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Domains for occupational therapy outcomes in mental health practices

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ABSTRACT

Occupational therapists in mental health care settings find it difficult to produce convincing evidence of their unique contribution to health care. This article reports on the initial phase of a larger study where the purpose was to determine domains for an outcome measure for occupational therapists in mental health care settings. A mixed methods exploratory design: Instrument Development Model was used to determine suitable domains. Occupational therapy clinicians participated in focus group discussions, workshops and the nominal group technique to discuss the status quo of outcome measurement and eventually selected domains for the ideal outcome measure for their contexts of practice.

Five themes emerged from the thematic content analysis of the focus groups: Understanding the concept of outcomes, Giving examples of outcomes, Factors influencing the measurement of outcomes, Benefits from using an outcomes measure and Characteristics of an outcomes measure. The nominal group technique was employed during workshops on current trends in outcome measurement in occupational therapy.

Eight domains emerged which represented the service delivery of the participating clinicians. The domains were Process skills, Motivation, Communication and interaction skills, Self-esteem, Balanced lifestyle, Affect, Life skills and Role performance.

Key words: Outcome measurement, Occupational Therapy outcomes, Mental health, Outcome domains, Instrument development model

Introduction

Occupational therapists in mental health care settings find it difficult to produce convincing evidence of their unique contribution to health care[1]. What they do looks simple. Making cards with clients, facilitating groups, planning and preparing a meal, teaching stress management, playing volleyball and the like, seem to be simple

tasks or activities. However, the occupational therapist is actually employing specific professional skills for example, clinical reasoning, activity analysis, the therapeutic relationship, adapting activities and the environment before selecting and using these seemingly "simple" activities. This is not always evident to the clients of mental health care, their caregivers, the multi-disciplinary team members, management teams, or to the employers.

Although anecdotal feedback from individual clients, their families and team members confirms the occupational therapists' valuable contribution, this type of feedback is hardly enough evidence to convince employers and new users of the value of occupational therapy services. What occupational therapists thus need is systematic objective evidence of the therapeutic outcomes of their services. "For a profession to earn the respect of the people it serves, it must offer a service of demonstrable value"[2:524]. Therefore, the development of an outcome measure for occupational therapy clinicians in mental health settings is long overdue. Hence the need for clarity on domains of practice as a major point of reference for development of such an instrument.

Literature review

Historically, measurement of outcomes in the health care arena was not included in routine clinical practice. Setting minimum standards of service and writing clinical guidelines for specific treatment regimes were beginning to be used during the late 1980's whilst the systematic collection of data on patients' outcomes became the focus with the introduction of outcomes research and evidence-based practice in the early 1990's.

Outcome measurement seeks to measure change as a result of intervention[3,4]. Laver Fawcett's[4] definition of outcome measurement confirmed that it is a process that establishes the effects of an intervention: clinicians should use a specific outcome measure for this purpose. Measurement of outcomes facilitate a number of management functions, for example, predicting recovery, calculating efficiency, effectiveness and efficacy of services, allocating resources, and determining critical pathways of professional conduct, to name a few[4,5,6,7,8]. If outcome measurement is routinely part of clinical practice, trends may be evident e.g. identifying clients who are making poor progress.

Hodges and Wotring[9] reported the role of monitoring outcomes in initiating evidence-based treatments in their practice setting. Adolescents who consistently performed poorly on the Child and Adolescent Functional Assessment Scale led to the investigation of effective interventions and to the implementation of evidence-based practice. This is an example of the equal importance of measuring outcomes and applying evidence-based practice.

Evidence-based practice rooted in medicine, is considered and practised as a best practice approach by many health care professionals[10]. Debates are now occurring about evidence-based practice, practice-based evidence, outcome measurement and delivering evidence of good care as well as the interconnections between these concepts. The question is: which is better, how are they presently implemented, and how can they be applied in occupational therapy in South Africa?

Joubert[11] questioned the introduction of foreign evidence-based practice in South African occupational therapy practices. She raised the dilemma of accepting or soaking up western world knowledge and neglecting our own indigenous knowledge systems, as a threat to practice. The availability of human resources, the shortage of credible research as well as the accessibility of resources raised concern. Joubert[11] further mentioned that evidence-based practice questions the integrity of training of occupational therapists and their wealth of experience of tried-and-tested methods. She suggested alternative methods to evidence-based practice in order to ensure accountability and quality assurance of a complex service like occupational therapy. These methods take into account the continuous assessment of patient response to treatment, research and publishing of successful interventions, collaborating with clients and caregivers and consulting South African experts with their wealth of experience.

Watson and Buchanan[12] on the other hand pleaded that the challenge to base practice on sound scientific evidence be taken up by South African occupational therapists. These authors spoke about the importance of having substantiated outcomes so that South African occupational therapy services could be better recognised and they intimated that evidence-based practice could address this issue.

The Standards Workgroup of Gauteng Health Hospitals described a quality assurance programme for occupational therapists in South Africa which set minimum standards of service and combined it with quality assurance[13]. This is based on the Donabedian model of health care that firstly describes quality assurance in terms of the structure of the organisation[14]. This structure takes into account the context of service delivery, the nature and types of equipment available as well as the staff structure. The structure leads to the second aspect of quality assurance which is a process of service delivery or the actions that are performed to deliver a quality service. The third and last aspect of the Donabedian model of health care is the measurement of outcomes to determine the results or effect of services delivered[14]. The workgroup's description of a quality assurance programme was the only reference found in recent publications for occupational therapists in South Africa.

Whilst it seems that very little outcome measurement is being implemented in mental health practices in South Africa, reference has been made in the literature in other countries to outcome measures such as the Canadian Occupational Performance Measure which was one of the first outcome measures specifically designed to measure change after intervention[15]. It was developed in the early 1980's by the Canadian Occupational Therapists' Task Force in consultation with the Canadian Department of Health. It assesses self-perception of performance and satisfaction of daily occupations and is a semi-structured interview used in conjunction with the occupation-focused, client-centered Canadian Model of Occupational Performance (COPM). It covers the areas of self-care, productivity and leisure (including social participation). It has officially been translated into 24 languages and has been used in 35 countries[16]. Since it uses a client-centered approach where the client identifies areas of concern, it is of vital importance that a thorough assessment of the client's competency be done before using the COPM. The client centered approach is a point of concern when using the COPM with clients with psychosocial problems as their level of competence and realistic decision-making could at some stages of the illness (e.g. psychotic episodes) impede on the applicability of the goals for treatment. Colquhoun et al[17] reported on the feasibility of the COPM for routine use and found that clinicians appreciated the benefit in routine use of the COPM but not necessarily for sustained use due to time constraints. This measure could be appropriate for some of the MHCUs in the South African context but it is surmised that many clients may not be functioning at the competence level at which they sufficiently understand their psychosocial problems.

The Assessment of Motor and Process Skills (AMPS) was also developed during the 1980's in response to the ever-increasing need for occupational therapy specific assessments and outcome measures[18]. Chard's[18] investigation into the use of the AMPS in clinical practice, revealed that it is able to measure change in clients' occupational performance in a range of clinical areas. However, difficulties were reported which included the time taken to complete the AMPS and trouble in getting started. A few clinicians reported that they were not able to apply the AMPS to their clinical areas, as their clients were not carrying out any of the daily living activities that are standardised in the AMPS. Hitch[19] criticised the use of the AMPS for mental health care clients due to its reductionist nature and for only measuring a single component. There are a number of occupational therapists in South Africa who are trained in the use of the AMPS but to the authors' knowledge have not been using it in mental health care settings in Gauteng. Due to its reductionist nature the AMPS is not suitable for this context as clinicians usually conduct comprehensive

assessments of performance components (or client factors) as well as occupational performance areas. Typical performance components would be volition, self-esteem and cognition. These are not covered in the AMPS.

Perry et al.[20] developed an outcome measure that focuses on multidisciplinary outcomes. The Australian Therapy Outcome Measure (AusTOMs) measures outcomes in speech pathology, physiotherapy and occupational therapy. The outcomes for occupational therapy consist of 12 domains, namely: 1) Learning and Applying Knowledge, 2) Self-care, 3) Functional Walking and Mobility, 4) Domestic Life: Inside House, 5) Upper limb use, 6) Domestic Life: Outside House, 7) Carrying out Daily Life Tasks and Routines, 8) Interpersonal Interactions and Relationships, 9) Transfers, 10) Work, Employment, and Education, 11) Using Transport, and 12) Community Life, Recreation, Leisure, and Play. If these outcome measures were to be used in mental health care settings, domains 3, 5, and 9 might be irrelevant. The criticism of the AMPS can also apply to the use of the AusTOMs; it does not include critical performance components for mental illness and the occupational performance areas are limited.

The MEDYN Questionnaire evaluates the change in functional ability in psychiatric in-patients that receive occupational therapy[21]. The name for this outcome measure is derived from the first letter of the first names of the authors and covers three areas namely general/social behaviour, cognition and task behaviour[21]. Although all these areas are appropriate for mental health care users, it is limited in terms of occupational performance areas such as personal management, role performance and coping with the demands of the environment.

The Model of Human Occupation Screening Tool (MOHOST) was originally designed for mental health settings[22]. It is not clear whether this tool was developed as a screening tool (referring to its name) or as an outcome measure. However, it has been used as an outcome measure. The MOHOST consists of six sections represented by 24 items. The six sections are motivation for occupation (or volition), pattern of occupation (or habituation), communication and interaction skills, process skills, motor skills, and the environment. It is an occupation-focused assessment that determines the extent to which client factors and environmental factors (physical and social) facilitate or restrict an individual's participation in daily life[22]. A 4-point scale indicates whether the above-mentioned items facilitate, allow, inhibit, or restrict participation in occupation. Kramer et al[22] claim that the MOHOST is sensitive to detect change in mentally ill patients.

It is not known how many occupational therapists in South Africa are using the models of practice mentioned above but from observation by the authors a large percentage seem to use the Vona du Toit Model of Creative Ability (VdTMoCA). Five of the eight occupational therapy training centers in South Africa train students in the Model of Creative Ability which has been shown to shape the students' clinical reasoning and management of their clients. The question arose as to whether the VdTMoCA could be applied in routine outcome measurement as this model was developed in South Africa.

Aims of the study

The aim of the larger study was to develop an outcome measure for occupational therapy clinicians to be used in South African mental health care practices. It was important that the outcome measure be based on a South African philosophy or model of practice. The VdTMoCA seems to be widely used in South Africa but little evidence exists to support its clinical utility and scientific basis, hence the need for an empiric investigation into its validity as an outcome measure. This article reports on the first phase of the development of the outcome measure.

Phase 1 of the three- phase larger study, as described here does not address the use of the VdTMoCA as this paper focuses on the determination of domains of the outcome measure. The model is however described in Phase 2 of the research and is reported in a separate article.

Phase 1 of the study was divided into two stages; Stage 1 was a situational analysis to determine the status quo of outcome measurement in occupational therapy practices for mental health care users (MHCUs), the recent term for persons who seek mental health care services under South Africa's Mental Health Care Act of 2002[23]. It included the gathering of information from clinicians regarding their needs and perceptions of outcome measurement in mental health care practices. Stage 2 of Phase 1 aimed to determine MHCUs' expectations from occupational therapy. The findings of Stage 2 are addressed in a future paper. At the end of Phase 1 the domains of the outcome measure were finalised.

Phase 2 consisted of the development of a consistent measuring scale for all the domains according to the levels of creative ability as described in Vona du Toit's Model of Creative Ability[24], the compilation of a training manual and the piloting of it as an outcome measure.

Phase 3 dealt with the investigation of the psychometric properties of the outcome measure.

This article reports on the process and outcome of the situational analysis, as well as the domains identified through the research process, thus the first stage of Phase 1 of the development of the outcome measure.

Methodology

Research design of the larger study

Mixed method design is a blending of qualitative and quantitative data. Creswell and Plano-Clark[25] suggest that when variables are still unknown and the researcher needs to explore the phenomenon to identify relevant variables, an exploratory mixed method design should be used. The measurement of occupational therapy outcomes in mental health care settings for the South African context have not been investigated and is fairly unknown to occupational therapy clinicians and researchers, therefore a mixed method design was the design of choice.

Thus this first stage of Phase 1 of the study started with a qualitative enquiry through the use of focus groups with clinicians. The results of this enquiry were used in a quantitative data collection technique, namely the nominal group technique to assist in determining the domains for the outcome measure. Creswell and Plano-Clark[25] classify this specific sequence of scientific enquiry as the mixed methods exploratory design: Instrument Development Model.

The participants

Occupational therapy clinicians from different mental health care settings in and around the Tswane Metropolitan area were asked to participate.

It was important for the focus groups that all participants shared a common concern[26]. This common concern drove the focused discussion during the focus groups. In this study the common concern was the need to produce evidence of the effect of their service. To be included, a clinician had to work in a mental health care setting and have at least one year's experience in such a setting. The sample was thus a convenience sample as all the clinicians who volunteered to participate adhered to the criteria and were included. Sixteen clinicians participated in the focus groups.

Data gathering methods and procedure

Using focus groups is a rapid and cost-effective method to gather data and is useful when little is known about a specific situation or topic[26]. Advantages such as direct interaction with participants, opportunity to explore deeper meaning of specific views and participants building on responses of others to provide rich information about phenomena, made focus groups the ideal data gathering technique for the first phase of the study. De Vos et al[26] suggest that focus groups should include 6 – 8 members so as to give sufficient opportunity for all to participate and share their views. Since 16 clinicians volunteered to participate, the sample was divided into two groups.

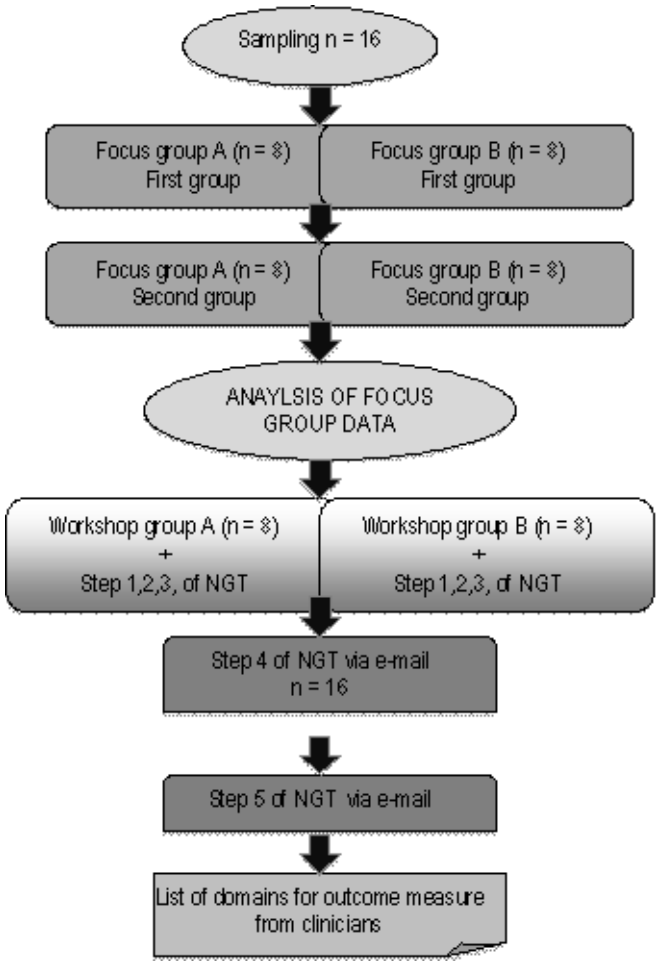

Figure 1: Procedure of the first stage of Phase 1 of the study

The researcher compiled a guide for questions to be used in the focus groups. Questions covered knowledge and attitudes of occupational therapy clinicians about outcome measurement, existing measurement systems in use including assessment methods and techniques and clinicians' need for an outcome measure. This guide was used to ensure that the same questions were posed to the two groups.

The focus groups were conducted until saturation of data occurred. Participants in the one focus group expressed a need for more information on what is available in terms of outcomes and which domains to select for an outcomes measure. They requested a workshop to update their knowledge of current philosophical, theoretical and practice frameworks as well as examples of existing outcome measures. The researcher mentioned this need for a workshop to the other group members who then agreed to a similar workshop. The workshop was presented separately to each group to maximise opportunity for discussion and participation. These workshops were not part of the initial plan and thus not part of the methodology but it was important to consider the needs of the clinicians in this early stage of identifying domains for the outcome measure. The workshops were conducted before the nominal group technique was implemented. The impact of the workshops was noticeable when the clinicians had to participate in the nominal group technique and select domains for the outcome measure. Many of the domains that were volunteered for the public list (see below), came from the information included in the workshops.

The nominal group technique as described by Wilcox and Zuber-Skerrit[27] was included in the methodology to reach consensus on the domains. It is a valuable data gathering technique for consensus with the advantage that all participants' views and opinions can be acommodated[26]. It is structured and produces qualitative and quantitative data. The nominal group technique usually commences with a focal question using brain storming[28]. A public list of all responses that participants are contributing is compiled. The third step involves discussion and clarification of similarities, duplications or unclear statements. During step four each participant prioritises and selects the top three statements from the public list. The final step is to rank the chosen statements in order of priority.

The focal question in step 1 of the nominal group technique was posed to the participants towards the end of the workshop when they were satisfied that they had received an update of theoretical frameworks and other outcome measures. The focal question was formulated as: "What are the domains that you wish to include in an outcome measure for your practice?"

The table below explains how the nominal group technique was applied in this study.

Table 1: The procedure of the nominal group technique

The focal question	What are the outcomes or the domains that you wish to include in an outcome measure for your practice?
Step 1 (10min)	Individual brainstorming: each participant received a small booklet of paper (8cm x 8cm) on which to write one outcome per piece and had to write one outcome on a piece of paper. The number of outcomes per participant was unlimited.
Step 2 (20 – 30 min)	Compiling a public list (on a flip chart) by a round robin collection of ideas. No criticism or judgement was allowed during this step.
Step 3 (30 – 45 min)	Discussion and clarification of outcomes on the public list. Duplications were deleted and other domains were re-named for clarity of understanding.
Step 4 (via e-mail)	Compiling the final list of the outcomes and distributed via e-mail to all the participants. Each participant had to select the three most NB outcomes or domains from the list and rank the three domains from first to third priority (A = priority 1, B = Priority 2 and C= priority 3).
Step 5	Counting and weighting of domains: assigning 3 to all As, 2 to all Bs and 1 to all Cs. The list was then re-ordered in order of priority.

Data analysis

The discussions in the four focus groups (2 per clinician group) were transcribed verbatim and thematic content analysis was used to categorise common themes[29]. The key elements of the participants' versions were compared with each other and then classified into an existing theme. A new theme was labelled if the key element did not fit an existing theme. Themes were subdivided into clusters while codes were used to describe examples that represented the clusters.

Possible domains for the outcomes measure were listed during step 3 of the nominal group technique. In Step 4 the list was distributed via e-mail to all the participants. Each participant was required to select the three most important outcomes or domains from the list and rank the three domains from first to third priority (A = priority 1, B = Priority 2 and C= priority 3). In Step 5 the counting and weighting of domains were done: assigning 3 to all As, 2 to all Bs and 1 to all Cs. The list was then re-organised in order of priority.

Trustworthiness in qualitative enquiries needs to be ensured to produce results that will be accepted by the profession. Krefting[30] suggested four strategies to establish trustworthiness in qualitative enquiries: credibility (internal validity in quantitative terms), transferability (external validity), dependability (reliability) and confirmability (objectivity). These strategies were applied during different stages of the research e.g. in the course of the research design, data collection and data interpretation and are detailed in the doctoral

thesis [31]. One example of a credibility strategy namely prolonged engagement is presented here for clarity. The researcher engaged in the research setting for an extensive period of two years since and immersed herself in the research process by paying regular visits to settings, by having informal discussions with clinicians and students who did their training at the settings and often returned to supervise students in training. By the time the focus groups and interviews had started, the researcher valued and sometimes even identified with the comments from the clinicians and MHCUs.

The study was approved by a Human Ethics Committee of a tertiary institution in South Africa and signed consent was obtained from the participating clinicians as well as the management of the hospitals.

Results

The sample

Table 2 below presents the clinicians who participated in the focus groups.

Table II: The participants in the focus groups (n=16)

Setting	Phase of illness	Number of therapists	Age range	Years of experience (range)
Hospital 1	Acute, sub-acute and chronic	11	22 – 40 yrs	1 – 18 yrs
Hospital 2	Acute	1	25 yrs	3 yrs
Hospital 3	Acute and sub-acute	2	26 – 30 yrs	6 – 10 yrs
Hospital 4	Acute and sub-acute	2	33 – 42 yrs	11 – 20 yrs

Analysis of the data from the focus groups

Five themes emerged from the thematic content analysis of the qualitative data: Understanding the concept of outcomes, Giving examples of outcomes, Factors influencing the measurement of outcomes, Benefits from using an outcomes measure and Characteristics of an outcomes measure.

Figure 2 on page 31 presents a summary of themes, clusters and codes.

Theme 1: Understanding the concept of outcomes

Most of the responses from the participants were about measuring the change that occurred in their clients and whether treatment was successful. "*One must be able to say what has changed".* One participant explained that *"outcomes is what you achieve, the functioning of the patients, the how is not so important, it is what you measure"*. Another response supported this understanding: "*outcomes are something that comes after the process e.g. baking a cake, the outcome is the cake, the process is following the recipe"*

Theme 2: Giving examples of outcomes

Skills showed up as the outcome that most participants would measure. Many different types of skills were mentioned e.g. assertiveness, social or interactional skills, stress management, and conflict management. Life skills were mentioned several times and participants referred to aspects such as using transport, being able to budget, running a household, taking care of children, and being able to identify and solve problems. Skills necessary to cope outside the hospital and the ability to "*integrate into real life*" were singled out. Preventing relapses, "*coping outside and stays there, not being re-admitted*" and "*using the skills they have learnt in OT*" were examples of important outcomes that ought to be measured.

Work, leisure, social sphere, functioning in the home environment, self-care and taking medication were pointed out as important occupational performance areas. Work habits, social and personal presentation were also highlighted as essential components of going back to employment.

Performance components were viewed as important outcomes which should be measured in clients with psychiatric disorders. "*Depression, mood, self-esteem, motivation, anxiety, all these have an influence on the progress of the patient*". The importance of insight into the psychiatric condition, concentration, memory, decision-making, social judgment and frustration tolerance were mentioned a few times.

Theme 3: Factors influencing measurement of outcomes

The effect of psychiatric symptoms on the overall functioning of a client was a dominant issue. Participants explained that in many cases progress in a psychiatric patient is minimal due to debilitating symptoms such as lack of drive in persons with schizophrenia and mood disorders. "*Some will in any case relapse*" was another response from a participant indicating that relapses impact negatively on client progress.

The staff patient ratio was another factor influencing the measurement of outcomes. One participant felt that there is much more a clinician could address but there are not enough clinicians appointed at the different facilities. "*We do not have the man power and then* [have] *to out-source*". "*I do not have time to write down something for each patient*", "*I am getting despondent with the number of patients*".

Role boundaries between the different health care workers in a psychiatric team were discussed: *"One asks* [one]*self what was my role* [with] *this patient*?" and "*Role boundaries between disciplines are not clear in the hospital.* [Nurses attempt occupational therapy activities in the wards without realising the therapeutic value of the activities.] *Activities are poorly presented and they also do groups but they cannot do it as well as we do. We need to show that we are the experts. Nurses taking over because OTs do not provide evidence of our excellent services*", "*It is time to say what OT will do well."*

Apart from role boundaries, role overlap was also discussed. "*There are so many variables to consider, everyone (health care professionals) takes credit when patients improve, who helped the most*?"

Responses indicated that the participants felt that their role as occupational therapists is not well known, doctors do not refer patients, doctors' knowledge about other professions is also vague and there is "*no appreciation of each other's contribution*". The following quote pinpoints the problem: "*We are not seen as an essential service and that brings many problems. To enhance quality of life is not essential".*

Theme 4: Benefits of measuring outcomes

After all the factors of concern to the participants were discussed and shared, the participants were asked to talk about benefits of an outcomes measure. This question was only posed in the second round of focus groups although some benefits emerged without a prompting question during the first round of focus groups. Benefits for the profession and benefits for the individual clinician emerged.

Benefits for the profession included statements like "*It is essential if the profession is going to survive*" and "*it would make OT a more recognisable profession and the role that we play, the necessity*". In terms of improved treatment, the following statement was made: "*Effectiveness and productivity could be measured, we can then see what needs to change*". There was also a comment that it provides opportunity for research. One participant pointed out that one could use outcomes to predict future needs of clients and that one may determine minimum and maximum requirements for successful treatment programmes.

Increased motivation was mentioned by three participants as a benefit for the individual clinician. It could add to professional development and improved skills as stated in the following quote: "*I will work* [in a] *more directed* [way], *will know the path of how to get there*" and "*it will decrease the risk of burnout".*

Theme 5: Characteristics of outcomes measures

Participants' responses indicate a strong client-centered approach as a characteristic of an outcomes measure according to

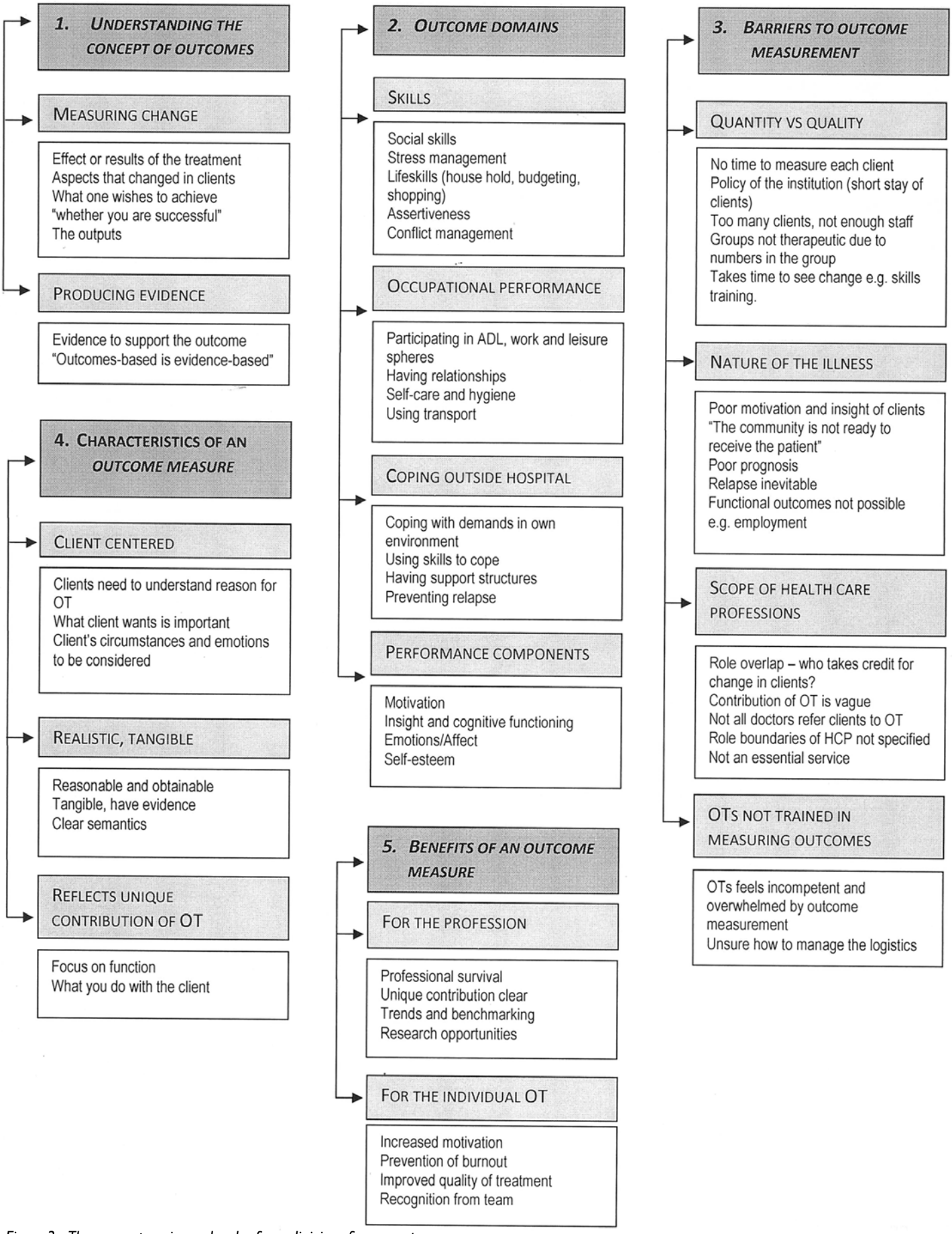

Figure 2: Themes, categories and codes from clinicians focus group

the frequency of codes. Clinicians felt that the needs of MHCUs should be taken into account when goals of treatment and outcomes are set.

The codes "*realistic, sensible and tangible*" were often mentioned by participants to describe characteristics of an outcomes measure. The semantics and how an out-come is formulated were added. One participant was concerned that if an outcome was not well formulated, it could cause confusion and become vague.

A third characteristic, reflecting the unique contribution of occupational therapy emerged. Codes like "*We must go back to occupational therapy as a profession, the theoretical, scientific basis*" and "*the focus should be on function and skills, assertiveness, social skills, life skills" and "we focus too much on components"* were also mentioned.

Analysis of the data from the nominal group technique

The results of the final selection of the domains took place in the fourth step of the nominal group technique. Seven of the 16 participants (44%) responded by sending their selections through via e-mail. One participant did not respond, even after several e-mail follow-ups and one telephonic follow-up. Two participants went on maternity leave while the other six participants left their places of work. These six participants were not tracked down or required to continue their participation in the study as some had left the profession while others had left the country.

Table 3 below indicates the frequencies of the domains and the respected total score.

Table III: The frequencies of the domains selected by 7 participants

Domain	A – 1st priority 3 points	B – 2nd priority 2 points	C – 3rd priority 1 point	Total
Communication and interaction skills	1	1	1	6
Process skills	1	2	1	8
Leisure	0	0	1	1
Motivation	2	0	1	7
Affect	0	1	0	2
Self-esteem	1	1	1	6
Balanced life style	1	0	0	3
Role performance	0	0	1	1
Instrumental ADL	0	0	1	1
Cognition	1	0	0	3
Life skills	0	1	0	2
Social participation	0	1	0	2

The fifth and final step of the nominal group technique was to count and weigh the domains in order to arrange them in order of priority. *Table 4* reveals the ranking of the domains.

Table IV: The list of domains in order of priority

Ranking	Domains
1	Process skills
2	Motivation
3	Communication and interaction skills Self-esteem
4	Balanced life style Cognition
5	Affect Life skills Social participation
6	Leisure Role performance Instrumental ADL

The first four domains, Process skills, Motivation, Communication/Interaction skills and Self-esteem received the highest totals. The remaining eight domains received a total of three and less. Six of these eight domains were grouped together using common characteristics as a guide e.g. Cognition was moved to Process skills as these two domains have much in common for instance concept formation, attention, general knowledge of materials and tools and understanding of task requirements. Social participation and Leisure were grouped with Balanced lifestyle. Many leisure pursuits happen in social situations and being able to spend proportionate time on leisure indicates the ability to balance obligatory and enjoyable occupations. Social participation was also presented under the domain of Communication/Interaction skills where verbal and non-verbal skills were included as well as relationships. Instrumental ADL was grouped with Lifeskills as many of the skills like domestic skills, child care skills, money management and budgeting, pre-vocational skills and adhering to safety regulations are sometimes grouped under skills that are instrumental to activities of daily living. Affect and Role performance remained ungrouped. The decision to group certain domains was also influenced by the responses of the clinicians in the focus groups. The researcher reviewed the transcriptions of the focus groups to find support for the specific groupings.

The following eight domains have thus finally been derived from the first phase of the study: 1) Process skills, 2) Motivation, 3) Communication and interaction skills, 4) Self-esteem, 5) Balanced lifestyle, 6) Affect, 7) Lifeskills and 8) Role performance. These domains represent several aspects of occupational therapy namely occupational performance areas (Lifeskills), performance skills (Process skills and Communication/Interaction skills), client factors or performance components (Motivation, Self-esteem and Affect) and well-being or quality of life (Balanced lifestyle and Role performance). The researcher decided to label all these aspects in one construct of *activity participation* as all these aspects ultimately contribute in one way or another to a person's ability to participate or engage in activities and occupations. The name of the outcome measure then resulted as the Activity Participation Outcome Measure (APOM).

Table 5 on page 33 gives definitions for each domain of the APOM. These definitions were formulated by the researcher.

Discussion

The aim of Phase 1 of this study was to establish domains for an outcome measure that represented the service delivered by clinicians applicable to the South African context. It had to cover the type of domains that are typically addressed in intervention programmes delivered by occupational therapists in acute, subacute and chronic settings. This aim was thus achieved when the eight domains emerged.

Clinicians who participated in the focus groups were extremely positive and volunteered a great deal of information. During focus group discussions it became evident that clinicians did not have misconceptions or lack understanding of outcomes since all agreed that measurement of change was the focus of any outcome measurement. The participants were, however, not sure how to label the outcomes and which outcomes to select for an outcome measure, hence the workshops on philosophical, theoretical and practice frameworks. A similar trend was reported by Bowman and Llewellyn[32] who conducted structured interviews with occupational therapists with regard to measuring outcomes. Their sample also showed agreement about outcomes and explained it as the tangible and measurable result of intervention.

Client-centeredness was mentioned as an important characteristic of an outcome measure. The clients' needs were important to clinicians as these assisted them in keeping services relevant. Clients' needs, at all times, reminded clinicians of their circumstances and context. Currently, the client-centered approach is globally accepted as one of the core caring aspects of any occupational therapy service. Measurement in occupational therapy should reflect the individual nature of people engaging in occupations. These measure-

Table V: Definitions of the domains of the outcome measure

Process Skills	The cognitive and executive functions that one uses to perform a task. This includes the ability to plan a task, select and use tools and materials appropriately, to pace the actions and to adapt one's performance when problems are encountered.
Communication/ Interaction skills	Exchange of information using the physical body and spoken language to express intentions and needs in building and maintaining social relationships.
Lifeskills	Skills and competencies required by a person to manage independently in the community. It includes the abilities individuals acquire and develop to perform everyday tasks successfully.
Role performance	The ability to meet the demands of roles in which the patient engages. A set of socially agreed upon expectations, tasks or obligations that a person fulfills and which become part of that person's social identity and participation in everyday life.
Balanced Lifestyle	Use of time, habits and routines that address personal needs and demands of environment, occupational preferences in balance (good mix of occupations in all areas: physical, mental, social, spiritual, rest). It includes occupations that are meaningful and promote wellness.
Motivation	The desire to explore and master the environment through occupation or engagement in activity. It includes the basic drives and motives for action as well as the perception about the underlying main causes of events in one's life.
Self-esteem	The worth that one ascribes to one self, the evaluation of one's virtues, the desire to feel accepted and expectations of success or failure.
Affect	The observed expression of emotion by others, what one is able to see from the outside. The appropriateness of the emotion, how it is controlled and the range or repertoire of different emotions are aspects that one could observe in a person.

ments focus on a client's subjective experience of an occupation, on the one hand, but, on the other hand, on the observable qualities of occupational performance as seen through the eyes of the clinician. Client-centeredness is thus an important facet of occupational therapy and the researcher expected that clinicians would include it in their discussions of outcome measurement.

Clinicians strongly felt that an appropriate outcome measure had to reflect the unique contributions of occupational therapy. They mentioned that domains had to focus on function and occupational performance of the client. Domain descriptions had to inform consumers and practitioners of other health care professions of the core business of occupational therapy. During the member checking, clinicians agreed that the domains that were eventually selected acknowledged the discipline's unique contribution.

The researcher noticed that clinicians had developed their own terminology to describe the unique contribution of occupational therapy in the health care team. Their terminology often was outdated (such as the term *function*) and not aligned with terms in the latest literature, for example the Occupational Therapy Practice Framework of the American Occupational Therapy Association[33]. This framework contains powerful terminology that explains the contribution of occupational therapy towards any condition or situation. When the researcher introduced clinicians to this terminology during the workshops, they were remarkably receptive and agreed that it would be relevant for their practice settings. The clinicians in the end were satisfied with the inclusion of domains like Role performance and Balanced lifestyle in the outcome measure as they felt that these would assist them in their quest to make their unique contribution towards mental disorders public.

The lack of staying in touch with latest terminology could be a consequence of clinicians' attempts at coping with large numbers of patients and as a result, effectively reducing time allocated for professional development. It became obvious that an outcome measure had to be time efficient and user friendly to complete, without adding to already overloaded work expectations.

The domains that emerged are a good representation of the unique service that the clinicians wish to render: that is, the ability of a person to perform and participate in activities and occupations that are demanded from their environments and contexts.

The domains that emerged from this study showed similarities with domains of other measures e.g. the MEDYN Questionnaire that evaluates the change in functional ability in psychiatric inpatients receiving occupational therapy[21]. The domains in MEDYN questionnaire cover general/social behavior, cognition and task behavior. Similarities were also found with the AusTOMs that measures impairment, activity limitation, participation restriction and well-being [20]. The AusTOMs was developed for use across a variety of health care disciplines, such as speech-, physio- and occupational therapists. In total, 12 items applied to occupational therapy, including three items aimed at physical dysfunctions.

There is a concern from the researcher that the domains of the outcome measure might be over-inclusive and will take too much time to measure, especially if one takes into account that an outcomes measure must be carried out routinely. However, when considering the psychometric properties of an outcome measure, it should fully represent the construct and domains. Clark and Watson[34] argue that over-inclusion is necessary during the developmental stage of a measure as data analysis techniques could indicate weak or unnecessary items but it cannot detect items that should have been included. It was envisaged that during the pilot study (Phase 3 of the study), domains and items that are over-represented would be identified with factor analysis. It would therefore be sensible to remove additional items in a systematic and statistically sound manner rather than using human judgment and making premature decisions at this stage.

Limitations of Phase 1 of the study were that the sample was selected from a particular demographic location in South Africa and not representative of the entire country. However, since a qualitative inquiry was executed, the onus lies with clinicians who wish to use this outcome measure to decide on the transferability and relevance of the domains to their setting. It is thus important that clinicians realise that the domains in this outcome measure should resemble their service delivery and be relevant for their client population.The eight domains that emerged were used in the development of items that represented each domain. Scale development for each domain and validation of the outcome measure were done in phases 2 and 3 of the study and will be reported in future publications.

Conclusion

Participation of clinicians in selecting domains for an outcomes measure that represent the unique occupational therapy service, was done successfully. Their participation ensured that the final domains were appropriate for the settings for which it was developed. It is too early to claim at this stage of the research that the domains emerged from the focus groups represent the service and will produce evidence of the outcomes of the services rendered at mental health care settings. It is however envisaged that the results from the third phase of the study (investigation into psychometric properties) will tell how valid these domains are.

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