kwaguqua. Each HCW completed the adapted COPM questionnaire individually and was requested not to discuss their responses with the other participating HCW. Their predicted occupational performance priorities were also converted into ICF categories. Following this, the priorities were combined and ranked according to the range of their COPM "Importance" score.

The Delphi Technique was selected to reach consensus on their prediction of occupational performance priorities of their clients.^{31,32,33} As expected, the occupational performance priorities indicated by this smaller group of seven participants were initially diverse in nature, but after the HCW participated in a second round (Round 2) of re-ranking their occupational performance priorities consensus on the combined ranked list from the perspective of the HCW was obtained.

Phase 3

The results obtained from these two groups were analysed and compared.



Data Analysis

The results obtained from the PWD and the HCW in both rounds were compared by means of tables and graphs using descriptive analysis.

Results

Participants

Twenty-five adult PWD who had mobility or dexterity problems participated in Phase 1. Sixty-eight percent ($n=17$) were male, 32% percent were female ($n=8$). The age distribution of the participants was grouped according to the following five age groups: 18-30 years (32%); 31-40 years (16%); 41-50 years (20%); 51-60 years (12%) and those above 60 years of age (20%).

All seven of the HCW who participated in Phase 2 were female and their professions and experience are presented in Table 1.

	Designation	Experience
1	Occupational Therapist	More than 10 years
2	Occupational Therapist	Less than 5 years
3	Physiotherapist	More than 5 years
4	Dietician	More than 10 years
5	Nursing Sister	More than 10 years
6	Doctor	Less than 5 years
7	Social Worker	More than 10 years

Table 1: Professions represented by the HCW

Comparison of the occupational performance priorities

After all the performance priorities obtained from the participants were ranked only the highest-ranking positions of the occupational performance priorities from the perspective of each group were compared with the others. All the ICF categories and the relevant codes that will emerge in the graphs that follow are listed in Table 2.

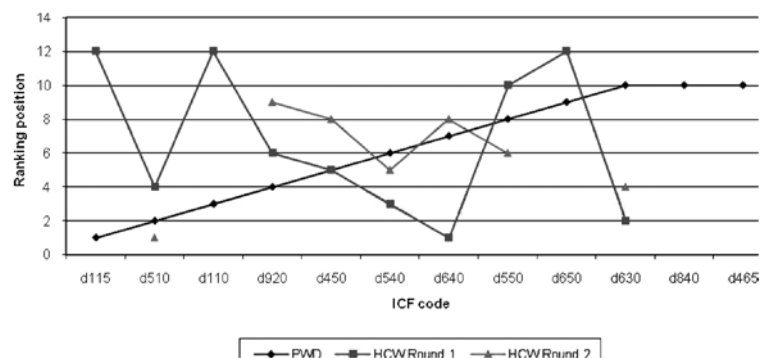
ICF category	ICF code	ICF category	ICF code
Watching	d110	Acquiring goods and services	d620
Listening	d115	Preparing meals	d630
Walking	d450	Doing housework	d640
Moving around using equipment	d465	Caring for personal objects	d650
Using transportation	d470	Apprenticeship	d840
Washing oneself	d510	Acquiring, keeping and terminating a job	d845
Toileting	d530	Recreation and leisure	d920
Dressing	d540	Religion and spirituality	d930
Eating	d550		

Table 2: The relevant ICF categories and codes

A comparison of the occupational performance priorities from the perspective of the PWD

The 12 occupational performance priorities that were ranked one to ten by the PWD according to their COPM "Importance" score, were compared with the same 12 priorities as determined by the HCW. (Figure 2) A score of one represents the highest ranking and a score of ten the lowest ranking.

Figure 2: The ranking positions from the perspective of the PWD

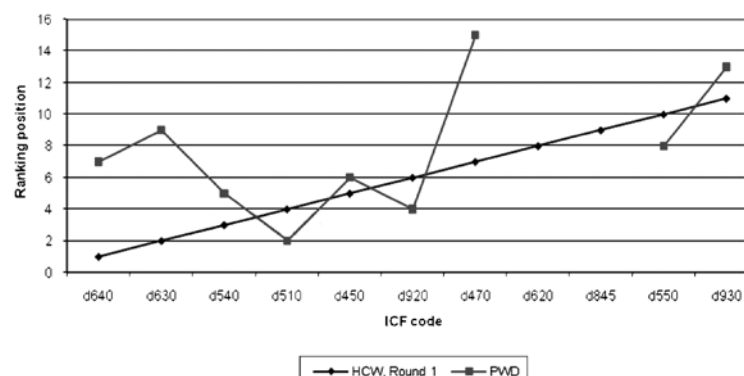


The line diagram in Figure 2 has been drawn from the perspective of the PWD and therefore a straight line illustrates the ranking positions of their priorities. Most of the priorities were also selected by the HCW in Round 1, but their ranking positions seem to be an almost inverse line. Seven priorities were selected by the PWD as well as the HCW in both rounds. The ranking position of three of these priorities (d510, d450 and d540) differed less than three ranking positions, while the other four (d920, d640, d550 and d630) differed more than three ranking positions. "Listening (d115)" and "Watching (d110)" which were ranked first and third by the PWD, achieved the lowest possible ranking of 12 from the HCW and were not selected at all in Round 2. These two priorities were put forward by the PWD as listening to the radio and watching television respectively.

A comparison of the occupational performance priorities from the perspective of the HCW in Round 1

The 11 occupational performance priorities that were selected by more than one HCW in Round 1 were ranked according to the range of their COPM "Importance" score. It was decided to compare all eleven of these priorities with the same eleven priorities as determined by the PWD (Figure 3). A score of one represents the highest ranking and a score of ten the lowest ranking.

Figure 3: The ranking positions from the perspective of the HCW in Round 1



The line diagram in Figure 3 has been drawn from the perspective of the HCW in Round 1 and therefore a straight line illustrates the ranking positions of their priorities. Nine priorities were selected by the HCW in Round 1 and by the PWD. The ranking position of six of these priorities (d540, d510, d450, d920, d550 and d930) differed less than three ranking positions, while the other three (d470, d630 and d640) differed more than three ranking positions. Acquiring, keeping and terminating a job" (d845) and "Acquiring goods and services" (d620) were not selected by the PWD at all.

A comparison of the occupational performance priorities from the perspective of the HCW in Round 2

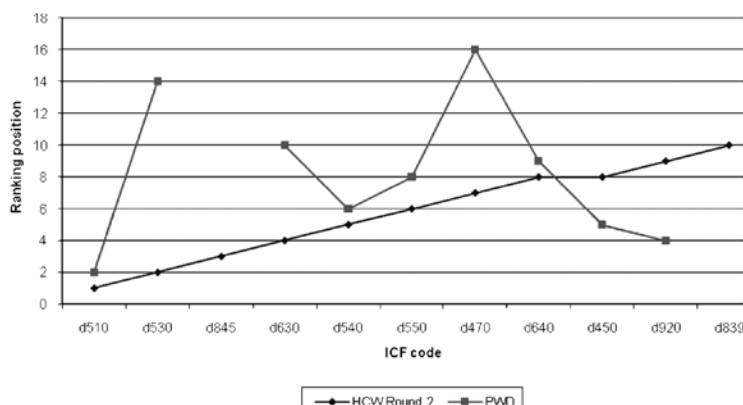
In Round 2 the HCW were requested to re-rank the occupational priorities obtained from Round 1, according to the Delphi Technique.



Each HCW received the ranking order of the occupational priorities that she had previously listed as well as the combined ranked list of all the priorities from Round 1, including those that were selected by one HCW only. Each one was requested to re-rank what she considered as the five most important priorities. Following this, the occupational performance priorities listed by one HCW only were discarded, as one person does not represent consensus.

The nine occupational performance priorities ranked one to eight were ranked by the HCW in Round 1 were then compared with the same nine priorities as determined by the PWD (Figure 4). Two of the priorities d640 and d450 were both ranked in the eighth position; therefore there were only eight ranking positions. A score of one represents the highest ranking and a score of ten the lowest ranking.

Figure 4: The ranking positions from the perspective of the HCW in Round 2



The line diagramme in Figure 4 has been drawn from the perspective of the HCW in Round 2 and therefore a straight line illustrates the ranking positions of their priorities.

Eight priorities were selected by the HCW in Round 2 as well as the PWD. The ranking position of five of these priorities (d510, d540, d550, d640 and d540) differed less than three ranking positions, while the other three (d530, d630 and d470) differed more than three ranking positions. Acquiring, keeping and terminating a job" (d845) were not selected by the PWD at all.

Three occupational performance priorities (d620, 920 and 930) were not re-selected in Round 2. However, "Toileting" (d530) that was selected by only one HCW in Round 1 was re-ranked as the second most important priority in Round 2.

Discussion

Occupational performance priorities

The contribution of this research is that the occupational performance priorities were proposed from the perspective of the PWD and the HCW and not from the perspective of any predetermined list. This addressed the concern of the researcher that the HCW that does not hail from the same community as the PWD may perceive occupational performance priorities differently to the PWD.

It seems that "Listening (d115)" and "Watching (d110)" represents the biggest disparity between the occupational performance priorities selected by the PWD and those selected by the HCW. As explained in the results' section, these two priorities were put forward by the PWD as listening to the radio and watching television respectively. Some of the PWD lived in informal housing without electricity and the researcher proposes this as the reason why "Listening (d115)" was ranked higher than "Watching (d110)". The high ranking of these two priorities could be a result of the high unemployment rate and the time available for leisure. The official unemployment rate in September 2003 for Mpumalanga was 25% of the economically active population (aged between 15–65 years). This was slightly below the figure of 28.2% for South Africa²⁴. If discouraged job seekers were included, then the national unemployment rate was 41.8%, where 38–40% of these job seekers had not secured employment for at least 3 years.³⁴ The popularity of listening to the radio and watching television could also reflect the spirit of Ubuntu or togetherness where leisure time is spent socialising with

others while watching television or listening to the radio.¹⁶ The HCW who delivers services in the community should take cognisance of the fact that a considerable time is spent in front of the television and could maybe maximize the ergonomic positioning of the PWD to prevent postural deterioration and contractures.

"Walking (d450) seems to be the only priority that received the same rating by the PWD and the HCW. Kwaguqua is a developing area and has a number of badly kept dirt roads with few available tarred roads. As most of the PWD do not have their own transport or the means to afford public transport, the participants have to walk to their friends, church or the workshops, which may be challenging due to their mobility impairment.

Occupational performance areas

Self-care

Self-care accounted for most of the occupational performance priorities selected by both groups of participants. The importance of self-care to both groups of participants confirms an initial assumption by the researcher that people with mobility and dexterity impairments would probably have problems with self-care and especially with mobility and toileting. Fifteen of the 25 PWD listed some aspect of the ICF domain of "Mobility" (d4) as an occupational performance priority. "Toileting" (d530) was ranked higher by the HCW in Round 2 than in Round 1. This correlates with other studies done on levels of mobility and functioning. In a study conducted in Ireland, 1034 PWD indicated "getting around" as an area of difficulty⁸. Although van Egmond and van der Broek found more independence in mobility following therapy with the group of PWD in Venda, a rural area in South Africa, the terrain still required a considerable amount of mobility in order to move around effectively.¹⁹ The impact of the terrain on the PWD in Kwaguqua was explained in the preceding paragraphs.

The importance of self-care from the perspective of the PWD and the HCW was highlighted when a group of 26 home-bound stroke patients and 10 physio and occupational therapists in Columbus, USA, were asked to rate the value of 15 ADL activities. Mobility was most important from the perspective of both groups, but dressing, grooming, toileting and eating were also amongst the eight most important activities.⁶ Ludgren-Lindquist found that although self-care was important to a group of 77 PWD in Botswana, most were satisfied with their level of self-care.¹⁸ A study by Andr n confirms that self-care was important to a group of 31 adults with cerebral palsy and spina bifida but that their level of satisfaction altered with change in their physical status.⁷ Van Egmond and van der Broek reported on the positive impact of therapy on the level of independence in toileting in Venda and it was ranked as the 3rd most important ADL item by the therapists in the study by Chiou.^{6,19} However, the importance of self-care seems to decrease when a satisfactory level of independence has been achieved or when the PWD's general level of functioning increases.^{6,7,18,19} Radomski has also suggested that HCW should look beyond this occupational performance area by saying: "There is more to life than putting on your pants."¹¹

Productivity

Maintaining the household or domestic activities accounted for two-thirds of the priorities in the performance area of productivity. The remaining third consisted of priorities relating to employment. Anecdotal comments from the PWD were that they were allocated specific household tasks, which was important to them as it provided them with an opportunity to contribute towards the household. The lower rating of the priorities relating to employment could reflect the disillusionment of the PWD towards the labour market. The priority "Acquiring, keeping and terminating a job" (d845) were only selected by the HCW.



Anecdotal comments from a number of PWD were that they had been unsuccessful in finding employment for some time. Even though they were all registered with the Kwaguqua Association for the Disabled, according to the management of the two workshops, not all of them attended the workshops on a regular basis. Although all the PWD who participated were unemployed, most of them qualified for a disability grant and therefore had some form of income.

Leisure

More PWD than HCW decided on priorities from the performance area of leisure. The importance of listening to the radio and watching television was explained previously. The research conducted by Lundgren-Lindquest in Botswana revealed that all PWDs were satisfied with their leisure activities, but amongst the elderly PWD there was more dissatisfaction in socialising than with the younger age group. This may be due to the difficulty with mobility that was discussed previously. McEwen confirmed that social functioning including leisure, is an important indication of the well-being and quality of life of PWD.^{13, 18} The fact that leisure accounted for fewer of the priorities as determined by the HCW is probably the result of the higher percentage of priorities allocated by them to the performance area of productivity.

Conclusion and recommendations

The results indicate that some variations existed in how both groups perceived the importance of the three occupational performance areas. Even though the PWD were individuals living in their community, both groups still perceived self-care as the most important priority. The PWD rated leisure higher than the HCW while the HCW rated productivity higher than the PWD. It seems therefore that although the HCW may have a reasonable idea of the occupational performance priorities, the actual priorities and their importance to the PWD in a developing community should ideally be determined from a client-centred perspective involving the PWD.

Both groups seem to be of the same opinion on the importance of self-care, which seems to indicate that occupational therapists working in a developing community in South Africa should still address self-care. However, they should take cognisance that the literature implies that its importance diminishes once a PWD has achieved a certain level of self-care.^{7, 11} The importance of self-care does however change with regression in the PWD's physical abilities as indicated by a group of adults with muscular dystrophy.¹⁵

The lower rating of employment could reflect the disillusionment of the PWD towards the labour market.³⁴ The contribution of household tasks towards productivity should however not be overlooked. Anecdotal comments from the participants were that some were allocated specific household tasks, which was important to them as it provided them with an opportunity to contribute towards the household.

The difference in how leisure is perceived, was most notable in the high ranking of "Listening" (d115) and "Watching (d110)" by the PWD and the low ranking of these two priorities by the HCW. Another example is "Acquiring goods and services (d620)", originally listed as 'shopping' by some HCW, that was not selected by the PWD at all. It seems therefore that HCW should not regard active involvement in leisure as a quantifiable action only, but should be aware of the influence of the spirit of Ubuntu on so called 'passive leisure' e.g. watching television or listening to the radio and on the way that people interact with those around them and with their community.¹⁶

The COPM proved to be a suitable measure to determine occupational performance priorities from both the perspective of the PWD and the HCW although this resulted initially in diverse lists of priorities.²⁶ The ICF proved to be a useful way of organising these diverse occupational performance priorities. An unexpected positive contribution to processing the data was the search function of the ICF browser that allowed the researcher to enter these diverse priorities, which were then impartially electronically coded and grouped.³⁰ This was invaluable, as any preconceived notion, on

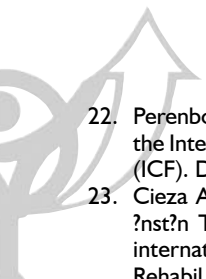
how the priorities ought to be grouped could to a great extent, be eliminated. Once the occupational performance priorities were coded, the data could be processed.

In conclusion, the HCW could foresee the importance of self-care, but were less accurate with the importance of productivity and leisure. Furthermore, this method of involving both the PWD and the HCW in prioritising the occupational performance priorities of a developing community could aid in the negotiation between the PWD and the HCW on which are the most important occupational performance priorities that should be addressed. Ultimately, this should result in the effective utilisation of time and human resources available for rehabilitation by focussing on the authentic priorities of a community.

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