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Development of descriptors for domains and items for collective participation in occupations

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DEVELOPMENT OF DESCRIPTORS FOR DOMAINS AND ITEMS FOR COLLECTIVE PARTICIPATION IN OCCUPATIONS

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A thesis submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Doctor in Philosophy

Johannesburg, 2016

DECLARATION

I, Fasloen Adams declare that this research report is my own work. It is being submitted for the degree of Doctor in Philosophy at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other university.

_____

[Signature of candidate]

On the _____ day of _____ 2015

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To my Creator who made it possible to do this. Shukran.

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PRESENTATIONS ARISING FROM THE THESIS

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Title: Assessment of collective occupations

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Title: Collective occupations: Indigenously African

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ABSTRACT

The intention of this study was to develop domains, items and descriptors for levels of collective participation, which can be used as guidelines by occupational therapists to determine a collective's ability to participate in collective occupations. These developed levels aimed to increase therapists' understanding of the collective's occupational potential, enabling better planning of more appropriate, preventative and promotive health programmes. A mixed methods approach and a sequential exploratory design were used to complete this study. The study consisted of three phases.

Phase one used a qualitative approach and a descriptive design to explore and conceptualise collective occupation and participation in collective occupations. The phase consisted of two stages. Stage one conceptualised collective occupations from the perspectives of South African occupational therapists. Data were gathered through eleven semi-structured interviews. Stage two focused on the conceptualisation of collective occupations from profession-specific literature. Data were gathered through a literature review.

Phase two focused on the development of the domains and items for the understanding of collective participation using the information gained from the interviews (stage one in phase one) and from the review of the literature (stage two in phase one). This phase also consisted of two stages. In stage one, domains and items for collective participation were developed. In stage two, descriptors for each domain and item on seven levels of collective participation were developed. In this phase, five domains - motivation, action, relations, product and emotional functioning - were developed and each of these domains has associated items. In stage two of this phase, descriptors for each item on seven sequential levels of collective participation in occupation were developed. The Vona Du Toit Model of Creative Ability was used to provide structure and to guide the development of domains, items and item descriptors.

Lastly, phase three focused on the content validation of the domains, items and descriptors developed in the previous phase. In this phase, item content validity, as well as scale content validity, was established. Results from this phase found that the scale as a whole, the domains and items were valid. The majority of the items descriptors on the sequential levels were also found to be valid with only ten items being rated as invalid by a panel of experts.

In conclusion, descriptors for seven levels of collective participation were developed through this research. The newly developed levels of collective participation are now ready for conversion into an assessment tool, psychometric investigation and field-testing. These descriptors of collective participation could help occupational therapists to understand the behaviour and the potential of collectives, which in turn could aid in harnessing the effectiveness of collectives and thus passively influence the health and well-being of collectives.

ABBREVIATIONS

CA – Creative ability

VdTMoCA: Vona du Toit Model of Creative Ability

MOHO: Model of human occupation

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PROLOGUE

An African funeral: my personal experience of a collective occupation

It was the morning of the 20th of July 2013. It took us six hours of driving to get there. Every time we stopped and asked for directions, the nature of the comments was always the same. “Eish! Mdlelanto yo! It’s far. Do you really want to go there?”

We drove up and down hills, over mountains and through sugar plantations. We had to stop to let very young cattle herders pass with their cattle and, again, wait for children playing a soccer game on the gravel road to get out of our way. We slowed down as we approached the foot of the steep hill, looking for where we were supposed to turn right. We slowly continued on our way.

Some of us westerners were concerned that we may be late for the funeral but our colleagues, who were familiar with Zulu traditions, reassured us we could never really be late in Africa.

“Look for the house with the large tent,” we were told.

In a beautiful, typical, Kwazulu-Natal valley, we found the homestead sitting on a hill surrounded by green hills, steep mountain paths, small houses and rondavels.

We had arrived at Papa Phineas's funeral.

We parked at the bottom of the hill and started to make our way up to the house with the tent. It was a steep hill and we were not dressed for the hike.

There were some ladies with very high heels walking up the hill with us. They had left Durban at six o’ clock that morning to come to the funeral. It was their pastor's brother's funeral. Their congregation was paying for the funeral as the family could

not afford it. They had never met Phineas but they were doing it for their pastor. “It’s the right thing to do,” they told me.

We arrived at the family’s rondavels and had to wait while they brought in extra chairs. It was dark inside. Light only came in through the door. The small rondavel was packed with people sitting in circles all around the coffin. The female family members were seated on the ground on reed mats and the women from the St Anne’s Catholic Society, in their purple and white uniforms, were singing, praying and praising while the rest of the family was outside, busy preparing for the funeral that had already started.

We were formally greeted. A neighbour gave a tribute. She talked about Phineas and what a loss his death was for his family and the community. In between singing and praying in the rondavel on the hill, the eulogies continued. People volunteered to say something. Nobody was allocated or asked for the duty.

After an hour, we were asked to move outside to the tent. The ceremony was about to start. There were many people around. Everyone seemed to know what they had to do. Some were taking the sides of the tent off, some were putting the chairs in a row, while others were putting grass mats on the ground. Everyone helped. This was a familiar ritual for all of the community. It appeared as if they had done it numerous times before.

The combination of the African and Catholic service was very harmonious. When someone stopped talking, someone else started singing and vice versa.

Two hours later and the funeral still continued. There were various speakers, a great deal of praying and praising but not much in English and, since I could understand very little, I looked around repeatedly during the service.

Throughout the hours of the service, more and more people came and the women and children put grass mats down for them to sit on. This was Africa. People came when they came. The ceremony was long, so they knew they had time.

Every so often, the grave diggers came with two reeds to measure the coffin to make sure the hole was big enough. Although this was done during the service, nobody looked at them strangely. Apparently, this was how it was done. They had a job to do. It was their contribution.

During the service, I saw people walking from a rondavel carrying food, pots, plates and other things. I saw women sitting in front of the rondavel peeling, stirring and cooking food, working together.

I saw neighbours coming up the hill carrying crates of beer and soft drinks. Others were carrying bags of vegetables. This was their contribution to the funeral.

Eventually, the service was over and we moved to the burial site, which was just behind Papa Phineas's house overlooking the beautiful valley where he was born. I thought that he would be happy there. He had always talked about home.

After more prayers, the coffin, draped in a blanket, was lowered into the hole. It was covered with a grass mat and the men (family and neighbours) formed a row to pass the wood that was used to stabilise the coffin and fill the hole.

While the hole was being filled, we were led to yet another rondavel. This one was set with chairs and a table for the food. We were told that it was a neighbour's rondavel and that she had offered the use of it. We were told to eat. The women had been cooking since early that morning.

At this funeral, everyone did their part. Everyone contributed and, as with many events in Africa, the funeral was a collective effort. It made me realise that I was privileged to be part of a very traditional, African, collective occupation. This was how it was always done.

It brought tears to my eyes.

CHAPTER 1: INTRODUCTION

"A single bracelet does not jingle" (Congolese proverb. Author unknown)

This chapter provides an overview of the background of the problem under investigation. Furthermore, it outlines the problem statement, the research questions, the purpose, the aim and the objectives of the study. It includes a reflection on the researcher's theoretical perspective that underpins her interpretation. Lastly, a summary of the phases of this research study and the organisation of the thesis is presented.

1.1 BACKGROUND

Contact with others is considered a basic, biological need for infants and forming connections with others is believed to be a part of normal development for all human beings (1). These connections or social networks include families, friendship groups, sports groups, women's groups and even virtual groups, for example, Google groups and Facebook communities, to name two. Being part of a collective is seen as important to mankind's survival and also to its progress (2-4).

Within Africa, being part of a collective reflects the traditional African ethos (5). While the Western perspective focuses on the uniqueness, autonomy and self-actualisation of the individual, the African perspective or ethos is based on the survival of the collective community and interdependence (5). This ethos presses for values such as commonality, cooperation, agreement and being collectively oriented. The African ethos is further promoted by the philosophy of ubuntu which emphasises sharing (5, 6). It highlights the belief that a person can only be a person through others (7). Ubuntu advocates a collective approach that includes working together, solidarity, cooperation, communalism and achievement of group goals (1, 6).

Since it is the philosophy of occupational therapy to consider a human being as a holistic being, the profession has to take into consideration the need for people to be

part of a collective and to engage collectively in occupations, especially in Africa (8). To this end, the concepts of co-occupation and collective occupation emerged within occupational science literature in the early nineteen-nineties (9, 10).

Pierce (2004), who initially created the term *co-occupation*, defined it as an occupation performed by two or more individuals which, consequently, shapes the occupation of those individuals (10, 11). Ramugondo and Kronenberg (2015) expanded on this definition by defining collective occupation as "occupations that are engaged in by groups, communities and/or populations in everyday contexts and may reflect a need for belonging, a collective intention towards social cohesion or dysfunction and/or advancing or averting a common good" (12)(p. 10). Similar to Pierce's definition, this definition highlights the collective nature of participation in occupation but added the motivational aspect of people working together out of choice or necessity.

Reasons for the above-mentioned collective participation have been explored extensively in sociology, anthropology and psychology research and literature (13-15). Similarly, in occupational therapy, the epistemology of why people engage in collectives is important. However, the benefits of engaging in collectives and maintaining the ability to participate in the collective are more important considerations within the scope and philosophy of the occupational therapy profession (13-16). Current research and discourse in occupational therapy focuses more on defining the concept of collective participation and describing how people participate rather than on why they participate (17, 18). The description emanating from occupational therapy discourse is, however, still superficial and needs further exploration.

Changes in occupational therapy services

Post 1994 South Africa adopted a Primary Health Care (PHC) approach in order to restructure health care with the intention of ensuring a comprehensive, effective, scientifically based, accessible and affordable national health care system (19).

This health care system focused not only on the individual but also on his/her family and community. Prevention and health promotion approaches were prioritised and the bulk of the services centred on a primary level of care. The approach aimed to promote not just health but also the economic and social development of the country (19). In order to do so, it advocated self-reliance and self-determination by the community, thereby, contributing to community development and empowerment. This involved community members playing a role in sustaining their health through active participation in needs identification, identification of appropriate solutions and implementation of those solutions (20).

The above mentioned prevention and health promotion approaches and programmes are not always successfully incremented in South Africa. Perez, Ayo-Yusuf, Hofman, Kalideen and Maker, Mokonoto et al. (2013) reported that South Africa is suffering under a quadruple burden of disease (21). Although South Africa spends about 8.6% of the gross domestic product on health annually, outcomes to alleviate this burden of disease are not being fully met (21). A significant portion of the allocated funds are spent on curative care and it is suggested that this needs to change if the country is to meet outcomes (21). To address this problem (and in support of the PHC approach), health promotion and prevention programmes to address determinants of health and social inequality were proposed by various authors including Perez, et al. (21). Although a significant amount of the health budget is allocated to health promotion and prevention campaigns, a review of health promotion programmes in Gauteng found little evidence of the success of existing programmes (22). Lack of understanding of the community and their needs were highlighted as one of the barriers to success of these programmes. Similary, Meiinzen-Dick, DiGregorio and McCarty (2004) who studied collective action in rural development, also reported that a lack of understanding of communities to engage in collective action caused the failure of community-based development programmes (23).

In South Africa, the majority of occupational therapists work in institutions in the health and education sectors. In these sectors, services predominantly take place

on a one-to-one basis as well as in therapeutic groups (16). However, due to the move to adopt a PHC approach, services are branching out into community and social development sectors in which therapists not only render services to individuals but also to families, small groups and communities of people. This is aimed at facilitating better health in general but, specifically, occupational well-being (24). In addition, in line with the move to PHC, occupational therapists have to focus on preventive and promotive programmes that could influence health and social well-being. It is in this context that occupational therapists often encounter and work with people participating in collective occupations. This could be, for example, in the form of a group of elderly women working together on a community garden project used for feeding the community. Another example may be a group of mothers of children with disabilities working together to plan and execute a community-based disability awareness campaign. Effective collective participation in these occupations could contribute to the success of health promotion and prevention programmes.

Current profession-based models, tools, techniques and theories can guide therapists to work with individuals but not with families and communities as the majority of literature and research within occupational therapy is focused on understanding how the individual engages in occupations within his/her context (25, 26). Many occupational therapists, including Iwama (2006), believe that this focus on the individual is due to the fact that fundamental theories in occupational therapy are built on Western philosophy (27, 28). This may be due to the hegemony of "white, middle-class women of North America and Western Europe" (29)(p. 30) who influenced the epistemology and, thus, the tools, techniques and models used in the profession (27, 28, 30). The individualistic approach was also highlighted by Wilcock (1998) as one of the main reasons for occupational therapists to feel more comfortable in a hospital-based setting than in a community setting where the focus is not only on curative intervention but also on preventive and promotive programmes for collectives or communities of people (31). Currently, there are no profession-specific guidelines for inexperienced therapists, in particular, working in the latter settings (25).

Similarly, knowledge and methods of assessment of collectives and communities are lacking in occupational therapy-specific literature. As indicated previously, one of the identified barriers to success of prevention and promotion programmes is lack of understanding of the community's abilities and needs. In line with this, it is important for occupational therapists to understand the collectives and communities they work with if they want interventions to be successful. They also need to understand the ability of the collective/community to participate in occupations. Currently, there is little occupational therapy-specific literature that focuses on understanding group or collective functioning, and inadequate attention is paid to what motivates people to participate collectively in occupations and how they engage collectively (12). Until now, the profession has relied on information generated by other disciplines such as sociology and psychology.

Lastly, during discussions at the Creative Ability Colloquium in Durban (UKZN, 2010), occupational therapists working in public health settings expressed the need to understand the behaviour of communities and collectives better. They felt that understanding a community's motivation to participate in occupations that could benefit the wellbeing of the community, could give occupational therapists valuable insights when developing occupational therapy intervention programmes for communities as a whole. They proposed using the Vona du Toit Model of Creative Ability (VdTMoCA) (32) to attempt to understand a community's ability and motivation to participate. Based on their experience and the preliminary results of research currently being done on the use of the VdTMoCA with groups of people or communities, many of the participants of the colloquium felt that the principles and theory underpinning the VdTMoCA could successfully be applied to understand a community's ability to participate in collective activities. Although there was an agreement by experts on the VdTMoCA that the clinicians' rationale appeared sound, there was some concern that the rationale was not supported by research.

1.2 PROBLEM STATEMENT

South Africa has adopted the Primary Health Care approach to ensure a more equitable and effective health care system. This system specifically advocates disease, mortality and disability prevention and the promotion of health and requires the community to be an active role-player in the above-mentioned initiatives and programmes (19, 20). Health care professionals and other community development role-players need to collaborate with community members to ensure successful campaigns to address the health and development needs of that specific community.

Occupational therapy plays a significant role in these campaigns and occupational therapy contribution within health promotion and prevention programmes has been comprehensively reported on in occupational therapy-related literature (33, 34). This role is often performed in a community-based setting and includes working with collectives to address health determinants (34, 35). In these settings, occupational therapists use the community-based rehabilitation approach which also encourages community members to play an active role in their rehabilitation. This must be done through involvement of individuals and collectives of people from a community. However, there is currently neither profession-specific literature nor guidelines, models and tools (for assessment and treatment) in occupational therapy to aid occupational therapists within a community-based setting to understand the functioning of a collective and how people collectively engage in occupations. Scaffa (2014) highlighted the lack of evidence there is to support and give guidance on occupational therapy intervention for collectives including organisations, communities and populations (35). This means that occupational therapists do not always understand, amongst other factors, a collective's ability and motivation to participate in occupations that could promote their wellbeing. This, in turn, causes difficulties for occupational therapists in determining at what level they have to direct a programme to ensure that it is in line with the collective's ability to participate.

Occupational therapists in health care (specifically in public health care) need profession-specific guidelines, models and tools to assist them in understanding the

behaviour and potential of collectives. Current methods used are not supported by research.

1.3 PURPOSE OF THE RESEARCH

This study intended to develop domains, items and descriptors for levels of collective participation, which can be used as guidelines by occupational therapists to determine a collective's ability to participate in collective occupations. The guidelines aim to increase therapists' understanding of the collective's occupational potential, enabling better planning of more appropriate, preventative and promotive health programmes.

1.4 RESEARCH QUESTION

What are the domains and items that need to be explored in order to gain insight into a collective's levels of participation in occupations?

1.5 RESEARCH AIM

This study aims to develop and validate domains, items and descriptors for levels of collective participation in occupations.

1.6 RESEARCH OBJECTIVES

Three phases for this study were planned and executed to develop and validate domains, items and descriptors for levels of collective participation in occupations. The specific objectives of each phase are listed below.

1.6.1 PHASE 1: CONCEPTUALISATION

To conceptualise collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.

To conceptualise collective occupations from profession-specific literature in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.

1.6.2 PHASE 2: OPERATIONALISATION

To develop and formulate domains, items and descriptors for levels of collective participation in occupations. To develop descriptors for levels of collective participation in occupations.

1.6.3 PHASE 3: VALIDATION

To determine the content validity of each domain, item and the descriptors for levels of collective participation.

1.7 JUSTIFICATION OF THIS STUDY

Items, domains and descriptors for levels of collective participation in occupations could contribute to occupational therapists' understanding of a collective's ability to participate in collective occupations. The insight gained could ensure that intervention is particularly developed according to the abilities, needs and motivation of a specific collective which, in turn, could contribute significantly toward ensuring the sustainability of programmes and projects.

1.8 THEORETICAL PERSPECTIVE

Positivism, which is typically associated with quantitative research, emphasises that science and the laws in science are the only truth (36). It focuses on facts and on cause and effect and it is through this verification that it becomes possible to predict and control a phenomenon. Positivism gives preference to theories and laws and advocates the gathering of information through observation and measurement. This world view has been criticised for being reductionistic as its "intent is to reduce the ideas into a small, discrete set of ideas to test" (37)(p. 7). Research by means of this world view is focused narrowly on specific variables and the control and

measurement of these variables. However, its principles are in line with traditional empirical scientific methods of research (37).

On the other hand, constructivism, usually associated with qualitative research, is based on the idea that people construct their knowledge and meaning through their experiences, their reflections on those experiences and their interactions with others. Constructivism is centred around the belief that a person and the world he/she exists in cannot be separated. It advocates an active process of learning and development of meaning and acknowledges that past experiences, knowledge, values and beliefs influence current learnings, understandings and interpretations (38). Constructivism is considered to be linked to empowerment as it gives credit to people's opinions and thoughts. A constructivist world view proposes that behaviour and phenomena cannot always be measured (36).

Within research, constructivism assumes that meanings attached to a phenomenon are multiple and varied and, thus, focuses on the complexity rather than reducing or controlling the meanings. Constructivism uses more naturalistic methods of data gathering and analysing, for example, interviews, focus groups and narratives. Although it can also use observation, the analysis of this observation differs from analysis done within a positivistic world view. In addition, within this world view, the researcher acknowledges and reflects on personal biases that could influence his /her interpretation of the data as opposed to a positivist world view that attempts to control and eliminate the influence of the researcher's bias on the results. Finally, constructivism starts from the assumption that theory needs to be created, while positivism starts from theory itself (37).

The researcher has chosen a constructivist world view for this study as she believes in the fundamentals of this worldview. Furthermore, as stated previously, constructivism is often associated with a qualitative research approach (37). Since the concepts of collective participation and collective occupations are relatively new to discourse in occupational therapy, especially in South Africa, they, as a phenomenon, need to be explored before they can be measured. The constructivist

world view is, thus, ideal. Specific application for this study will be explored further in the methodology sections of the research.

1.9 SUMMARY OF THE PHASES OF THIS RESEARCH STUDY

1.9.1 PHASE 1: CONCEPTUALISATION

This phase explored the concepts of collective occupation and participation in collective occupations. The phase consisted of two stages:

STAGE 1: The conceptualisation of collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations. Data were gathered through eleven semi-structured interviews.

STAGE 2: The conceptualisation of collective occupations from profession-specific literature in order to develop the constructs needed for inclusion in the development of domains and items for collective participation in occupations. Data were gathered through a literature review.

1.9.2 PHASE 2: OPERATIONALISATION

This phase focused on the development of domains, items and descriptors for levels of collective participation in occupations using the information gained from the interviews (stage one in phase one) and from the review of the literature (stage two in phase one). The VdTMoCA provided structure and was used as a guideline to develop these domains (32). Observable actions for each level were developed as required by the model. This phase also consisted of two stages:

STAGE 1: The development of domains and items for collective participation

STAGE 2: The development of descriptors for each domain and item on seven levels of creative participation

The development of the domains, items and observable actions was based on the guidelines provided for understanding the creative ability level of individual clients according to the model. To ensure correct interpretation of the model, the researcher summarised her understanding of the levels of creative ability for individual clients which was sent for validation to experts in the field.

1.9.3 PHASE 3: VALIDATION

This last phase focused on the content validation of the levels for collective participation in occupations. A panel that consisted of five experts was used to validate the domains, items and observable actions.

1.10 ORGANISATION OF THE CHAPTERS OF THIS THESIS

This thesis has been organised into eight chapters.

Chapter 1: Introduction of the problem, problem statement, purpose, aim, objectives, theoretical perspective and a summary of the phases of the study.

Chapter 2: Review of the literature

Chapter 3: Overarching methodology for the study

Chapter 4: Phase 1: Conceptualisation: Qualitative study and literature review to conceptualise collective occupations

Chapter 5: Phase 2: Operationalisation: Development of domains, items and observable actions

Chapter 6: Phase 3: Validation of domains, items and descriptors for levels of collective participation in occupations: Quantitative study

Chapter 7: Overall discussion

Chapter 8: Conclusion and recommendations

CHAPTER 2: REVIEW OF THE LITERATURE

If you want to go fast, go alone. If you want to go far, go together

(African Proverb. Author unknown)

2.1 INTRODUCTION

In this chapter, core concepts around collective, group, community and collectivism are introduced and explored. Reasons for collective participation by human beings will be discussed. The need for collective action and participation is explored and a link shown with the concept of occupation in general, as interpreted in occupational therapy and occupational science. Finally, the alignment to fundamental theories and models in occupational therapy is explored.

2.2 THE CONCEPTS OF COLLECTIVE VS GROUP VS COMMUNITY

As human beings, people are born alone but born into a family, groups and a community or a collective of people (2, 4). From here onwards, it is considered as part of our normal development to strive constantly to form social networks such as in families, clans, friendship groups at school, religious groups, colleagues at work, sports groups, clubs and even modern virtual communities. Being part of a collective or group has, since the beginning of time, been seen as essential for the survival of human beings because of the belief in strength in numbers. However, being part of a collective is also seen as emancipatory, since being in a collective or group can create opportunity for empowerment of the group/collective as well as for the individuals in the collective (2, 4).

2.2.1 A COLLECTIVE

A collective is defined as two or more people coming together to perform as a unit (39, 40) or as a group of people coming together for a reason (18). The layman's

definition in the Oxford dictionary also defines it as a whole, for example, when talking about the whole workforce or collective workforce (41). The first definition is used extensively in sociology and other disciplines when describing certain behaviour, for example, collective action, collective bargaining, collective investment schemes and even when describing collective consciousness. Ultimately, a collective refers to a group of people engaging together for common needs or to achieve a common goal (42, 43).

A collective can be categorised into a crowd, a mass or a mob (44). A crowd is defined as “a relatively large number of people who are in one another’s immediate vicinity” (44)(p. 616). An example of this is spectators at a soccer match. A crowd can react to common concerns and this behaviour is usually reactive and not proactive. On the other hand, a mass is also defined as a large number of people, but they do not need to be in proximity to each other. They form a collective due to shared interests in a specific topic or shared needs (44). An example of this could be a Facebook group that forms due to a collective interest in environmental issues (44). Lastly, proximity is highlighted as a characteristic of a mob which is defined as an emotional collection of people whose members are ready to engage in mass action, for example, riots and civil disobedience (44). While the first two can be seen as positive, a mob is associated with negative images of violence and destruction.

In 1969, Blumer published a typology of crowds that is still used today. This typology is based on the purpose of the collective and its dynamics (44, 45). It includes casual, conventional, expressive, acting and protest crowds.

Casual crowds are collections of people who happen to be in the same place at the same time. This crowd develops spontaneously, is unplanned and is very loosely organised, for example, a collective of people in a train compartment or a group of people congregating around a street performer (44). The people in this crowd have very little interaction with each other, initially, and are usually unfamiliar with each other. Goode (1992) queried whether this collective should have been included in the typology since these members have so little in common and their behaviour is

unstructured (46). According to him, a casual crowd does not exhibit collective behaviour, but is merely a number of individuals engaging in similar action (46). However, this definition of a collective is still in line with the definition of a crowd as mentioned above.

Conventional crowds are crowds of people who come together for a specific pre-planned or scheduled event. They, thus, have a common focus, purpose or interest, for example, people attending a graduation ceremony or a concert (44). Interaction between members is possible in this collective as they share commonalities and could have met at similar past events. Again, Goode (1992) queried the inclusion of this group as they do not exhibit collective behaviour where people interact with each other. They are neither required to talk or respond to each other but simply sit next to each other.

Expressive crowds form around events that give opportunity for emotional expression (happiness, anger or grief). This could be a collective of people who come together for a political rally, a church service or a funeral (44). Being a part of this collective is voluntary and a feeling of being a part of is significant for these members (46). In a casual crowd, it is the activity that is important. For example, the individuals want to see the act of the street performer. For an expressive crowd, being a part of the collective is the primary objective of the individual.

An acting crowd is a crowd that is established due to a common need or purpose and where the members are involved in collective action to achieve common goals. These actions can be constructive or destructive. A mob is considered to be part of this type of collective by Kendall (44, 46).

Finally, a protest crowd is included as a category by McPhail and Wohlstein (1983) (47). This is a collection of people who specifically gather to protest. They can, thus, have common interests and want to achieve specific political goals (47). Again, these protests can be positive or negative. For example, the Occupy Wall street protest

movement that emerged from 2011 is considered a positive crowd by some and a negative crowd by others (44).

In summary, a collective is seen as two or more people coming together due to proximity or for a specific purpose. In line with this, collective behaviour is defined as "not just the sum total of a large number of people acting at the same time; rather, it reflects people's joint responses to a common influence or stimulus" (44)(p.116). These definitions for collective and collective behaviour are similar to those for the groups and group behaviour found in literature.

2.2.2 A GROUP

In its simplest form, a group can be defined as a congregation of objects, people or figures that form a unit (39) and interact with one another (48-50). In its more complex form, it can be defined as a cluster or assembly of people repeatedly interacting. The interaction takes place according to a shared understanding and expectations of each other's behaviour (51) and the cluster or assembly can have shared values and norms (48, 52). This was reiterated by the psychotherapist, Yalom's (1980) interpretation of a group that calls for group members to interact with each other (53). These characteristics of a group are similar to the definition of a collective and to the last two categories in Blumer's typology which have interaction and common goals or purpose as a requirement.

Scaffa (2014) took this definition further by, not only highlighting the common purpose that the group shares, but adding that this common purpose "can only be achieved through collaboration" (p. 437), suggesting that groups have an independent and interactive nature (54).

Becker (2005) identified two types of groups, a natural and a formed group. She highlighted the fundamental difference between the two as being the impetus to form the group: intrinsic or extrinsic. A formed group is formed by an outside influence for a specific purpose, for example, a therapy group in a psychiatric unit formed by the occupational therapist (6). A natural group forms spontaneously due to needs or

interpersonal attraction between members (6). Natural groups are less artificial and less manipulated by outside influences. This latter group is again in line with the last two categories in Blumer's typology.

Cooley (1909 in OpenStax College, 2012) (50) also identified two types of groups, namely primary and secondary groups. Primary groups are the most important in the lives of human beings and are defined as small, intimate groups of people who engage face to face and over an extended time. These groups form not only for practical reasons but also for emotional, expressive and affective functions. Secondary groups are defined as larger, more impersonal groups that are time-limited and form for practical reasons. The differences between these types of groups are similar to the differences between a collective and a group as described by Cragum, Cragum and Konieczny (2012) (49). These authors highlighted certain differences when defining collective and group behaviours (49). The differences are summarised in table 2.1 below.

Table 2.1: Summary of differences between collective and group behaviours. Adapted from Cragum, Cragum and Konieczny (2012)

Criteria	Collective	Group
Length of interaction	Social interaction is short-lived	Groups remain together for longer
Social boundaries and membership	Limited social boundaries and anyone can join the collective	Usually more discerning and membership is dependent on commonalities and interest
Generation and adherence to norms	Generates weak and unconventional norms	Tends to have stronger and more conventional norms

These differences were reiterated by Worchel, Cooper and Goethals (1991) who highlighted the superficial and incidental nature of a collective and the deeper and longitudinal nature of a group. They also stated that, in a collective, people engage in

common activities while, in a group, people can influence each other and their behaviour (55).

In summary, while various theorists define a collective as temporary with limited interaction, Blumer's typology (1969) integrated all the characteristics in his definitions of the different types of crowds that are part of a collective (45, 49). Comparisons between the initial definitions of a collective and a group appear to show similarities. In fact, the term collective is suggested when considering synonyms for the concept of a *group* in a thesaurus.

This research will, thus, consider the two concepts as synonyms with the principal defining characteristics being that a collective is a congregation of people (physical or virtual) and that the members interact with each other and work together to achieve common outcomes.

2.2.3 A COMMUNITY

A community is defined as a social organisation where people have a sense of belonging due either to proximity or a common identity (52). Labonte (1997) expanded on this definition by proposing a community as an intersection between geography, people and common or shared identities and issues and suggesting that people can belong to numerous communities at any given time (26, 56). This definition described elements that could contribute to the social organisation identified by previous authors. Cognisance must be taken of the fact that communities are considered to be complex social structures that can consist of substructures and subgroupings (26).

Defining the concept of community has been described as problematic (57). According to South, Fairfax and Green (2005), a community can be defined as a place with geographical boundaries or it can be defined as people with similar identities or interests (58). Ife (2002) concurred with the latter part of this definition when he defined a community as a "form of social organisation" (p. 80) with the following characteristics (57):

1. Human scale: The scale of the community needs to be of a limited scale so that people can either know each other or can get to know each other.

2. Identity and belonging: People in the group need to experience some sort of belonging due to a common identity, for example, people in a similar ethnic group.

3. Obligations: A community should have shared rights and responsibilities. It is expected that people contribute to the existence and/or sustainability of the group by participating in activities that contribute to the maintenance of the group. Being a community member, thus, needs to be an active process and not a passive process.

4. Gemeinshaft: Being part of a community should enable people to interact with a greater variety of people on a more superficial level and in a greater variety of roles. This makes it possible for individuals to contribute a wider variety of abilities to the benefit of the whole community.

5. Culture: In a community, the members should be able to value, produce or express a local community-based culture. The community must have similar beliefs, traditions, values and actions.

The above characteristics are based on what Yalom called universality. This denotes a link between the members of a group or a collective based on a commonality which could be that they face the same problems or that they come from the same culture and have similar views (53).

In summary, a community, a group or a collective is defined as two or more people who interact with each other and share commonalities, coming together as a unit. It is more than a random collection of people who accidently occupy the same physical space (59).

2.3 MOTIVATION FOR PEOPLE TO FORM COLLECTIVES OR GROUPS

Within groups, people can coordinate their actions to achieve common outcomes; however, belonging to groups is much more important than simply working together (60, 61). The way people perceive themselves and the way they relate to others and situations is regulated and constructed by the groups and society to which they belong (60). These group memberships are the lenses people use to understand and interpret their environment.

Contact and bonding with others are considered a biological need for infants. Human beings are socialised into being part of groups from an early age (1) and are trained in socially expected behaviour patterns and language. This social training continues throughout life. Thus, to survive and develop as a human being, people need regular interaction with other people. Additionally, according to Cooley (1902 in Popenoe et al. 1998), the self emerges as a product of the society in which it develops, since interaction with others shapes development, knowledge, beliefs and values (1).

Sociology and psychology highlight various reasons for the need of human beings to belong to a group. Firstly, belonging to a group can be instrumental in members achieving certain goals since it is easier to achieve them together than when working alone (1, 60, 61). At times, these group formations are essential for survival, for example, a platoon working together during war or, in pre-historical times, for hunters to successfully hunt large animals, such as mammoths, for food (3). While working in a group is not always essential for achievement, it is often better to work collectively, for example, within a study group. A student could pass his/her examinations by studying alone, but he/she might do better, in fact, by joining a study group (25).

Secondly, individuals join groups to meet their emotional needs, for support and to have an opportunity to express their feelings and opinions. According to Jax and Britt (2008) this need for support is linked with a need for companionship (61). The authors propose that people have a need to be *a part of*, for example, a support or

friendship group where friends listen to each other (25). This supports the argument that, as humans, we are social beings (60, 61).

Thirdly, the need for security and survival is a motivator for people to work together. Historically, human beings have joined together since they found it easier to provide for themselves and their families if they hunted and gathered in a group (3, 61, 62). They also found it easier to secure themselves, their families and their possessions when acting as part of a collective (3). In addition, motivation to avoid death and injury was also linked with this (60). Pyszczynski, Greenberg, Solomon, Arndt and Schimel (2004) used the terror management theory to explain how the fear of death and the awareness of our mortality as human beings could be a motivator for group formation (63). According to terror management theory, existential anxiety motivates people to seek validation, which can be found in groups, for their fear. They are encouraged by the fact that others see the world in the same way and have the same fears (61, 63). This is what Yalom (1980) called universality, which refers to similarities in the fears, anxieties and needs of group members, motivating membership (53).

Fourthly, the need for affiliation and status drives group formation since it can provide members with a certain social status and acceptance in society (61). Being part of a specific collective can increase status and this might be the motivator for people to join that collective.

The fifth reason given is the need for power and control (61). This can be interpreted from two perspectives. On the one hand, the joining of groups or collectives can enhance the perceived power of an individual. For example, joining a gang can give power to the individual. As a gang member, the individual might feel more in control of his/her situation and feel he/she has more power in the community (64). On the other hand, it can also be interpreted that the joining of a collective shows a need for power and control that can only be fulfilled within a group context since here there is opportunity to take leadership, share opinions and exert power (61).

Lastly, when considering the sociometer hypothesis, it is believed that being part of a group or being accepted in one, builds an individual's self-esteem (61, 65). People feel better about themselves if they are included in a group rather than being excluded.

As evident from the literature, there are many theories about why people join groups; however, currently there is a debate about whether this need for socialisation and to belong to a collective or group, is biological or socialised. From the literature above, it appears as if it is a combination of the two with personal and social factors being highlighted. However, one cannot explore reasons for group formation without reflecting on the concept of collectivism.

2.4 COLLECTIVISM AND THE AFRICAN PERSPECTIVE

The need to belong is linked with collectivism which was described by Oyserman (1993) as a social way of existing and involves interdependence and adherence to collective values and norms that shape the behaviour of the collective (66, 67). This description is in line with the suggestion of the Swiss-born philosopher, Jean-Jacques Rousseau, that the underlying core of collectivism is that people's freedom lies within their submission to the general will of the community in which they live (68).

"In a broad sense, collectivism represents the degree to which individuals hold general orientation towards group goals, a concern for the well-being of the group and its members, an acceptance of group norms and a tendency towards cooperation in a group context" (69)(p. 247). This statement highlights the individual's beliefs around collectivism and belonging that could guide his/her actions. These beliefs can be influenced by the context or by the prior learning experiences of the individual. They include:

preference: a belief that collective effort is better than individual effort and wanting to perform within a group. Interdependency rather than independency is considered important (5).

reliance: in-group reliance on one another. Responsibility belongs to the whole collective. There is a sense of collective responsibility and members are comfortable to rely on one another.

concern: a greater concern about the well-being of other members within the collective. Individuals, however, still have their own concerns.

norm acceptance: a strong tendency to comply with in-group norms and rules in order to ensure harmony within the collective. An acceptance of these norms is considered important.

goal priority: preference of the collective's priorities and goals over those of the individual (69). The collective's action is governed by the collective's interests and priorities.

relationships: importance of relationships. This is seen as vital even if it is at the cost of the individual's benefits (70).

self: development of self-identity and defining the self. Group membership is considered essential in this development (67). This is in line with the socio-meter theory as mentioned earlier (65).

These stated beliefs are in line with many of the characteristics of the African perspective, which focus on the needs of the collective rather than the individual. The individual is defined through the collective to which he/she belongs. This link is further highlighted by Mbiti (1989) who said, regarding being African, "to be human is to belong to the whole community, and to do so involves participating in the beliefs, ceremonies, rituals and festivals of the community" (71)(p. 2). With this quote he linked the African perspective with the characteristics of collectivism. Similarly to

collectivism, the African perspective also presses for collective values of co-operation, interdependence and collective responsibility while the basis of the philosophy or perspective focuses on the importance of survival as a tribe or group as well as collective existence (5).

In order to really understand African philosophy, one needs to understand African humanism and communalism (72). Traditional African humanist philosophy underlies African philosophy, guiding individual and collective behaviour and focusing on humans and relationships rather than on the tasks and achievement of personal goals (72). The thinking around it is similar to that of collectivism; however, the two are not synomomous. Instead, African humanist philosophy should be seen as a motivator for collectivism since it guides rather than dictates the beliefs and values, that can lead to collectivism, of the person.

It is believed that the concept of ubuntu (Zulu) or obotho (Pedi) underlies African humanism (73). Ubuntu is commonly linked with communal values. However, Pietersen (2005) highlighted the fact that it is more often Western anthropology that links ubuntu with collectivism (73).

For the layperson really to understand the concept of ubuntu, it is helpful to reflect on Emeritus Archbishop Tutu's interpretation of the concept. The following two quotes summarise his understanding:

"A person with ubuntu is open and available to others, affirming of others, does not feel threatened that others are able and skilful. He or she has a proper self-assurance coming from knowing that he or she belongs in a greater whole…." (Tutu, 1999 in Jolley, 2011: p. 30).

"…we believe that a person is a person through other persons, that humanity is caught up, bound up, inexplicitly with yours. When I dehumanise you, I inexorably dehumanise myself" (Tutu, 1999 in Jolley, 2011: p. 18).

These two quotes demonstrate that ubuntu is not about collectivism in the true sense of the word but about an underlying understanding and philosophy of the individual that motivates him or her to be open to collectivism and to want to engage in activities that could bring benefit to others. It is for this reason that Pietersen (2005) cautioned that ubuntu and African humanism should not be used interchangeably (73).

African communalism is based on a similar foundation to African humanism and ubuntu. Mbiti (1969) wrote, “I am because we are: and since we are, therefore I am” (Mbiti, 1969 in Bell, 2002: p. 59) (72). Again, the emphasis is put onto the person within his/her context, defining him/herself not as an individual but as part of a community or a collective (72). It is, however, important to note that this does not disregard the importance of the individual within the collective or community but recognises that individual identity is fused with collective identity.

Nsamenang (1995) argued that African philosophy and social thought differ vastly from Western thought, philosophy and psychology and urged researchers and scholars not to try and interpret African realities and systems from a Western perspective (74). It is, thus, imperative to take African philosophy into consideration when trying to understand the African context and the people within it.

Lastly, Eisenburg (1999) cautioned theorists that no society can be exclusively collective or individualistic since this is unrealistic and can cause dysfunction within that society (75). According to Eisenburg (1999), modern communities are mixed and can consist of individuals following either a Western or an African perspective in the same community. It is, thus, important when trying to understand collective behaviour that the reason or motivation for forming the collective is interrogated. The question needs to be asked whether the collective was formed due to a belief in collectivism or for individual gain. The motivation behind collective formation will guide the actions of the collective.

In summary, within African behaviour, beliefs and values are often influenced by the African philosophy that advocates collectivism and interdependence. These values and beliefs can guide motivation to form collectives as well as the actions of individuals and collectives. As stated previously, if we want to understand collective participation, collective motivation and collective functioning of collectives within Africa, African philosophy needs to be explored and understood. However, collectives in Africa are changing and this must also be taken into consideration.

2.5 OCCUPATIONAL THERAPY AND COLLECTIVES

As a profession, occupational therapy has been providing group and collective intervention in numerous settings including psychiatric care facilities, addiction rehabilitation facilities, schools, community-based services, nursing facilities and physical rehabilitation facilities, to name a few (54). This type of intervention is reported to be cost-effective and efficient in the of use of time and allows for opportunities for interpersonal connection and growth as well as for intra-personal development. Additionally, it provides an opportunity for mutual learning and the generation and exchange of ideas, has the potential for problem-solving and allows for the experience of commonality with others. As a result, it brings about a feeling of belonging and acceptance and promotes motivation and creativity (4, 54). In these settings, the majority of the time intervention takes place through formed groups [1]. . Often, occupational therapists group clients for therapeutic reasons, focusing around a common need or a certain therapeutic outcome and, usually, the criteria for the inclusion of participants is set by the occupational therapist. The focus of these groups is on the promotion of occupational performance and includes skills such as life skills, social skills and practical performance of occupation – these take place in leisure groups or gardening groups, for example (54).

[1] Although the researcher has adopted the word ‘collective’ to describe a number of people, Becker uses the word ‘group’ when describing the types.

Within communities and primary health care settings, the focus of occupational therapy intention is more on collectives, and the underlying principle is that individual health can be improved by improving collective and community health (76). Often, a community-based rehabilitation approach that advocates intervention is followed, whereby community members play an active role in and take ownership of the programme. It is in these settings that occupational therapists collaborate with natural groups as defined by Becker (2005). These groups are usually formed by members to address their own needs, rather than by occupational therapists who can, however, contribute as consultants (6). Where, in the formed group the therapist may formulate the membership criteria, in natural groups the members set the criteria. These groups are often driven by the mutual needs, visions and vulnerabilities of members of the collectives (25). Although both types of groups can be used in intervention in a community-based setting, the naturally formed groups are more in line with the principles of community-based rehabilitation, since this type puts the ownership and power in the hands of the community members.

Although there are research results that provide evidence for the use of groups as an intervention strategy in occupation, these are focused on formed groups rather than on natural groups. The formed groups centre on the outcome for the individual clients in the group, rather than for the collective as a whole (54).

Besides group intervention, occupational therapy literature also explores collective participation in occupations. From the early nineteen-nineties when the concepts of co-occupation and collective occupation emerged, theorists within occupational science linked them to the development of human beings as social beings and the need to belong or to engage with others. Reasons for the need to belong and collective formation have been analysed extensively in sociology, anthropology and psychology literature. Although in occupational therapy the reasons for collective participation and collective formation are important, the benefits of engaging in collectives and maintaining the ability to engage in the collective are seen to be more significant and more in line with the profession's scope and philosophy (13-16).

Current profession-specific models, tools and theories cannot guide occupational therapists to work with groups (natural or formed) since these models, tools and theories are focused on individualistic participation in occupations rather than on collective participation. Many occupational therapists, including Dickie (2006) and Iwama (2006), are of the believe that the focus on individuals within occupational therapy is due to the fact that Western philosophy underpins the fundamental theories of occupayional theory (27, 28). They express concern with traditional occupational therapy beliefs, for example, that independence in occupations is the ultimate goal when working with clients and that individuals have to master their environment. To emphasise this point, Iwama said "… the Western notion of independence reaches its zenith as an individual's status of being is decided by the extent to which one can exploit his or her environment" (77)(p. 583). The focus on the individual was presumed to be due to the dominating influence of "white, middle-class women of North America and Western Europe" (29)(p. 30) who influenced the development of fundamental theories and literature that, in turn, influenced the development of tools, techniques and models used in the profession (27, 28, 30).

In addition, Rudman said that the individualising of occupation needs to be politicised by identifying the limitations it places on the profession's ability to engage and affect change on broader socio-political issues (78). She argued that an individualistic focus limits the attention given to socio-political and social justice issues that affect occupational behaviour (78). Thus, the individualistic focus is problematic in general when considering occupational behaviour but becomes even more problematic when considering occupational participation of marginalised societies. An example can be seen when considering the infrastructure in South Africa, such as the built environment and public transport. Many people with disabilities are excluded from accessing needed services which, in turn, could limit their participation in occupations. Collective issues like these, need to be addressed on a socio-political level by collectives of people (12). Therefore, occupational therapists need to understand how to facilitate and guide these collectives to take action.

Consequences of the individualistic approach, besides the impact it had on the development of theory, models and guidelines, can also influence where occupational therapists choose to work. The individualistic approach is highlighted by Wilcock (1998) as one of the main reasons for occupational therapists to feel more comfortable in a hospital-based setting than in a community setting that focuses on prevention and promotion programmes for collectives or communities of people (31). Current language, knowledge, tools, techniques and methods are more focused on working with individuals and not with collectives, making it difficult for inexperienced therapists, in particular, to work in the community setting.

Ramugondo and Kronenberg, however, cautioned that the individual focus is not necessarily flawed, rather that it is limiting and reductionistic (12). They urged for "reorienting an approach to occupation from the dominant conventional individualistic perspective to a possible expansion of the scope of occupational therapy" (12)(p. 9). In order to do this, new theories that include African humanism and ubuntu principles, need to be infused into current occupational therapy discourse (12). Inclusion of these theories will afford opportunities to focus on both the individual and the collective as well as the relationship between them. This research project is specifically intended to explore and incorporate theory on collectives.

Lastly, occupational therapy group-related literature focuses on formed groups and guides intervention of formed groups. There is comparatively very little written in occupational therapy for naturally formed groups.

2.6 OCCUPATIONAL PARTICIPATION: FROM INDIVIDUAL TO COLLECTIVE

Occupational therapy as a profession is based on certain core constructs. These include that occupation is central to health and wellbeing, that occupational therapy (OT) intervention should focus on occupational problems or challenges to the performance of occupations, and occupational roles. Lastly, occupations or activities should be used to improve health and well-being (79). Occupations are, thus, central to OT and are, therefore, both the focus of assessment and treatment, and the main modality for intervention.

There is not currently a universal, accepted definition for occupation within occupational therapy (24). In occupational therapy, the premise is that human beings engage in occupations and activities daily throughout their lives and through this participation, they develop a repertoire of knowledge and skills (80). Thus, participation in occupations is essential for all human beings and they are born with an inherent motivation to perform actions (30). At the outset, the focus in literature was on the individual person and the occupation(s) in which he or she engages. The literature looked at the person's personal factors and how they matched with the occupation in which the person wanted or needed to engage.

Subsequently, Nelson (1988) brought in the environmental perspective in order to understand participation in occupation. Nelson proposed a link between the person, the occupation and the environment (81, 82). An optimal fit between these three aspects is what occupational therapists strive for when planning therapy for clients. Nelson coined the phrase *occupational form* and described it as the conditions that structure and guide our occupational performance. In layman's terms, occupational form refers to the reasons why we, as individuals, perform our occupations in the way that we do. These reasons generally include the physical as well as the socio-cultural environment in which the client performs his/her occupations.

In 2009, Hocking urged occupational scientists to generate knowledge of the various occupations themselves and not just of how people engage in them (83). She said that both are important. Rather than just focusing on people and their behaviour, an understanding of the occupations in which they are engaged is necessary. Over the last two decades a plethora of information being generated on occupations themselves (28). Common occupations that groups of people participate in, for example, quilting in a group, or skateboarding, were also reported on, but from an individualistic perspective (28, 84). These articles looked at the meaning the occupation has for the person or how the person's occupation is shaped by his/her personal and environmental factors.

Unease with the individual focus started to emerge in the late eighties and early nineties when certain occupational scientists including Pierce (2009), Dickie, Cutchin and Humphry (2006), Pickens and Pizur-Barnekow (2009) and Fogelberg and Frauwirth (2010) argued that occupations are not always performed by only one person (10, 11, 18, 28, 40). According to them, occupation is often shared and the collaboration between two or more people in the same occupation is essential for the success or failure of certain occupations. This was the birth of the concept of co-occupation or collective occupation. The above-mentioned occupational scientists argued that the knowledge generated through occupational science is limited if occupation is only looked at from an individual perspective. In line with this, Fogelberg and Frauwirth (2010) contended that the individual perspective is a reductionist and linear approach to study a very complex concept (18).

It should be acknowledged that, when considering the basics of the profession, occupational therapy has moved forward from this point, however limited that progress might be. The language about and the understanding of the concept of 'occupation' has evolved to be more inclusive of Eastern or African perspectives. For example, the concept of *occupations* in 1997, was defined as "a group of activities and tasks of everyday life, named, organised and given value and meaning by individuals and a culture" (85)(p. 34). This definition placed the emphasis on the person within a culture. In 2006, Wilcock defined *occupation* as providing "the

mechanism for social interaction and societal development and growth, forming the foundation for community, local and national identity because individuals not only engage in separate pursuits, they are able to plan and execute group activities…for individual, mutual and community purposes". (86)(p. 9). This definition differs from the previous definition in that it brings in the participation of the individual in collective activities and impels occupational therapists to start investigating collective planning and execution of occupations.

Currently, the World Federation of Occupational Therapy's definition of the concept of occupation, is defined as "everyday activities that people do as individuals, in families and with communities to occupy time and bring meaning and purpose to life" (87). This definition defines the *group* that Wilcock mentioned in her definition. When considering these basic definitions, it is clear that language and thinking are changing. However, the definitions need to be expanded on and brought to influence the models, tools and techniques used by therapists if there is to be successful work in community-based settings and with collectives. Within the profession, there is currently a paucity of literature and research on new models, tools and techniques or guidelines on how to adapt existing tools, models and techniques to be used with groups of people engaging in occupations collectively. This current research project is attempting to use the underlying principles and theory of one of the existing models in order to guide assessment of collective participation in occupations.

With the changing view of the concept of occupation came the need to define the concept of co-occupation or collective occupation. Ramugondo and Kronenberg (2010) defined collective occupation as "occupations that are engaged in by groups, communities and/or populations in everyday contexts and may reflect a need for belonging, a collective intention towards social cohesion or dysfunction and/or advancing or averting a common good" (88). This definition not only highlighted collective participation in occupation, but also the motivational aspect, in other words that individuals are motivated to participate out of choice or necessity. There are similarities between this definition and the definitions of the last two categories in Blumer's typology described earlier.

Fogelberg and Frauwirth (2010) used complex systems theory to develop a framework that expanded the description of collective occupation. The description departed from an underlying assumption that occupations are key to many social systems (18). Fogelberg and Frauwirth (2010), thus, identified three levels to describe how occupation can be performed by collectives of people. These levels included group level, community level and population level (18). Ramugondo and Kronenberg suggested similar levels (88). Each collective is bigger than the previous level (18, 88).

The group level's description is similar to that of a collective or group that was defined above. Interaction is expected on this level although it does not have to be face to face (18). An example of a group on this level is a family group or a study group. In each of these groups, there needs to be interaction and there are commonalties between group members that link them together as a collective.

The community level is defined as the interaction between various groups to reach a common goal (18). An example of this is a community working together to keep their neighbourhood safe. The occupations they engage in to ensure this depends on the socio-cultural background of the community. Various groups in the community might work on different aspects. For example, the education sector might incorporate guidelines for community safety in their teaching at schools, while the adults in the community form community policing forums and neighbourhood watch committees. They still all have a similar reason to be part of the collective and there are commonalities between them, but engagement amongst all the collectives might be limited due to the size. It is important to note that the description of this level differs from the description of a community discussed in the first part of this review (see 2.2.3). This description is similar to what sociology might call a community within a community (89).

A societal or population level is the broadest level and is considered to consist of all the rest of the levels combined. Thus, groups and communities combined make a society or population (18). Within this collective, the commonality is often broader

and more heterogenic, for example, physical location and culture. This level focuses more on the relationship between collectives, for example, interaction between various groups to organise successful national elections.

While Fogelberg and Frauwith named this level the population level, Ramugondo and Kronenberg referred to it as a societal level. They proposed that the concept of population is used by researchers who investigate collectives from a resources or service delivery point of view. They defined populations as incorporating various societies and communities (12). On this and the previous level, there are various groups that work together to ensure success. However, on a community level, this interaction takes place on a smaller scale than on a population level.

Within their article, “Explaining collective occupations from a human relations perspective: Bridging the individual-collective dichotomy” (12), Ramugondo and Kronenberg listed specific groups or populations which included street children, HIV positive youth and illegal immigrants. However, if you consider the characteristics of the groups mentioned and why they form a collective, their characteristics are similar to the definition of South et al. (2005) of a community that includes similar beliefs, identity or issues with which they are dealing (58). From Ramugondo and Kronenberg’s article, it is not clear how they differentiate between the two concepts of community level and population level or whether they interpret the scale as different. For example, a community of street children may be the street children in Johannesburg city centre, but a population of street children might be all the street children in a city or country. When planning around resources and service delivery, differentiation on a scale level is important.

Population or societal level occupations are considered to be abstract. They are occupations performed by a combination of subordinate levels, that is, communities, groups and individuals. For example, during the opening of the Olympic games, various communities and groups of people as well as many individuals work together to make the event successful (12). Thus, many people engage together in a variety of occupations to ensure success. During this event, there are groups of people

participating in the opening event, a different group of people ensuring security at the various events, while a third group of people is the organising committee that ensures the event progresses as planned. The majority of the population of the hosting country might be involved in one way or another, even if they are simply supporting their athletes at the various games or interacting with tourists to ensure that they enjoy their stay (18).

In conclusion, it is suggested in occupational science literature that participation in occupations and collective occupations is a tool that creates opportunities for social interaction, community development and growth (31, 78). Through participation in collective occupations, communities can form a collective identity and work towards achieving individual and collective goals (31). Each individual member of a collective or group might have a different reason for engaging in collective occupations, but by finding common goals and common needs, they identify a collective or shared purpose (24).

Fogelberg and Frauwirth (2010) suggested that the framework of levels needs to be considered for further research around the concept of occupation (18). This current research intends to contribute to and expand the information available when considering collective occupation on a group level as described above.

2.7 CURRENT MODELS AND THEIR POTENTIAL FOR USE WITH COLLECTIVES

2.7.1 CURRENT MODELS IN OCCUPATIONAL THERAPY

Currently, occupational therapy has various models that guide practice. These models have developed over time to address different needs of the profession and practitioners. Initially, the models aimed to provide structure, enhance understanding and simplify a phenomenon; however, currently, models aim to integrate a multitude of aspects in order for the user to tie together, and to make sense of, a specific phenomenon (90, 91). Within occupational therapy, models can be broadly classified

into three categories: generic or outcome models, programme models and specific practice/conceptual models (90).

On a practical basis, conceptual models for practice intend to develop an understanding of how to apply occupational therapy contracts and theory in the clinical context. Often, these models guide occupational therapists' practice by suggesting an organisation of function and dysfunction. In addition, sometimes, through these models, an understanding of the individual within his/her context and insight into occupational dysfunction can be developed. This type of model also guides clinical reasoning and treatment planning (91, 92). Models in occupational therapy include, amongst others, the Vona du Toit Model of Creative Ability, the Model of Human Occupation, the Occupational Performance Model, the Occupational Adaptation Model, The Person-Environment-Performance Model, the Ecology of Human Performance Model, the Canadian Model of Occupational Performance, the Kawa Model and the Person Environment Occupation Model.

Conceptual models in occupational therapy have been criticised for various reasons (77, 90, 92, 93). They are thought to be limited in their ability to explain the exact nature of occupational needs and how these needs arise (93). Another criticism is that the models view occupational performance from a Western perspective, which makes it difficult to interpret and apply by occupational therapists following an Eastern perspective (27).

Despite the criticisms, models are widely used by occupational therapists. In a study by Owen (2014), who did a national study that looked at models used in South Africa, the majority of her participants found that model use is important and guided their practice. In this study, she found that the VdTMoCA was the most common model used followed by the Model of Human Occupation (MOHO) (94). However, it is important to note that the majority of her participants were trained at a specific university where these were the two models taught. A study by Casteleijn, who also looked at model use in South Africa, found that the MOHO was the most popular followed by the VdTMoCA (95).

2.7.2 POTENTIAL FOR MODEL USE WITH COLLECTIVES

As reported above, there are many profession-specific models. Within this section, only the most common models used and reported on in occupational therapy literature will be reviewed.

Systems theory has been incorporated in occupational therapy literature since the early seventies (18, 96-98). At least two of the commonly used models in the profession have claimed to use the general systems theory as part of their organising framework.

In the MOHO developed by Gary Kielhofner, a human being is seen as an open system and his occupational behaviour is the consequences (output) of this system (18, 99). The model guides the clinicians into gaining an understanding of the factors that influence the system positively and negatively. The model also facilitates understanding of the impact of socio-cultural factors on human behaviour. Although this model advocates exploration of how socio-cultural factors influence the individual's system, it is argued that the focus on the individual is a limitation of the model (18, 100).

Royeen (2003) contended that general systems theory is too reductionist to understand the complexity of occupational behaviour, especially concepts as complex as co-occupations or collective occupations (101). In her 2003 Eleanor Clarke Slagle Memorial lecture, Royeen (2003) stated that if occupational therapists want to live up to the philosophy of taking a holistic approach when assessing and treating clients (including collectives) then chaos theory needs to be looked at (101). She argued that general systems theory breaks systems into components, while a dynamic approach like the chaos systems approach focuses more on relationships between components and how they influence each other. In addition, she suggested that chaos theory could assist occupational therapists to apply gestalt theory, which guides the understanding of occupational performance as a whole rather than as the sum of the parts (102). Gestalt theory is seen as essential to understanding non-linear, unpredictable and uncertain behaviour and social systems (103). In essence,

chaos systems theory is based on the underlying assumption that relationships between variables are not linear and not dependent on each other. According to the theory, any differences or changes in the initial conditions can change outcomes. Chaos exists in disequilibrium and this disequilibrium (differences in forces) facilitates change (101). As this theory does not specifically consider the components itself, but the relationships between the components, it might give occupational therapists and occupational scientists a better understanding of the factors influencing occupational behaviour and participation, especially collective occupation.

Many occupational therapy models focus on analysing and understanding individual–based occupations like leisure, self-care and productivity. Trying to use these traditional categories of occupation performance areas poses problems for occupational therapists working with groups and communities of people (24). In line with this, models, for example MOHO, advocate analysis of the individual's skills, abilities and internal performance components, for example, their motivation, moods and cognition and the impact these could have on the individual's ability to engage in occupations. Again, these categories do not lend themselves to better understanding of occupational participation of communities, groups or societies. They focus on the sum of the parts rather than on the whole. Trying to understand concepts like collective occupation and collective participation through the use of this model could be problematic. These concepts focus on relationships, interaction (with others and the environment) and other dynamic systems that could influence outcomes of collective participation and basic systems theory could cause a loss of the dynamics between the different categories. Dynamic systems including chaos theory would, thus, be more appropriate.

Iwama (2005) argued that this model, (MOHO), which is based on general systems theory, is hinged on Western traditions where the *self* forms the centre of the system and focuses on how the *self* can control the environment and its own circumstances (104). This, Iwama (2005) believes, is in contrast to Eastern tradition which focuses more on the social structure and collective perspective that is being neglected in

occupational therapy. However, a study by Casteleijn that looked at, amongst other things, frameworks that guide occupational therapy curricula at training institutions in South Africa, found that this model was the third most common influence on curriculum development after occupational science and the Occupational Therapy Practice Framework of the American Occupational Therapy Association (95).

The VdTMoCA (32) was developed in South Africa. The model describes participation of the individual in daily occupations and acknowledges that the environment as well as personal factors of the individual can influence this participation (105). Similarly to the other models described above, it focuses on the individual client as an agent of change. The study by Casteleijn (2012) identified this model as the fifth most influential framework that guides curriculum development in South Africa (95). However, a study by Owen, Adams and Franszen (2013) that reported on the use of models by South African occupational therapists, found that the VdTMoCA is the most common model used within Gauteng province (90). In line with these findings, results from an unpublished national study by Abed, Fiddes, Hamman, Sayed and Zakariudakis (2014) that explored the use of the VdTMoCA in community-based settings in South Africa, found that the majority of the participants (n=52) reported that they used the VdTMoCA for assessment (87%) and treatment planning (80%) within this setting (106). Additionally, 90% of participants reported that they used the principles of the model as it ensured appropriate treatment planning for clients. When interpreting these results, one needs to consider the small sample.

The Ecological Sustainability Model (31) which Wilcock refers to as an “occupation-focused eco-sustainable community development approach” (86)(p. 222) pushes for eco-sustaining community action. This model guides clinicians to use eco--sustainable occupations to facilitate community development. This model, however, does not guide clinicians to understand the nature of collective occupations and collective participation.

The Canadian Model of Occupational Performance (107) focuses on the interdependent relationship between the person, the occupation(s) in which he/she engages and the environment. This model advocates clients playing an active role in their rehabilitation as well as a client-centred approach in treatment. The client's goals and needs are considered to be central to treatment planning (107). Additionally, it views barriers and facilitators to occupational performance from a justice point of view and suggests that society can negatively or positively impact on occupational performance. Again, this model focuses primarily on the individual as an agent of change. Although it does consider the environment, it still advocates mastery of self and the environment (104). The model does acknowledge that occupational therapists work with individuals and groups, but gives little guidance in terms of understanding collective participation.

The Person-Environment-Occupation-Performance Model was initially developed by Christiansen and Baum (108). Similar to the previous model, this model also focuses on the interdependent relationship between person, the occupation and the environment. An individual's occupational performance depends on the fit between these three components and intervention is focused on the area that is affected in order to restore balance (108, 109). Although this model moves away from the bio-medical approach to health and advocates enabling environments, in much the same way as the previous model, this model focuses on understanding the individual person and how he/she functions.

Lastly, the Kawa Model developed by Iwama is a model that argues occupational performance from an Eastern perspective (27). The model considers collectivism and the importance of belonging and interdependence and suggests that health and wellbeing are dependent on a harmonious relationship between people and their environment and not on the individual's ability to master his/her environment (27). The model makes use of a river as a metaphor, incorporating various, symbolic, natural elements - personal attributes such as personality, assets, liabilities are seen as driftwood, life-flow or life energy is the water, life's circumstances are rocks and the environment is the bottom and sides of the river. A diagram of the river is used

by the clinician and the client to identify the different elements that facilitate and hinder the client's occupational performance. This diagram is used as a trigger to discuss intervention and the client's needs and goals.

The Kawa Model is presented as a culturally-relevant model and was developed by Japanese occupational therapists; however, users are cautioned that all the constructs and concepts might not be relevant or important to other cultures (92).

A study done by Owen (2013) that explored the applicability of the Kawa Model in the South African context, found that the model could be applicable to this context as participants found it client-centred (94). However, participants still preferred to use the VdTMoCA and the MOHO as they felt that the Kawa Model lacked specific guidelines for intervention (94). In addition, although the model views the person as part of a collective, it still does not explore collective interaction and collective participation.

In summary, all the models reviewed above were found to focus on the individual client only and are based more on Western than Eastern (which includes African) traditions. However, the VdTMoCA was found to be popular in South Africa since it guides treatment planning, especially in community-based settings.

2.8 CONCLUSION

In conclusion, when studying the underlying characteristics of the concepts of groups, collectives and communities, there are many similarities. Ultimately, the characteristics for these concepts focus on not just a collective of people in the same physical environment but a collective of people with shared commonalities who interact with each other for a specific reason.

The literature reports that people participate in collectives for various reasons, but ultimately, it is their beliefs, values and past experiences that motivate them to participate. Furthermore, collective participation in Africa can be influenced by the

African perspective that is underpinned by African humanism. This African perspective, advocating collectivism and interdependence, is also one of the main reasons why occupational therapists in South Africa need to consider collective participation in occupations and not just occupations from an individualistic point of view.

Lastly, the concept of collective occupations is currently being explored within the occupational science literature, but this exploration is superficial and cannot guide assessment and treatment planning for collectives. Current models focus on the individual, thus, further exploration is needed.

CHAPTER 3: OVERARCHING METHODOLOGY FOR THE STUDY

"Cross the river in a crowd and the crocodile won't eat you" (African proverb. Author unknown)

3.1 INTRODUCTION

This chapter describes the overall methodology of the project. It explores the research approach and design, justifies the choices of the approach and design as well as gives an overview of the research procedure followed. Furthermore, it reflects on techniques that were used to ensure the rigour and trustworthiness of the research study. This chapter concludes with the ethical considerations that were considered in the study.

It is important to note that it is the overall methodology for the study that is described in this chapter. When reporting on each phase (chapters four, five and six) of the study in subsequent chapters, the methodology specific to that phase will be described. This includes research design, population and sampling, data collection technique, data organisation and data analysis.

3.2 RESEARCH APPROACH AND DESIGN

A sequential mixed methods research approach was chosen for this study (110). Over the years there have been many definitions for this approach, but in essence, a mixed methods approach integrates elements of both quantitative and qualitative research methods into one process (36, 110). There are certain core characteristic of this method (36).

It is based on the assumption that the use of only one approach will not answer the research question adequately - in the case of this study, the two methods of development and validation were used.

Methodology includes the design and collection of both quantitative and qualitative data although one type of data could be prioritised.

The approach can be used within a single phase or multiple phase study.

Data can be gathered concurrently or sequentially. The first method would entail combining quantitative and qualitative data gathering while the latter would require first one approach to be used then the other. Thus, one builds on the other.

Creswell (2009) stated that problems encountered in health and social sciences are complex and a mixed methods approach can ensure that more insights concerning the problems are generated than by using either a qualitative or quantitative method (111). In occupational therapy, much is known about what collective occupations are, but little is known about participation in collective occupations, especially which domains and items to use to describe collective participation comprehensively. Additionally, little is known about this topic within the South African context. This study aims to validate the domains, items and observable actions through qualitative methods. A mixed methods approach was, therefore, the best option for this project as qualitative data is needed to identify domains and items while quantitative data is needed to validate these domains and items.

There are two types of designs that can be used within the mixed methods research approach, namely the sequential design and the concurrent design (112). The sequential design requires that a qualitative or quantitative approach is introduced subsequently to the initial core approach. For example, if a qualitative approach is the core method then a quantitative approach is introduced subsequently. On the other hand, with concurrent design, the two approaches are used simultaneously (110, 112).

The sequential mixed methods design was used for this study. The qualitative research approach was employed to generate the data that was were to develop the domains, items and observable actions for collective participation. A qualitative

research approach focuses on exploring a phenomenon when little is known about it (113). Due to the fact that collective participation is a new phenomenon under investigation in occupational therapy, a qualitative approach was essential to start this study. This phenomenon was, therefore, explored before it could be measured or validated (36).

There are three types of sequential designs: the sequential explanatory design, the sequential exploratory design and the sequential transformative design (112). The sequential transformative design is used when the researcher wants to use the research to facilitate transformation. The research project may start with either a qualitative or a quantitative phase, but it must have a specific theoretical lens (for example, gender or race) (111). The sequential explanatory design allows researchers to collect and analyse quantitative data first before they use a qualitative approach to understand the results/phenomena. The sequential exploratory design allows for the collection of qualitative data to describe and understand a phenomenon before a traditional quantitative approach is used to test or validate the results (111). The sequential exploratory design was used for this project. As no literature is available on the domains, items and levels of collective participation in occupational therapy, a sequential exploratory design allowed for exploration of this phenomenon first.

A sequential exploratory design is often described as a two-phased design that consists firstly of a qualitative approach that explores the phenomena under investigation. This is followed by a quantitative approach. In many applications of this design, the researcher often develops a measuring tool as an intermediate step between the phases (36). Consequently, this design is also known as the instrument development design (114). This study used this format. Firstly, in phase one of the study, the concept of participation in collective occupation was explored through qualitative methods. In phase two, this information was then used to develop domains, items and descriptors for the various levels that could be utilised to measure collective participation in occupations. Lastly, in phase three of the study

the domains, items and descriptors for each level were validated through a quantitative method.

The mixed methods approach is partially in line with the theoretical world view chosen for this project. Phase one, though a qualitative approach, allowed for the exploration of the phenomenon from the perspective of the participants and the literature. This approach advocates the exploration of a phenomenon from the perception of the individuals or group who are experiencing the phenomenon, that is, the lived experience of the participants with the ultimate outcome being to understand the trends in their opinions and thinking (37). As collective participation is an unknown phenomenon in occupational therapy and there are no items to measure, a constructivist world view was used to inform this phase. The overall study aimed to develop and validate domains, items and descriptors for levels of collective participation in occupations. To do this, an understanding of how the concepts of collective occupation and collective participation are interpreted by occupational therapists in South Africa was required. This was done through a literature review and semi-structured interviews that not only explored the perspectives of the participants but how they constructed these perspectives and opinions. Inclusions of the various perspectives as well as triangulation with theory allowed for deeper analysis and made it possible for an understanding of the concepts that were the basis for the rest of the study to be constructed. Thus, in phases one and two the concepts were described rather than measured. By exploring the thoughts, knowledge and beliefs of the participants developed through their experiences, an understanding of the concept of participation in collective occupations from a South African perspective was gained. This is in line with the constructivist world view as described in chapter one of this thesis.

Content validation in phase three required a shift to post- positivism (as described in chapter one) since statistical trends were looked at in this phase (36). A quantitative approach was used in this phase. Please see table 3.1 below for an overview of the study.

Table 3.1: Quick overview of study

<table>
<tr><td colspan="2">Aim of the study
Development and validation of domains, items and descriptors for levels of collective participation in occupations</td></tr>
<tr><td colspan="2">Phase 1: Conceptualisation
Exploration of the concept of participation in collective occupations
Qualitative phase</td></tr>
<tr><td>Stage 1</td><td>Stage 2</td></tr>
<tr><td>Objective: To conceptualise collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations</td><td>Objective: To conceptualise collective occupations from profession-specific literature in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.</td></tr>
<tr><td colspan="2">Information from both stages was analysed and compared. Results from both stages were used to inform phase two</td></tr>
<tr><td colspan="2">Phase 2: Operationalisation
Development of domains, items and descriptors for levels of collective participation in occupations</td></tr>
<tr><td>Stage 1</td><td>Stage 2</td></tr>
<tr><td>Objective: To identify domains and items that could be used to describe collective levels of participation through information gained from the interviews and from a review of the literature</td><td>Objective: To develop descriptors for each domain and item on seven levels of creative participation.</td></tr>
<tr><td colspan="2">Phase 3: Validation
Validation of domains, items and descriptors for levels of collective participation
Quantitative phase</td></tr>
<tr><td colspan="2">Objective: To determine the content validity of each domain, item and the descriptors for levels of collective participation. Method used: Through the use of the Content Validity Index, a panel of seven experts was used to rate the content validity of the domains, items and descriptors for levels of collective participation</td></tr>
</table>

3.4 TRUSTWORTHINESS WITHIN QUALITATIVE PHASE OF THE RESEARCH

Positivists often query the trustworthiness of qualitative research (115). This could be due to the differences between the philosophy of positivism and naturalistic research. However, there is an extensive amount of work published on trustworthiness in qualitative research by authors, for example, Lincoln and Guba (116), Guba (117) and Silverman (118). These authors attempted to demonstrate to researchers how trustworthiness can be ensured in qualitative research.

The nature of the difference between qualitative and quantitative research lies in the fact that the traditional validity and reliability strategies used in quantitative research are not transferable to qualitative research (119). Guba (1981) constructed criteria for ensuring rigour and trustworthiness in qualitative research which correspond with the quantitative criteria. These are summarised in table 3.2.

Table 3.2: Similarities between qualitative methods and quantitative methods in ensuring reliability and validity of research: Table adapted from information in Shenton (115) and Siegle (120).

Constructs	Qualitative method	Quantitative method
Truth value	Credibility	Internal validity
Applicability	Transferability	External validity
Consistency	Dependability	Reliability
Neutrality	Confirmability	Objectivity

Guba and Lincoln (1994) linked the quantitative methods, which include internal validity, external validity, reliability and objectivity, with positivism and post-positivism to ensure rigour (excellence or quality of research) and trustworthiness since these criteria are more situated in objectivity and reality (121). Although quantitative

methods are generally perceived to ensure quality of research, especially from a constructivist perspective, their similarities to positivistic methods make them suspect. Within a constructivist world view, the following criteria are suggested: credibility, transferability, dependability and confirmability as these are more in line with the fundamentals of this world view (121).

3.4.1 CREDIBILITY

According to Lincoln and Guba (1985), credibility is the most important criterion to enhance trustworthiness (116) since it promotes the truthfulness of the findings of the research.

Techniques to ensure credibility include:

Prolonged engagement: Prolonged engagement requires that the researcher immerse him/herself in the research over an extended period of time. This is done in order to gain sufficient insight into the phenomenon (115, 116). The researcher needs to spend an adequate amount of time observing or speaking to a range of people. The researcher also needs to ensure that he/she has enough time to build up a rapport with the people that are interviewed or observed. This ensures a higher level of trust and more natural behaviour.

This research study has been in progress for the last five years. During that time, literature has been constantly reviewed and the topic under investigation studied, not only from an occupational therapy perspective but also from the perspective of psychology and sociology. Through the teaching and supervision of students in the areas of public health, community-based rehabilitation, community development and group facilitation, opportunities for interaction with various communities, collectives within communities and occupational therapists working within these settings were afforded the researcher. This, in turn, opened up circumstances to observe and consider the realities in the communities related to the phenomenon under investigation.

Numerous oral presentations on this topic over the last five years, also provided the researcher the opportunity to share parts of the results of the research and receive comments or questions back from the audience. For example, while presenting at the Occupational Therapy Association of South Africa Congress in 2012, it was discovered that one of the audience members presented on the same topic at the previous World Federation Occupational Therapy Congress in 2010. Thus, a copy of this presentation as well as a previously unknown reference to an article was obtained.

During phase one, each interview lasted a minimum of an hour within a natural and familiar setting to the participants (usually in their home or work environments). This was done to make participants more comfortable. Before beginning the interview, at least thirty minutes was spent with the participant to outline the format that the interview would follow and to obtain consent. This time was also used to reconnect with participants since the population of occupational therapists within South Africa is small and all of the participants were known on a professional basis. This was also done to build a rapport with each participant before the start of the interview.

Member-checking: This is defined as the checking or testing of the data that emerged out of the research in order to verify it (115, 116). Member-checking can be done at various stages of the research. Firstly, it can be done after the interview or focus group discussion has been transcribed. Participants can be asked to read the transcription and evaluate whether it was accurately transcribed but also whether these words matched their intended thoughts (what they actually wanted to say) and to correct errors if need be (115). Secondly, member-checking can happen after analysis. Here, members are asked to review selected codes, subcategories and categories to assess the accuracy of these and whether they are reflective of the conversation, interview or focus group discussion.

Within phase one of the study, all participants were asked to check the validity of emerging codes and themes after analysis (see appendix A for participation letter). Ten out of the eleven participants responded to this request. Within phase two, when

participants had to give comments on the researcher's understanding and interpretation of individual levels, members were asked either to clarify their feedback if it was ambiguous or the researcher sent them her interpretation of their comments and asked them to verify this interpretation.

Background, qualifications and experience of the investigator: The qualification of the researcher and his/her knowledge of qualitative methodology is important in qualitative research and can contribute to the credibility of the research (122). Alkin, Daillak and White (1979) suggested that the researcher must be scrutinised to the same level as the research procedure (123). This research study was undertaken for the purpose of obtaining a doctoral degree. The researcher successfully obtained her master's degree, based on a study using qualitative methodology, has taught postgraduate courses on qualitative research methodology and supervised numerous students who used this approach. Both her supervisors are familiar with the approach and have used it extensively.

Triangulation of information: This is defined as the use of multiple data sources to gather information which could facilitate a broader and deeper understanding of the data (115, 116). Within the qualitative phase of this research project, data were gathered through semi-structured interviews and a literature review. Data that emerged from these two methods were analysed and compared.

Peer debriefing: Lincoln and Guba defined this as "a process of exposing oneself to a disinterested peer in a manner paralleling an analysis session and for the purpose of exploring aspects of the inquiry that might remain otherwise only implicit within the inquirer's mind" (116)(p. 308). Within this project, peer debriefing took place in two ways. The first was in regular discussion times with three fellow PhD students where certain issues were debated. These discussions with other students with very different fields of interest allowed for a deeper insight to be gained through the exploration of different perspectives and for potential biases to become evident. The opportunities for discussion also gave the researcher the necessary time to clarify and reflect on the issues.

Secondly, peer debriefing took place within a PhD support group. This group was a formalised group with an external facilitator that met regularly to discuss progress and problems the students were experiencing and to set goals. This forum also allowed for clarification and justification of certain choices regarding methodology and provided a space in which to ask and receive advice on methodology.

Reflective commentary: It is suggested that the researcher should always actively reflect on and review his/her actions, choices and interpretations (115). This method is intended to enhance the objectivity of the researcher and ensure reflexivity. Reflexivity is defined as the interrogation and evaluation of the researcher's background, experience, thoughts, perceptions and assumptions to minimise the influence these could have on the research process (119).

Throughout the project, journal notes were made to clarify thinking and record decisions as well as to state the rationale for these decisions. These journal notes were made accessible to the supervisors so that they could interrogate the rationale for decisions. Additionally, since this study took place over five years, the journal was a paper trail of events that allowed for reflection by the researcher to ensure appropriate progress..

Accurate transcription of information: Data were transcribed by an external party; however, all transcribed data were checked personally as well to ensure correctness. The interviews were listened to while the transcriptions were being read. This process helped eliminate mistakes made during the transcription process and contributed to the credibility of the information gained.

3.4.2 TRANSFERABILITY

Transferability is based on the construct of applicability. It is concerned with the degree to which findings are transferable from a study to a different situation or context (119). It is not the intention of qualitative research to be fully applicable or for the results to be regularised widely; however, the researcher needs to give a full description of the research process, research context and participants to allow other

researchers to assess the applicability of the findings to the context (116). In this project, a comprehensive description of the methodology used and outline followed as documented in the methodology sections of the thesis was given.

3.4.3 DEPENDABILITY

Dependability is linked to the construct of reliability and consistency of the findings of the research project (124). According to Lincoln and Guba (1985), there are similarities between techniques for dependability and those to ensure credibility. By ensuring credibility, dependability will be enhanced (116). Techniques used to ensure dependability include:

Recoding of data during analysis: It is suggested in research literature that the researcher uses peers to examine the accuracy of the analysis as this can enhance the reliability of the analysis. (119). During stages one and two of phase one, this technique was used to enhance dependability. In stage one, during the analysis of the interviews, the first two interviews were analysed concurrently by a fellow researcher. Similarities and differences in interpretation were discussed and addressed. In stage two, during the review of articles, a fellow researcher reviewed three articles. Again, the intention was to analyse similarities and differences in interpretation between the reviews; however, no differences were found.

Obtaining data saturation: Within qualitative research, it is important to collect sufficient data to allow for variations to be accounted for and understood. To ensure data saturation, data were gathered until no new data emerged (122). In this study, interviewing continued until data saturation was reached. By the eleventh interview, data saturation was reached and no further interviews were scheduled.

Detailed audit trail: This is defined as a detailed transparent description of the method, process notes, tools and techniques used (116). As mentioned above, a research process is described in detail. It is also the requirement of the University of the Witwatersrand to store raw data, process notes, instrument development notes and so on for six years.

3.4.4 CONFIRMABILITY

Lastly, confirmability is related to neutrality and objectivity (116). This means that results are reflective of data gathered and not researcher biased (125). Triangulation of data with literature and reflexivity by the researcher were strategies implemented to ensure this. Additionally, confirmability is related to confirmation of the correctness of the process used to gather and process data (119). An audit trail, as described above, contributes to confirmability. A timeline is included in the appendices as part of the audit trail. (Please see appendix B.)

3.5 ETHICAL CONSIDERATIONS

Ethical clearance was applied for and granted by the Human Research Ethics Committee of the Faculty of Health Sciences of the University of the Witwatersrand. The ethics number is M110219 (see appendix O). For all three phases, participants were emailed an information sheet about the research as well as a consent sheet.

In all three phases of this research study, data were gathered from occupational therapists only. No personal information, other than demographic information, was requested from participants. They were asked about their opinions and experiences and this information was reported on anonymously. The demographic data recorded were year of graduation, highest level of qualification and years of experience working in a specific field. Although the occupational therapy community is relatively small, the reporting on these factors alone was not sufficient to identify individual participants.

During the interviews, no personal identifying information was shared about clients with which these therapists were working.

In phase one, at the beginning of the interview, the research study was briefly explained again. This included the aim of the interview, the main focus areas that would be covered during the interview and approximately how long it would take. Withdrawal procedures were explained, including that the person was free to

withdraw from the research at any time without consequences. It was also explained that confidentiality would be adhered to and, at no point, would a participant's name or any other identifying information be revealed. During the interview, each participant was allocated a code. This code was used during analysis and in reporting of the information. Once the participants indicated that they had a clear understanding of the research, they were asked to sign the consent sheet. Informed consent was also obtained from the participants to audio-record the interviews. (Please see appendix C for participant information sheets and consent sheets.)

Although some co-workers of the participants were told by participants why they are being interviewed, the anonymity of the comments and opinions reported on in this thesis ensured that it cannot be linked to a specific participant.

During phase two, the participants were emailed an information letter. The letter briefly explained the aims and objectives of the study and what phase two entailed. Their right to withdraw and confidentiality measures were explained, as outlined above. Participants were asked to proceed to the task if they wanted to participate. Completion of the task and feedback to the researcher were considered as consent. (Please see appendix D.)

Lastly, in phase three, participants were emailed an information letter similar to the one described above. The objective of the phase and the detail of the task were explained, including how long the process would take and what would be required from participants. Participants were asked to complete the consent form if they were willing to participate in this phase of the study. On receipt of the consent form, the link to the survey on Survey Monkey® was emailed to them. (Please see appendix E.)

Individual feedback on results of the research was not given to participants, but the results of the research were reported on through verbal presentations and journal articles. (See pages iii and iv of this thesis for details on these presentations and article.)

3.6 CONCLUSION

In summary, this study used a mixed methods approach with a sequential explorative design to gather information. As little is known about collective occupations and collective participation in general within occupational therapy and, specifically, in South Africa, it was felt that this was the best method to use. This study consisted of three phases with both phases one and two having two stages each. Measures used to ensure trustworthiness included prolonged participation, member-checking, triangulation of information, peer debriefing, reflection by the researcher, accurate transcription of information and obtaining data saturation.

Ethical clearance for this study was obtained from the Human Research Ethics Committee of the Faculty of Health Sciences of the University of the Witwatersrand. Informed consent was obtained from each participant.

CHAPTER 4: PHASE 1: CONCEPTUALISATION

QUALITATIVE STUDY AND LITERATURE REVIEW TO CONCEPTUALISE COLLECTIVE OCCUPATIONS

"Sticks in a bundle are unbreakable." (Bondei proverb. Author unknown.)

This chapter describes the first phase of the study. The intentions of this phase are briefly described followed by a description of the research design for the phase. This phase consisted of two stages. Each stage is described separately. This includes methodology specific to the stage and results. Lastly, the results of both stages are reported followed by a discussion of the results. As a literature review is part of the methodology in this phase, this chapter will not contain a separate literature view.

4.1 INTRODUCTION

Participation in collective occupations is an essential part of being human. Over the last three decades in occupational therapy, there have been strong arguments for exploring the concept of collective occupation and expanding the understanding of collective participation by occupational therapists (10, 28). Unfortunately thus far, exploration of participation in collective occupations has been limited and there are no profession-specific guidelines, tools or models to guide occupational therapists in working with clients participating in collective occupations.

This study is, thus, intended to develop domains, items and descriptors for levels of collective participation that could guide occupational therapists to understand collective participation in occupations. In order to do this, the concept of collective occupations had to be explored and conceptualised. This was the focus of phase one.

Phase one consisted of two stages:

- **STAGE 1:** This stage intended to conceptualise collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.

- **STAGE 2:** The objective of stage two was to conceptualise collective occupations from profession-specific literature in order to develop the constructs needed to be included in the development of domains and items for collective participation in occupations.

4.2 METHODOLOGY

4.2.1 RESEARCH APPROACH AND DESIGN FOR THIS PHASE

As indicated previously, a mixed methods research approach was chosen for this study. The overall design for the study is a sequential exploratory design as little is known about the phenomenon under investigation and it is essential that it was first explored before it could be measured. This design allows for collection of qualitative data to understand and describe a phenomenon before traditional quantitative approaches are used to test or validate the results (111).

Phase one focused on understanding the concept of collective participation in occupations. This was done through exploring the concept from the perspective of occupational therapists within South Africa as well as through a literature review. A qualitative approach (as defined in chapter three) was used to gather data within this phase.

For this phase, descriptive, non-experimental research design was selected. This research design attempts to answer the question “What is…” and can be used in both qualitative and quantitative research approaches. According to Creswell (2011) a phenomenon needs to be described first before it can be measured (36). Therefore

in this study, due to the fact that the descriptions for collective occupations and participation in collective occupations are limited in occupational therapy literature, these concepts needed to be described first. In this case, it is necessary to understand the phenomena of collective occupations and collective participation in occupations, how these are perceived by occupational therapists in South Africa and how they are reported on in occupational therapy literature that focuses on these phenomena. This design allows for exploration of the phenomena from both perspectives – that of occupational therapists and that of occupational therapy literature - in order for the researcher to gain a deeper and more comprehensive understanding.

In addition, this design is considered to be based on a constructivist paradigm or perspective as it allows for the participants to express their opinions and perspectives, thereby creating a reality that is aligned to the context. It also allows the researcher to use this data to construct her/his own reality (126). It is, thus, in line with the theoretical perspective chosen to guide the study as described in chapter one.

One of the identified pitfalls with this design was that the question being asked would be too broad. Boundaries, thus, needed to be put in place to ensure quality and depth rather than quantity of information gained (127). In this research study, the boundary that was placed was that it should be explored from the perspective of occupational therapy and occupational science and not psychology, anthropology and sociology. This was done to ensure focus and depth within the analysis. Anthropology, psychology and sociology literature was used to understand the phenomena in general, but only occupational therapists were interviewed and only occupational therapy and occupational science literature was reviewed.

4.3 STAGE 1

4.3.1 INTRODUCTION

This stage focused on conceptualising collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations. Data were gathered through eleven semi-structured interviews.

4.3.2 METHODOLOGY

4.3.2.1 Sampling

Purposive sampling was used to identify participants for this stage. With this sampling method, participants were selected deliberately to "permit inquiry into and understanding of a phenomenon in depth" (128)(p. 46). Information-rich occupational therapists that currently work or have worked with collectives of people and/or are working in a community or a public health setting were identified and invited to participate. Sampling continued until data saturation was reached.

Inclusion criteria

Each participant had to:

- have more than three years of experience working as an occupational therapist in the community or working with collectives of people
- be a registered occupational therapist in South Africa
- be familiar with the concept of collective participation in occupation in the South African context.

Eleven participants were interviewed when data saturation was reached.

4.3.2.2 Data gathering

Semi-structured interviews were used to gather information. The aim of interviews as a data gathering tool in qualitative research is to explore an issue in-depth. During an interview, the researcher probes the ideas of the interviewees in order to obtain

detailed information about the topic. If the interviewing process is done correctly, it can give the researcher ample time to explore the ideas and perceptions of the participant. Research literature identifies three types of interviews. These include unstructured, semi-structured and structured interviews. In unstructured interviews the researcher asks the client a question and does not direct conversation. The researcher can probe for more detail but is not allowed to direct. Although this is a valuable technique to obtain information from a participant, its outcomes are unpredictable and may not answer the research question (129).

On the other hand, in a structured interview set questions are asked in a set way. Structured interviews are used to gather specific data. However, this does not mean that only fixed-response or closed-ended questions are asked. Open-ended questions can be asked; however, in each interview the same fixed set of questions must be asked in the same way. Structured interviews are useful in obtaining specific information but do not allow for in-depth exploration of issues (129).

Lastly, semi-structured interviews generally include open-ended questions. With this technique, the interviewer uses an interview guide with a list of open-ended questions and topics that need to be covered in the interview. However, conversation is allowed to deviate from these as the interviewer is free to probe for more details or to focus the person. Semi-structured interviews allow for in-depth exploration of a specific topic and the researcher is allowed to probe until he/she has a clear understanding of the participant's ideas, opinions and perceptions on a topic (122, 129). It was for this reason that semi-structured interviews were selected for use in this stage.

Interview questions were guided by the objectives of this stage. The seven questions focused on the participants understanding of collective action and collective occupations (Please see appendix F for interview questions.) These questions were only used as a guide for the interviewer.

In a discussion between the researcher and her supervisors potential participants, who adhere to the inclusion criteria were identified. Each of these participants where contacted by the researcher via email. In this email a brief description of the research objectives were given and the participant information letter was attached (see appendix C) for further information. The researcher set up interviews with participants who consented to participate. These interviews were set at a time and place that was convenient for participants.

Interviews took place in Gauteng, Cape Town, Bloemfontein and Durban. The setting for the interview was the choice of the interviewee. They had to decide where and when would be most convenient for them. Each interview took a minimum of an hour.

A demographic questionnaire was attached to the information letter. Each consenting participant was asked to either email it to the researcher before the interview or hand a hardcopy of the questionnaire to the researcher on the day of the interview. The questionnaire consisted of five close-ended questions that gathered information on the participant's current employment, education and work experience.

As stated previously, within qualitative studies, data are gathered until data saturation is reached (122). At such a point, data gathering can be discontinued. Data gathering was discontinued after the eleventh interview.

4.3.2.3 Data management

With permission from the participants, each interview was audio-recorded. Recordings were stored on the researcher's personal computer in a password protected folder as well as in DropBox® which is an online data storage site. Access to the online folder is password protected and only the researcher and her supervisors have access to the folder.

The semi-structured interviews were transcribed verbatim by a professional transcribing company. When interview recordings were sent to the company for

transcription, each interview was labelled with the participant's code and not his or her name.

Once the interviews were transcribed, data were cleaned and corrected as described in chapter three of this thesis. This process was also used as a method of familiarisation with the data.

4.3.2.4 Data analysis

While quantitative research generates a mass of numbers which can be statistically analysed, qualitative research generates a mass of words. This can be challenging as these words need to be analysed to understand their meaning.

The constructivism perspective puts forward the belief that the researcher constructs a 'reality' with his/her interpretations of the qualitative data (36). In order to do this, it is suggested that analysis procedure needs to be 'custom-built' for each project and not just according to a set recipe (130).

Creswell (2013) proposed the following broad steps: organising the data, reading of data and lastly , interpreting data into codes and themes (131).

Firstly, raw data need to be organised into data that can be analysed. Creswell suggested that computer programmes can be of help with this. In this current study, the Nudist Nvivo® Data analysis software package was used to organise data and to start initial analysis. This software package was chosen for familiarity and successful use of it in the past.

Secondly, the researcher needs to get a sense of the data by reading it in its totality (131). This was done through the cleaning up of the transcriptions as described earlier. When all the interviews were transcribed, the data were reread. As part of this step, the journal notes on the interviews were also reviewed.

With the third step, conventional content analysis was used since this allows the researcher to analyse large amounts of data systematically (131, 132). This type of content analysis is often used to describe a phenomenon, which is an appropriate method when considering the objective of this stage of the study. The use of conventional content analyses requires the researcher to become immersed in the data in order for new insights to develop (132).

Within this project, each interview was analysed in its totality first. Inductive analysis was used to identify codes. After all eleven interviews were analysed and codes identified, a second round of analyses was completed by an examination only of the codes of all the interviews. Codes were grouped together to form subcategories. From these, categories and themes were formed. The objective of this stage of the study was kept in mind when analysing (133).

Lastly, member checking was done with all of the participants to validate data gained during this phase.

4.3.3 RESULTS

4.3.3.1 Demographic information on participants for this stage

Data were collected through semi-structured interviews with eleven occupational therapists from South Africa.

Within this study, the demographics of the participants varied (table 4.1). When considering the number of years since graduation, the highest was forty-nine years and the lowest was seven years. When exploring the number of years participants had worked with collectives, the highest number was twenty-five years and the lowest was three years. Only one participant had a doctoral degree while five had master's degrees.

The sample consisted predominately of white females; however, this is representative of the profile of occupational therapy in South Africa. In addition to the

eleven participants, four other non-white occupational therapists and one male were invited to participate, but they either refused or did not respond to the request.

Table 4.1: Demographic information on participants for this stage

Participants	Year of graduation	Highest level of education	Years of experience working in a community setting or with collectives
01	1972	MSc OT	12
02	1979	MSc OT	12
03	2007	Occupational therapy degree	3
04	2003	MSc OT	5
05	1994	Occupational therapy degree	16
06	1990	Occupational therapy degree	16
07	1965	Occupational therapy degree	15
08	2007	Occupational therapy degree	4
09	1993	MSc OT	10
10	1992	MSc OT	19
11	1985	PhD	25

4.3.3.2 Themes, categories, subcategories and codes

This stage of the study yielded two themes, *The whole is more than the sum of the parts* and *I joined because of me, I stayed because of them*. While the first theme describes the nature of the concept of collective occupations and participation in collectives, the second describes reasons why people engage in collective participation. The essence of each of the themes, as well as the categories, is corroborated with supporting quotes. All quotes have been placed in bold font.

All the participants agreed that engaging in collective occupations is an everyday occurrence in South Africa. Examples are a husband and wife parenting together,

students completing an assignment as a group or a group of women in a township soup kitchen preparing the food for the day.

Participant 05: “**Yes, yes, there is such a thing as collective participation. Every day people do things together, whether it is playing rugby to people working together to make a play, to lecturers in the OT department working together to ensure that students learn.”**

Theme 1: The whole is more than the sum of the parts

This theme describes the participants’ understanding of the nature of collective occupations and participation in collective occupations.

Participants felt that the nature of collective participation in occupations goes beyond just a group of individuals being in the same place at the same time doing similar things. The group or collective should be together for a reason and needs to engage with each other as indicated by the quote below.

Table 4.2: Theme 1: The whole is more than the sum of the parts

Category	Subcategory	Code
Mutuality	Mutual vulnerability	Similar needs Mutual feelings of powerlessness as individuals I cannot do it alone
	Mutual vision	Mutual ideas of what needs to change Mutual ideas of how it should change Mutual motivation to make a change
	Mutual benefit	Collective participation can benefit individuals Collective participation can benefit the collective Collective participation can benefit others beyond the collective
	Mutual accountability and responsibility	Sharing of responsibility makes actions more possible Sharing of responsibilities heightens individual accountability
Connectedness	Connecting with others drives cohesion	Connectedness with others Connection beyond the physical into the spiritual Feeling of belonging Response and interactions with others Feedback on success
	Collective identity that goes beyond the individual	A new identity Giving of oneself enables a better fit into the collective Feelings of togetherness increase confidence and hope
Co-creating beyond what the individual can do	Symbiotic combined action	Benefit for all Greater outcomes Reciprocal interaction
	Co-creating harnesses group strength	More knowledge More skills More choices Increases possible solutions
	Co-creating creates more internal changes	Hopes that a change is possible Confidence

Participant 10: **"It's about face to face contact. They need to connect. Not just be together."**

In order to really understand collective participation in occupations, one needs to look beyond the individual members of the group to the collective as a whole and how they function together.

Participant 09: **“Whatever happens to create the system is a lot more than the sum total of the individuals in the system. It is exponentially more than that.”**

As indicated by the quote above, when engaging collectively in occupations, the collective has exponentially more skills, ability, power and potential than individuals working alone on the same task.

Participant 10: **“It goes beyond the group of individuals. I would go so far as to say if there are 10 people in the group, the collective identity is the 11th person.”**

All the participants described a similar concept but in different ways. Essentially, they all described the nature of collective participation in occupations as *more than the sum of its parts*. This concept will be discussed later.

Results from this research found that the underlying principles for collective participation in occupations are mutuality, connectedness and co-creating. Mutuality and connectedness not only make it possible for co-creating to take place but also for the collective to participate in a way that is *more than the sum of its parts*.

Mutuality

When considering the nature of collective participation in occupations, *mutuality* is found to be essential. This concept highlights the *sameness*, *sharing* and *inter-dependence* that can be associated with collective participation and these characteristics are reflected in the reciprocal relationship that is needed for people who want to participate collectively in occupations successfully. There need to be similarities for people to want to participate collectively. In addition, there must be a willingness to share their time, skills, knowledge, abilities and actions with the collective as well as a willingness to share responsibilities and be accountable, not only for their own actions but also for the collective action of the group. Lastly, this is an interdependent relationship where a person’s efforts and commitment influence those of others.

This reciprocal relationship is based on mutual vulnerabilities, mutual vision, mutual accountability and responsibility, and mutual benefit. Mutual vulnerabilities often lead to mutual vision, which leads to mutual accountability and responsibility which could then have a mutual benefit as an outcome.

Mutual vulnerability

It is often mutual vulnerability that drives a collective to be formed. In the current situation in South Africa, there are many examples of mutual vulnerabilities that drive collectives to actions. Poverty is one example.

Participant 07: **"Well, like poverty. It often drives people to work together, whether it is a communal food garden or a soup kitchen. They want to make life better."**

In this case, the participant used an example of the mutual need for food or having hungry people in the community that could drive members of the community to work collectively to solve the problem. They could rally around the communal need and try to make life better for all involved. This would, however, not be successful if various people did not share this need, if they did not have a mutual need. The mutual need, in this case, is related to the need for food. Whether this is the need of many individual people who are looking out for themselves or whether individual people are concerned about the lack of food within their community is irrelevant, as long as the focus of the need is similar and leads to the same action.

Participant 11: **"She makes soup at the soup kitchen to feed herself."**

While the need could be aligned around providing food, the motivation to participate might be different. As seen in the example above, some individuals might participate for themselves in order to receive a share of the food. Other people might participate because they feel it is best for the community. Whatever the motivations, they all have a mutual need.

This need, however, does not necessitate being on a community level. It can also be evident in the need of two people wanting to raise their children successfully as described earlier or that of a group of women with disabilities who are trying to make life better for themselves. These needs drive individuals to work collectively to achieve a certain outcome.

Most participants referred to examples seen in South Africa when talking about mutual need. Mutual needs have driven collective action throughout history. When looking back at South Africa's history pre- and post-1994, it is riddled with examples of collective action from service delivery riots, where community members protested for the right to receive basic services, to ward-based health committees that rallied around a community's right to access and maintain services to promote health in their community.

Participant 03: **"They were not receiving the services that they should have so they had to make themselves heard. They had to state their case together. They learnt that this is the only way."**

When needs are not heard, community members are often left with feelings of powerlessness. These community members are already living in conditions where resources and opportunities are limited. Frequently, their options for employment are also restricted which causes them to have significantly fewer choices over how they want to live their lives. These conditions can cause feelings of impotence which, when added to an inability to voice their concerns, can compound the sense of helplessness and ineffectiveness. This motivates collective participation.

Participant 03**: "People do not know what else to do than to take mass action. They feel that they might have more power if they stand together."**

People soon realise that they cannot fight the system alone and that they need to form collectives in order to be heard. A collective's voice is perceived as more powerful and more likely to be listened to. It is, thus, mutual needs and vulnerabilities

that drive collective participation in occupations, according to the participants. This was supported by a statement from participant one.

Participant 01: **“At the moment [in South Africa] a collective voice, mass action is the only thing that gets results.”**

Mutual vision

Participant 09: **“We had a vision that we all believed in. That made us succeed.”**

In this case, a mutual vision facilitated the staff to work together to change the image of their institution after a negative incident. The staff had to reconsider the vision of the institution and re-commit to it. This caused staff to work together towards changing the perceived image of their institution. This example can also be linked to mutual needs. The staff identified a mutual need to change the image of the institution which led to a mutual vision. A mutual vision was one of the tools that made it possible for them to work together to change their image.

Participant 01: **“By deciding together where we want to go made it possible for us to actually move forward in the department.”**

Here, the participant reported on the difficulties the department was having in terms of achieving success as a department in certain areas. A strategic planning meeting helped the department to re-establish a collective vision. The department went through a lengthy strategic planning session where all the staff was involved in deciding on the vision and objectives and the action plans to achieve these objectives. They could decide what needed to change and how this change should be orchestrated. This process facilitated ownership by the staff of the vision, objectives and action plan which strengthened their collective action to ensure that it was achieved.

A discussion on ideas of what needs to change and how to change the situation or how to facilitate the action is important. All members involved need to contribute to

and know the plan of action. This process of planning together, if facilitated well, can enhance connectedness between members and give the opportunity to compare possible solutions and action plans. The process of 'doing together' strengthens the action plan since it is based on input from various people. It also gives members an opportunity to get to know each other - their opinions, views, knowledge and strengths, thus, enhancing collective participation. This knowledge can be incorporated into future action plans to ensure that member's strengths are utilised, which could enhance sustainability of future collective actions.

Lastly, mutual motivation to make changes or to participate collectively is important.

Participant 11: **"Motivation is important. People must want to work together if it is going to be a success."**

This participant related a story about a group of women with disabilities that she co-facilitated. The women formed a self-help and support group with the aid of one of the community agencies. They had to take responsibility for running the meetings and planning future actions. The participant highlighted the importance of collective or shared motivation for wanting to work together to improve their common conditions. What was important was that they needed to be motivated to do both, meaning that they needed to have the intention to participate collectively. If they were only motivated to change their situation and not to work together as a collective, their actions might not be successful or as successful as they could be. These women came to understand the power of a collective and how it surpasses the power of an individual and, therefore, they were motivated to participate as a collective.

Participant 11: **"If they were not in a group, they would not have achieved as much. It was being in a group that made it possible."**

Due to their understanding of the power of a group and their motivation to work in a collective, this group went on to establish various other collectives. Each of the women established a group in her own neighbourhood.

Mutual benefit

Collective participation in occupations should be mutually beneficial to the collective and to the individuals in the collective. As previously discussed, the woman who participated in the soup kitchen benefited because she was able to feed her family and herself as well as others in the community. By participating in this collective occupation, she was providing for her family's basic need for food. In the same way, a man who joins the local neighbourhood watch often does so to contribute to the safety of his family and himself. Many participants agreed that personal benefits are the main reason people participate in collective occupation. This will be further expanded on in the next theme.

Often, the benefits are internal for the person.

Participant 11: **"Lindiwe changed completely from when we started the group. She became stronger."**

In this case, the benefits were internal growth for Lindiwe (a member of the disabled women's group). Participants reported benefits of increased knowledge and skills. This could be new knowledge and skills in specific areas, for example, sewing or entrepreneurship skills or running a business, as the women in Lindiwe's group learnt. By applying the knowledge and getting feedback from the rest of the group, individuals could further improve their knowledge and skills. Other skills benefits reported were those of decision-making, problem-solving and communications, to mention a few.

What most participants commented on was that collective participation increases people's confidence in their own skills and knowledge. As previously stated, this can be ascribed to the feedback they get when they are with other people. It is also due

to the acknowledgement they feel when others listen to their opinions and/or implement their ideas or suggestions. They feel validated when they are listened to and agreed with, as seen in the quote below.

Participant 04: **“Working together in certain occupations can help develop a person’s confidence. For example when you suggest something to solve a problem and other people think it is a good idea and they do it, you feel good. I can sometimes see that inner glow or pride in people in a group when that happens.”**

Being in a group where other people express the same concerns, fears and needs can elicit what Yalom (1980) called universality (53). This is where the person feels that they are not alone and that others are in a similar situation. This can also improve their confidence.

Collective participation in occupations should also benefit the collective. Collectively, members create opportunity for their skills and knowledge to develop by teaching each other or by creating learning opportunities. Thus, a characteristic of collective participation in occupations is mutual benefit - all parties in the collective should benefit from being there. This benefit is not always equal in nature, however. For example, newer members might gain more knowledge when first joining in collective occupation than older members. However, the older members might have had more opportunity to learn and develop their skills than newer members who are still learning.

Considering the statement below by participant eleven, it is clear that the members of this collective became more proficient in certain skills and more confident in their abilities. Eventually, they were able to apply the skills they had learnt in organising different events, which were beneficial for the outcomes that they wanted to achieve as a collective.

Participant 11: **“Due to doing things with other people [in the collective] they felt more confident, they were able to problem solve by themselves and able to organise things. This would not have been possible if they were not working as a group.”**

Mutual accountability and responsibility

Participant 02: **“Collective participation in occupations can only be successful if everyone takes responsibility.”**

Sharing of responsibility is one of the main components of collective participation in occupations. Since people have to work together to make action happen, it is essential that each person makes the effort to do his/her best as effectively as possible. This allows for greater accomplishment as a collective. Through sharing of responsibilities, more actions can be performed and/or performance can be on a larger scale, as seen by the quote below.

Participant 10: **“It is essential that everyone has to do their part in a group. Otherwise the group will not be able to function successfully.”**

Another characteristic of collective participation in occupations is that of sharing of accountability for actions. Everyone in the group needs to understand and take ownership of the aim/purpose of the collective and the actions he/she performs. This leads to an expectation of shared accountability. Each person should be held accountable for his/her own action, but there needs to be shared accountability for collective action to ensure that it is successful. In other words, it is everyone’s responsibility to ensure success. Collective participation in occupations is more effective if the accountability is shared than if one person (for example, the leader) is held accountable. In addition, limited accountability could affect the performance of the others in the collective as they might not perform optimally.

Sharing of responsibilities heightens individual accountability. Each person needs to understand his/her own responsibility, how he/she fits into the collective and how

he/she contributes to the collective and the successful outcomes of the collective. This can heighten feelings of responsibility which, in turn, heightens feelings of accountability. Only if each person performs optimally, can optimal collective participation in occupations be achieved.

Connectedness

Participants felt that connectedness was the essence when considering the nature of collective participation in occupations. For a collective to form a *whole* that is *more than the sum of the parts*, people have to *connect* with each other within the collective. Only if this happens, can they truly function as a collective unit.

Connecting with others drives cohesion

Participant 10: **"Without the connection, there is nothing. If they do not connect with each other in the group, they cannot perform together, they cannot be productive."**

This connection is defined as a connection that goes beyond just being together physically or cognitively. However, physicality can enhance connectedness as people interact with each other and get to know each other quicker.

Participant 01: **"it goes beyond just knowing why you are there."**

The connection goes beyond cognitive knowledge. Knowing why one is in a collective, what the collective stands for, what its purpose is, and how this purpose aligns with the purpose and needs of the individual is important when a person joins a collective. This knowledge can be the start of cohesion as the person might feel that this is the right group for them, thus experiencing a feeling of belonging. The more cohesive the collective, the easier it is for individuals in the collective to work together. This connectedness and cohesion can lead to the individuals within the group developing a collective identity.

Participant 10: **“People realise that they have things in common with other people, then they will connect, they feel as if they belong.”**

This connection is also heightened by members feeling that they have things in common with others and that there are similarities between members in the collective. Participants linked the feeling with Yalom’s (1980) curative factors of universality and cohesion that suggest that commonalities between members can make them feel less alone and more a part of a group (53). Thus, universality enhances cohesion.

Participant 10: **“….so the cohesion and universality for me is almost core if I can put that way.”**

Universality means that members of a collective feel that there are commonalities between the other members and themselves, thus, they are not the only people with those specific concerns and needs. This makes it possible for members to connect with other members as they feel that the other members understand what they are feeling and experiencing. *Cohesion* is the feeling of belonging shared by individuals in a collective.

Participant 04**: “I almost want to say that the connection is spiritual. It is more than the person.”**

Participants felt that the connection between members of a collective is on a spiritual level. Here, the participants wanted to highlight the intangibility of the connection. It is not something that you can touch and point out. It is a subconscious new identity that the members of the collective form when they start to feel that they belong together.

Collective identity that goes beyond the individual

Through cohesion, the collective forms a collective identity. A collective identity is considered as another essential component of collective participation in occupations.

As suggested by the quote below, a collective's identity goes beyond the sum of the parts.

Participant 05: **"A group consists of individual people, but together they are a collective group with their own collective identity."**

When a collective forms, it develops a collective identity that goes beyond the individuals in the group.

Participant 10: **"If you look at each one separately they would not have ended up doing what they did, so that for me was a very good example of this. They [the group] form an identity that is totally different from the individual…I would go so far as to say if there are 10 people in the group, the collective identity is the 11th person, because this identity is not just a sum of the other people in the group, but more than that."**

This participant highlighted an incident which occurred when she was facilitating a series of closed groups. During this time, the group members participated collectively in an activity that she (as the group facilitator) would not have expected them to participate in. In her opinion, they would not have participated in this activity if each member was alone, but collectively they had the confidence to do it. This collective confidence changed their collective identity. This identity went beyond just the identity of the combined individual members - it was a new identity that they developed as a collective. Thus, the whole was not equal to the sum of the parts but more than the sum of the parts.

Participant 08: **"We do outreach with a certain group of friends. Then you will do funny and strange things like eating bugs and you know, sharing a toothbrush… strange things like that so it is almost… yes but then everybody is strange, but when you meet at Mugg and Bean everyone is not strange and you don't eat bugs at Mugg and Bean."**

The quote above demonstrates that this group identity can influence the norms that the collective adheres to at any given time. The above-mentioned group changes their collective norms according to the context. In a particular context, for example, doing outreach in remote areas, a certain type of behaviour is acceptable, while that same behaviour would not be acceptable in another context.

Conversely, participating in a collective can cause people to change their behaviour in order to fit in with the behaviour of the group.

Participant 03: **“When we in a group together we are different from when we alone. It’s almost as if we’ve changed.”**

The participant felt that this change is usually made in order to fit into the group. The change goes beyond behavioural changes. It can include changes in confidence as highlighted by the quote by participant ten below which, in this case, also causes a change in usual behaviour. This change in behaviour is also evident in the example given by participant eight above.

Participant 10: **“It’s almost as if you have to give up a little of yourself to be part of the collective group.”**

When working within a collective, individuals cannot just consider their own needs, feelings, opinions, values and beliefs. In order to be an effective part of a collective, the individual needs to be open to considering other people’s opinions, beliefs, values and so on. People need to be able to compromise, for example, their own opinion if it goes against the collective view of the group. For example, in the scenario mentioned above by participant ten, the participant reported that one of the group members still went with the collective behaviour even though this behaviour went against her normal beliefs. In this case, the group member had to compromise in order to align her behaviour with that of the group’s. She had to give up a little of herself.

Lastly, it is the feeling of togetherness and connectedness that increases confidence and hope.

Participant 02: **“Being part of a group makes you feel as if it is possible. As if together you will be able to make a difference.”**

Participant 03: **“During service delivery riots people feel that they have more power if they do it in a group. They can achieve more.”**

Participants felt strongly that people, in general, believe in the power of collective participation. When considering South Africa’s history there were, and still are, many examples of collective participation by community members wanting to change their situation. Since many of these past protest actions had successful outcomes, a perception has been built that collective action can be powerful.

As stated previously, people feel that a collective has more power since it has a louder voice and, therefore, a better chance of being heard. A collective also has more knowledge, skills and opportunities which can aid the members to overcome problems they might encounter or help them to plan more effectively for future successful action. All of these factors increase confidence in the power of a collective.

In summary, connecting with others in a collective can lead to the formation of a collective identity. This collective identity can make it possible for the collective to perform cohesively or as *more than the sum of the parts*.

Co-creating beyond what the individual can do

For a collective to be more than the sum of the parts, it needs to co-create. The concept of *create* is commonly understood as *to make* or *to produce*. It is the product of the energy spent and can bring something new into existence or change a current context or situation. Through collective participation in occupations, the collective

could be working together to address collective problems and to strive for a collective vision. They are, thus, co-creating.

Symbiotic combined action

Participant 07: **“But it is important that they work together. One person might be able to do it, but not as effectively as a few together.”**

The last quote highlights the fact that for collective participation in occupations to occur, parties need to work together and interact with each other. This interaction can be a symbiotic relationship where people work together to achieve success. Often, the outcome of these actions benefits all involved. As indicated by the quote above, some of these tasks can be done by individuals, but completion of a task in a collective is often more beneficial and effective.

Participant 04: **“My husband and I look after our children together every day. I do some things and he does some things, but ultimately we parent together. If one of us doesn’t participate it’s not going to be successful… you understand what I mean?”**

Conversely, parties involved in collective occupations can also work against each other and these actions might be detrimental to all involved or could be beneficial to only one of the parties involved. A collective positive outcome is, thus, not vital for collective participation in occupations but it is preferable. It is the process of participating and interacting that defines the term, not necessarily the outcome. If individuals participate well collectively, they might have a positive outcome. On the other hand, if collective participation is fragmented, uncoordinated or disharmonious, the outcome may not be positive.

Co-creating harnesses group strength

By participating collectively to achieve certain outcomes, the collective is co-creating, harnessing group strength in the form of its collective knowledge, skills and strengths to achieve collective goals and visions.

Participant 02: **“There are more people, which mean more knowledge, more skills, and more abilities if they put all their assets together.”**

As highlighted by participant two, a collective will have more combined assets than an individual. This could be more effective to create change or find solutions for problems than an individual’s effort. It could also allow the collective more choice in its actions and approaches.

Participant 03: **“There are many people that can do many things. Many shared resources. This gives them choice to decide on the best option. They do not have only one option like an individual with limited resources.”**

Co-creating creates more internal changes

Lastly, participants talked about the individual changes caused by that co-creating. This is linked with the increased confidence, knowledge and skills reported on under the *mutual benefit* section above.

Participant 11: **“Lindiwe changed completely from when we started the group. She became stronger”.**

This was one of the quotes that highlighted internal changes as a result of participating collectively. When individuals get positive feedback, acknowledgement and validation, it can increase self-esteem which, in turn, leads to an increase in confidence. This increase in confidence can influence behaviour positively.

Additionally, participants reported that co-creating also created feeling of hope for members of a collective. Members of a collective hope that change is possible when if they work together to address a specific need. Previous successes due to working

in collectives gives them hope and motivate them to participate in the collective again as seen is a quote by participant 08 who said:

"His father always worked in the community groups to make the community better. He saw it worked. Now he also does it".

The success this group member saw was his motivator for future participation. It gave him hope that by participating change is possible.

In summary, this study found that mutuality and connectedness between members in a collective are important components to make co-creating possible. In addition, cohesion associated with connectedness causes the collective to develop a collective identity and it is this that drives co-creating, ensuring that the whole is more than the sum of the parts.

Participant 09: **"…. a lot more than the sum total of the individuals in the system. It is exponentially more than that."**

Theme 2: I joined because of me, I stayed because of them

Table 4.3: Theme 2: I joined because of me, I stayed because of them

Category	Subcategory	Code
If the group meets my needs	Innate needs as a human being (Much more basic and primitive)	Need to belong Collective conscience - ubuntu Belief in the value of a group Need to survive
	My needs as an Individual within society (More layered and influenced by society and own personal situation and factors)	Need to change situations in environment Need to change own situation/reduce the feeling of powerlessness Need for personal growth (knowledge, skills) Universality Values (in God, in helping others, sense of responsibility)
Enabling environment	Supportive nature of a collective	Open attitude Welcoming atmosphere Group cohesion (working together as a group)

		Support as needed Opportunity and nurturing for development Opportunity to make a change Mixing with like-minded people
	Enabling community	Community is open to groups/people working together Community supports people who want to help others Community has some resources
I see the difference	Achieving outcomes is a motivator	I see us making a difference. I saw the difference I've seen it work
	I see the difference in myself and my own situation/It's empowering.	Changes that improve own situation Changes that improve personal factors (skills, abilities, confidence, knowledge, choices, et cetera) Validation of own skills, knowledge, abilities, et cetera)

This theme describes the participants' understanding of the reasons why people participate in collective occupations. These reasons are described in three main categories. Firstly, the participants felt that people participate in collective occupations because being part of a collective meets certain personal, conscious and unconscious needs. Secondly, a supportive, enabling environment makes it possible for the person not only to want to participate collectively but also to continue this participation. If the environment is enabling and fulfils their needs, people often choose to stay in the collective. Lastly, people are more motivated to participate collectively if they perceive the participation as being successful and they can see a difference.

If the group meets my needs

The majority of the participants felt that the choice to participate collectively is usually motivated by an individualistic need of the person rather than a more collective need of the community, meaning it is individual's needs that drive collective participation. These needs are twofold. Firstly, they are related to the basic, innate needs of human beings and secondly, they are related to more individualistic, personal needs.

Innate needs as a human being

Individualistic-focused motivation is driven by the basic, innate need of human beings to be connected to other human beings.

Participant 04: **“Humans are essentially social beings. We want to belong to a group.”**

Participant 02: **“As human beings we are made to want to connect. It is…. a human thing…”**

The above-mentioned participants summarised the point when they linked the need of human beings to belong to a group with the reason they participate collectively and join collectives. Being part of a collective addresses the innate need to belong. Socialisation was not highlighted as an origin of this need, but an inherent drive possessed by all human beings or a *collective unconsciousness* was reported as the origin.

Participant 09: “Being African means that we are part of a collective and our culture is based on ubuntu…”

The above quote, which was expressed in various ways by different participants, supports the findings of the *collective unconsciousness*. Through this, people have an understanding of the importance of working collectively as well as how their needs fit into the needs of the collective. It also gives them an understanding of how their contribution could be beneficial for the community that they live in, which in turn could benefit them as well.

Participant 11: **“Working in, for example, a communal garden is about ubuntu, both you and the community benefit.”**

According to the philosophy of ubuntu, people believe in the value of working together in a collective and recognise that it can be more beneficial for all involved.

Participant 09 took this point further by adding, **"…but we struggle with Western influences that dictate looking after yourself and your family first."**

It is important at this point to note that, although many participants talked about the inherent need for people to belong to a collective, the individualistic approach of the Western world view was also brought into the discussion. This view is in contrast to ubuntu. This was clarified by various participants who said that, although as human beings we still have the innate need to belong, our needs are often more individualistic. The quote below summarised it well.

Participant 06: **"…here is the wonderful dichotomy of life that is dialectic between individualism and cooperative living."**

In direct conflict with a human's need to be part of a collective, data from this research highlighted the human being's innate need to survive on an individualistic basis as another reason for people joining or participating in collective action. People join collectives because it is beneficial for them in order to survive (to improve their situation).

Participant 06: **"So I'm saying it is an animal thing…individualism…it is instinct."**

This participant felt that human beings have an innate motivation to survive and their actions often focus on this need. She justifies this further.

Participant 06: **"Still, it is that basic drivers… Maslow's lower rings are making us individualistic, first me and then you."**

Due to this innate need, human beings focus their actions first on their own and their family's survival before focusing on the needs of others. This does not mean a lack of understanding of others' needs or a lack of consideration for them. Rather, it means a focus on individualistic needs first. Additionally, human beings have learnt over time that working together as a collective is important for survival and progress.

Some participants said this is part of their collective unconsciousness while others felt that it is learnt behaviour.

In summary, these innate needs, as reported on by the participants, are motivators for people to participate in collective action. By joining or participating in a collective, their needs as human beings can be met.

My needs as an individual within society

As indicated at the beginning of this theme, the data highlighted two reasons why collective participation is motivated by individualistic needs. The first is the innate needs of human beings as discussed above; the second is that of individual needs within the social context. These needs are more influenced by society, socialisation and the person's own situation and context.

Participant 11: **"People participate in their community because they see some benefit to themselves."**

People participate collectively because they see it as an opportunity to change their situation for themselves and their families. Additionally, people join a collective to address the problems in their occupational settings, as seen in the example given by participant three above, of collective action in service delivery protest. They could possibly address these problems on an individual level, but from experience they might have learnt that it is easier to achieve certain outcomes in a collective. As stated previously, this experience has taught South Africans that there is power in forming a collective since this gives them a greater voice.

In addition, universality, as defined earlier, makes it easier for people to cope with their problems as they feel that they are not the only ones with the problem. This could also reduce their feelings of powerlessness as indicated by the quote below.

Participant 11: **"They talked about common problems and how to address these."**

This participant referred to a collective of women with disabilities in a community that found that they had similar problems and could find solutions for these problems which, as individuals, they were not able to address. Thus, finding others in a collective with similar needs and vulnerabilities is one of the reasons people join collectives. Validation of fears and concerns by others in a collective is a reason for people to continue participating in collectives.

Participant 03: **"…it takes individuals connecting and acting collectively to make a difference."**

People also perceive that a collective has more power than individuals, as seen by the quote below.

Participant 03: **"People do not know what else to do than to take mass action. They feel that they might have more power if they stand together."**

Participating in a collective also gives people the opportunity to share information with others and to help others to develop certain skills. In essence, they help others to develop themselves. In the process, this makes them feel good about themselves and could add meaning to their own lives. It can also validate their knowledge and skills. The participants saw this as one of the important motivators to joining collectives for people whose basic needs have been met.

Lastly, people join and participate in collectives since this addresses a need to act within their beliefs or values. Various participants talked about the belief in a higher power and how this belief motivates participation, as indicated by the quote below.

Participant 08: **"…they believe that they need to do good to others then they will participate for the greater community. They formed like a women's group or something like that to address the issues."**

In summary, people stay in a collective if they see that the collective actions in which they participated were successful. If collective participation leads to achievement of

their collective outcomes and vision, members could be motivated to stay. Fulfilment of individual needs and seeing individual benefits due to participating in a collective also act as motivators for people to continue their participation.

Enabling environment

Collective participation needs a supportive and enabling environment for it to be effective. Data from this research highlighted the fact that people often participate collectively for their own individual gain, but that they stay in a collective in response to the support and feedback they get from the group. Participants felt that the supportive nature of the collective and the enabling community environment with which the collective interacts are reasons why people participate collectively. They have to feel comfortable in the collective.

Participant 10: **"Nine out of ten times people stay because the group supports and helps them. Why would they stay if they do not get anything out of being in a collective as you put it?"**

Supportive nature of a collective

It was felt that a welcoming and open attitude of members in a collective would attract people to engage with and join the collective. People are more comfortable to participate collectively if they feel welcomed and included as part of the collective.

Secondly, as indicated by the quote above from participant ten, people will stay in a collective if they feel supported and as if they belong. This feeling of being supported could make it easier for them to deal with problems but will also make them more comfortable in the collective, which could, in turn, motivate them to participate and stay within the collective.

Thirdly, people join and stay in collectives if they believe the collective is successful and if the members work well together. According to participants, people seldom stay in a collective if goals are not achieved, which means that the individual's personal

goals (reason why he/she joined the collective) are not met. Additionally, as seen by the quote below, people will feel comfortable to join a collective if other members share similar needs, vulnerabilities, ideas and perceptions, that is, if they are like-minded people. This could enhance the feeling of group belonging which, as indicated earlier, is an innate need.

Participant 10: **"For people to engage in a collective or group if they see the group is supportive to them as people, that they work well together, but also if they similar to them…like-minded."**

Lastly, opportunities for development and change were highlighted as a reason why people join and stay in collectives.

Enabling community

It is not just the openness and attitude of the collective that is important but also that of the community in which the collective is situated. It was felt that collective participation would only be successful if the community supported the collective.

Participant 02: **"If the powers that be do not agree and give them support there then working as a collective is difficult."**

This participant highlighted the need for support by community leadership. However, the same can be said for the other community members. A community needs to be open to accepting the goals of a collective, otherwise it would be difficult for the collective to access community resources.

It was felt that successful collective participation is dependent on resources in the community. If there are no resources, for example, a safe place to meet that is large enough, participation would be problematic, as supported by the quote below.

Participant 06: **"They could not meet at night as it was too dangerous. They all worked so during the day was out. This really made it too difficult."**

I see the difference

Participation in a collective to successfully achieve individual and collective goals was one of the biggest motivators identified by participants.

Achieving outcomes is a motivator

Participant 07: **"The more they achieved, the more they wanted to do and the more they did, the more they achieved."**

The above quote was by a participant who reflected on one of the successful collectives with which she had engaged. She reported on how the achievement of outcomes motivated group members to do more which, in turn, led them to achieving even more goals. As she reported, one member said that their biggest motivator was when they saw the collective making a difference in their community.

Seeing and experiencing success as a collective was also identified as a motivator for future participation in other collectives.

Participant 08: **"His father always worked in the community groups to make the community better. He saw it worked. Now he also does it."**

I see the difference in myself and my own situation/ its empowering

Changes for individuals, achievement of personal goals and subsequent changes to their own situation, as highlighted previously, were all reasons why people continue to participate collectively. These changes also included personal changes of knowledge and skills which influenced their confidence. All of these gains have been reported on in detail in sections above.

4.3.3.3 Use of the VdTMoCA

During the member-checking process for this phase, participants were sent the tables that summarise the themes, categories and subcategories as well as the

reports. They were asked to member-check these and comment. (Please see appendix A for information letter.)

In addition, two questions were included and participants were asked to answer these questions via email. These questions were included since, during analysis of the interviews, it was felt that these questions were not answered adequately by all participants. The questions were:

Question 1: Currently, the Vona du Toit Model of Creative Ability is being used to guide occupational therapy assessment and intervention for individual clients. In your opinion, can the underlying principles of the Vona du Toit Model of Creative Ability be used to measure a collective's creative ability/collective participation? Justify your answer.

If 'yes', please continue with the questionnaire.

Participants unanimously answered 'yes' to the question. Comments submitted with the answers included:

Participant 01: "**Yes, without a doubt, but not as is. You could use the principles, but how you use it will have to change"**

Participant 06: **"Yes, I cannot see why not. I make total sense to do it. Using the essence of it would work"**

Participant 10: **"In my opinion yes, most definitely. I think there will be some differences in order to make it relevant/ appropriate to communities; for example in case of 'handling materials' it could be changed to 'handling resources' and looking at interaction would be something to the effect of valuing people in the community"**

The remainder of the participants replied 'yes' to the question and justified the answer by answering question two. For example, participant eight said:

“Yes, it can be used. In your results you mentioned that a group forms its own identity. So you can use CA to measure that identity. You can also look at a group’s collective action to measure on what collective level of motivation they are on.”

Participant four stated: **“Yes, I think so. In my opinion the same criteria for evaluation can work.”**

Participant nine had the following to say:

“Yes, I think most of the aspects of the VdTMoCA model for assessment are appropriate. But one will have to delineate the collective.”

Participants two and eleven answered ‘yes’ without justifying their answers.

Question 2: Currently, when determining an individual’s creative ability within the VdTMoCA, a clinician looks at his/her volition and action. The clinician specifically looks at the client’s ability to engage in tasks and to engage with others to gain insight into a client’s creative ability. In your opinion, what should a clinician consider when determining a collective’s creative ability/participation? Justify your answer.

The results of this question were analysed according to frequency of answers.

Eighteen items were suggested. These were in order of frequency of answer:

- Collective action/acting as a collective
- Achievement of outcomes as a collective
- Pattern of exchange with each other
- Leadership: ability to lead a collective
- Handling of resources
- Ability to take initiative
- Insight and reflection in actions
- Interaction with other collectives

- Ability to problem-solve as a collective
- Ability to make decisions as a collective
- Group process
- Quality of produce
- Ability to make maximum effort
- Motivation
- Handling of anxiety and conflict inside and outside collective
- Creativity
- Norm awareness and norm adherence
- Handing of situations inside and outside the collective

4.3.4 CONCLUSION

In summary, results from eleven interviews yielded two themes. Theme one centred on the interactive relationship within mutuality leading to connectedness that, in turn, leads to co-creative or collective participation in occupations.

Theme two reported on reasons for collective participation and found that it is motivated by innate needs as well as the experience of individuals. Additionally, a supportive collective and an enabling environment make collective participation possible and are usually motivators for continuous participation.

When asked whether the underlying principles of the Vona du Toit Model of Creative Ability could be used to measure a collective's participation, the participants all answered affirmatively; however, many cautioned that adaptation would be needed.

4.4 STAGE 2

Stage two focused on conceptualising collective occupations from profession-specific literature in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.

This systematic literature review explored how concepts of collective occupation or co-occupation were defined in occupational therapy literature. The literature review also served to impart an understanding of the characteristics of the nature of collective occupation.

As stated previously, in order to ensure depth, boundaries were placed on the review. Therefore, literature was explored from the perspective of occupational therapy and occupational science and not in terms of anthropology, psychology and sociology.

4.4.1 METHODOLOGY

The most common objective of any literature review is to discuss information and previous research that was published on a particular topic of interest (134). This is done to ensure that the researcher has a thorough understanding of the topic and gains an understanding of what research has been done in the specific field in order to identify gaps in research that need to be investigated. The existing literature is also critically reviewed (135). The objective of this systematic literature review was to understand how the concepts of collective occupation or co-occupation are defined in occupational therapy literature as well as to gain an understanding of the characteristics of the nature of collective occupation, that is, when can an occupation be classified as a collective occupation? The information was used to triangulate data gathered through the interviews of phase one as well as guide the researcher to develop categories in phase two of the research.

4.4.1.1 Review process

The literature review process was similar to the systematic review process used by Brereton, Kitchenham, Budgen, Turner and Khalil (136). The process consists of three steps which include planning, review process and documentation of the review.

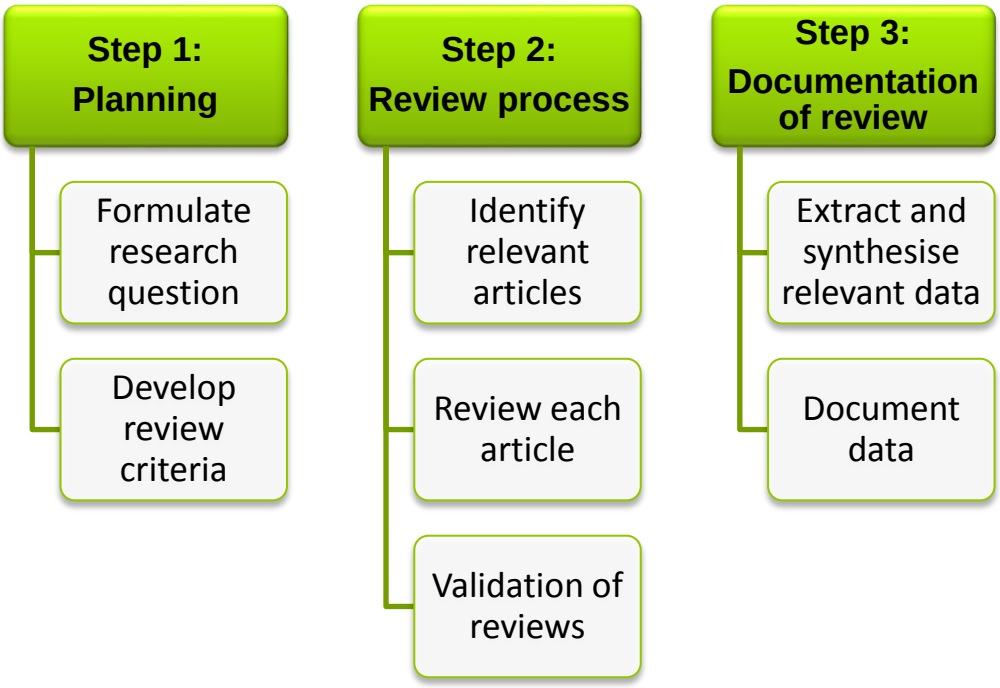

Figure 4.1: Diagrammatical representation of the review process. Diagram adapted from Brereton, Kitchenham, Budgen, Turner and Khalil (136).

Step 1: Planning of review

This step consists of the formulation of the research question and the development of review criteria.

Formulation of research question

As stated above, the objective of the review was to achieve insight into how the literature defines the concepts of collective occupation and co-occupation, to

understand how the concepts developed and to determine the characteristics of the nature of collective occupation or co-occupation as reported on in the literature.

Research questions were formulated as follows:

- How is collective/co-occupation defined in literature?
- What are the defining characteristics of collective/co-occupation?

Development of review criteria

When reviewing articles as part of a literature review, it is recommended that each article relevant to the topic be critically analysed to determine the *believability* or *credibility* of the article (124). Lewis (2009) linked the concept of *believability* with validity and reliability within qualitative research (137). The critical review process of articles can enhance the validity of the literature review, ensuring that the reviewer includes articles where an appropriate adherence to scientific standards was maintained (138). Since many of the articles found in the literature search were qualitative in nature, critiquing guides for qualitative articles were looked for in the literature.

The critiquing guide used for this project was adapted from Ryan, Coughlan and Cronin's (2007) suggested guide (138) and is presented in table 4.4.

Table 4.4: Guide for critiquing articles

Author(s):		
Reference:		
Type of article	Opinion article	
	Editorial	
	Research article	
Phenomena/interest explored		
Qualification of author(s)		
Setting		
Methodology		
Is evidence provided for opinion?		
Is the evidence provided?	Theory-based	
	Experience-based	
Inclusion of literature	Relevant to phenomena under investigation	
	Relevant to occupational science	
	Inclusion of research results	
If research article		
Research methodology: congruity with research question and objectives of study		
Participants		
Data gathering method(s): congruity with research question and objectives of study		
Data analysis: congruity with methodology		
Data analysis: comprehensive description of results evident including voices of participants		
Was ethical permission obtained and were ethical considerations adhered to?		
Is the link evident between results and conclusions drawn?		
General		
Relevance to research project		

Step 2: Review process

This step consisted of the following tasks: identifying relevant articles, review of articles and validation of reviews.

Identify relevant articles

EBSCO® was the main host that was used to search for data as it was known to host several databases which are commonly used for medical as well as social research. Within this host, the following databases were used: Academic Search Complete, CINAHL Plus, Global Health, Health Source: Nursing Academic Edition, Humanities International Complete, Medline, Philosopher's Index, Psychology and Behavioural Science Collection, PsychInfo and SocINDEX.

The researcher completed three searches. For each search, a different Boolean or phrase was used.

Search 1: The Boolean that was used was collective *occupation**. A '*' was put after the word *occupation* so that the plural term of *occupations* was included in the search as well.

Search 2: *Co-occupation**.

Search 3: Advance search: *co-occupation** and *occupational science*.

In addition, personal correspondence with colleagues with an interest in the concept, yielded two additional articles that were not discovered in the initial searches.

Review each article

Each article was reviewed and a review form was completed.

4.4.2 RESULTS FROM THE SEARCH

Search 1: This search yielded seventeen articles. Of these, four articles were relevant as they defined *occupation* from an occupational science perspective. However, only one of these four articles looked at defining or understanding the concept which was the objective of the search. The rest of the articles were excluded since they looked at how *collective occupation* could be meaningful for a specific population.

Search 2: This search yielded fifty-four articles. Within these, twenty-two mentioned *co-occupation* as defined within occupational science and occupational therapy, but only five of these twenty-two focused on clarifying and/or understanding the concept of *co-occupation*, one of which was an editorial on the topic. The rest of the articles were either excluded as not relevant for the same reason as was cited above or because they focused on how co-occupation contributes to either development of children or development in the relationship between mother and child.

Several interpretations of the concept of occupation were found in the literature. Some articles focused on occupation of a space (39) and not occupation as defined in occupational therapy. To exclude this interpretation, an advanced search that combined the phrases of *co-occupation** and *occupational science* was done.

Search 3: This search yielded eleven articles. All eleven were also highlighted by the searches above. The five articles that were highlighted in search two above were also the most applicable in this search.

Additional articles, not identified by the literature searches, were included. These articles were supplied by a colleague. These articles were:

Ramugondo and Kronenberg (2013): “Explaining collective occupations from a human relations perspective: Bridging the individual-collective dichotomy” (12).

The 2012 Townsend and Polatjko Lectureship given by Debbie Rudman, entitled: “Enacting the critical potential of occupational science: Problemising the ‘individualizing of occupation’” (78).

A transcription of a verbal presentation by Ramugondo and Kronenberg that was presented at the World Federation of Occupational Therapy Congress in Chile in 2010. This was included due to the paucity of other literature. On request, the presenters supplied a transcription of their verbal presentation.

Validation of reviews

To enhance the validity of the review process, another researcher also reviewed the identified articles. Using the same review form, this second researcher randomly selected three articles and followed the same process. After the process, the reviews were compared. There were no differences between the reviews, thus, no adjustments had to be made.

In conclusion, due to the limited availability of articles that explores the above, only seven articles and one conference verbal presentation were found to be relevant to the topic.

Step 3: Documentation of results of review

Similarly to the two previous steps, this step consisted of two tasks, namely data extraction and synthesis of information, and review of literature and document data.

Data extraction and synthesis of information

The review found that eight articles, including the transcription of the presentation, adhered to the search criteria. These articles are shown below.

Table 4.5: Articles reviewed

Title of article	Author(s)	Reference	Type of article
Guest editorial	Noralyn Davel Pickens and Kris Pizur-Barnekow	Journal of Occupational Science, 2009, 16(3), pp 138-139	Editorial
Co-occupation: Extending the dialogue	Noralyn Davel Pickens and Kris Pizur-Barnekow	Journal of Occupational Science, 2009, 16(3), pp 151-156	Opinion article
Co-occupation: The challenges of defining concepts original to occupational science	Doris Pierce	Journal of Occupational Science, 2009, 16(3), pp 203-207	Opinion article
A complexity science approach to occupation: Moving beyond the individual	Donald Fogelberg (1) and Stacy Frauwirth	Journal of Occupational Science, 2010, 17(3), pp 131-139	Opinion article
Learning to promote occupational development through co-occupation	Pollie Price and Stephanie Miner Stephenson	Journal of Occupational Science, 2009, 16(3), pp 180-186.	Research article
Explaining collective occupations from a human relations perspective: Bridging the individual-collective dichotomy	Elelwani Ramugondo and Frank Kronenberg	Journal of Occupational Science, 2013: 1-14. Epub 21 March 2013.	Opinion article
Enacting the critical potential of occupational science: Problemizing the 'individualizing of occupation'	Debbie Laliberte Rudman	Journal of Occupational Science, 2013: 20(4), pg. 298-313	Opinion article
Collective occupations: A vehicle for building and maintaining work relationships	Elelwani Ramugondo and Frank Kronenberg	Verbal presentation. World Federation of Occupational Therapy Congress. Santiago, Chile,	Transcription of a verbal presentation

		2010.	

In general, the review found that only one article could be classified as a research article. Although some of the other authors alluded to the information in the article as being based on research, they did not describe the research process within the article. Six articles were, thus, classified as editorial or opinion articles. From these, one was a memorial lecture that was published. Article eight was the verbal presentation by Ramugondo and Kronenberg. Lastly, the one research article that was reviewed was found to have superficial reporting of their methodology, thus, critical reviewing of the *believability* of the content of this article proved to be difficult. Unfortunately, due to the paucity of information available, the above- mentioned articles had to be mentioned in the literature review.

Review of literature and document data

The development of the concepts of collective and co-occupation

This literature review intended to explore how collective and co-occupations were defined in literature as well as to define the characteristics of collective and co-occupations. However to contextualise these definitions and characteristics we firstly need to explore how and why the concept of collective occupation developed within occupational therapy epistemology.

The concept of collective or co-occupations has evolved over the last few decades (10, 11, 40). Within occupational science, the premise is that human beings participate in occupations and activities daily throughout their lives and, through this participation, they develop a repertoire of knowledge and skills (30). Thus, participation in occupations is essential for all human beings since they are born with an inherent motivation to perform actions (30). Initially, the focus in the occupational science literature was on the individual person and the occupation. The literature

looked at the individual's personal factors and how these matched with the occupation in which the person wanted or needed to participate.

Nelson (1999) brought in the environmental perspective in order to understand participation in occupation which led occupational scientists to contemplate the person, the occupation and the environment (81, 82). An optimal fit between these three aspects is what occupational therapists strive for when planning therapy for clients. Nelson coined the phrase *occupational form* and describe it as the conditions that structure and guide occupational performance. In layman's terms, occupational form is the reason why individuals perform their occupations in the way they do. These reasons generally include the physical as well as the socio-cultural environment in which the client performs his/her occupations (82).

In 2009, Hocking urged occupational scientists to generate knowledge of the various occupations themselves and not just of how people participate in them (83). She said that both are important; that we cannot just focus on people and their behaviour but need to understand the occupations in which they participate. This led to a plethora of information being generated on the occupations themselves; however, the focus has always been on the occupations in which individuals engage (28, 78). Common occupations for collective participation, for example, quilting in a group, were also reported on, but from an individualistic perspective (28). These articles looked at the meaning the occupations have for the person or how the person's occupation was shaped by his/her personal and environmental factors.

Unease with current concept

From the late 1980s and early 1990s, various occupational scientists, including Dickie (2006) and Pierce (2004), argued that occupations are not always performed by only one person (10, 28). They claimed that the knowledge generated through occupational science is limited if occupation is only looked at from an individual perspective. In line with this, Fogelberg and Frauwirth (2010) argued that the individual perspective is a reductionist and linear approach to study a very complex

concept (18). Wilcock (1998) also alluded to the limitations of this individualistic focus as one of the reasons why occupational therapists are more hospital-based and not involved in community prevention and promotion programmes (31).

Within occupational therapy literature, a community is described as “groups of people acting collectively in a desired or needed occupation” (10)(p. 210). This can be interpreted as a group of people coming together to work alongside each other or to participate collectively. Several authors are calling the latter, co-occupations or collective occupations (11, 30, 40), for example, a group of women coming together to cook soup at a soup kitchen in a community. They might all be doing a different task, for example, one person peeling vegetables, while the other tends to the pot on the stove. However, collectively they cook the soup that could feed the community and themselves (25). An individual focus on occupational analysis and generated research would make it difficult for occupational therapists working with, for example, this group of women to understand the occupation in which they are participating.

In addition, for a long time many occupational therapy theorists, including Iwama (2006), have argued that fundamental theories in occupational therapy are built on Western philosophy (27, 78, 139). Part of Iwama’s argument is that, in many countries, occupations are done for the benefit of the community and not for the benefit of the individual. He is, thus, arguing for a more Eastern philosophy including a collective approach when considering the occupations in which people participate and why they participate.

Lastly, as previously stated in chapter two of this thesis, an individualistic focus limits the attention given to socio-political and social justice issues that affect occupational behaviour (78, 140). Thus, an individualistic focus is problematic, in general, when attempting to understand occupational behaviour but particularly problematic when exploring occupational participation of marginalised societies, for example, those in developing countries. When considering some of the infrastructure in South Africa such as the built environment and public transport, many people with disabilities are excluded from accessing needed services which, in turn, could limit their

participation in occupations. This kind of collective issue needs to be addressed on a socio-political level by collectives of people (78).

The change

In the late 1980s and early 1990s, change started to happen when certain occupational scientists argued that occupations are not always performed by only one person (10, 18, 28, 40). According to them, occupation is often shared and the collaboration between two or more people in the same occupation is essential for the success or failure of that occupation. This was the birth of the concept of co-occupation or collective occupations.

Pierce (2004) coined the term co-occupations. She defined it as the interaction between the occupations of two or more individuals which consequently shapes the occupation of all the individuals (10, 11). Pierce (2004) described co-occupation as "a dance between the occupations of one individual and another that sequentially shapes the occupations of both persons" (11)(p. 203). Thus, there needs to be interaction between the two people and this interaction influences and, ultimately, shapes both people's occupations. Similarly, Humphry and Thigben-Beck (141) and Olson and Esdaile (142) also defined co-occupation as an interaction where the occupation is dependent on the occupational performance of another. For example, when two people play tennis, each tennis player has his/her own motivation and skills to engage in the occupation, but usually the tennis players respond to each other's game and style of playing (11). If one player changes his/her style of playing, the other also has to if he/she wants to be successful. Thus, how they interact and respond to each other will shape their co-occupation. What is limiting about these definitions is that, when considering the literal interpretation, it alludes to only two people, that is, one's action influences that of the other.

Traditionally in occupational therapy, services were rendered to individuals; however, within the public health and community-based setting, therapists work with individuals, families and communities of people (143). Thus, it is unclear how the

definition of co-occupation relates to families and communities which are important collectives in African or Eastern culture. An example is the group of women at the soup kitchen described earlier. The above definition does not accurately reflect this group or community of women working together in the soup kitchen. It helps development of understanding of the interactive nature of co-occupations and how they respond together but does not describe how a collective that wants to address their own needs, for example, in a naturally formed group (as defined in chapter two), works together. A broader viewpoint, thus, needs to be considered.

In order to understand the concept of co-occupations in the context of these women working in the soup kitchen, the work of Pickens and Pizur-Barnekow (2009) becomes informative (40). In their description of the nature of co-occupations, they talked about “two or more people" (40)(p. 152). This led to the assumption that co-occupations are applicable to collectives of people including families and communities.

In similar vein, Fogelberg and Frauwirth (2010) stated that occupations can also be generated by collectives such as groups, communities and populations. They defined co-occupations as “groups of individuals acting collectively” (18)(p. 131). This definition cements the fact that co-occupations can be performed by more than two people, but its main contribution to the development of the definition of co-occupation was that it argued that the group has to act collectively. In other words, it is important that these occupations are performed collectively to ensure successful performance (18) which, again, is more in line with what the women are doing in the soup kitchen. Furthermore, they urged occupational therapists to analyse this concept of co-occupation or collective occupation, not simply the occupations in which individuals participate. This phase of the study intends to do this.

Although the concept of *co-occupation* is more prevalent in occupational therapy and occupational science literature, the concept of *collective occupation* is starting to emerge as a synonym. In their verbal presentation at the 15th Annual World Federation of Occupational Therapy Congress, Ramugondo and Kronenberg (2010)

defined collective occupation as “occupations that are engaged in by groups, communities and/or populations in everyday contexts, and may reflect a need for belonging, a collective intention towards social cohesion or dysfunction” (88). When analysing this definition, the basic characteristics are similar to those of *co-occupation* especially when considering the work by Fogelberg and Frauwirth (18). However, Ramugondo and Kronenberg expanded on the definition even further by highlighting a collective intent. For people to participate collectively in an occupation, their intention to participate should be similar. This intention could be conscious or subconscious. For example, the group of women at the soup kitchen all have the intention of helping to feed themselves and/or the hungry people in the community, but it could also be their intention to make life easier for others in their community. Ramugondo and Kronenberg’s (2010) definition also alluded to human being’s *need to belong* as a motivator to participate in collective occupations (88).

In their latest article, Ramugondo and Kronenberg (2015) adjusted their definition by adding that collective participation may or may not be for the common good, highlighting the fact that collective occupations are not always beneficial for all parties involved (12). Examples are occupation in the act of war or a group of gang members working together to attack members of a rival gang.

When reviewing how the definition of the concept of collective occupation has developed over time, it appears as if this evolution led to the development of the name as well. Initially when considering Pierce’s definition of co-occupation, the definition was a reflection of the name, namely two people engaging in occupation together.

On the other hand, the concept of *collective* is defined as “a number of people acting as a group” (39). The definitions from the last three articles highlighted above, either mentioned two or more people or a group or community of people. This is in line with the definition of a collective stated above as it describes people working together collectively or in a group to perform an occupation. The development in the definition of the concept is more reflective of the definition of collective occupation. Thus it

appears, when considering the latest definitions of this concept, the name *collective occupation* is more applicable than *co-occupation*. For the purposes of this research project, in principle, Ramugondo and Kronenberg's definition of collective occupation has been adopted. This is a more comprehensive definition that is reflective of the range of collectives seen in occupational therapy from formed groups to natural groups.

Characteristics of collective occupations

(Please note: in this section the core concepts were taken from occupational therapy and occupational science literature. Other literature was only used to clarify concepts.)

- Two or more people are engaging together

These occupations occur every day when two (or more) people work together on tasks, projects, programmes or even when playing games (144). However, the previous authors were clear that these people do not have to be physically together for collective action to happen, for example, a chess game that is played via the internet by two players on different continents. Although these players are playing against each other, they are engaging in the game together and respond to each other's actions, even if they are neither physically together nor necessarily participating at the same time. However, for the game to be successful, they have to both participate.

- It is interactive in nature

Pierce said that co-occupation is about working together (11), meaning that it involves a process that is interactive in nature and leads to mutual participation (11, 40). It requires a response from another person or persons involved in the occupation (10, 11), therefore, it is an active process. Although these responses are reciprocal in nature, they do not have to be symmetrical in nature (10) as long as there is some form of interaction. An example is that of the mother and child expounded on in the next paragraph. Additionally, the interactions or responses are not only based on language or cognitive responses, but could be based on affective or physical process observations.

According to Pierce (2009), co-occupations/collective occupations do not have to occur within shared space or time (11). For example, when exploring the interplay between a mother and her child, they do certain activities together such as playing a game, and certain activities separately, for example, the child leaving his toys all around the house while playing resulting in the mother having to collect and return them to their proper place or to guide the child to do it at the end of play time (17). Pierce (2000) described the latter as the daily routine pattern of the child and mother where both contribute to the same routine from different perspectives and with different intentions (17). This is not in line with Ramugondo and Kronenberg's (2015) definition that highlighted an intention to participate collectively as essential (12).

- There is shared meaning and shared intention in collective occupations

"Co-occupation is embedded in shared meaning" (40)(p. 152). It was suggested by Freeman (1999) that shared meaning comes from shared intention (145). The implication of this is that participants need to have an intention to want to participate in collective occupation or to achieve a certain goal. It is also suggested that if this intention leads to participation in collective occupation, it can, in turn, lead to shared meaning for the participants since, by participating collectively, they can develop the shared meaning as opposed to the meaning for each individual (40). Thus, shared intentionality can only happen when all parties involved in a collective have mutual

goals and perceive the other people in the collective as having the ability to participate collectively (40).

Ramugondo and Kronenberg (2015) expanded on this by highlighting the link between intention, and action and goals (12). There needs to be a shared intention and a goal for collective action to be successful. For example, when a husband and wife are parenting together they must have the intention of parenting together otherwise the result might be two parents with different styles of parenting, each working individually. This could have detrimental effects on the children or on their relationship.

On the contrary, Pierce (2009) argued that participants engaging in collective occupation do not have to have shared meaning or similar intentions although these do frequently accompany co-occupation (11). For example, when a mother is dressing her child, she might be more engaged in the occupation than her child since the child may not be able to dress him/herself yet. On the other hand, the child might see it as an opportunity to play and his/her intention is then to have as much fun as possible, while the mother's intention is to dress the child as quickly as possible. Although they are still participating in a collective occupation, their intentions for engaging and the meaning they attach to the occupation are different.

Pickens and Pizur-Barnekow (2009) further expanded on the understanding of this concept by stating that, for the occupation to be classified as a co-occupation, there needs to be a shared physicality and intentionality as well as shared emotional components (40) When analysing their statement, this is not in line with Pierce. They argued that all three areas are considered to be important, but for different co-occupations, the relationship between these three might vary. These three components contribute to the complexity of co-occupations.

- Co-occupation is part of a continuum of social occupations

As children get older and improve their social and communication skills, their play and social participation develop as well. For example, when considering the Revised Knox Pre-School Play Scale (146), which is based on Parten's stages of play (147), the scale highlights five types of play: solitary, onlooker, parallel, associative and cooperative. Each type of play requires an increase in communication skills and socialisation until the last stage where the child plays in groups. It is suggested in occupational science literature that occupational participation development follows a similar path when considering the social nature of occupation. The suggested types of social style of occupational participation are solo or solitary occupations, parallel occupations, co-occupations and group or collective occupations (11, 40). Throughout a person's life, he/she will have to participate in all the types of occupations. Unfortunately, the bulk of discourse and research focuses on solitary and parallel play, highlighting, again, the need for further research in the other types of play where collective occupations are involved.

4.5 DISCUSSION

4.5.1 INTRODUCTION

This section focuses on interpreting the combined results of phase one (stage one and two) as well as exploring the meaning of the results. It reflects on the significance of the results and how they answer to the objectives of phase one. Lastly, it explores how these results could inform phase two of the research.

4.5.2 DEMOGRAPHICS OF THE PARTICIPANTS

Within this sample, the demographic characteristics of the participants varied. When gathering data through interviews, focus groups or observations, it was suggested by Kielhohner (2006) that variety in demographics can ensure a wider range of opinions and views (129). This can enhance the depth and breadth of information.

The sample consisted predominantly of white females. Although these demographics are not reflective of the population of South Africa, they are representative of the

demographics of the occupational therapy population in South Africa (148). A more representative sample was invited to participate, but many declined.

4.5.3 CONCEPTUALISING COLLECTIVE OCCUPATION

Stage one focused on conceptualising collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.

This stage answered two questions, namely:

- What is collective participation in occupations and what are its characteristics? This question was answered by theme one.
- Why do people participate collectively in occupations? This question was answered by theme two.

The answer to the first question contributes to developing domains and items needed for describing and understanding collective participation in occupations. The answer to the second question does not contribute to the above, but highlights the importance of collective participation for human beings and contributes the importance of this topic for occupational therapy to the discourse. Within this discussion, the second question will be reflected on first.

4.5.3.1 Why do people participate in collective occupations?

According to the participants, collective participation in occupations is prevalent in South Africa. This research found that people join collectives and participate in collective occupations firstly, because of the innate needs of the individual and secondly, due to the enabling environment of the collective. Participating in collectives makes it possible for the innate needs of the individual to be addressed and met. Secondly, this enabling and supportive environment motivates them to continue their collective participation. Lastly, people stay in a collective because of

the success they experience through collective participation and the changes they can see for themselves.



Figure 4.2: Diagrammatical representation of theme two: why people participate in collective occupations

The results of this stage found that it is an innate need for human beings to be part of a collective. They do this because they want to belong. Reasons for this need to belong and to participate in a collective are accredited to their collective unconscious and their need to survive as individuals. People, thus, choose to participate in collectives mainly for egocentric reasons. These include existential fears, the need to survive, the need to progress and the need to belong or be *part of*.

The need to belong, to survive and to do better drives collective participation

Early contact and bonding with others is a biological need for infants (1, 149). This bonding and connecting allows human beings to start understanding themselves in relation to others but also allows for development of social patterns. Social development and the development of the *self* are influenced by others and the *self* is seen as a product of the society in which it develops (1). Thus, contact with others is considered a biological need that guides how human beings develop. Human beings

evolve into social beings whose identity is defined by their group belonging (60). This is in line with the results of stage two which highlight the *need to belong* to a group, as one of the reasons people choose to participate collectively (theme two, code one). As stated earlier, participants linked this need to belong with human beings' innate need to fit in as well as their need to survive and do better. These results are supported by Baumeister and Leary (1995) who argued that the need to belong is one of the fundamental motivators that drive action (150, 151). Similarly, this need was highlighted on Maslow's hierarchy of needs when he described human motivators (152). The need to belong drives action, in this case, to join a collective and participate collectively. This is in line with the findings of Oyserman, Coon and Kammelmeier (2002) who carried out a meta-analysis of studies that focused on scales for assessing individualism and/or collectivism (66). After coding twenty-seven scales they found eight similarities in the scale for collectivism. One of these was *belonging* which was described as "wanting to belong to, and enjoy, being part of groups" (66)(p. 9). Another reason highlighted in literature for this need to belong is found in evolutionary theory which suggests that human beings, through evolution, developed an interdependency on others, that is, that they are not able to live completely independently from each other (153). Human beings need to be part of a group to survive, to develop as individuals and to progress as a species (3, 153).

Results from this current study found that this need to belong is also due to learnt behaviour since, over time, human beings discover that it is more effective to work collectively. This finding, again, is supported by Schmid (2005) who reported on the link between collective formation and survival of human beings as a species, as reported above (3). For example, in South Africa, community members, through years of experience, have learnt that collective action is more powerful than individual action and that the collective voice is often more effective in highlighting problems than individual voices. This knowledge drives community members to join collectives in order to achieve positive change in their community and for themselves.

Additionally, the results of this study found that it is easier to choose to join a collective if there are similarities between the other people in the collective and the new person. These similarities could include needs and vulnerabilities or corresponding ideas and goals. The similarities or mutual commonalities make relating to others in the collective easier. These results are similar to what Yalom (1980) referred to as the curative factor of universality (53). Universality is when group members feel that others in the group are similar to them which helps people to move beyond the isolation they may have felt and motivates them to move towards change (53). In South Africa, where many people still struggle on a daily basis with survival and with feelings of powerlessness, isolation, anger or anguish about their circumstances (154), forming a collective with others who are experiencing similar feelings can facilitate universality. In addition, as stated above, through learnt behaviour many South Africans believe that collective action is one of the best methods to change their circumstances. This motivates them to participate collectively with others who are facing similar problems to them. Universality also facilitates cohesion amongst group members, an important factor in collective participation. Universality is about *fitting in* and enhances the feeling of group belonging because members feel that they are similar to others (53).

Lastly, African philosophy and the principles and values underpinning collectivism need to be considered in order to gain an understanding of why people need to belong. The participants referred to this as ubuntu and defined ubuntu as being part of a collective. This reference is in line with literature in which ubuntu is often linked with collective values, collective existence, co-operation, interdependence and collective responsibility. It is based on the understanding that the collective's welfare is more important than that of the individual (5). Additionally, in support of the findings within occupational science literature, the concept of ubuntu is also highlighted as an important consideration in the understanding of collective occupations and collective participation (12).

To a degree, considering ubuntu is correct when considering the general understanding of this concept; however, as highlighted in the general literature

review (Chapter 2), Pietersen (2005) argued that ubuntu is not a synonym for collectivism although it does underpin motivation for collective participation (73). Ubuntu influences the underlying understanding and philosophy of the individual that motivates him/her to be open to collectivism and to collective participation for the benefit of others. If the individual understands why the collective's welfare is important and how the collective's welfare can benefit the individual, it is easier to adopt this philosophy. Ultimately, it is about the individual's choice. This choice is influenced by collective consciousness, which was highlighted by the results of this study but, as was also found, this choice is affected by the environment in which the person lives as well.

Aside from the need to belong, the results of this stage found that personal needs are motivators for collective participation. This includes a need for change in the individual's situation in order to reduce feelings of powerlessness, to increase self-growth and confidence, to develop knowledge and skills and to achieve personal goals. These are all reasons why people choose to participate collectively in occupations. This is related to their innate need to survive and improve themselves and their own situation. It was felt by participants that individuals respond to the innate drive to survive and to improve their circumstances by joining a collective that can protect them and allow them to give voice to their concerns, thus, reducing their feelings of powerlessness. People also join a collective where the needs of the other members are similar to their own.

In support of the above results, the Collective Effort Model "suggests that individuals will be willing to exert effort on a collective task only to the degree that they expect their efforts to be instrumental in obtaining outcomes that they value personally" (155)(p. 119). According to the model, the degree of collective participation depends on whether the individual perceives that his/her personal goals are being achieved. If they are not achieved, motivation to participate decreases (155). Thus, individuals participate for egocentric reasons; however, this is not the only reason for participation.

'Positive feedback' and 'fitting in' are motivators to continue participating in collectives

The results of this stage show that there are many reasons why people participate collectively as discussed above, but reasons why they continue this participation is due to the support they receive from others in the collective, as well as the changes they perceive are achieved as result of their collective participation. These changes are not only limited to how the egocentric needs of the individual are addressed but also include achievement of outcomes through collective action. As one person said, "I see us making a difference". People's experience of self-growth, success in achievement of goals and changes to their situation or circumstances demonstrate to them that collective participation can be successful which, in turn, leads to continued participation or future collective participation. This can become a circular process as seen in figure 4.3 below.



Figure 4.3: Diagrammatical representation of the circular effect that motivates collective participation

These findings are similar to Du Toit's (1991) creative ability theory which suggests that if the task is challenging and the person is able to complete it successfully, this would be a motivator for the person to try again or attempt a task that is even more challenging (32). Thus, success increases participation which can lead to further success.

This increased motivation might be understood when considering the incentive theory (156, 157). This theory is based on incentives and conditioning and suggests that behaviour can be motivated by external incentives, for example, money, a reward or positive feedback. In this case, the reward could include the positive feedback, affirmation from others and achievement of goals. Experiencing success and getting positive feedback can, thus, be incentives for further participation.

According to the results of this study, the continuous motivation towards collective participation in occupations is also influenced by the enabling environment of the collective and the skills and knowledge gained in the collective. The more enabling the environment, the more motivated a person is to participate and to continue engaging. An enabling environment is created by an open attitude amongst members, a welcoming atmosphere in the group and during meetings as well as the collective cohesion discussed earlier. For a disempowered person, this could be a very nurturing environment that develops his/her confidence and increases his/her feelings of hope that the situation could change for the better (158). This feeling of hope was described by Yalom (1980) as 'instilling hope' and means that a person experiences feelings of hope when he/she sees other people, who are in the same situation, coping and improving their situation (53). This gives the person hope for the same result. An enabling group environment can also develop members' skills and knowledge, and create opportunity for them to develop their confidence by getting positive feedback from other members in the group. Lastly, an enabling environment creates opportunity for individual members to feel that their fears, insecurities and problems are not unique and that others also have these. Joining a group where people have similar problems is common, but finding out that people in

a collective have similar fears and concerns can be cathartic and can make an individual feel less alone. This can be linked to universality as described above (53).

In addition, the research found that the environment can influence continuous collective participation. The community needs to be an enabling and accepting environment for collective participation. Organisational theory suggests that appropriate infrastructure is important for initiation and coordination of collective participation (159). Resources, for example, a physical space large enough to meet or communication methods that make coordination possible when the collective is not together, are essential for successful participation. However, acceptance and support by other collective and community members, as well as leadership, are just as important.

A community ethos of collectivism or communalism would be more open to collective participation since it is part of the core principles of collectivism and is, therefore, linked with African humanism. However, post-colonial theorists caution that African and European philosophies have started to become intertwined causing an increase in capitalism and individualism in Africa (72). Thus, not all communities are currently supportive of collective participation. They might not be against it, merely indifferent, which could lessen the support and resources available for collective participation in those communities.

4.5.3.2 What is collective participation in occupations and what are its characteristics?

It is interactive in nature

When unpacking the concept of collective occupation, results from this phase suggest that it is two or more people participating in an occupation together. It is a dynamic process where people interact with each other and respond to each other's actions and communications in order to achieve certain outcomes. This is similar to the definitions for groups and collectives discussed in chapter two of this thesis which highlighted the interactive nature of a collective (4). The definitions further

emphasise the commonalities amongst members of the collective that bring them together, in contrast to a random collection of people in the same physical space (4, 44). The research results suggest that the commonalities amongst members can enhance the interactive nature of collective occupations as members can relate to each other.

According to results from stage two of this phase, this interaction does not have to be symmetrical in nature, meaning that some people could do more while others do less. Pierce and Marshall (2004) specifically linked mother-child co-occupations and reported that, although they participate in the same occupations, individual contributions might differ (10). However, when considering the social loafing theory that suggests that individuals exert less effort when working in a collective than they would when working alone (155), doing less than others in the collective can negatively influence the individual's motivation to participate which, in turn, can negatively influence the collective effort.

In terms of the shared physical space, the argument of Pierce and Marshall (2004) and the social loafing theory could both be correct, but it depends on the abilities and level of functioning of the people involved. For example, Pierce (2009) said that shared space and time is not needed as two people could work in the same occupation but on different parts of it, for example, a group of women preparing food and feeding people at a community soup kitchen. The people preparing the vegetables may start early in the morning, while others come in later to distribute the soup. Although they are working on the same occupation, they are not sharing the same space and time.

Results of this study also found that shared physical space and time can create opportunity for the interactive process described above and, thus, can enhance performance of collective occupations; however, according to Pierce (2009), this is not essential (11). There is evidence in literature that supports the proposal that the need for shared space will be dependent on the task that needs to be completed, the phase of planning, the cohesion of the collective and how well they work together. According to Barlow and Dennis (2014), different types of collective tasks have

different requirements (160). Some might need face to face meetings and others might not. Additionally, the differences in tasks would also require different collective processes and underlying group characteristics (160).

However, it is important to remember that, with today's technology, virtual space and meetings via the internet are common and easy. Barlow and Dennis (2014), who analysed the tasks performed by eighty-six groups, found that face to face group meetings were more effective than groups using communication technology and virtual mediums (160). Face to face contact gives opportunity for conflict management and sorting out of other processes that can impact on interpersonal relationships and the success of the collective. On the other hand, collectives where intelligence and cohesion are high and where the members have been together for a while and work well together will continue, irrespective of whether they are in the same physical space or performing the task at the same time.

Collective occupations are more than the sum of the parts

Theme one suggests that collective occupation is much more than the sum of the parts. Collective participation in an occupation is seen as an interaction between various members in a collective to achieve an outcome that can benefit the collective as well as the individuals in the collective. When trying to understand the nature of collective participation, we should take into consideration the process of interaction and not specifically at the outcomes of the interaction.

Firstly, the collective should not just be an accumulation of people in the same area doing similar things. They need to connect with each other and actively interact or engage with each other, not only on an affective level but also on a cognitive level (40). This is the core concept on which theme one is based. To understand this, it is important to understand the nature of collective participation in considering gestalt theory (161). Underpinning the gestalt theory was the principle of Aristotle who said, "The whole is better than the sum of its parts". In 1935, Koffka adjusted this by stating that the whole is not specifically *more* than the sum of the parts, but *something different* from the sum of the parts. Thus, the *whole* develops its own identity (66, 161). Therefore, if we apply this theory to collective participation in an occupation, it means that the whole, which in this case is a collective, needs to be more than just a collection of individuals. Through connecting with each other, the collective develops its own identity. The fact that an occupation is performed by a collective makes it more beneficial not only for the individuals in the collective but for the collective as a whole. The results of theme one aligns with the above theory. The participants talked about a collective identity that goes beyond the identities of the individual group members, and this can make the outcome greater than could be achieved by an individual working alone. According to Muir (2007), this collective identity "…allows us to generalise from individual encounters to a sense of solidarity" (162)(p. 9) which, in collaboration with shared values and shared action, is essential for collective cohesion (162). Similarly, this research study found that mutuality, which includes mutual vulnerabilities, needs, and visons, can also contribute to a

collective identity and enhance cohesion when contemplating it from the perspective of Yalom's universality factor (53).

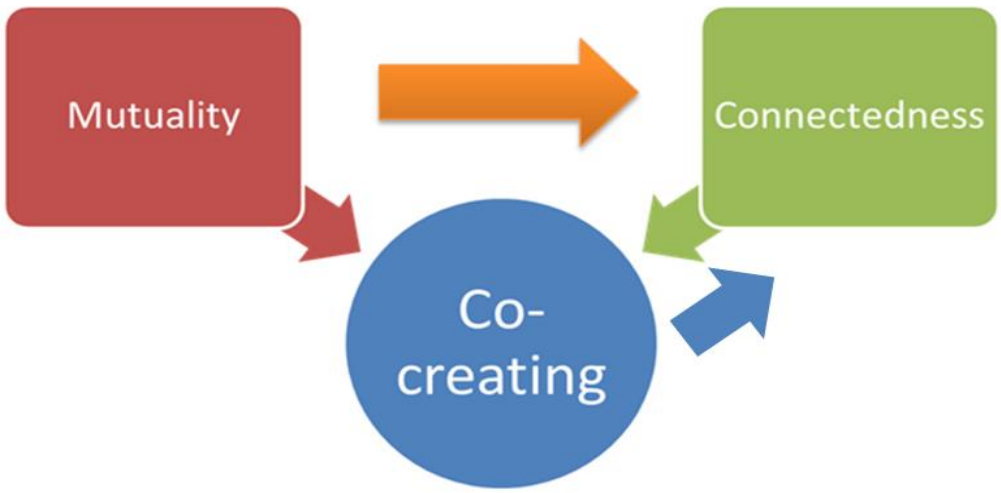

Figure 4.4: Diagrammatical representation of theme one

The results of this research study found that mutuality can influence connectedness or cohesion and is important for co-creation. In this case, mutuality, including mutual vulnerabilities, vision, benefits, accountability and responsibilities, develops and enhances the feeling of *connectedness* that is an essential component of collective participation. This connectedness makes it possible for members of the collective to co-create successfully. It is through this connectedness that the collective becomes *more than* or *different from* the sum of the parts and starts interacting to ensure successful co-creation of occupations. By co-creating occupations, outcomes beneficial to all parties involved can be co-created as well. Additionally, co-creating is important for cohesion and connectedness since, according to Muir (2007), shared action influences collective cohesion (162). These findings are also supported by Karau and Williams (2001) who reported on the importance of cohesion for collective performance and sustained productivity as well as for motivation (155). Similarly to theme two where success is a motivator for participation in collectives and collective

cohesion, Martens and Peterson (1971), while reporting on cohesion in sports team performances, proposed a circular model in which cohesion can lead to successful performance. This in turn, increases satisfaction, which, again, leads to improved cohesion.

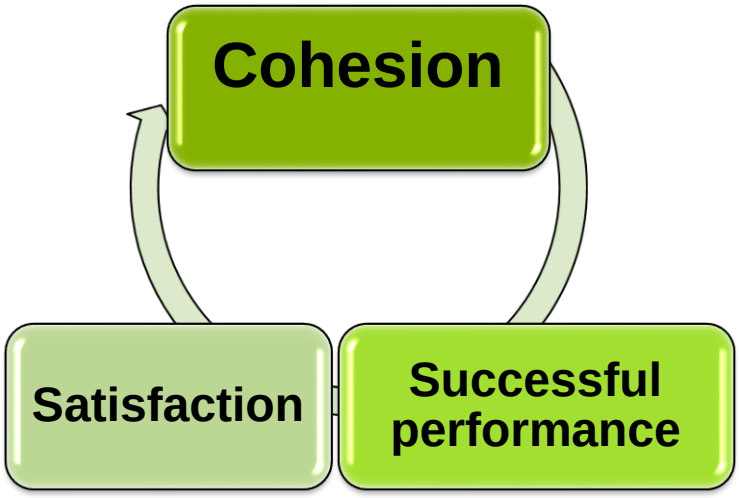

Figure 4.5: Circular model to demonstrate how success and satisfaction influence cohesion. Figure adapted from Martens and Peterson (1971)(163).

According to participants, connecting with others or cohesion goes beyond physical or cognitive cohesiveness to what participants (of this current research study) called a *spiritual connection* that includes affective and emotional connectedness as well.

The findings of theme one are also in line with those of Pickens and Pizur-Barnekow (2009) who stated that the nature of collective occupation is that it should have shared physicality, intentionality as well as shared emotionality components (40). However, the results of this research study found that, although physicality can develop *connectedness* faster, it is not essential for co-creating occupations. What is essential is the mutuality which, in part, is similar to Pickens and Pizur-Barnekow's (2009) *emotionality* and *intentionality* (40).

When considering the aim of this phase – the understanding of the concept of collective participation in occupations, results from this stage clarified how the

concept developed within occupational therapy as well as identified the defining characteristics of collective occupation. While a comprehension of the development of the concept is important, it is not relevant to the understanding of collective participation in occupations. However, it can be significant in gaining insight into why this concept is important for occupational therapy and why our understanding about it needs to be developed further.

Intentionality to participate is vital for collective occupations

Intentionality as a characteristic of collective occupations has been debated in occupational science literature. While collective intentionality was especially highlighted as important by Ramugondo and Kronenberg (2013), Pierce (2009) stated that it is not essential. In favour of Ramugondo and Kronenberg (2013), Searle (1990) argued that collective intentionality lies at the core of collective action (164). Searle clarified his statement by saying that collective intention is not just an accumulation of people who happen to do the same thing at the same time. It needs to be an accumulation of people who have planned together to perform a certain action (164). This is in line with theme one that says that collective participation is more than the sum of the parts. This is not just an accumulation of the parts or people but a collective formed with collective intentionality, goals and collective action to achieve the goals. This was supported by Kendall (2013) who, when he defined collective behaviour said, “not just the sum total of a large number of people acting at the same time; rather, it reflects people’s joint responses to a common influence or stimulus” (44)(p. 116).

4.5.3.3 Review of the literature

Stage two focused on conceptualising collective occupations from profession-specific literature in order to develop the constructs that need to be included in the development of domains and items for collective participation in occupations.

The literature review answered the following questions:

1. How is collective/co-occupation defined in literature?

2. What are the defining characteristics of collective/co-occupation?

The three searches that were conducted identified eighty-two articles. However, there was much duplication among the three searches as some articles adhered to the search criteria of all three searches. The various meanings of the term *occupations* were problematic as the majority of the articles defined this term differently from occupational therapy and occupational science. The most common interpretations of this term were from political science and sociology perspectives which focus on occupation of land and collective action, which is fixed on mass action. This was also the reason that the last search included the term *occupational science*. Since it was the intention of this literature review to focus on the occupational therapy and occupational science perspectives of this concept, articles from the perspective of other disciplines were excluded.

Concepts of *collective occupation* and *co-occupation* were both included in the search as they are considered synonyms of each other.

Of the eighty-two articles initially identified, only five fitted the search criteria after duplicated articles were excluded. The researcher was sent an additional three articles by a colleague, which brought the total number of applicable articles to eight. Seven articles were printed in the Journal of Occupational Science which is a peer-reviewed open access journal. The journal publishes research as well as opinion articles. Only one of the eight articles was written in a research article format as suggested by the nature of the journal. It was therefore classified by the researcher as a research article. The one research article that was reviewed was found to have superficial reporting of the methodology.

Finding a critical appraisal guide to direct the review of articles proved to be problematic. When exploring literature that focuses on critical appraisal of articles, it

was found that the bulk of the articles focus on critical appraisal of research articles. Published guidelines for assessing research articles are numerous and the suggested criteria focus on the relevance of the study question, methodology, what the study adds to the literature and the validity and reliability of the results. Additionally, the guidelines propose a critical appraisal of the variations in the analysed findings and whether all sources were well referenced (165, 166). However, since the bulk of the articles reviewed in this literature review were opinion articles and did not adhere to these criteria, the criteria could not be applied in a critical review of the articles. There are no specific published guidelines available to critique an opinion article. A systematic review process by Ryan, Coughlan and Cronin (138) was, thus, selected as a guide since it proposed all the traditional criteria applicable to reviewing a qualitative article but included other criteria such as *clarity of description of phenomenon of study*.

Additionally, the systematic review process suggested that the author's qualification should be evaluated as this could contribute to the credibility of the article (167). This was added as a criterion for this review. Unfortunately, due to the paucity of relevant information available on this topic, all the articles that were identified were included, irrespective of whether they adhered to all criteria or not.

In conclusion, the systematic literature review found that there is limited literature in occupational therapy and occupational science that focuses on the concept of collective occupation.

4.5.3.4 Combining the core characteristics of collective participation in occupations

Table 4.6 below shows the core characteristics of collective participation in occupations that were identified through the interviews, the specific questions that participants were asked relating to domains for collective participation in occupations, and the literature review. Altogether, thirty-six core characteristics of collective participation were identified; there was duplication between the three lists

which was eliminated. The final list of core characteristics of collective participation in occupations was used in phase two to develop domains and items.

Table 4.6: Summary of characteristics of collective participation from stage 1

POSSIBLE DOMAINS AND ITEMS		
From Lit review	From interviews	From participants
2 or more people	Mutual vulnerability	Collective action/acting as a collective
Interactive nature	Mutual vision	Achievement of outcomes as a collective
Mutual engagement	Mutual benefit	Pattern of exchange with each other.
Requires repose from other participants	Mutual accountability	Leadership: Ability to lead self as a collective and/ or nomination of leader
Active process	Mutual responsibility	Handling of resources
Not symmetrical in nature	Connecting with others	Ability to take initiative
Do not have to occurs in shared time	Collective identity	Do they have insight and are they reflective in their actions
Do not have to occurs in shared space	Symbiotic combined action	Interaction with other collectives
Shared meaning	Co-creating harnesses group strengh	Ability to problem-solve as collective
Shared intentionality	Co-creating created internal change	Ability to make decisions as a collective
Shared physicality		Look at group process
Shared emotionality		Quality of produce
		Ability to make maximum effort
		What motivates them Handling of anxiety, conflict inside and outside collective



4.5.3.5 What could this mean for occupational therapists working with collectives?

As stated previously, many occupational therapists are working in community-based settings with communities or collectives which have to participate in collective occupations to enhance their health and to develop their community. It is, thus, imperative for these occupational therapists to understand the nature of collective participation as well as why people participate. The characteristics of collective occupations identified above can be used by occupational therapists to generate a more in-depth understanding of the collective participation of the specific collectives with which they are working. This could ensure the facilitation of optimal participation in collective occupations by the creation of an environment that makes it attractive and easy for people to participate collectively. Occupational therapists need to consider how groups of people work together to contribute to one or a series of occupations. Considering only the *sum of the parts*, may not lead to a complete understanding of the community. There needs to be an understanding of what makes collectives function optimally and how to enhance collective participation, since optimal collective participation is essential for community development. Understanding of all of the above, in turn, could lead to improved participation in preventative and promotive programmes within health and social services.

4.6 CONCLUSION

In conclusion, this phase of the study looked at the nature of collective participation in occupations and why people participate collectively. The results found that collective participation is a common occurrence that happens daily. Collective participation is a symbiotic interaction between various parties that can benefit a collective and the individuals in a collective. Mutual vulnerabilities, visions, benefits and accountability create a connection that makes it possible for a collective to co-create. In addition, the benefits the collective experiences through collective participation are motivators for continued participation in collective occupations. The core characteristics that were identified, describe the important components that

need to be considered when trying to understand collective participation in occupations. These include: two or more people engaging together, the fact that shared space and time are not essential, the interactive nature of collective participation and the necessity of a response from another person or persons involved in the occupation. Responses need to be reciprocal in nature; however, they do not have to be symmetrical in nature. Additionally, meaning and shared intentionality is important.

Lastly, the study found that people participate in collective occupations due to innate needs as well as personal needs, and an enabling collective environment makes it possible to continue collective participation. However, participation can be a learnt behaviour as well.

With this added insight into collective participation, tools and methods to enhance understanding of specific communities' or collectives' readiness or ability to participate collectively, have to be developed. This is the next step in ensuring an understanding of collective participation.

CHAPTER 5: PHASE 2: OPERATIONALISATION

DEVELOPMENT OF DOMAINS, ITEMS AND OBSERVABLE ACTIONS

"Umuntu ngumuntu ngabantu"

(Zulu Philosophy: Original author unknown)

"I am because of who we all are"

5.1 INTRODUCTION

This chapter reports on the relevant literature that was reviewed in order to understand the VdTMoCA as well as its link to collective participation. Furthermore, it describes the methodology that was used to develop domains, items and observable actions for collective participation. This is followed by a description of the domains, items and descriptors for observable actions for collective participation on seven levels of participation. Lastly, the results of this phase are discussed to highlight their relevance and meaning.

This phase focused on the development of domains, items and descriptors for levels of collective participation in occupations. The results of phase one of the study were used to develop these. The VdTMoCA was chosen to provide structure and used as a guideline to develop domains and items (32). The model, as it is currently, provides descriptions of observable actions on different levels that the clinicians can use in their assessment of the client (see appendix G for a summary of observable actions for individual clients). Descriptors for observable actions for each level were developed as required by the model. The development of the domains and descriptors for observable actions were based on principles and guidelines provided by the model for understanding the creative ability level of individual clients.

5.2 LITERATURE REVIEW TO JUSTIFY MODEL USE AND INFORM DOMAIN DEVELOPMENT

Within this section, the VdTMoCA will be described briefly and a justification of why this model was chosen as a basis for development of domains and items will be explored. Furthermore, the link between the underlying theoretical constructs of the model and collective participation will be investigated.

5.2.1 VONA DU TOIT MODEL OF CREATIVE ABILITY

The VdTMoCA was chosen as the structure for the development of domains, items and observable actions for levels of collective participation as it is a well-known model in South Africa and its application in practice is increasing significantly abroad.

The VdTMoCA is a South African practice model that originated from theory developed in the 1970s by Vona du Toit, an occupational therapist (95, 168, 169). This model is used within occupational therapy to understand how individuals participate in everyday activities and, specifically, how they function in those everyday activities (105). Currently, this model is taught to occupational therapy students on an undergraduate level at universities in South Africa, as well as at one university in the United Kingdom (UK) (170). Originally, the model was only used by clinicians in South Africa; however, over the past five years the use of this model has spread within the UK and Japan, with both South Africa and the UK hosting annual symposiums and conferences that focus solely on the understanding and use of the model (95, 169).

In South Africa, it is extensively included in the curricula of five out of the eight training institutions. A study by Casteleijn (2012) that surveyed the use of models in South Africa, found that the VdTMoCA is the third most common model taught to students (95) after the Model of Human Occupation by Kielhofner (98) and the International Classification of Functioning (171). A study by Owen, Adams and Franszen (2013) that reported on the use of models by South African occupational therapists, found that the VdTMoCA is the most common model used within

Gauteng province (90). In line with these findings, results from a national study by Abed, Fiddes, Hamman, Sayed and Zakariudakis (2014) that explored the use of the VdTMoCA in community-based settings in South Africa, found that the majority of the participants reported that they used the VdTMoCA for assessment and treatment planning within this setting (106). Additionally, 90% of participants reported that they use the principles of the model since it ensures that treatment planning is appropriate for clients. However, when interpreting these results the small sample size needs to be taken into consideration.

In a survey conducted in 2013 by Sherwood, Crawley and Taylor (2013) that looked at British occupational therapists' perspective of the use of the model, it was found that 97% (n=71) of the sample felt that the VdTMoCA could be used with clients with any type of diagnosis and in all fields of practice. The majority of the participants felt that this model guides assessment (86%) and treatment planning (99%) and that their intervention has been more effective since they started using the model (87%) (172).

5.2.2 THE THEORY OF CREATIVE ABILITY

Du Toit (1991) developed the theory of creative ability based on work from Buber, Frankl, Rogers Maslow, Piaget and Weinstein and Schossberger (32, 169). She defined creative ability as the ability of a person to present him/herself to others freely (32). This presentation should be without anxiety and limitations (168). Additionally, it is also a person's ability or preparedness to function at a level of competence, which depends on the person's ability and skills. Du Toit (1991) believed that creative ability develops sequentially over a person's lifespan and that optimal creative ability is dependent on optimal circumstances and optimal creative potential of the person (32). According to creative ability theory, growth or recovery of creative ability takes place through various levels and a level cannot be skipped (32, 168). Usually development of creative ability does not happen automatically, but the person has to facilitate this growth through the development of self, which could lead to the further development of creative ability. For this growth to occur, certain interdependent elements are required (32, 168, 173).

- Creative capacity is seen as the person's potential to be creative. It is influenced by a person's context (social, physical, political, economic, virtual and so on), intelligence, mental status, physical and social health (32, 105, 168). Therefore, creative capacity can differ from one individual to the next based on these factors (32, 105). To reach optimal creative capacity is a long process of development and people seldom reach it, leaving most individuals with room to grow.

- Creative response is the positive attitude towards opportunities offered. It is also the person's preparedness to use resources in order to participate, despite anxieties about outcome or capability. This precedes creative participation (32, 105, 168, 174).

- Creative participation is the process of actively participating in daily activities. The person is expected to take an active rather than a passive role in these activities (32, 168, 174).

- A creative act is the final product of the creative response and creative participation. This product can be tangible or intangible (32, 168).

In essence, to have optimal creative ability, one needs to have the potential, must be able to respond positively towards opportunities and actively engage in daily activities that contribute towards a final product. This means that with optimal creative ability, a person is able to engage optimally in the highest level of occupations that are appropriate to his/her social/cultural background, gender, age and life milestones. If any of these interdependent elements are affected through social circumstances and limiting mental or physical abilities, optimal creative ability cannot be obtained (6). Accidents, illnesses, disabilities, trauma and environmental changes can cause a regression of a person's creative ability. It is, therefore, important to note that creative ability is dynamic and can vary from person to person depending on personal and environmental demands (7). In addition, it is believed that a person's motivation or volition guides his/her actions and, without volition, there is no appropriate action or behaviour.

The theory of creative ability which evolved into a model over many years, has nine sequential levels of motivation and each level of motivation has an associated level of action (95). Each level describes nine components which include an individual's motivation; ability to perform action; ability to handle tools, materials and objects in the environment and to handle the situation within his/her context; ability to relate to others; ability to show initiative; ability to show effort; ability to control anxiety and the ability to produce a quality end product (32, 95). These levels are used to understand an individual's level of functioning or level of participation and guide intervention. The planned intervention programme for the individual client should endeavour to ensure optimal functioning on a specific level or to progress sequentially to a higher level of creative ability or to the optimal level for that specific client (95, 168, 175).

In Du Toit's paper delivered in 1974, she highlighted five components that needed to be explored. These included: the quality of tangible and intangible products; the ability to relate to materials, objects, people and situations; the ability to control the effect of anxiety; the ability to take initiative and the ability to make maximum effort to ensure that demands are met (175). However, when she described the levels of creative ability of children in the same paper, she described each level in terms of the nine components and not the five components mentioned above. She split ability to relate to materials, objects, people and situations into three separate components and included *motivation* and *action* as components, resulting in nine components (175). In her description of each level she included observable actions. These actions are level-specific and give a detailed outline to clinicians of what actions would indicate a specific level. For example, if a clinician observed certain actions, they could compare these actions to Du Toit's suggested actions for each level. These descriptors for observable actions make levelling of clients easier (168).

At Du Toit's untimely death in 1974, the theory was not yet fully developed and the subsequent development of the theory and model was based on papers and presentations by Du Toit before her death (169). Contributors to the development of the theory and the model included Van der Reyden who developed an assessment tool named the Creative Participation Assessment to gain insight into a person's

level of motivation and action. She also contributed to the available knowledge on the different levels (105, 169, 173). De Witt (2005) diverged from the domains used by Du Toit to describe each level of creative ability according to the areas of occupational performance, that is, personal management, social participation, work and leisure (95, 168). De Witt also expanded on the knowledge base available on task concept (176). Zietsman developed the Functional Level Outcome Measure (FLOM) which was specifically designed for use in a chronic mental health setting (177). Development of this outcomes measure was based on the levels of the VdTMoCA. Lastly, Casteleijn's contribution was the development of an outcomes measure based on the VdTMoCA namely the Activity Participation Outcomes Measure (APOM)(178). Additionally, Casteleijn and De Vos contributed information on the application of the model within vocational rehabilitation and medico-legal settings (174).

Although the VdTMoCA is widely used by occupational therapists in South Africa, and increasingly abroad, to assess and treat an individual's level of creative ability (179, 180), there is ongoing criticism, especially within South Africa, about the model. Firstly, there is still a debate around its status as a model, that is, whether it is a frame of reference, a theory, a model or an approach (169, 174). It is clear, when reviewing the literature, that Du Toit developed a theory, but when and why it was reclassified as a model was never documented. Sherwood (2011) suggested evaluating the model "against criteria for theory and for occupational therapy models" to finalise this debate (169)(p. 21).

A frame of reference is defined as a set or collective of assumptions, philosophies, ideas or conditions that determines or guides how something will be interpreted, handled or approached (181). Within occupational therapy, the definition of a frame of reference is debated. While Mosey (1992) defined it as knowledge that is profession-specific (182), other authors defined it as non-profession-specific knowledge that is used by occupational therapists (92, 183). Irrespective of how it is defined, it is believed that frames of references can guide practice by defining concepts, beliefs and assumptions specific to an area of practice within occupational

therapy (183), for example, the biomechanical and cognitive-behavioural frames of reference.

On the other hand, a theory is defined as a theoretical, conceptual base that guides intervention, research and teaching (174). It is overarching and acts as the foundation for the development of models, frames of reference and guidelines. Cole and Tufano (2008) took a more practical approach to this definition and categorised theories into three types, namely, paradigms, frames of reference and occupation-based models (184). Lastly, a model is believed to guide operationalisation of theory and clinical application by conceptualisation (174). It helps occupational therapists to make clinical decisions and ensure systematic and comprehensive assessment to help with the holistic understanding of a client and his/her context (92).

When considering these definitions, it can be said that the initial creative ability theory was just that - a theory. It gave occupational therapists insight into the behaviour of human beings and into how their volition drives their action. However, it did not guide operationalisation of the theory or clinical application. Conversely, in subsequent writings, for example, her paper entitled “A course for occupational therapists at schools for cerebral palsied” presented in 1974, Du Toit described each level in detail and proposed aims and methods for presenting treatment (185). This can be interpreted as operationalisation of theory and guidance of clinical application, which fit the definition of a model. The same can be said for the introduction of Van der Reyden’s Creative Participation Assessment (105) and De Witt’s descriptions of the levels of creative ability and proposed objectives and intervention principles (168), which not only guide application of the theory but also operationalise the theory and make clinical application possible. It can, thus, be said that, collectively, the initial theory and the subsequent additional contributions adhere to the descriptors of all three definitions mentioned above, including that of a model, in varying degrees. This could be what causes the continuous debate around this issue. Additionally, the model guides in-depth assessment of the individuals and how they relate to others, but it does not guide the occupational therapist’s understanding of the contextual and external factors that impact on functioning. Considering the

context in which a client performs his/her occupations has been highlighted as important to ensure holistic intervention in occupational therapy (16, 28). It can, thus, be said that this model cannot give occupational therapists a holistic view of the client and his/her context.

Secondly, although the model has been used in South Africa for the last fifty years, little research has been done on the fundamental components and suggested levels of the model (168, 173, 174). This has led to criticism of the use of the model since the bulk of the research undertaken involving the model has only been done in this century (169). Additionally, there was limited focus in the research on gaining a deeper understanding of fundamental concepts underpinning the model and theory. In 1994, Van der Reyden advocated further exploration of the understanding of the concept of motivation, an investigation into whether motivation and action levels really correspond and a substantiation of evidence to verify whether a "certain level of volition always leads to a certain level/ type of action" (173)(p. 6). However, the only published research on deeper understanding of fundamental concepts was done by De Witt who investigated the behaviour and criteria used to assess task concept (176). This study defined the components for task concept for individuals.

Casteleijn's study, which used "measurement principles to confirm the levels of creative ability as described in the Vona du Toit Model of Creative Ability", is the only published study that investigated the validity of the levels (186). Through the use of the threshold ordering of the Rasch Measurement Model, it was found that the levels do exist. In addition, one study reported on the psychometric properties of the FLOM (177). Rasch analysis showed uni-dimensionality within the construct of functional levels and internal consistency of the items of the FLOM (177).

In 2001, Casteleijn measured the psychometric properties of the measuring tool developed by Van der Reyden to assess the level of creative participation (187). It was found to have good inter-rater reliability and construct validity; unfortunately, the measurement tool has not been published in its totality, which makes it difficult for clinicians to use.

The remainder of the current research related to the model is either focused on the APOM developed by Casteleijn (178, 188) or the application of the model within clinical settings. For example, Jansen (2008) considered using the VdTMoCA to understand the motivation of patients with diabetic foot problems (189) and Sherwood (2005) explored the methods and processes of creative ability assessment used by occupational therapists in mental health (190). Abed et al. (2014) completed a pilot study to explore the use of the model in South African community-based practice settings (106).

Lastly, clarification on fundamental terms of the models is needed. Although the levels have been reported on comprehensively, concepts like *volition* and *action* need further clarification. The choice of domains or components used as a structure to describe each level (the individual's ability to handle tools, materials and objects in the environment; the ability to handle situations within his/her context; the ability to relate to others; the ability to show initiative; the ability to demonstrate effort; the ability to control anxiety and the ability to complete a task, the ability to produce a quality end product) was not justified or defined in detail in any of Du Toit's writing. This lack of clarity on fundamental concepts leaves them open to subjective interpretation by clinicians, which could influence the objectivity of the model.

However, the model is user-friendly and remains the only professional-based model that has published levels to guide clinicians in assessment and treatment of individual clients. It is also the only indigenous occupational therapy practice model in South Africa (174). Through the use of the model, clinicians have an understanding of the client's level of motivation and how it influences his/her actions. This model makes it possible to measure motivation and behaviour and use these measurements to plan outcomes. It also guides treatment planning to ensure that this is on the right level for the client, that is, realistic for the client's capabilities and capacity and challenging for the client without being overwhelming (168, 174). According to De Witt (2005), this model is unique in the way it succinctly guides achievement of growth within a client's occupational performance (168).

A study by Abed et al. (2014) found that occupational therapists working in primary health care and community-based rehabilitation settings in South Africa are using this model in assessment and treatment planning of individual clients (106). In discussions at the Creative Ability Colloquium, clinicians working in these settings also reported that they use the model when planning intervention programmes for communities and collectives within a community. In order to understand a collective's creative ability level, some clinicians assess each individual client within a group/ community to determine his/her level of creative ability. They would then group clients according to their levels for group-focused intervention. This process can be very time-consuming, and it is also unrealistic to expect therapists to assess each person before planning a group intervention especially, for example, when planning a health promotion programme for a community. Additionally, group literature has shown that a group's functioning is not always the sum of individual functioning (161), thus, assessing individual clients, according to this theory, would not give the clinician full insight into the potential and ability of the collective. Other clinicians try to understand a group's behaviour by using the descriptors of observable behaviour identified by the VdTMoCA for individual clients. The effectiveness of this method is also not known. In essence, no information is currently available in occupational therapy literature on how to use this model to measure group/community participation.

5.2.3 UNPACKING CONCEPTS RELATED TO THE VDTMOCA

5.2.3.1 Creativity

There are many definitions for this term among the different professional groups and disciplines and these definitions, at times, contradict each other (32). As stated above, Du Toit defined the concept of creative ability as a person's ability to present him/herself freely to others without anxiety, inhibitions or limitations (32). It is a process of creating or developing a novel, tangible or intangible end product and it reflects the uniqueness of the person (191) as well as being related to creating the self or the world in which one lives (32). According to Buber, it is in a human being's nature to want to create and make things (192). However Du Toit (1991) felt that the

definitions provided in literature were vague and too diverse and, thus, urged occupational therapists to use the term minimally. She encouraged the use of “more specific and functional significant terms: creative capacity, creative responses, creative participation, creative act and creative ability” (32)(p. 22).

Schmid (2005) explored the concept in depth and defined creativity as “the innate capacity to think and act in original ways, to be inventive, to be imaginative and to find new and original solutions to needs, problems and forms of expression. It can be in all activities” (62)(p. 6). When considering this definition, it is in line with Du Toit’s descriptors of the higher levels of creative ability, which also require individuals to be original, inventive and independent in their actions and handling of tools, materials and situations, and in their ability to form meaningful relationships (32).

Similar to Du Toit, Schmid (2005) believed that all people have the capacity to be creative, but the degree of this can vary, and that this capacity to be creative is biological (62). To understand the biological link, the functioning of the brain needs to be explored. Firstly, Bogen and Bogen (1999) reported that the right hemisphere is important for creativity (193). However, the left hemisphere that focuses, for example, on language, logic and analysis, contributes to the creative process by processing information, developing insight and forming analogies, which are all important for optimal creativity (193, 194). By using creativity, for example, to problem-solve by analysing or to learn, additional permanent pathways in the brain were developed. Development of these pathways is thought to be one of the reasons why homo sapiens progressed and Neanderthal man did not (3, 195). The shift in human behaviour in the middle to upper Palaeolithic period, where there was a significant increase in the creative use of materials and tools, is thus attributed to the development of complex cognitive systems, meaning that the shift is believed to be biologically driven rather than socio-culturally driven (3, 196). In line with this, Kielhofner (1985), who used systems theory to describe human beings as an open system, believed that development or interference in one area influences development and functioning in general. Thus, increased use of creativity in, for example, problem-solving could not only improve one’s ability to problem-solve but

could also lead to improvement in other areas, for example, the ability to manage stress (197).

However, Csikszentmihalyi (1995) said that creativity is also a behavioural phenomenon that is influenced by the interactions with environment and context (198). This thinking is linked to systems theory and gestalt theory, which believe that human behaviour needs to be understood as an open system and that it needs to be explored in its totality rather than just the underlying components. There are many socio-cultural obstacles to creativity, for example, social norms, beliefs or policies, as well as environmental issues like poverty and limited resources that can hinder development of creativity (3). In line with this, Du Toit's description of creative ability stated that humans need to have the capacity or potential to be creative. This capacity is influenced by his/her biological and personal factors (such as intelligence, mental status, physical abilities) as well as the environment (32, 105, 168). These factors cause differences in the creative capacity of individuals. According to Du Toit, capacity needs to be developed and it is not fully innate for human beings (32, 105).

It can, thus, be concluded that biology is important when it comes to creativity, but creative development is also influenced by environmental influences. Creativity can be seen, ultimately, as an outcome of the interaction between biology and social interaction (3).

Creativity can be found in everyday activities and it is essential for optimal participation in occupations. It is through participation in occupations that creativity is expressed and further developed and, in turn, the presence of creativity and creative ability makes it easier to engage in occupations. Without creative ability and creativity, participation in occupation is not possible (3).

5.2.3.2 Initiative

Initiative is defined as the power to start or continue a process, task or plan (199). It is related to a person's readiness to take action and the ability to make the decision to start that action. Du Toit (1991) linked it to self-application and self-direction,

making initiative an internal component for humans (32). It should not be confused with habituated behaviour, therefore, it is more evident in a novel situation in which habitual behaviour has not been formed (32). Additionally, initiative is reliant on adequate knowledge, the level of intelligence and self-confidence. There also needs to be an intentionality to act, which means that taking initiative is voluntary. Having intentionality and self-confidence in one's own skills and abilities within a context, are building stones for initiative (32).

Initiative can also be enhanced by past experience. This is linked to knowledge and not habitual behaviour. Knowledge and insights that were gained through past experiences can guide action taken in novel situations and act as motivators to take initiative.

For initiative, one must have an awareness and receptiveness of one's context. A person needs to be actively engaging, listening and talking and also feeling a level of responsibility. This responsibility can be related to oneself or to others within one's context or just the context itself. There needs to be a feeling of *I ought* or *I should* (32).

Lastly, according to the third stage of Erickson's development theory (Erickson 1963 in Meyer and van Ede, 1998), initiative versus guilt, children begin assuming control of their environment by taking the initiative to plan and implement activities, to face challenges and to accomplish tasks successfully (200). During this stage, children should be allowed to explore and to self-initiate since, through doing this, they learn and build self-confidence. Ability to take the initiative also develops independence and the ability for children to assert themselves in socially acceptable ways (200, 201).

Du Toit (1991) believed that initiative is a quality that is present in all human beings but can only emerge when there is adequate intelligence and when the person accepts responsibility for this intelligence (32). Therefore, it is only present in the higher levels of creative ability.

5.2.3.3 Motivation

Motivation is considered to be one of the most complicated topics in psychology (157), but it is seen as an essential component when exploring occupational participation (32, 79, 187, 197). Motivation is related to goal-directed behaviour and is defined as biological, social, emotional and/or cognitive forces that drive, guide, initiate and maintain goals-directed behaviour and actions (202). Therefore, it is considered to be the inner drive or internal state of a person that impels behaviour, action and initiation (157, 203). A person's motivation is evident through his/her actions, therefore, action can be seen as a manifestation of motivation. Motivation is dynamic and is dependent on the particular stage of human development (32). It is, thus, suggested that motivation is not a unitary phenomenon, but that the amount of motivation as well as the type of motivation people have, can differ (204).

Motivation can be divided into intrinsic and extrinsic motivation (204, 205). Self-determination theory (SDT) highlights the reason for participation as being the difference between the two types of motivation (204, 206). Intrinsic motivation is an internal motivation that drives the person to engage in action due to an inherent interest or for inherent satisfaction. This type of motivation is seen as essential for normal physical, cognitive and social development. Extrinsic motivation is driven by external stimuli, for example, an incentive. Traditionally, intrinsic motivation was seen as important, especially over the long term, since it can lead to achievement and self-actualisation while extrinsic motivation, although still considered powerful, has limited potential for sustainability (204). SDT argues for extrinsic motivation to be viewed differently (206) and proposes that motivation should be viewed on a continuum, which ranges from unwillingness or amotivation to passive compliance or active commitment (206). Extrinsic motivation may be used initially but, through a process of internalisation, intrinsic motivation can develop (206). This continuum is similar to the continuum seen within sequential levels of motivation in the VdTMoCA, which also start with the external motivation needed for action in the lower levels and move on to internal motivation present in the higher levels.

In addition, at any given time action is driven by various motivators (157). Some motivators are as basic as biological needs and others are as complicated as environmental barriers. There are various theories that attempt to explain motivation. These include the instinct theory that believes behaviour is instinctive and that it is activated by environmental stimuli (207). The behaviour of human beings is driven by innate motivators. For example, babies are born with reflexes that impel them into certain behaviour if conditions are right - the rooting reflex motivates actions of sucking and the turning of the head to search for a nipple (157). This reflex is also important for later development such as eating. In line with this, the biological need of an infant to bond with his/her mother drives actions such as reaching out (1, 157).

The instinct theory is, however, unable to explain the individual differences between people (208). For example, some individuals engage in high-risk adventure sports that many others would avoid (157). In addition, the theory only looks at behaviour linked to instinct and it is unclear how learnt behaviour fits into this theory.

Secondly, the drive-reduction theory argues that homeostasis is the main driver for behaviour. It is a biological need for human beings to ensure the body maintains a state of equilibrium (157). When an internal or external factor disrupts the balance, a motivation occurs to correct the balance. For example, high heat causes the body to start sweating in an attempt to cool the body surface. It could also motivate the person to take off extra clothing in order to stay cool. This theory works well to justify the above behaviour; however, it cannot be used to describe behaviour that disrupts homeostasis, for example, going on a roller coaster where the main purpose is to disrupt balance (157).

Thirdly, in opposition to the previous theory, the arousal theory argues that motivation arises from the need to achieve an appropriate level of arousal (209). In other words, people need the appropriate level of arousal for the actions they want to perform and an inappropriate level can be a motivator for action. When a person's level of arousal drops, the motivation is to raise it to an optimal level, for example, by

taking a coffee break. This motivation will guide action and the person might seek out stimulation (210).

This theory underpins Eysenck's (1990) theory of extraversion, which maintained that an introvert is over-aroused, so they avoid further stimulation while an extrovert is under-aroused, so they actively seek out further stimulation such as noisy places with many people (211). Additionally, the Yerskes-Dodson law links arousal levels with performance (212). Optimal level of performance can be achieved if arousal levels match the difficulty of the task. Difficult tasks are better performed when levels are low, while simple tasks are better performed when levels are high. For example, a surgeon needs low levels of arousal to focus and perform optimally during surgery. However, increasing levels of arousal can also mean increasing levels of alertness or readiness.

The incentive theory is the fourth theory of motivation that needs to be considered (156, 157). This theory is based on incentives and conditioning and maintains that behaviour can be motivated by external incentives such as money, a reward or positive feedback. This is linked with extrinsic motivation, as described above. The theory does not argue for innate motivators like the previous theories, only external motivators. These motivators or incentives are divided into primary and secondary incentives. Primary incentives are innate to human beings. These incentives are not learnt but almost instinctive, for example, food and pain. Food is instinctively seen as a reward while pain is seen as a punishment. These incentives are connected to survival and reproduction while harm is avoided (157). Secondary incentives are based on learning. Human beings have learnt to associate these with either reward or punishment. For example, money is a motivator when we learn what we can do with it (157).

In line with the above, the multiple motivation theory argues that a combination of factors, including learnt and innate factors, can drive action (213). For example, it is difficult to focus on work if one is hungry (157). This theory is underpinned by Maslow's hierarchy of needs where both learnt and innate needs are motivators for

action (152). Maslow (1970) identified psychological need as the most basic motivator for action. This is followed by the need for safety and then the need for love and belonging. The latter drives social actions and conformity (152). The last two levels are the need to feel worthy and self-actualisation. The need to feel worthy can motivate human beings to perform well or at optimal levels, for example, to work hard at school. Lastly, self-actualisation motivates human beings to live to their full potential (157). For many people, this means being selfless and altruistic and not focusing on material or external incentives.

Maslow's theory also holds that the lower levels need to be achieved first before higher levels can be achieved. Maslow's theory has been criticised since the concept of self-actualisation is found to be vague and difficult to measure. It has also been felt that he was over-optimistic when he said that everyone has the potential to reach self-actualisation, and that he didn't adequately consider the severity of environmental influences on motivation (157).

The creative ability theory was partially built on Maslow's theory. Similarly, it has levels of motivation and holds that the lowest level of motivation focuses on existence (biological and physiological) while the highest level focuses not only on self-fulfilment but on the achievement of this through the sublimation of one's own needs for the needs of others (32, 168). It is also based on the understanding that the levels are constant, yet sequential and that progress happens from lower to higher levels which should not be skipped; however, moving back and forth between levels is possible. It is important to note that Maslow's levels focus on need satisfaction while Du Toit's levels focus on developmental patterns. Du Toit (1991) believed that every person has the potential and capacity, but that these need to be further developed (32).

According to the VdTMoCA, there are six levels of motivation that are sequential. These are tone, self-differentiation, self-presentation, participation, contribution and competitive contribution.

Table 5.1: Levels of motivation: Table from Casteleijn (2012) (95) and De Witt (2005)(168)

	Level of motivation	Descriptor of motivation on that level
1	Tone	Motivation is directed towards establishing and maintaining a will to live.
2	Self-differentiation	Motivation is directed towards becoming self-aware, using and controlling own body to interact with the world and learning basic social behaviour.
3	Self-presentation	Motivation is directed towards presenting one's self to others. Motivation is also directed to exploring materials, objects and others within the environment in order to learn.
4	Passive participation	Motivation is directed towards becoming aware of and understanding norms and rules and complying (passively or actively) with these. Motivation is also directed towards becoming more accepted by others and to establishing own identity. In the latter part of this level, motivation is directed towards voluntary changing of problematic behaviour and activities.
5	Imitative participation	Motivation is directed towards being and doing as others and to participate and accomplish tasks.
6	Active participation	Motivation is directed towards achieving industrial and social norms and to surpassing norms.
7	Competitive participation	Motivation is directed towards surpassing standards and it is robust in nature. A desire to be better is the motivator.
8	Contribution	Motivation is directed towards contributing to the fulfilment of the needs of others and of society.
9	Competitive contribution	Motivation is directed towards being better than others and is also directed towards improving conditions for others and not self.

5.2.3.4 Action

Buber (1947), as highlighted by Du Toit, said that all human beings want to create (192). This statement partly underpins the philosophy of occupational therapy that says that all human beings are occupational beings who have an innate need to actively engage in occupations (214). In line with this, Kielhofner (2002) said that this need to be active is biological since all living organisms engage in action (215). As human beings evolved into more complex organisms, they engaged in a wider range of more complex actions. Du Toit (1991) described it as an innate drive to engage with, and to master, the world in which we live or to maintain the status quo (32). However, as reported above, Nelson (1988) cautioned theorists that actions are often a result of a combination of motivators rather than just the firing neuron transmitters (81, 216).

Similarly to motivation, the concept of action can be a complicated construct to describe. Action is defined as "the exertion of mental and physical effort which results in occupational behaviour" (168)(p. 7). It is a process of being active or doing something and of translating motivation into effort (203). This process is influenced by motor as well as processing skills and action, and how it is performed can be dictated by the social environment. External and internal factors, past experiences and subjective norms can influence the ability to perform action, the attitude towards the action that needs to be performed and the intention to perform the action (217). Thus, if a person feels that they cannot perform an action and that the action is difficult to perform, this will influence their intentionality to perform that action.

In addition, according to Van Dijk (1975), for action to take place there needs to be consciousness (218). Consciousness and awareness of the self are essential for voluntary movement. Without these, the movement cannot be called action since, if the person is not aware of it, he/she is not responsible for it. Furthermore, it is suggested that only movements that are under a person's control can be classified as actions (218). This is why reflex movements cannot be considered as action since they are involuntary. Du Toit's theory described the lowest level of action as unplanned, haphazard and biological (32). The person does not make a conscious

decision to act, but action is automatic due to biological and physiological needs. When comparing Du Toit's (1991) description of action on the tone level with Van Dijk's (1975) definition of action described above, Du Toot's description of action on the tone level does not qualify to be called an action since there are no movements performed with awareness.

The VdTMoCA also theorised that creative capacity, in addition to creative response, makes action possible. In this regard, creative capacity is a human being's potential that is influenced by internal and external factors while creative response is a positive attitude towards and preparedness to embrace the opportunities offered (32, 169).

Lastly, Du Toit suggested that action results in tangible or intangible products (32, 168). She proposed nine sequential levels of action where the lowest levels start at preparation for constructive action, progress to action related to norm compliance and culminate in actions related to self-actualisation and altruism. These actions are driven by motivation and, without motivation, action cannot happen. Action is also influenced by an individual's need to be part of society and to fit into society. The levels are seen in the table below.

Table 5.2: Levels of action: Table from Casteleijn (2012)(95)

	Level of Creative Ability	**Descriptor of action**
1	Tone	Purposeless and unplanned action
2	Self-differentiation	Incidental constructive or unconstructive action
3	Self-presentation	Constructive, explorative action
4	Passive participation	Norm awareness, experimental action
5	Imitative participation	Norm compliant, imitative action
6	Active participation	Norm transcendence, original , individualistic and inventive action
7	Competitive participation	Competitive-centred action
8	Contribution	Situation-centred action
9	Competitive contribution	Society-centred action

5.2.4 LINK BETWEEN THE THEORY OF CREATIVE ABILITY AND COLLECTIVE PARTICIPATION IN OCCUPATIONS

As reported earlier, Du Toit (1991) defined creative ability as the ability of a person to present him/herself to others freely and stated that creativity can only grow through the presence of and the acceptance of our fellow man. Additionally, Du Toit suggested that a human being's development progresses from egocentricity where the focus is on the self, to focusing on the self in relation to others, to sharing with others, eventually culminating in the experience of mutuality or "experiencing togetherness" (32)(p. 10). Mutuality within the theory of creative ability is defined as "the ultimate fulfilment of a reciprocal responsibility involving man and his fellowman – a co-responsibility in a man's world" (32)(p.10). She supported this proposition by highlighting a quote by Nel that said "man is only then a human being in his directness towards other human beings" (Nel in Du Toit 1991). By accentuating mutuality in her theory, Du Toit not only brought forward the importance of man in relation to others, but also that man is part of a collective and, significantly, wants to participate in a collective. Engaging in collectives is part of man's development.

Although Du Toit highlighted the importance of mutuality and the experience of togetherness, she did not explore this in depth or describe it in detail in her levels. The model still focuses on individuals and their relatedness to others. Aside from this study and the publications linked to this study, no other literature or research looked at the theory of creative ability and collective participation in occupations.

5.2.4.1 Creativity and collective participation

A number of scholars have reported on creativity and the creative potential of groups (155, 219) Unfortunately, these reports are predominantly on how collective participation can enhance the creativity of individuals within a collective rather than on how the creativity of the collective as a whole can be enhanced.

From an individual perspective, being part of a collective can negatively influence a person's motivation and creativity. The social influence model of production loss suggests that participation in collectives can decrease the creativity of an individual.

This is ascribed to what is called social loafing due to the demotivating effect of group work (155). Social loafing is when a person exerts less effort when engaging in a group than they would have when working alone. It is suggested that social loafing can be caused by the 'free rider theory', anxiety during social interaction and the novelty of engaging in a group and a group task (155). All of these factors can lead to low performance, low creativity and low persistence which, in turn, can lead to production loss.

Osborn (1957) highlighted four processes that could enhance creativity in groups (219). These are social-reinforcement, social-facilitation and stimulation, rivalry and competition and lastly, mutual association (219, 220). Social-reinforcement is the positive feedback group members receive from other members. This positive feedback can act as an incentive or motivator to continue in the same way or do better. Social-reinforcement is more prevalent in groups where thoughts and actions are similar. Thus, when a member does or suggests something that other members would have done, this action or suggestion is reinforced (221).

In opposition to the social influence model of production loss, Osborn (1957) said that engaging in a collective can stimulate individuals to do better (219). This could be due to increased levels of arousal in a group or due to imitation of behaviour of others in the group and the need to be similar. If the performance of some group members demonstrates high levels of creativity, others might copy them or be motivated to do the same (219). Some might be motivated to do better and could see it as competition, which could enhance their creativity even more. Unfortunately, here, the opposite could also occur. In groups where there is little incentive to perform, there might be a tendency to let the low performance set the standard. By setting low goals, failure is avoided.

Lastly, mutual stimulation of ideas can enhance creativity (219). This is when an idea, solution or action by one person stimulates an idea or solution by others, thus, there is a building on each other's ideas. Additionally, as previously indicated, knowledge is important for creativity. When engaging collectively, there are many

individuals that can contribute knowledge, thereby, enhancing the creativity of the collective. Ochse (1990), however, cautioned that if the knowledge is similar, and the variety is limited, the creativity of the group can be reduced (222).

Unfortunately, there is very limited research that looks at and reports on the creative potential of groups and it is suggested that this could be due to a lack of theory and an established paradigm (220) .

5.2.4.2 Motivation and collective participation

The original writing by Du Toit or any of the subsequent contributors towards the model did not include any theory on collective participation where motivation was defined and described.

Although there are no links between the original writings on the model and its application to collectives, there are links between fundamental concepts of the model and collective participation. Maslow's theory, which was considered by Du Toit in her initial work, was linked by Engleberg and Wynn (223) to collective participation. Other concepts fundamental to the model, including action and motivation, can also be linked to collective literature. Collective action, collective motivation and intention, and creative participation of collectives were explored in detail by authors such as Schmid (2005)(62), Paulus, Larey and Dzindolet (2001)(220), Karau, Kipling and Williams (2001)(155) and Searle (1990)(164).

The VdTMoCA, as highlighted by Van der Reyden (1989), suggested that motivation influences action (105). This concept is similar to the writings of Searle (1990) who suggested that collective action cannot happen without collective intention (164). Writings by Duncan (1999) linked motivation to collective action by underlining the link between group consciousness and collective action. Duncan specifically highlighted how feminist consciousness acts as motivation for collective action and activism (224). Additionally, the VdTMoCA proposed that the level of motivation that a person presents can indicate the action in which the person will engage. Similarly, Klassen and Krawchukcan (2008), who did a research study that looked at collective

motivation beliefs of early adolescents working in small groups, found that collective motivation is a predictor of collective performance (225).

One of the theories that was used in the development of the VdTMoCA - Maslow's hierarchy of needs described above - was linked to collective or group performance by Engleberg and Wynn (223). According to Engleberg and Wynn, a group that is motivated and committed to participate collectively, would perform easily at a high level. This would be possible if the needs of the group as a whole, and those of the individual members, were met in the group (223).

Table 5.3: Group motivators: Adapted from Engleberg and Wynn (223)

Maslow's hierarchy of needs	Individual motivators	Group motivators
Self-actualisation needs	Motivation is society-centred	Self-fulfilment, personal growth and service to others
Esteem needs	Motivation is directed towards surpassing standards and norms	Success, prestige, status, sense of achievement
Belonging needs	Motivation is directed towards meeting socially accepted norms and being like others	Acceptance, socialisation, friendship, close relationships and affection
Safety needs	Egocentricity	Money or benefits for insurance of safety, safe working and living conditions and pensions
Physiological needs	Motivation focuses on survival and basic life	Money or provision of food, clothing, shelter

According to Engleberg and Wynn, the lower two levels can motivate collective action, but they classified them as *satisfiers* while the last three levels were classified as *motivators*.

These levels of group motivators are similar to Du Toit's levels of motivation. Again, the lower levels focus on basic needs while the higher levels focus on self-fulfilment and service to others.

5.2.4.3 Action and collective participation

Similarly to motivation, no reference to collective action was made in the description of action within the VdTMoCA. No link was found between theories underpinning the model and collective participation.

However, when exploring community participation literature, there are reported levels of participation or community action, for example, levels of community participation by Thomas and Thomas (226). These levels describe the participation of communities in programmes and decisions that could benefit their community by considering how they act collectively. The lowest level describes very passive behaviour by the collective while the highest level describes autonomy and independent action by the community.

Table 5.4: Levels of community participation by Thomas and Thomas (2003) (226)

Level 1	Level 2	Level 3	Level 4	Level 5
Community receives benefits from service, but contributes nothing in return	Some personal, financial or material contributions from community, but no involvement in decision-making	Community participates in lower level decisions about daily management	Participation goes beyond lower level decisions to include monitoring and policy making	Programme is entirely run by community members, except for some external financial and technical assistance

Similarly, the levels of community participation described by the Tamarack Insitute also show the lowest level of the community as being passive and dependent on

others while on the highest level the community works independently. Although there are some similarities between these levels and the levels in the VdTMoCA, for example, the increase of independence and autonomy, these descriptors of levels are very limited and do not explore collective participation in occupations.

Table 5.5: Levels of community participation: Table adapted from Tamarack Institute (227)

Level 5	Leadership	Local residents and local organisations initiate and identify needs, prioritise and lead action.
Level 4	Empowerment	Local residents and local organisations share in planning of action with external organisations.
Level 3	Participation	Local residents and local organisations influence priorities and resources and participate in action with external organisations.
Level 2	Reactivity	Local residents and local organisations input into priorities, but decisions and action are taken by others.
Level 1	Passivity	Local residents are passive. They are informed about issues by government and external organisations.

5.2.5 LEVELS OF CREATIVE ABILITY AND COLLECTIVE PARTICIPATION

Lastly, another fundamental concept of the VdTMoCA is that growth takes place through exploration, participation and mastery of the task (105). When considering the results of phase one, stage one of this study, it was found that cohesion influences co-creating while co-creating can influence cohesion (discussion of phase one). Through successful participation in collective occupations, collectives grow closer together and this motivates them to increase their participation. As with Du Toit's suggestion in her theory that an individual develops and grows through participation and success, a collective can also grow through participation and success.

5.2.6 CONCLUSION

In conclusion, the VdTMoCA is the only indigenous occupational therapy model in South Africa. There are very limited links that can be made between the VdTMoCA and collective participation in occupations. However, it is a model widely used in South Africa. It is described as a user-friendly model that is already being utilised with individual clients and is increasingly being used with groups; however, there is no research or literature to guide occupational therapists to do the latter. This current research project is intended to establish the foundation for a literature base.

5.3 METHODOLOGY

This phase of the research project consisted of two stages. Stage one focused on developing domains and items for collective participation while stage two focused on describing observable actions related to each item on seven levels of collective participation.

The development of the domains, items and descriptors for observable actions were based on the underlying theory and prescribed levels of the VdTMoCA. To ensure correct interpretation of the model, the researcher summarised her understanding of the levels of creative ability for individual clients. This summary was sent out to fifteen participants for verification.

5.3.1 RESEARCH DESIGN

The research design for this phase followed on from the qualitative approach that was used in phase one. This phase used a three step approach, which included item generation, item reduction and validation of items as the basis for the development of domains, items and descriptions of observable actions for levels of collective participation (228). The three step approach has been used by other researchers in outcomes or instrument development, including Hudak, Amadio and Bombadier (1996) when developing the upper extremity outcomes measure (228); Williams, Weinberg, Harris, Clark and Biller (1999) who developed a stroke-specific quality of life scale (229); and Birring, Prudon, Carr, Singh, Morgan and Pavord (2003) who developed a symptom-specific health status measure for patients with chronic coughs, which was called the Leicester Cough Questionnaire (230). These latter authors expanded the descriptor for step two by adding “allocation of items to domains” (230)(p. 340).

Although the intention of this study was not to develop a questionnaire or a measurement tool, it did set out to develop and validate domains, items and descriptors for levels of collective participation in occupations. The above-mentioned steps of measurement for tool development were thus utilised to guide the process.

5.3.1.1 Step 1: Item and domain generation

In order to generate items, Williams et al. used interviews with stroke survivors to identify common problems that affect stroke clients. These identified problems were sorted into domains, which were the basis for their stroke-specific quality of life scale (229). Similarly, in development of the DASH, Hudack et al. generated items through a literature review in which they focused on published and unpublished outcomes measurements (228). In this research study, items were generated during phase one where the concepts of collective occupation and collective participation were examined. Exploration of the characteristics of collective participation can guide development of domains and items. Through interviews and a literature review, a total of thirty-six possible domains and items was identified. Since information was generated from various sources, duplications first had to be eliminated. Table 4.6 in the previous chapter provides a list of these domains and items and the sources from which they were generated.

5.3.1.2 Step 2: Item reduction and allocation of items to domains

During stage one of this phase, domains were developed and items were allocated to these domains. In order to reduce the amount of items and to allocate them to a domain, content analysis principles were used as defined in chapter four of this thesis.

During the content analysis process, a researcher can either analyse data inductively or deductively. While deductive analysis focuses on a top-down approach and is theory-driven, inductive analysis is guided by a bottom-up approach and is often used to develop theory (128). In this case, the researcher used deductive analysis. Priori-coding, which uses pre-determined codes when analysing data, was used to allocate items to domains. The components used by Du Toit to describe individual levels of creative participation were used as codes. Items generated during phase one were allocated to these codes. These codes were motivation, action, an individual's ability to handle tools, materials and objects in the environment; the ability to handle situations within his/her context; the ability to relate to others; the

ability to show initiative; the ability to demonstrate effort; the ability to control anxiety and the ability to produce a quality end product (32). These codes, used as domains by the researcher, led to nine domains.



Figure 5.1: Possible domains (first round of analysis)

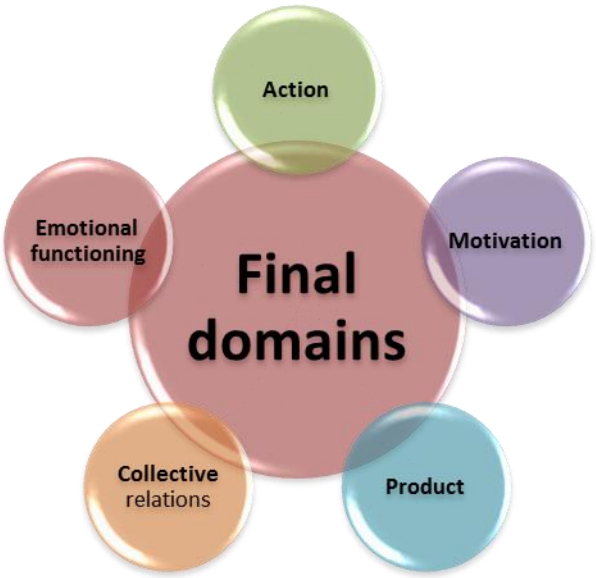

Figure 5.2: Final domains (second round analysis)

During the second round of the analysis, the nine domains (see figure 5.1) were reduced to five, namely, *relations*, *emotional functioning*, *motivation*, *action* and *product* (see figure 5.2). Reduction of domains was based on practicality since the question that guided reduction was 'if occupational therapists have to determine a collective's level of collective participation, where and how will they get the information?' The thirty-six possible items identified in phase one of the study were coded according to the components mentioned above.

According to Braun (2006), in order to ensure trustworthiness of theme, categories and codes identified during thematic analysis, the process must not be rushed and a prolonged time needs to be spent so that the researcher can immerse him/herself in, and become familiar with, the data (231). Within this study, the researcher and her supervisors spent an extensive amount of time reducing the items. Throughout this process, Du Toit's theory on creative ability was considered and taken into account.

5.3.1.3 Step 3: Validation of items

Items and domains were validated in phase three of the study and the process is described in detail in the methodology section of the next chapter.

Once domains were developed and items were allocated, the researcher had to develop descriptors for each item on the various levels, similar to the VdTMoCA. This was done during stage two of this phase. The descriptors were based on the general descriptors given by Du Toit when she reported on creative ability levels for individual clients. In order to develop descriptors for observable behaviours for collective participation, the researcher had to ensure that her understanding of the individual levels was correct. To do this, the researcher summarised her understanding of the levels, which she sent to fifteen participants for verification. Only then, were descriptors for observable behaviour for collective participation developed.

5.4 RESULTS

5.4.1 STAGE 1

5.4.1.1 Domain development

As stated previously in the methodology section, the domains that Du Toit used to describe individual levels were used as priori-codes for content analysis. These included motivation, action, the individual's ability to handle tools, materials and objects in the environment; the ability to handle the situation within his/her context; the ability to relate to others; the ability to show initiative; the ability to demonstrate effort; the ability to control anxiety and the ability to produce a quality end product (32). In order to reduce and refine the domains, the practical approach was used to make levelling of collectives by clinicians easier and more logical. These were:

Effort, initiative and handling of tools and materials were linked to the domain of *action*. It was felt by the researcher and her supervisors that these items could be observed by occupational therapists when observing the actions of a collective.

Names of four of the domains were changed to be more reflective of their content but also to be reflective of collective behaviour.

In describing the creative ability levels, Du Toit referred to *handling of situations and anxiety* and participants in phase one suggested exploration of how collectives handle conflict situations, problem- solving and decision-making. This led to a name change for this domain to *emotional functioning*. The items under the domain of *ability to control anxiety* included collective decision-making, conflict management and collective problem-solving as well as an openness by collectives to new members, ideas and situations. The name of this domain was, thus, changed to *emotional functioning* to be more reflective of the items. It was felt that, although decision-making, problem-solving and conflict management all have cognitive components, emotionality influences these, especially in a collective. The emotional functioning of a collective would influence the handling of collective problem-solving, conflict management and so on. The *ability to control anxiety* became an item in this domain.

Similarly, the domain name of *ability to relate to others* was changed to *relations* to be more reflective of the items within this domain, as well as more reflective of collective functioning. It was felt by the researcher and her supervisors that the term *ability to relate to others* implies, or could be interpreted on, an individual level, in other words, whether individual members relate to each other within a collective. Although the researcher and her supervisor thought this was important, it was felt that the term *relations* is more reflective, not only of the pattern of interactions within the collective, but also of its cohesion, communication, mutual accountability and responsibility.

The domain name of *ability to produce an end product* was changed to simply *product*. This was done in order to reflect the items in that domain since items included *collective formation* (which is an end product in itself) and a *tangible and intangible product* - a collective could work towards the achievement of a process or relationship as well as a tangible product. For example, the goal of a collective could

be to create awareness around the plight of people with disabilities in a community or to establish a relationship with other collectives in the community in order to broaden the collective's support structure.

The process of domain development reduced the possible nine domains to five domains (appendix H).

Please see figure 5.3 for a diagrammatical representation of the above.

5.4.1.2 Item development

The thirty-six items that were generated from phase one were initially distributed into nine domains, which were then reduced to five. (See figure 5.3 for details on the item distribution.) Through the process of reduction, items were reduced from thirty-six to nineteen items.

Items were reduced in a discussion and reasoning between the researcher and supervisors. During the process of item reduction, the following questions were consistently posed for each item:

- Is this item similar to, or a repetition, of an existing item?
- Does this item belong to one of the domains and if so, which one?
- Is the wording expressive of the meaning of the item?

Care was taken not to generate new items or new ideas that were not captured in the literature review or the focus groups with the experts.

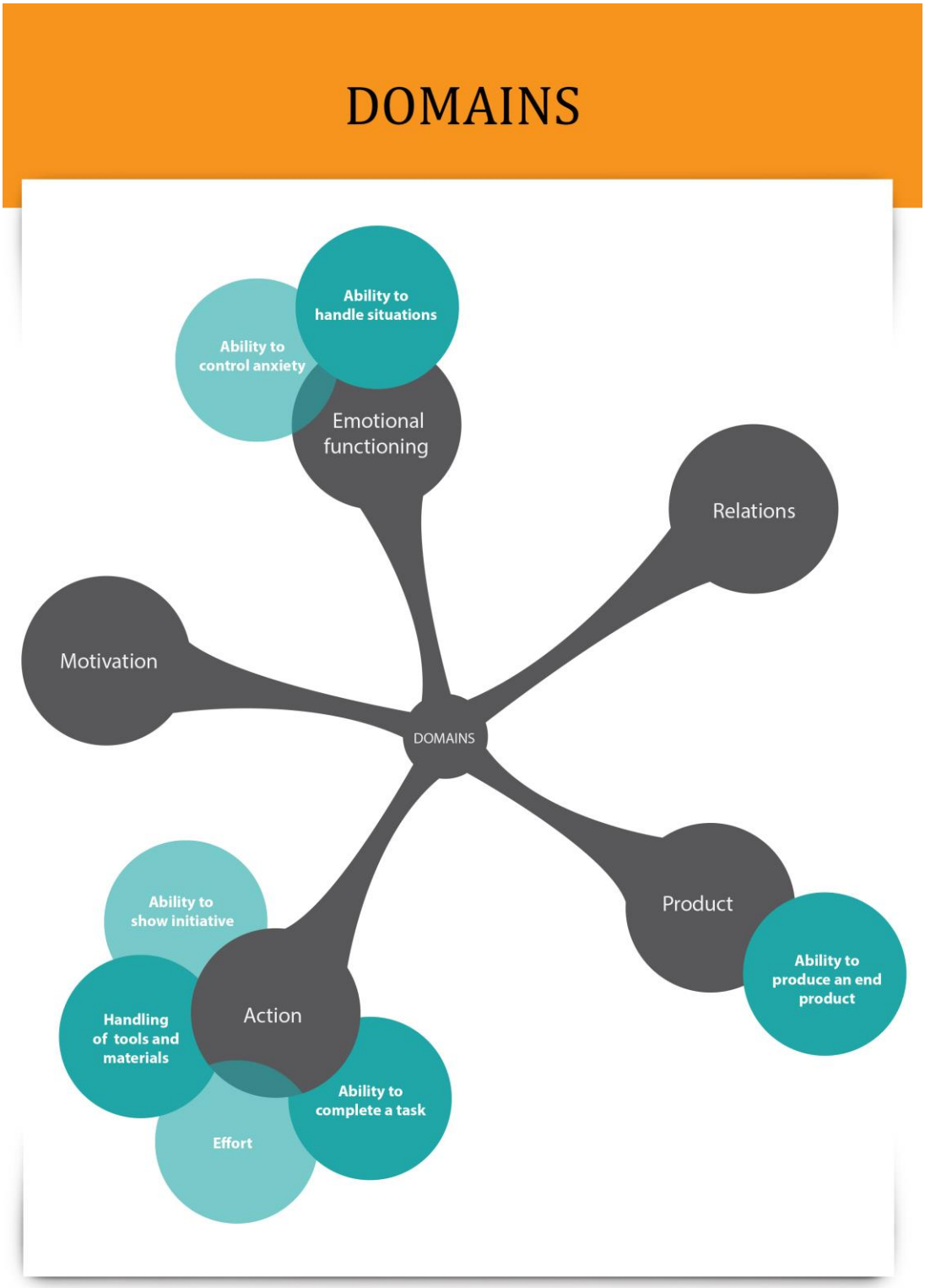

Figure 5.3: Diagrammatical representation of domain reduction



Figure 5.4: Diagrammatical presentation of item distribution (round one of item reduction)

5.4.1.3 Brief descriptions of domains and their accompanying items

(Please see appendix H for a summary of descriptors of all domains and items.)

- Domain 1: Motivation

In this study, motivation is defined as biological, social, emotional and/or cognitive forces that drive, guide, initiate and maintain directed behaviour (157, 202). Therefore, it is considered to be the inner drive or internal state of a person that drives behaviour, action and initiation (157, 203). Motivation is dynamic and is dependent on the stage of human development (32).

The results of the priori-coding linked two items to the domain of motivation, namely *shared meaning* (described in results of phase one, stage one) and *shared intentionality* (defined in the literature review and discussion in chapter two). This means that a collective needs to have the intention to participate as a collective to address problems or to achieve goals. Shared meaning is one of the driving forces for intentionality. Mutual vulnerability that could lead to shared goals, and a mutual vision for the collective could be the reason members of the collective decide to participate collectively as highlighted by the results of phase one. Ultimately, this domain focuses on the motivators for collective formation and for action.

- Domain 2: Action

Action is defined as “the exertion of mental and physical effort which results in occupational behaviour” (168)(p. 7). It is a process of being active or doing something and of translating motivation into effort (203). According to the VdTMoCA, motivation drives action (32, 168) and action results in tangible or intangible products.

Through priori-coding, seven items were allocated to this domain. These were *co-creating* (described in phase one, stage one), *symbiotic action* (described in phase one, stage two), *equal action* or *symmetrical action* (described in phase one, stage

two), *shared space and time* (reported on in phase one, stage two), a collective's *ability to take initiative* (in the literature review of this phase), the *ability to exert effort* and lastly, the *ability to handle tools and resources*. Effort is defined as the use of energy (physical or mental) to do or produce something (232). A collective, thus, exerts physical or mental effort to perform action. This effort is influenced by motivation as well as by contextual factors. Within a collective, the ability to exert effort collectively needs to be considered.

The concept of *create* is commonly understood as *to make* or *to produce*. Doing this collectively is to co-create. Through collective participation in occupations, the collective works together to create. It is suggested by the research findings that co-creation is an active process where people in a collective *create together* (phase one, stage one). This *creating together* and its outcomes should be beneficial to all parties involved, thus, symbiotic in nature, and the effort that is exerted by all involved should be equal or symmetrical in nature. The symbiotic action should be mutually beneficial for the collective as a whole and not just for some in the collective. While co-creating, members of a collective respond to each other's action. For some collectives, this action should be equal action or symmetrical, that is, everyone should contribute equally.

Initiative, in its simple form, is defined as the power to start or continue a process, task or plan (199) while in its more complex form it is defined as "a quality of self-application and self-direction in a new situation" (32)(p. 7). Within collective action, the collective should be able to take initiative - starting and maintaining action as well as planning to achieve goals. In the context of a collective, initiative is related to a collective's readiness to take action and the ability to make the decision to start that action, thus, linking this domain with domain five (*emotional functioning*).

Results from the literature review (phase one, stage two) suggest that shared space and time is needed for collective participation in occupations. As indicated in the discussion of phase one, this is debated within occupational science literature; however, there is evidence in literature that highlights the importance of a shared

space and time for collective action. Lastly, literature on groups and collective action highlights that the need for this depends on the complexity of the task as well as the cohesion within the group. It also indicates that the more cohesive a group and the better it works together, the less it needs shared space and time for collective action (155, 163).

Lastly, *handling of tools and resources* is related to the manipulation and use of tools and use of resources within the community in which the collective is situated (32). The use of tools and resources is important for action. As discussed in phase one, the absence of tools and materials could influence collective action negatively; however, to understand the collective participation of a specific collective, one also needs to assess how it handles tools and resources. Is it using them for the benefit of the collective or only to the benefit of some individuals in the collective? Is it using them for the benefit of the collective or more for the benefit of achieving outcomes related to others in the community? Additionally, is it only using the tools and resources within the collective or also using them outside of the collective? All of these questions can be answered when observing a collective's actions.

- Domain 3: Product

A product is something that is produced through human, natural or mechanical effort (233). It is the outcome or consequence of action and effort. The product can be tangible or intangible (32). Formation of a collective can be a product and it can be an end result of a process. Additionally, within a collective the product should also be related to its purpose and goals (what it wants to achieve).

Three items represent the product domain. For a collective, the product is related to vision and goals, thus, it is related to the end results of participation in collective action to achieve its vision and goals. However, for a collective the actual formation of a collective is also a product if it is related to its goals, for example, the formation of a group by the women with disabilities as mentioned by participant eleven in phase one. The collective's intention was to start a group where women with

disabilities could support each other and develop. Thus, collective formation was part of this intention and vision.

Understanding how and why the collective formed, as well as how involved external facilitators and/or community leaders were in this process could enhance understanding of collective participation.

- Domain 4: Relations

This domain includes relations/associations between members in the collective (internal/in-group relationships) and collectives outside of the collective (external/out of group relationships).

Through priori-coding, this domain was allocated five items. These included *interaction*, *cohesion*, *communication*, *mutual res*ponsibility and *mutual accountability*. All of these items except communication were described in stage one of phase one.

In this research, interaction is defined as the reciprocal or mutual action that can enhance collective participation. It is similar to the symmetrical co-creation that was described earlier. Without interaction, there is no collective participation. Interaction needs to be an active process since people need to respond to each other. Preferably, there should be mutual benefit and the interaction should to be symbiotic. Interaction also needs to be a norm or value of the collective, occuring on a regular basis for the collective to be successful. Initially, it might be leadership-driven but as a collective works together and builds cohesiveness, it should be more comfortable interacting without the intervention of a leader (4).

Cohesion, which was described and discussed in phase one (stage one), is defined as a connection that goes beyond just being together physically or cognitively. The more cohesive a collective, the more productive it can be (155), thus, the level of cohesion within a collective influences other domains. Cohesion is dependent on members connecting with others. As seen in the results of the previous phase,

mutual vulnerabilities and needs among members can facilitate this connection and motivate them to form a collective and to act collectively. As seen in figure 4.4, there is a reciprocal relationship between connecting with others or cohesion and co-creating in that the two influence each other. While successful participation in a collective occupation and co-creating can increase cohesion in a collective positively, increased cohesion, in turn, can make it easier for members of a collective to co-create or participate collectively.

Mutual accountability is where members of a collective consider themselves to be answerable to each other. This could be a personal value of the individuals in a collective but can also be part of a collective's norms and values. For mutual accountability to be successful, members in the collective need to accept responsibility and account for their part. As a collective, they also have to be accountable for the results of their actions. In addition, they must accept the obligation and duty to contribute to action and processes that can lead to the achievement of goals.

In phase one, participants identified "patterns of exchange with each other" as important to consider when trying to understand a collective's ability to participate in collective occupations. The literature review in phase one also highlighted the fact that participation in collective occupation requires members to respond to each other. These two items were combined into the item of *communication*. Communication, which is defined as the exchange of thoughts and ideas, is important for collective participation since, without it, interaction, cohesion and co-creating are not possible. The act of communicating includes verbal and non-verbal communication skills as well as listening skills.

- Domain 5: Emotional functioning

This domain focuses on the ability of the collective to handle emotional situations. This domain has two items. The first is *handling of anxiety and conflict, problem-solving and decision-making.*

Secondly, participants suggested that the *openness of the collective to new members/situations/ideas* also needs to be explored. It was felt that the more confident and cohesive a group, the more open it would be. Insecurities within collectives could make welcoming new ideas and other people difficult.

Please see figure 5.5 for a diagrammatical representation of final domains and items allocated to domains.



Figure 5.5: Domains and items for collective participation

5.4.2 STAGE 2

During stage two of this phase, observable behaviours for each item were described. This was done for seven of the nine levels identified by Du Toit. Du Toit's descriptors of individual levels of creative ability were used as a base to describe the observable behaviour for collective participation.

To ensure correct interpretation of the levels of creative ability for individual clients, the researcher summarised her understanding of the levels and sent this to participants for verification. Only then did she develop descriptors for observable behaviour for collective participation. The theory of creative ability as well as group, community and collective theory as described in chapters two, three and four in this thesis were used to inform these descriptors.

5.4.2.1 Methodology

Selection of participants

Purposive sampling (as defined and described in the methodology description of phase one, stage one) was used to identify participants who are knowledgeable about the VdTMoCA.

The inclusion criteria were that:

- all participants must be qualified occupational therapists
- they must adhere to one or more of the following criteria:
    - be a member of the VdTMoCA committee and currently either engaged in teaching CA and/or using it actively in their daily work
    - have published either an article or contributed to books or manuals about the VdTMoCA or related to it (research theses were also considered here)
    - have been or are currently teaching the VdTMoCA in a tertiary institution.

Fifteen invitations were sent out and nine participants agreed to take part in this stage.

Research procedure

Participants were invited to participate via email. They were sent an information letter and instructions. Participants were asked to review the interpretation of the levels. They had to indicate whether they agreed or disagreed with the descriptors and give suggestions for changes if needed. Return of the document with comments was considered consent to participate. (See appendix D for information letter.)

Any confusion or ambiguity in comments from participants was clarified via email with the participants. Only five comments needed to be clarified.

Trustworthiness

To ensure correct interpretation of the participants' comments by the researcher, comments were reviewed in a meeting with the researcher and her supervisors. This increased the objectivity, thus, enhancing the credibility of this step.

In addition, the final draft was member-checked by two participants to enhance credibility.

5.4.2.2 Results

Demographics of participants

Of the fifteen occupational therapists that were asked to participate, nine agreed to do so.

Table 5.6: Demographic information for participants

Code	Member of the VdTMoCA committee and currently either engaged in teaching CA and/or using it actively in daily practice	Published either an article or contributed to books or manuals about the VdTMoCA or related to it	Have been or is currently teaching the VdTMoCA in a tertiary institution	Number of years of experience working with the VdTMoCA
012	x	x	x	42 years
013	x	x		
014			x	16 Years
015			x	
016		x		12 Years
017			x	
018			x	11 Years
019			x	6 years
020		x	x	

As evident in table 5.6, the bulk of the participants have been or are currently teaching the VdTMoCA in tertiary institutions in South Africa and abroad while three of the participants have published either an article or contributed content to a book. Participant twelve has done both.

The majority of the participants (eight out of nine) had more than ten years' experience engaging with the model.

Out of the nine participants, three agreed fully with the content of the document sent to them and returned it with no comments for consideration. No participants disagreed completely with the content. Seven comments were received that focused on specific words used by the researcher. For example, in the descriptor for the self–differentiation level, the researcher included the word *pre-destructive* and it was recommended that she change this to the words *unplanned* and purposeless. In another example, to describe action in the passive participation level, the researcher said that action is geared towards norm compliance. This was corrected by two

participants to *norm awareness/experimenting with norms*. It was suggested that norm compliance be moved to the imitative level.

The final draft of the individual levels of creative ability was completed. (Please see appendix G for details of these levels.) This was the basis for development of levels for collective participation in occupations.

Levels for collective participation

Descriptors for eight levels of collective participation were developed. For each level, items were described specific to that level. These included levels of self-differentiation, self-presentation, passive presentation, imitative presentation, active participation, competitive participation, contributive level of participation and competitive contributive level of participation. The descriptors for the levels were as follows:

- Self-differentiation level

Descriptor of level

Collective action is directed towards the self-preservation of individuals in the collective. The forming of the collective itself to participate in occupations is situational (for basic needs). The collective forms due to mutual/collective vulnerabilities and needs. Collective action on this level is in response to a threat and/or to secure a basic need. Thus, participation in a collective occupation is incidental. Actions are dependent in nature. The collective demonstrates no concept of procedures. Strong leadership is needed on this level for constructive action and for relations.

The *self* that is referred to in the name of this level refers to the *collective self*.

Table 5.7: Descriptors for levels of collective participation in occupations

Domain	Items within domain	Observable action
Motivation	**Shared meaning** Descriptor: With the collective there needs to be shared or mutual vision/purpose of the group, which is based on shared or mutual vulnerabilities amongst members that links them.	• Collective participation is incidental. Focus is on surviving within the context and self-preservation. Fear, self-preservation and common vulnerability (for example, fear, hunger) drive collective action. • Mutual vision (vision of the collective) is basic and reactive due to mutual vulnerability. • Energy and drive is focused on existence of basic needs, maintenance of basic life and basic resources and satisfying immediate needs of individuals within the collective.
	Shared Intentionality Descriptor: A shared intentionality to participate collectively in occupations. Participants have an intention to want to participate in collective occupation or to achieve a common goal.	• No shared intention to participate collectively. Due to reactive nature of actions and fleeting awareness of others, on this level individuals will not have an intention of collective participation. • Collective participation and formation is reactive and/or guided by leadership.
Action	**Co-creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create. Through collective participation, the collective is working together to create.	• Co-creating is incidental and unplanned. • Actions are directed towards maintaining basic life and/or protecting self as an individual in a collective (self-preservation). • Collective is dependent on leadership. • Action is reactive, fleeting and only if it will satisfy basic needs of the collective and individuals in collective. • Action can be constructive if guided by leadership.

	Symbiotic action Descriptor: Mutually beneficial. Collective participation can benefit the individuals who participate in the collective.	• Action is not equal in nature between members within a collective (it is dependent on individual's levels and must be guided by leadership on this level).
	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.	• Action is not equal in nature between members within a collective (it is dependent on individual's levels).
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	• Collective action only occurs in a shared time and physical space.
	Ability to take initiative Descriptor: Initiative is defined as the power to start or continue a process, task, plan (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start that action.	• Cannot show initiative as a collective.
	Effort Descriptor: The use of energy (physical or mental) to do or produce something. To produce through exertion.	• Fleeting effort, unplanned, reactive and only if it will satisfy basic needs of the collective and individuals in collective. • Effort does not have to be equal in nature between members within a collective.
	Handling of tools and resources Descriptor: Manipulation and use of tools and use of resources within the community.	• Not able to identify resources in surroundings and use appropriately. No knowledge of tools and materials.
Product	**Tangible product** Descriptor: An end product that can be touched or a concrete end product. Related to achievement of goals and occupations performed.	No collective product unless guided by leader.
	Intangible product Descriptor: An end product that cannot be perceived by the senses.	No collective product unless guided by leader.

	Could be a process, a relationship, et cetera.	
	Collective formation Descriptor: Forming of a collective or group to participate in occupations.	Participation in a collective is a reaction to a common stimulus.
Relations	**Interaction** Descriptor: Mutual or reciprocal participation. Interaction is needed for participation in collective occupation. Without the interaction there is no collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.	• Interaction is incidental and either facilitated (by leadership) or reactive due to common vulnerabilities/needs. • Responsiveness is superficial and incidental.
	Cohesion Descriptor: A connection that is defined as a connection that goes beyond just being together physically or cognitively. Cohesion in a collective is essential for all the rest of the items. The level of cohesion within a collective will enhance effort, action, motivation, relations, et cetera. Mutual/collective participation (same as definition for cohesion).	• Cohesion is superficial, reactive or incidental due to a common/mutual basic need(s) and not intentional. The need impels the forming of a collective. • Connectivity (connecting with others) is incidental, reactive, superficial and will be to mutual/collective needs and vulnerability. • Collective identity is reactive and due to a press in the community.
	Accountability Descriptor: To be answerable to each other in the collective. To accept responsibility and account for one's part.	No accountability on this level, due to the egocentric nature and superficial cohesion and interaction taking place at this level.
	Responsibility Descriptor: Obligation or duty to contribute as part of the collective engaging in occupations.	None due to the egocentric nature and superficial cohesion and interaction taking place at this level.

	Communication Descriptor: The exchange of thoughts, ideas, et cetera. The act of communicating. Includes verbal and non-verbal skills.	• No awareness of dynamic interactions in situations. • Not able to read cues in each other's responses and fleeting awareness of others within the collective. • Communication between members of a collective is superficial and individual needs-driven. • Communications with other collectives is non-existent or incidental.
Emotional functioning	**Handling of situations within a collective** • anxiety • conflict • problem-solving • decision-making	• Collectively, cannot actively control anxiety, conflict situations or make collective-informed decisions and problem-solving is non-existent (in the collective and externally). • Dependency on others especially leaders or dependency on immediate people/family/friends. (Might not even be aware of leaders.)
	Openness of collective to new members/situations/ideas Descriptor: The collective's ability to be open and embrace new members, ideas, situations.	Not possible on this level.

Please see appendix H for the remainder of the levels.

5.5 DISCUSSION

In this discussion, a general overview of the most important findings is given. This is followed by explanation and reflection on the findings and how they align with the literature. Lastly, the significance of the findings is explored.

5.5.1 INTRODUCTION

In phase two, information generated in phase one was used to develop domains, items and descriptors for observable actions for levels of collective participation. Priori-coding was used to reduce the domains and items and to link items to domains. After the reduction, five domains remained with nineteen items divided amongst them.

The VdTMoCA was used as a guideline to identify the domains, items and observable actions. The concept of sequential levels, advocated by the model, guided the development of levels for collective participation.

5.5.2 DEVELOPMENT OF DOMAINS AND ITEMS FOR COLLECTIVE PARTICIPATION IN OCCUPATIONS

The nine components used by Du Toit (1991) to describe levels of individual creative ability were considered as domains. Thematic analysis was used to reduce the nine domains to five. This was done to streamline the end product as well as to ease practical application for future users. According to results from a study by Casteleijn (2010), where she used focus groups with occupational therapists to establish domains for an outcome measure for occupational therapists in mental health care settings, participants considered a feasible outcomes measure as one that is realistic, tangible and practical (178). By reducing the domains from nine to five, the intention was to ensure that it was as practical as possible for occupational therapists to use in the future. These domains included *motivation*, *action*, *product*, *relations* and *emotional functioning*, which were all defined in the section above.

For similar reasons, the items were reduced from thirty-six to nineteen. Hudak et al. (1996) recommended reduction of items to avoid repetition and to ensure they fitted

the domain (228). In line with this suggestion, the researcher reviewed items to reduce repetition and duplication, to ensure a logical and practical fit for future users and to ensure that the items were in line with the descriptor of the domain under which it was placed.

Although there are many guidelines and measurement tools to describe group participation, there are none that describe levels of collective participation in occupations. However, similarities can be found between items and domains generated in this research and descriptors used in existing collective participation scales. In addition, similarities can be found in domains and items in group functioning scales and measuring of group processes. For example, the Group Climate Questionnaire is a self-report measurement tool that aims to assess individual group member's perceptions of the group's therapeutic environment (234). Although it focuses on the individual point of view, it does include *engagement* and *conflict management* as domains and items for evaluation, which are similar to the domains in this study.

The Curative Climate Instrument is also a self-report measurement that measures the helpfulness of therapeutic factors (Yalom 1980) utilised in group therapy (234). Again, this measurement tool focuses on the individual perspective; however, it does include c*ohesion*, and links it to the item of *group belonging*, which is similar in this current study. The Curative Climate Instrument's descriptor of the item of group belonging highlights the need of members of a collective to be accepted and understood by others in the collective (234). This sentiment is in line with the subcategory of supportive group nature within theme two of phase one of this study. This subcategory identifies group cohesion and a supportive in-group environment as important motivators for members of a collective to want to stay in the collective.

Similarly to the group participation measurements, in revision of the community participation literature, there are scales to measure and describe the participation of communities; however, these are vague and have limited descriptors. These scales are focused on the general behaviour of the community and not specifically on how it engages in occupations. For example, the community participation levels by Thomas

and Thomas (2003) reported on in the literature review of this phase, consider a community's decision-making abilities as an important indicator for levelling a community (226). According to Thomas and Thomas's (2003) levels, this ability of the community to engage actively in decision-making starts on level three and improves on each subsequent level (226). This decision-making ability develops from the community's ability to engage in low level decisions on level three, to an active participation in the decision-making process that is needed for the programme at hand. The levels for collective participation developed in this study also grade decision-making, and it is suggested that active decision-making starts on the imitative level with the collective being able to make low-level decisions and solve simple problems and then develop on subsequent levels.

Lastly, *initiative* as an item under the domain of action in this current study, is also found in other community engagement levels including the Tamarack Institute's levels of community engagement that have *initiative taken by the community* as an indicator for its highest level of participation since this demonstrates the community's ability to be independent and initiate new actions without outside help (227). Similarly to results of this current study, the Tamarack Institute's levels place the ability to initiate action as a characteristic of a community that can participate collectively and has reached a high level of cohesion. In the same line, the VdTMoCA highlights the ability to take initiative as an indicator of a higher level of creative ability and suggests that an ability to take initiative presupposes self-confidence and an intentionality to want to do better and improve, for example, the situation, the self (32) or, in this case, the collective. In this current study, the item descriptors for initiative are, thus, graded from the collective not being able to take initiative on the self-differentiation level to the collective being able to take initiative in unfamiliar situations on the highest level of collective participation.

5.5.3 DEVELOPMENT OF LEVELS FOR COLLECTIVE PARTICIPATION

Sequential levels

Many scales within community development and community participation have similar sequential levels. An example is the Ladder of Community Participation by

Heritage and Dooris (2009), which focused on describing levels of community participation and the involvement of community in, for instance, decision-making, planning and problem identification (235). This scale has sequential levels that range from no active participation by the collective to where the community has full control of decision-making, planning and problem-identification. The intention of this scale was to aid in understanding levels of participation of a community and to work towards optimal participation on the highest level.

Similarly, the Ladder of Citizen Participation developed by Arnstein (1969), focused on describing types of participation, with the bottom rungs of the ladder being reflective of passive or non-participation while the higher rungs describe full control by citizens of programmes, decisions and planning (236). In line with the Ladder of Citizen Participation, Thomas and Thomas's five levels of community participation described in chapter four of this thesis, also have sequential levels that range from passive behaviour of the community to full, active participation by the community (226).

The VdTMoCA has nine sequential levels that are based on a continuum from unconstructive action to action that transcends norms and, finally, to action that is for the benefit of society (32, 168) In addition, the continuum also extends from egocentric motivation and action to behaviour that focuses on contributing positively to the community and society (173). The levels for collective participation in occupations developed in this study correspond with the basic descriptors for levels described in the VdTMoCA but follow the suggested grading of the community and citizen participation scales described above.

For collective participation in occupations, this study developed seven sequential levels, which range from the self-differentiation level to the competitive contributive level. The tone level, used by Du Toit, was excluded. The tone level was defined by the VdTMoCA as biologically and physiologically focused with these functions being potentially completely automatic and not directed by the person. On this level, there is no awareness of others and no ability to connect with others or respond to their needs. Effort is not made and initiative cannot be taken (173). Active decision-

making to participate is not possible and responses to needs, vulnerabilities and visions are not intentional. As there is no voluntary participation and intentionality to participate with others or to want to engage with others, it was felt that a collective cannot exist on this level.

This research found that intentionality to participate in a collective is essential for collective participation. This is supported by the writings of Kendall (2013)(44), Pickens and Pizur-Barnekow (2009)(40), Searle (1990)(164) and Ramugondo and Kronenberg (2015)(12), which highlighted intentionality to participate collectively as core when considering collective formation and collective motivation. Without the intention to participate collectively, collective participation is not possible.

In addition, Du Toit's description of this level specifically excludes interaction with others (32). Due to the nature of this level, awareness of others is not present. This was an important reason to exclude the tone level when the levels of collective participation in occupations were developed. Reasoning by Goode and Yalom was considered when taking this decision. Goode (1992), in defining a crowd, stressed the importance of interaction between members (46). According to him, without interaction between members, a collective cannot be described as a group, but merely as people who are in the same place at the same time. Yalom (1980), in describing a group, also highlighted the need for interaction and engagement with each other (53). Without interaction, a collective cannot exist.

The levels of collective participation in occupations developed in this study are, in part, based on Engleberg and Wynn's group motivators levels (223). Similarly to Engleberg and Wynn's group motivators, collective participation levels range from forming collectives and participation in collectives to fulfil basic needs, to altruism being the highest motivator for collective participation. The above-mentioned authors suggested that basic needs are the lowest form of motivation for collectives and this motivation drives action that contributes to survival-securing basic needs. This suggestion was supported by Schmid (2005) who reflected on the early human beings who formed collectives for survival and security (3).

In addition, Fogelberg and Frauwith's (2010) and Ramugondo and Kronenberg's (2010) suggested levels for analysis of collective occupations were considered when levels were developed in this study (18, 88). These included groups (collectives), communities and population or society levels. Therefore, the levels of collective participation in occupations developed in this study range from actions and motivation focusing on the individuals in the collective to actions and motivation for the benefit of the collective itself, to collective actions and motivation for the benefit of the community, culminating in collective actions and motivation for the benefit of the broader society.

5.5.4 LEVELS OF COLLECTIVE PARTICIPATION

5.5.4.1 Self-differentiation level

On the self-differentiation level, collective formation is described as incidental and situational as members do not make a choice to participate but rather form the collective by accident or incidentally. This incidental formation could be due to mutual or collective vulnerabilities and needs amongst members. Collective action on this level is directed towards self-preservation of individuals in the collective and is in response to a threat and/or a basic need. Within the collective, actions are dependent in nature since a leader is needed for planning, organisation and coordination of action to ensure a successful outcome. The collective demonstrates no concept of procedures and is dependent on the leader for adherence to procedures and social norms.

When considering the description above, it falls somewhere between Blumer's (1969) descriptor for a casual crowd and a conventional crowd (45). Members of the collective have the opportunity to interact with each other, which is applicable to conventional crowds; however, the collective is not planned and collective formation is incidental, which is similar to the definition for a casual crowd.

On this level, no collective product is produced unless guided by a leader. Interaction with others is incidental and either facilitated (by leadership) or reactive due to common vulnerabilities or needs, which is similar to Blumer's (1969) descriptor of a casual crowd. In responding to each other's actions, communication and collective

cohesion is superficial and incidental. Cohesion within the collective is superficial, reactive or incidental due to a common/mutual basic need(s) and is not intentional. The need drives the forming of a collective. Similarly to the above, connectivity (connecting with others) is incidental, reactive, superficial and will occur due to mutual/collective needs and vulnerabilities.

It is important to note that on this level there is no intention to participate collectively in occupations, which means that the descriptor of this level does not comply with Ramugondo and Kronenberg's (2015)(88) suggestion that intentionality is an important component of collective participation. However, this is why self-differentiation is the lowest level and why strong leadership is needed on this level.

5.5.4.2 Self-presentation level

On this level, collective participation in occupations is due to convenience, environmental barriers or leadership, for example, people interacting when congregating at the communal water point at the same time. Motivation of the collective is egocentric and members engage only if the collective fulfils the basic needs of the individual members. This makes forming a collective reactive rather than proactive. Tilly (1978) suggested that collectives engaging in proactive action are more superior than collectives engaging in reactive action since proactivity can address the problem in more depth and from a more original perspective than reactivity (237). Thus, classification of reactive action on the lower levels of collective participation is in line with Tilly's theory.

Action is focused on improving conditions for the self, members within the collective and their families. This collective cannot participate independently and needs leadership or appropriate action and achievement of goals. The collective receives (is able to demand) services but contributes nothing. Similarly, egocentricity is in line with the lower levels of Engleberg and Wynn's hierarchy of group motivators (223).

The collective can work appropriately as a collective in simple, familiar or habituated tasks. In any other tasks, leadership is still essential. Communication between members is concrete and often between the members and the leader unless the

group has been in existence for a while and members know each other well. This collective cannot take initiative without leadership and can only sustain effort in simple, familiar and habituated tasks, which is in line with the Tamarack Institute's levels of community engagement (227) that places the ability to take initiative on higher levels of engagement.

Additionally, for collective participation to take place on this level, the research suggests that a shared physical space is essential. This means that the collective needs to be in the same physical space for collective participation to be possible. As reported on previously, authors, for example, Pierce did not think this was important; however, Barlow and Dennis (2014) suggested that the need for a shared space would depend on the cohesion and intelligence of the collective (160). The lower the level, the more important a collective space is.

Lastly, on this level, due to low ability to initiate independently and dependence on leadership in all other functions, collectives would have difficulties initiating, organising and implementing a promotion or prevention programme independently. Strong leadership would be required and specific tasks would need to be identified and taught to the collective.

5.5.4.3 Passive participation level

On this level, participation in a collective is due to guidance (through leadership) and actions become more productive in achieving the collective's goals. The collective makes contributions but is not involved in the decision-making process for services or programmes for their communities. There is still a dependency on leadership. This definition is similar to Thomas and Thomas's (2003) second levels of community participation where the collective participates in limited decision-making and problem identification and dependency on others is still high (226).

On this level, members in the collective are starting to become motivated to be part of a collective and it is related to their need to belong. This is in line with Maslow's hierarchy of needs where the middle level is focused on needs for belonging (152) and Blumer's expressive crowd where being part of a collective drives collective

formation (45). Action is passive since members follow leadership rather than actively initiating actions.

Mutual vision is a motivator for collective participation. Intentionality to participate collectively is evident but guidance in the form of leadership is needed for active collective participation, that is, members want to participate collectively but need practical guidance to do it.

Co-creating and collective participation in occupations can take place on this level; however, the collective is able to perform action independently (co-create without guidance from a leader) in habituated, familiar tasks and simple unfamiliar tasks. In unfamiliar tasks, members follow directions and instructions from the leader. Action is in response to recognised social norms and is directed towards achieving goals as set by the collective following others, for example, the leader or strong members in the group and following a pre-existing protocol. Collective participation is becoming more productive in achieving the collective's goals. However, collective participation could still be erratic in unfamiliar or active situations and is dependent on others to initiate, for example, a leader. Guidance by the leader is still important for collective participation on this level.

Descriptors of behaviour on this level are in line with Blumer's descriptors of an expressive crowed since the members of the collective are starting to interact with each other for the benefit of the collective. However, they are still very dependent on leadership for complex decision-making, conflict management and problem-solving, which is similar to Thomas and Thomas's third level of community participation in which decision-making by the collective remains superficial and low-level (226).

On this level, collectives would be able to participate in familiar occupations independently. Leadership would be needed for initiation of projects. For example, if many members of the collective are familiar with and experienced in gardening, a leader could initiate a communal gardening project, but the day to day maintenance of the garden could be done by the rest of the collective.

5.5.4.4 Imitative participation level

Participation in collective occupations is planned and voluntary on this level. Intentionality to participate collectively is evident (individuals want to be in a collective because they think they can do more) and this intentionality to participate collectively is not only related to familiar tasks but also to unfamiliar tasks as long as they are related to the collective's outcomes.

The collective is compliant with norms and participates in low-level decision-making only, otherwise members do as they are told. Action is product and outcome-centered and members work towards achieving outcomes set by the collective. Like the level above, this description is similar, in part, to Thomas and Thomas's third level of community participation where participation is starting to be more active and collectives start engaging in low-level planning and decision-making (226).

Mutual vision is still egocentric relative to the collective, that is, what would be beneficial for the collective. The mutual vision could have been imitated from another collective if it is similar to what the collective wanted.

Co-creating and collective participation are possible on this level in familiar and unfamiliar activities or situations. Collective actions are directed towards following/ adhering to internalised norms (collective's and social), following actions of equivalent collectives (imitating) and achieving the collective's goals. This is similar to Engleberg and Wynn's third level, which focuses on acceptance and being similar to others as a motivator in groups (223).

Collective interaction can still happen in the absence of a leader and, as a collective, the group starts to demonstrate an ability to take initiative. According to Du Toit's (1991) creative ability theory, initiative can improve if intentionality to participate and self-confidence in skills and ability are present (32). This could be the reason why the ability to take initiative is starting to develop.

There is the ability to connect with each other in the collective on a deeper level, yet dominant members of the collective will still communicate the most. Communication between members is evident and they are able to read cues in people's reactions and can respond to them appropriately. Communication in the collective remains

focused on intra-collective communication rather than inter-collectives and communication with other collectives is still egocentric.

On this level, collectives would imitate successful occupations performed by other collectives. For example, if they see or hear of other collectives achieving outcomes that are similar to theirs, they might imitate the project or occupation. Members work together more productively and are less dependent on leadership for all functions. A collective like this would be able to organise and implement prevention and promotion programmes but may still need guidance for planning and evaluating the programme, which is similar to Thomas and Thomas's (2003) level four (226).

5.5.4.5 Active participation level

Participation in collective occupation is planned and the collective works together according to a pre-planned strategy. The collective predominantly participates in activities that benefit the collective more than the community in which it is situated. As a collective, members take more initiative and consider the bigger picture when planning, organising and executing collective action - they have an increased awareness of the community's needs.

On this level, motivation is interest-driven (the collective's interests), while adhering to social norms. However, as a collective, members are starting to want to surpass social norms and standards (do better). Motivation is also collective-oriented and focuses on the collective's need, which drives actions. In line with this, mutual vision is starting to become geared towards the collective, that is, what would be beneficial for the collective.

Intentionality to participate collectively is evident (individuals want to be in a collective because they think they can do more) and this intentionality to participate collectively is not only related to familiar tasks but also to unfamiliar tasks as long as they are related to the collective's outcomes.

Co-creating and active collective participation are possible on this level in familiar and unfamiliar activities or situations and are directed towards collaborative action (within the collective) to achieve the collective's goals and follow community norms.

The need for constant leadership and guidance reduces and the collective starts becoming a role model (imitated by other collectives). Its actions and responses are original, unique and not imitated. Interactive responses can take place on this level since communication is on a deeper level.

5.5.4.6 Competitive participation level

In the same way as the level above, participation in collective occupation is planned and the collective works together according to a pre-planned strategy. As a collective, members participate more in activities that benefit the collective than the community in which the collective is situated. The collective takes more initiative and considers the bigger picture as well as the needs of the community in goal-setting and planning. Through actions, members want to transcend norms (since they want to do better than the norm) and adapt to situations and conditions effectively. This is in line with Englewood and Wynn's fourth level of group motivators where prestige, success, status and achievement are the main motivators for collective action. Here, the group wants to achieve success and prestige by doing better than other collectives (223).

On this level, dependence on leadership decreases (168), thus, leadership is not a necessity but is used to enhance performance. Therefore, a leader may be elected to ensure that standards and norms are surpassed.

Actions are socially acceptable, appropriate and productive in various situations and the collective can adapt planning and action when needed without the intervention of the leader.

As a collective, there is an intention to participate collectively for the benefit of the community but also to surpass other similar collectives.

Mutual vision is starting to become less egocentric relative to the collective, that is, what would be beneficial for the collective. The mutual vision is original to the collective.

Co-creating and collective action is possible on this level in familiar and unfamiliar activities or situations and is voluntary since members understand the benefits of working together. The collective is directed towards norm transcendence and achieving goals as set by the collective. It is competitive and disciplined in order to achieve outcomes and to surpass expectations.

Interaction between members in the collective is an active process. Members understand the importance of interacting and responding to each other for the benefit of the collective in all activities and/or situations. Responding to each other's needs takes place in all activities and situations within the members' own community. Their responses are original (not copied from role models) and can happen in the absence of a leader. Their interactive responses and collective action are automatic.

Active collective participation can take place on this level. Cohesion within the collective is evident and this makes it possible for a collective identity to form. The collective can interact easily with other collectives for the benefit of the community.

5.5.4.7 Contributive participation level

The behaviour of the collective progresses from egocentricity (focused on the needs of the collective) to being more community-focused. The community's need is more important than that of the collective's. On this level, motivation is directed towards improving the community and is robust, and active collective participation is possible (want to participate collectively).

Intentionality to participate collectively is evident (individuals want to be in a collective because they think they can do more for the community) and this intentionality to participate collectively is for the benefit of the community. The collective or shared mutual vision focuses on the community's vulnerability and not on the collective's shared vulnerability.

Co-creating happens automatically due to a motivation to contribute. Collective action is community-centred and focused on improving conditions in the community. Action is disciplined to achieve outcomes and to surpass expectations and meet the community's needs. The collective has no need for leadership and guidance but might elect to have leadership to surpass standards and norms.

The collective participates in decision-making as well as in monitoring of achievement of outcomes, policy development and implementation on a community level. Collective interaction happens in the absence of a leader and interactive responses are automatic (works like a well-oiled machine).

The collective is responsive to each other's needs and actions since members understand the importance of interacting and responding to each other for the benefit of the community and for achieving outcomes in all activities and/or situations. Members also respond to each other's needs in all activities and situations within their own community.

Active collective participation takes place on this level. Cohesion within a collective is evident and the collective works together cohesively. There is easy connection with other collectives for the benefit of the community and a collective identity is present.

On this level, the collective would be able to plan, organise, implement and evaluate a prevention programme independently. Members might use the guidance of the leader to ensure implementation of the programme in order to exceed expectations (to make it better). This level of collective participation is similar to the highest levels of both participation scales described in the literature review section of the thesis, that is, the collective can take active leadership to initiate and implement action that can benefit the community.

5.5.5 LEADERSHIP AND COLLECTIVE PARTICIPATION IN OCCUPATIONS

Leadership can provide socio-emotional support as well as task-related guidance for a collective depending on the need and the capacity of the collective (238). These points are important when considering the level of collective participation.

Dependence on leadership decreases as the level of participation increases (239). On the self-differentiation level, strong leadership is needed for action, relations, emotional functioning, producing an end result and achieving outcomes. Collective formation is incidental but is often driven by leadership. Similarly, leadership is needed for both socio-emotional support and task-related guidance.

As levels progress, dependence on leadership decreases as some of the leadership functions are taken over by the group. For example, decision-making and goal-setting becomes more democratically shared amongst members with members actively contributing towards these. In the last two levels, leadership is used for the collective to exceed expectations. On these levels, leadership could also be collaborative to enhance the sustainability and effectiveness of the collective. Additionally, dependence on the leaders for socio-emotional support and task-related guidance is low. Therefore, leadership is not essential on this level; however, an effective leader can enhance the functioning of the collective.

Another point to consider is that the leadership style can facilitate or be a barrier for progress of the collective. A study by Jung and Sosik (2002) who looked at leadership in small groups, found that specifically transformational leadership can positively influence collective effectiveness, cohesion and empowerment (239). A transformative leader guides and motivates a collective to perform beyond standard expectations while an autocratic leader controls the collective and makes the decisions (240). Progress of the collective from lower to higher levels would, thus, depend on the type of leadership. However, an autocratic leadership style is more relevant for lower functioning collectives while not being appropriate for higher levels.

5.6 CONCLUSION

In this phase, five domains and nineteen items, which were used as a basis to develop descriptors for seven levels of collective participation in occupations, were developed. The development of the levels was based on the creative ability theory as well as the community participation theory.

The seven levels are sequential, ranging from incidental collective formations and guidance needed for actions to independent action of the collective, and their motivation is geared towards improvement of the community and society.

CHAPTER 6: PHASE 3: VALIDATION

VALIDATION OF DOMAINS, ITEMS AND DESCRIPTORS FOR LEVELS OF COLLECTIVE PARTICIPATION IN OCCUPATIONS: QUANTITATIVE STUDY

"Where there are many, nothing goes wrong." (Swahili proverb. Author unknown)

6.1 INTRODUCTION

In this chapter, the methodology used to validate domains, items and descriptors for levels of collective participation in occupations is described and the results of the validation process are reported on.

The study is intended to develop domains, items and descriptors for levels of collective participation. To do so, the following steps were used: item generation, item reduction and validation of items (228). While the first two steps were described in phases one and two of this study, step three, that is, the validation of items was completed in this phase. Phase three focused on the content validity of the domains, items and observable actions for the levels of collective participation.

6.2 METHODOLOGY

6.2.1 RESEARCH DESIGN

To determine the content validity of the domains, items and descriptors for levels of collective participation, a quantitative approach was used since this approach is grounded in the assumption of objectivity (129). The approach answers research questions that demand a quantitative answer, it measures numerical changes and it can be used statistically to describe a phenomenon. Additionally, it aims to quantify variations, predict casual relationships and describe characteristics of data that are obtained in a numerical format and analysed statistically (129). Since this phase

intended to measure the validity of the domains and items, the use of this approach was the best option.

The construct of validity is positioned within a positivist world view (as defined in chapter one) since validity is related to measurement of truthfulness and the ability of the tool to measure specific constructs (241). Although this study adopted a constructivist world view, a change to positivism was essential to complete the overall investigation. According to Patton (2001), “triangulation strengthens a study by combining methods. This implies using several kinds of methods or data, including using both qualitative and quantitative approaches” (122)(p. 247). If this statement is generalised to paradigms and world views, it can be said that the move from constructivism to positivism could strengthen the results of this study.

Research methodology literature identifies three broad categories of validity, namely, content, construct and criterion validity (242). This phase only focuses on content validity, which is defined as “the degree to which an instrument has an appropriate sample of the items for the construct being measured” (242)(p. 423). This definition of content validity is similar to that of construct validity; however, although content and construct validity both investigate the extent to which domains and items measure a certain construct, the difference lies within the method of data analysis. Content validity relies on expert opinion, which is analysed through the use of the content validity index (CVI) or percent agreement analysis (243) while construct validity uses different statistical analysis, for example, item response theory and factor analysis to validate constructs. The sample for content validity consists of experts and, therefore, a small sample size is acceptable, while the sample for construct validity is the data collected after using the tool on the population for which it was developed. Thus, a much larger sample size is used (243). Content validity was chosen for this study since the researcher intended to measure whether the content actually measures what it was intended to measure.

According to Rubio, Berg-Weger, Tebb, Lee and Rauch (2003), content validity can be further divided into face validity and logical validity (244). Where face validity is defined as a superficial type of validity that measures validity on face value, logical

validity is a more rigorous process involving a panel of experts evaluating the validity of the content (244). This study measured logical validity since the process is more rigorous.

When validating a measurement tool, Wynd, Schmidt and Schaefer (2003) pointed out that the items should also be reflective of the full domain of the phenomenon that is being investigated (245), meaning that it is essential that the items, when considered together, constitute the full scope of the construct that is being measured. In the case of this study, the domains and items, when considered together, need to describe levels of collective participation. In addition, besides ensuring that relevant content is included, content validity also aims to ensure that irrelevant content is excluded from the instrument (246).

This study elected to use the CVI within this phase. This index was chosen since it is widely used and the steps for it are well documented (243, 247). The CVI is popular since it is easily understandable, easy for computing totals, has specific guidelines for users, gives the developers information on relevance of items as well as whole measurement tools and indicates the extent of agreement by experts (248). The CVI consists of two components, the item content validity index (I-CVI), which measurers the validity of each individual item on the scale, and the scale content validity index (S-CVI), which measurers the content validity of the scale as a whole (247, 249).

6.2.2 ITEM CONTENT VALIDITY INDEX

Rubio et al. (2003) suggested the following steps when conducting a content validity study (244): selecting a panel of experts, soliciting experts' participation, analysing data and revising the measure.

6.2.2.1 Step 1: Selecting a panel of experts: population and sample

It is suggested in research literature that experts with more than ten years of experience should be used at this stage (247). The population for this study, thus, consisted of occupational therapists in South Africa who had more than ten years of experience working with collectives of people in community-based settings or working with the VdTMoCA.

For I-CVI it was recommended by Polit and Beck (2006) that the panel consist of an uneven number (to prevent chance agreement or 50-50% split of opinions) but not more than ten as this could lead to too many diverse opinions (249). For I-CVI, Lynn (247) suggested that the number of experts on the panel should depend on convenience (accessibility and amenability to participating in the study) rather than ensuring that they were representative of the population of experts. For this study, the researcher invited eight experts to participate in this round. Inclusion criteria were:

- a qualification in occupational therapy
- more than ten years of experience either working in community-based settings or working with the VdTMoCA
- more than ten years of experience working with groups.

6.2.2.2 Step 2: Soliciting experts' participation: data collection

To determine the I-CVI, literature suggests that a panel of experts rates each item on the scale in terms of appropriateness to the construct under investigation. Within this study, the experts independently rated each item on a four point scale as follows: 1= not relevant, 2 = somewhat relevant, 3 = quite relevant and 4 = highly relevant, as suggested by Wynd, Schmidt and Schaefer (2003) and Polit, Beck and Owen (2007) (245, 248). Lynn (1986) advocated a four point scale to eliminate the "ambivalent middle rating common in odd number rating scales" (247)(p. 384). A rating of one and two are considered as not appropriate while ratings of three and four are considered appropriate.

In this study, participants were invited to participate via email. An information letter was emailed to all the potential participants. If they consented to participate, they were asked to return the consent form via email to the researcher. Attached to this letter was a demographic questionnaire that participants had to complete and email to researcher. The questionnaire consisted of four close-ended questions that focused gathering information about the participant's level of education, engagement with the VdTMoCA (application of model in practice, teaching of model in a tertiary

institution. Membership on the VdTMoCA Foundation committee and publications that focused the model) and area of practice within occupational therapy

Once participants consented, the researcher emailed them a Microsoft word document consisting of all the descriptions for the domains, items and descriptors for all seven levels of collective participation. Each domain, item and descriptor was allocated a number. (See appendix I for this document.)

In addition, the researcher emailed the participants the link to the survey that was placed on Survey Monkey®. The participants were expected to read the descriptor on the word document and then give a rating for the descriptor next to the corresponding number on the web-based survey. At this stage, the experts were asked for suggestions on changes in wording or other aspects/variables that should be included or expanded on (243).

This method was selected as the researcher wanted the convenience of a web-based survey; however, two participants said that it was easier for them to read the descriptors from a hard copy rather than on a web-based medium. On completion of the survey, the participants submitted the survey via the website. This ensured anonymity of participants.

6.2.2.3 Step 3: Analysing data

To compute the I-CVI for each item, the scores for each rater, giving either a *quite relevant* (a rating of three) or a *highly relevant* (a rating of four) were included in the calculation (247). The percentage for each of the above scores was combined into a final percentage, which was converted to an I-CVI score.

In literature there is debate about the proportion of agreement that indicates content validity (247, 249). Many authors cited Lynn's (1986) proposal that the I-CVI score per item should not be lower than 0.78 (247, 249) while others proposed an average agreement of 70% (0.70) as necessary for content validity, 80% (0.80) as adequate and 90% (0.90) as good (245, 250). Due to the fact that the phenomenon under investigation in this study is a complex and new concept to many occupational

therapists, including the participants, the researcher decided to adopt the first proposal of 0.78 agreement for content validity for this study.

6.2.2.4 Step 4: Revising measure

Lynn (1986) suggested that items with a rating of one or two either be omitted from the measuring instrument or revised (247). Therefore, domains, items and descriptors not receiving an I-CVI rating of 0.79 or above were revised according to the participants' comments and re-sent during round two. Polit and Beck (2006) proposed that round two should follow the same process, but that the expert group should be smaller as only the relevance of the revised items needed to be evaluated again (249). Lynn (1986) suggested that the experts for this round could come from the same pool of experts (247). However, within this study, the researcher opted not to reduce the panel of experts, but to re-send to the same panel since they were all familiar with the process and the data.

During round two, a similar methodology was followed as in round one. However, in this round, the changed items were sent out as a word document with an attached page on which the participant had to indicate rating. The same rating scale was used as in round one. (See appendix K.)

Each item descriptor was allocated a number from one to twenty-eight and the participants had to indicate their rating next to the corresponding number on the rating sheet. Participants were also given a space for comments.

6.2.3 SCALE CONTENT VALIDITY INDEX (S-CVI)

Research literature reports on two methods to calculate the S-CVI (243). The first method includes agreement by two experts. This method entails sending out the items to two other experts that were not included as participants in the initial I-CVI rating. Their task would be to rate each item on the appropriateness of the item to the scale. Both experts have to allocate a score of three or four to the item in order for it to receive a CVI rating of 0.8. Expert researchers suggest acceptable S-CVI scores of 0.80 and above (249). The key here is that both raters need to be in agreement about an item before that item can be retained. If the index score is lower

than 0.80, the developer needs to re-look at the whole scale. The researcher opted not to use the two-rater method as there is a lack of occupational therapists that adhere to the inclusion criteria.

The second method suggested by research literature to calculate the S-CVI is by using the existing I-CVI scores. According to Polit and Beck (2006), both methods are used currently in research although the second method is considered less conservative (243).

According to research literature, for the second method calculations can be done in three ways (243). The first is to "average the proportion of items rated relevant across experts" (243)(p. 492). Here, the S-CVI is calculated by working out the proportion of items given a three or four rating by all raters during the I-CVI. The second way is by averaging the I-CVI for all items by calculating the sum of all the items and dividing this by the number of items. The third method is by calculating the sum of items rated as relevant and then dividing this sum by the total number of ratings (242). According to the above-mentioned authors, all three methods would always yield the same final score; however, they suggested using the averaging of the I-CVI as it "puts the focus on average item quality rather than on average performance by the experts" (243)(p. 493). For this reason, the researcher of this study elected to follow the suggestion of Polit and Beck.

6.2.4 ETHICAL CONSIDERATIONS

An information letter was sent to each potential participant (appendix E). Included in this letter was the research aim and objectives. The letter outlined the focus of phase three of the study as well as the task in which these individuals were invited to take part. Participants were informed that they could withdraw from the research at any point without negative consequences. If they consented to participation, they had to complete the attached consent form. The link to the web-based survey link was emailed to them once the researcher had received the consent form.

Use of the web-based survey tool during data gathering in round one of the I-CVI scoring ensured anonymity of participants since it eliminated identifying information,

such as the participant's email address. During round two, anonymity was ensured by experts emailing their rating sheets to the departmental administrator who printed out the hard copy and handed it to the researcher. No names were included on these rating sheets. (See appendix J for the information letter for round two.)

6.3 RESULTS

6.3.1 INTRODUCTION

Within this section, the results to establish content validity of domains, items and descriptors for levels of collective participation in occupations are presented. This was done through calculation of the I-CVI and the S-CVI. The results of round one and two of I-CVI are reported on separately.

6.3.2 ITEM CONTENT VALIDITY INDEX

6.3.2.1 Round 1

Demographics of participants

Eight occupational therapists that adhered to the inclusion criteria were invited to participate in this phase of the study. Seven occupational therapists agreed to participate. All participants classified their current working environment as the field of academia (100%) either in South Africa or England.

As seen in table 6.1, everyone in the sample has practised as an occupational therapist for more than ten years. An equal percentage of participants have practised between ten and fifteen years (28.57%), and twenty and twenty-five years (28.57%), and 28.57% of the participants have practiced for more than thirty years as occupational therapists.

Table 6.1: Demographic information for participants

Number of years practising as an occupational therapist	% (n=7)
Between 10 to 15 years	28.57
Between 15 to 20 years	14.29

Between 20 to 25 years	28.57
Between 25 to 30 years	0
More than 30 years	28.57
Highest level of education of participants	**% (n=7)**
Diploma	14.29
Degree	14.29
Master's	71.4
Doctorate	0
Length of involvement with the Vona du Toit Model of Creative Ability	**% (n=7)**
Between 10 to 15 years	57.1
Between 15 to 20 years	14.3
Between 20 to 25 years	0
Between 25 to 30 years	0
More than 30 years	28.57
Length of involvement with groups or collectives in practice	**% (n=7)**
Between 5 to 10 years	14.29
Between 10 to 15 years	42.86
Between 15 to 20 years	14.29
Between 20 to 25 years	28.57
Between 25 to 30 years	0
More than 30 years	0

The highest level of education of participants in the sample was a master's degree in occupational therapy and five participants (71.43%) reported having this degree. One participant has a diploma in occupational therapy, while none of the participants has a doctoral degree. One participant reported that she had two additional undergraduate degrees unrelated to the field of occupational therapy.

More than half of the participants (57.14%) reported that they had used the VdTMoCA in their practice for between ten and fifteen years while 28.57% of

participants reported that they had used the model in their practice for more than thirty years.

When asked how long they had been involved with collectives in their practice, 42.86% of the participants reported involvement with collectives of between ten and fifteen years while 28.57% reported an involvement of between twenty and twenty-five years. Lastly, 14.29% of the participants reported working with collectives for between five and ten years, and between fifteen and twenty years.

Content validity of domains, items and descriptors

A. Rating of appropriateness of domains and definitions of domains for collective participation

Participants were given the names and definitions of the five domains and were asked, firstly, to rate the appropriateness of these domains to determine a collective's level of participation. Secondly, they were asked to rate the appropriateness of the definition for each domain.

To ensure that participants understood the concept of a domain, the following definition and description was compiled by the researcher and given to participants: "A domain is defined as a set of values, a field of action or areas of organisation. Domains are usually the main areas and there are various items in each domain. Du Toit (32) had the following domains that she called components: motivation, action, individual's ability to handle tools, materials and objects in the environment; ability to handle situations within their context; ability to relate to others; ability to show initiative; ability to demonstrate effort; ability to control anxiety; ability to complete a task and ability to produce a quality end product".

Table 6.2: Rating of domains and definitions of domains for collective participation (n=6)

	Rating of appropriateness of domains for collective participation	Rating of appropriateness of definitions of domains

Domains	% of agreement	I-CVI score	% of agreement	I-CVI score
Motivation	100	1	83.33	0.83
Action	100	1	100	1
Product	100	1	100	1
Relations	100	1	100	1
Emotional functioning	100	1	83.34	0.83

All participants agreed with the identified domains and rated them as either a three (quite relevant) or a four (highly relevant). The I-CVI score for each of the domain names was 1.0 and, therefore, considered valid.

In the comment section, one participant suggested a change of name for the *emotional functioning* domain to the *psychological functioning* domain "because the descriptor does not only engage affect function but also integrated cognitive function and the whole psyche (as evidenced by the inclusion of life skills such as problem-solving under this domain". In discussion with her supervisors, the researcher decided not to change the name since it was felt that, although life skills were being referred to, it would be the collective's affective or emotional intelligence that would impact on its ability to perform these life skills. As emotional intelligence is defined as the ability to control one's emotions and is considered crucial for successful engagement in everyday life (251), it was felt that the term *emotional* fitted with the intention of this domain.

All definitions of the domains received agreement ratings of above 80% as seen in the last column in table 6.2 above. All participants rated the domains of *action*, *product* and *relations* as either a three (quite relevant) or a four (highly relevant). The domains of *motivation* and *emotional functioning* each received one rating of two (somewhat relevant). In summary, definitions of domains all received I-CVI scores of either 0.83 or one, therefore, all were considered valid.

Two comments were received from participants in this section and these comments were related to the definition of motivation. The comments were:

Comment 1: **"motivation of the individuals in a collective may have the same or a different motivation to the collective as a whole."**

The researcher agreed with this comment and felt that it was valid since a similar conclusion was arrived at in the results of phase one of this study. However, it was felt that the comment did not suggest a need for change to the definition.

Comment 2**: "The definition of motivation - which I assume refers to volition does not clearly capture the essence of this mechanism. In my mind volition and motivation is not the same thing and is often confused."**

This comment focused on the fact that Du Toit used the terms *volition* and *motivation* interchangeably.

B. Rating of appropriateness of items for the domain to which they were allocated

Participants were given the items for each domain and were asked to rate the appropriateness of these items to the domain to which they were linked, as well as to rate the appropriateness of each definition.

Table 6.3: Rating of appropriateness of items and item definitions for each domain (n=6)

	Rating of the appropriateness of items for each domain		Rating of the appropriateness of the definition of each item	
Items	**% of agreement**	**I-CVI score**	**% of agreement**	**I-CVI score**
Motivation				
Shared meaning	100	1	100	1
Shared intentionality	100	1	100	1
Action				

Co-creating	100	1	83.34	0.83
Symbiotic action	83.34	0.83	83.34	0.83
Equal action	100	1	83.34	0.83
Shared time and physical space	100	1	100	1
Ability to take initiative	100	1	83.34	0.83
Effort	100	1	100	1
Handling of tools and resources	100	1	100	1
Product				
Tangible product	100	1	100	1
Intangible product	83.34	0.83	83.34	0.83
Collective formation	100	1	100	1
Relations				
Interaction	100	1	100	1
Cohesion	100	1	100	1
Accountability	100	1	100	1
Responsibility	100	1	100	1
Communication	100	1	100	1
Emotional functioning				
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	100	1	100	1
Openness of collective to new members/situations/ ideas	100	1	100	1

Seventeen out of the nineteen (89.47%) items received a 100% agreement rating from the participants, as seen in the left column of table 6.3. above. Two items, *symbiotic action* (under the domain of *action*) and *intangible product* (under the domain of *product*) received agreement ratings of 83.34% because these items were rated by one participant as *somewhat relevant* (rating of two). Since the I-CVI for all the items was above 0.8, all items were rated appropriate and valid.

One comment was received from participants in this section and this comment was related to the *action* domain that includes an item named *handling of tools and resources*:

“Handling of resources should be a sufficient descriptor as tools are also resources.”

Although the researcher agreed with this comment, she decided not to change this item name as it might be helpful to novice occupational therapists, in particular, to understand everything that is included in this item.

C. Rating of the definition of each item

Participants were given definitions for each item and were asked to rate the appropriateness of these definitions.

The majority of the definitions of the items (73.6%) received a 100% (I-CVI =1) agreement rating from the participants, as seen in the right column of table 6.3 above, while 26.4% of the definitions received a rating of 83.34% (I-CVI=0.83). The definition for the item *ability to take initiative* was the only definition that was rated by one participant as *not relevant* (rating of one). Neither a justification for this rating nor a suggestion for change was given by the participant. As all items received an I-CVI score of above 0.8, they were all considered valid.

Only one comment was received from a participant in this section and the comment was related to the last item of *openness of collective to new members/situations/ ideas* under the domain of *emotional functioning*.

“Openness needs to include adjusting to changing needs and situations not only new ones”.

The researcher agreed with this comment and made an addition to her definition of the item. The descriptor now includes: **“Also openness to changes to existing situations”.**

In summary, all the domains, definitions for domains, items and definitions for each item were found to be valid.

D. Rating of descriptor for levels of collective participation

- Self-differentiation level

Table 6.4: Rating of descriptor of observable actions for each item on the self-differentiation level of collective participation (n=7)

Item	% of agreement	I-CVI score
Motivation		
Shared meaning	57.15	0.57
Shared intentionality	57.15	0.57
Action		
Co-creating	85.71	0.86
Symbiotic action	71.43	0.71
Equal action	71.43	0.71
Shared time and physical space	71.43	0.71
Ability to take initiative	85.71	0.86
Effort	71.43	0.71
Handling of tools and resources	85.71	0.86
Product		
Tangible product	85.71	0.86
Intangible product	85.71	0.86
Collective formation	57.15	0.57
Relations		
Interaction	85.72	0.86
Cohesion	57.15	0.57
Accountability	85.72	0.86
Responsibility	85.72	0.86
Communication	85.71	0.86
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	85.72	0.86
Openness of collective to new members/situations/ ideas	85.71	0.86

Of the nineteen descriptors of items on this level, eleven received an I-CVI rating of above 0.8 (0.86) and were, thus, considered valid. Four descriptors received ratings of 0.71 while four item descriptors received ratings of 0.57, therefore, these item descriptors were considered invalid. These items descriptors were as follows:

Shared meaning, *shared intentionality* (within the *motivation* domain), *collective formation* (within the *product* domain) and *cohesion* (within the *relations* domain) all received an I-CVI of 0.57

Symbiotic action, *equal action*, *shared time and physical space* and *effort* (all within the *action* domain) all received an I-CVI of 0.71.

Table 6.5: Frequency of ratings for invalid descriptors of items on the self-differentiation level of collective participation (n=7)

Item	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	% of agreement	I-CVI
Shared meaning	1 (14.29%)	2 (28.57%)	1 (14.29%)	3 (42.86%)	57.15%	0.57
Shared intentionality	2 (28.57%)	1 (14.29%)	0	4 (57.14%)	57.14%	0.57
Collective formation	1 (14.29%)	2 (28.57%)	0	4 (57.14%)	57.14%	0.57
Cohesion	1 (14.29%)	2 (28.57%)	1 (14.29%)	3 (42.86%)	57.14%	0.57
Symbiotic action	1 (14.29%)	1 (14.29%)	1 (14.29%)	4 (57.14%)	71.43%	0.71
Equal action	1 (14.29%)	1 (14.29%)	0	5 (71.43%)	71.43%	0.71
Shared time and physical space	0	2 (28.57%)	2 (28.57%)	3 (42.86%)	71.43%	0.71
Effort	1 (14.29%)	1 (14.29%)	1 (14.29%)	4 (57.14%)	71.43%	0.71

As seen in the table above, the ratings were widely spread out for all the items, with four items receiving a 57.15% agreement. The item descriptor of *shared intentionality* received a rating of *not relevant* by two participants (28.57%).

All the item descriptors received more *highly relevant* ratings than any other rating while the item descriptor of *equal action* received the highest amount of *highly relevant* ratings.

A comment received from a participant highlighted her concern with the item of *intangible product*.

Comment: **"Intangible products not clear enough- not a process, knowledge or attitude?"**

This comment was similar to a concern shared by the researcher and her supervisors. This was one of the reasons that this item was removed from all the levels. The rest of the comments were considered in review of the descriptors.

- Self-presentation level

Table 6.6: Rating of descriptor of observable actions for each item on the self-presentation level of collective participation (n=7)

Item	% of agreement	I-CVI score
Motivation		
Shared meaning	57.15	0.57
Shared intentionality	85.72	0.86
Action		
Co-creating	85.71	0.86
Symbiotic action	85.72	0.86
Equal action	85.72	0.86
Shared time and physical space	85.71	0.86
Ability to take initiative	85.71	0.86
Effort	85.72	0.86
Handling of tools and resources	85.72	0.86

Product		
Tangible product	71.43	0.71
Intangible product	71.43	0.71
Collective formation	71.43	0.71
Relations		
Interaction	83.33	0.83
Cohesion	85.71	0.86
Accountability	57.14	0.57
Responsibility	85.71	0.86
Communication	85.72	0.86
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	85.72	0.86
Openness of collective to new members/situations/ ideas	85.72	0.86

From the nineteen item descriptors on this level, fourteen (73.68%) received a rating of 0.86 while none received an I-CVI rating of one. Three (15.78%) item descriptors (*tangible product*, *intangible product* and *collective formation*) received ratings of 0.71. and two item (10.52%) descriptors (*shared meaning* and *accountability* received ratings of 0.57. The last five item descriptors were thus considered invalid.

Table 6.7: Frequency of ratings for invalid descriptors of items on the self-presentation level of collective participation (n=7)

Item	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	% of agreement	I-CVI
Shared meaning	0	3 (42.86%)	1 (14.29%)	3 (42.86%)	57.15%	0.57
Accountability	1 (14.29%)	2 (28.57%)	0	4 (57.14%)	57.14%	0.57
Tangible product	1 (14.29%)	1 (14.29%)	1 (14.29%)	4 (57.14%)	71.43%	0.71
Intangible product	1 (14.29%)	1 (14.29%)	1 (14.29%)	4 (57.14%)	71.43%	0.71
Collective formation	0	2 (28.57%)	1 (14.29%)	4 (57.14%)	71.43%	0.71

Table 6.7 above presents the frequency of the rating for the inappropriate items for this level. The item descriptors for *accountability, tangible product* and *intangible product* were all allocated a rating of one (not relevant) by one of the participants. While the scoring for the item descriptor for *shared meaning* was the most diverse, in addition to the one *not relevant* rating, this item received the highest amount of ratings of two (somewhat relevant) (28.57%). The item also received the lowest amount of *highly relevant* ratings.

The item descriptor for *shared meaning* received three ratings of *somewhat relevant*. On the positive side, four out of the five item descriptors mentioned above received more ratings of four (highly relevant) than any other rating.

Comments from participants on this level included:

Comment 1 (related to the item of *intangible end product*): **"intangible end-products concept problematic- aspect of negative drivers needs attention, avoidance, etc."**

Comment 2 (related to the domains of *motivation* and *action*): **"The aim of the collective here is to present their new found identity (which was acquired in the previous stage and is still developing) to the world/others."**

Comment 3 (related to the domain of *action*): **"Does collective engagement and collective action [2] refer to the same thing? If so, it may be helpful to stick to one term. If the primary perspective of your research is creative ability, then I would suggest 'action' and if the primary perspective is community theory then 'engagement' would probably be more congruent with theory."**

Similarly to the comment in the self-differentiation level above, the item of *intangible product* was commented on again and it was felt it needed to be expanded upon. As indicated above, this item was eventually excluded. Comment three was reviewed;

however, the researcher decided to continue using the word *action* since it is well described in both the VdTMoCA and in collective behaviour theory.

- Passive participation level

Table 6.8: Rating of descriptor of observable actions for each item on the passive level of collective participation (n=7)

Item	% of agreement	I-CVI score
Motivation		
Shared meaning	85.72	0.86
Shared intentionality	66.66	0.67
Action		
Co-creating	85.72	0.86
Symbiotic action	71.43	0.71
Equal action	71.43	0.71
Shared time and physical space	85.71	0.86
Ability to take initiative	71.43	0.71
Effort	68.43	0.68
Handling of tools and resources	85.72	0.86
Product		
Tangible product	85.71	0.86
Intangible product	85.72	0.86
Collective formation	71.43	0.71
Relations		
Interaction	85.72	0.86
Cohesion	68.43	0.68
Accountability	71.43	0.71
Responsibility	85.71	0.86
Communication	71.43	0.71
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	85.72	0.86
Openness of collective to new members/situations/ ideas	85.72	0.86

As seen in the table above, on this level, 52.63% (ten out of the nineteen items) received a I-CVI rating of 0.86. As these ratings were above 0.8, these items were all considered valid. Six (31.57%) of the items descriptors (*symbiotic action*, *equal action*, *ability to take initiative*, *collective formation*, *accountability* and communication) received a rating of 0.71 and three items (15.58% of items) (*shared intentionality*, *effort* and *cohesion*) received ratings of either 0.67 or 0.68. Therefore, nine item descriptors received ratings of less than 0.80, thus, were considered invalid. None of the item descriptors received an I-CVI rating of a one.

Table 6.9 below presents the frequency of the rating for the inappropriate items for the level of passive participation.

Table 6.9: Frequency of ratings for invalid descriptors of items on the passive level of collective participation (n=7)(for shared intentionality n=6)

Item	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	% of agreement	I-CVI
Shared intentionality	0	2 (33.33%)	2 (33.33%)	2 (33.33%)	66.66%	0.67
Effort	0	2 (28.57%)	1 (14.29%)	4 (57.14%)	68.43%	0.68
Cohesion	0	2 (28.57%)	1 (14.29%)	4 (57.14%)	68.43%	0.68
Symbiotic action	0	2 (28.57%)	0	5 (71.43%)	71.43%	0.71
Equal action	0	2 (28.57%)	0	5 (71.43%)	71.43%	0.71
Ability to take initiative	1 (14.29%)	1 (14.29%)	0	5 (71.43%)	71.43%	0.71
Collective formation	1 (14.29%)	1 (14.29%)	0	5 (71.43%)	71.43%	0.71
Accountability	1 (14.29%)	1 (14.29%)	2 (28.57%)	3 (42.86%)	71.43%	0.71
Communication	0	2 (28.57%)	2 (28.57%)	3 (42.86%)	71.43%	0.71

From the table above, it can be seen that the ratings for each item descriptor are very spread out with ratings distributed in all the categories. Item descriptors for

symbiotic action, *equal action*, *ability to take initiative* and *collective formation* received the most *highly relevant* ratings.

On review of the comments received for this level, it was felt that they were aimed at further expanding descriptions of items and the need for clarification. There were no comments that expressed disagreement with the item descriptors. These comments were considered in the revision of descriptors for round two.

- Imitative participation level

Table 6.10: Rating of descriptor of observable actions for each item on the imitative level of participation (n=7)

Item	% of agreement	I-CVI score
Motivation		
Shared meaning	100	1
Shared intentionality	100	1
Action		
Co-creating	100	1
Symbiotic action	85.72	0.86
Equal action	85.71	0.86
Shared time and physical space	100	1
Ability to take initiative	100	1
Effort	100	1
Handling of tools and resources	85.72	0.86
Product		
Tangible product	100	1
Intangible product	71.43	0.71
Collective formation	100	1
Relations		
Interaction	100	1
Cohesion	100	1
Accountability	100	1
Responsibility	100	1
Communication	100	1
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-	100	1

solving and decision-making		
Openness of collective to new members/situations/ ideas	100	1

As seen in the table above, the degree of agreement was high on this level with fifteen (78.94%) out of the nineteen item descriptors receiving an I-CVI rating of 1.0. Three items (15.78%) received an I-CVI rating of 0.86 (85.71% and 85.72%). All these item descriptors could, therefore, be considered as valid. Lastly, only one item received a rating of 0.71 (71.43% agreement) and was, thus, considered invalid.

Table 6.11: Frequency of ratings for invalid descriptors of items on the imitative level of collective participation (n=7)

Item	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	% of agreement	I-CVI
Intangible product	0	2 (28.57%)	0	5 (71.43%)	71.43%	0.71

As seen in table 6.11 above, five participants considered this item descriptor as *highly relevant* (71.43%), while two participants (28.57%) considered this item descriptor as *somewhat relevant* (rating of 2).

Only one item descriptor was considered invalid on this level. Although five comments were received from participants on this level, none of the comments was related to this item. As indicated previously, this item was excluded. The researcher, however, used these comments to inform her own thinking process, which was beneficial for the research process.

- Active participation level

Table 6.12: Rating of descriptor of observable actions for each item on the active level of participation (n=7)

Item	% of agreement	I-CVI score
Motivation		

Shared meaning	100	1
Shared intentionality	100	1
Action		
Co-creating	100	1
Symbiotic action	85.72	0.86
Equal action	85.71	0.86
Shared time and physical space	100	1
Ability to take initiative	100	1
Effort	100	1
Handling of tools and resources	100	1
Product		
Tangible product	85.72	0.86
Intangible product	100	1
Collective formation	85.72	0.86
Relations		
Interaction	85.72	0.86
Cohesion	100	1
Accountability	100	1
Responsibility	100	1
Communication	100	1
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	100	1
Openness of collective to new members/situations/ ideas	100	1

Of the nineteen item descriptors on this level, fourteen (73.68%) received 100% agreement ratings, meaning these item descriptors received I-CVI ratings of 1.0. (see table 6.12 above). Five (26.31%) of the item descriptors received ratings of 0.86 (85.71% or 85.72% agreement). Therefore, all item descriptions for this level could be considered as valid.

- Competitive participation level

Table 6.13: Rating of descriptor of observable actions for each item on the competitive level of participation (n=7)(n=6 for collective formation)

Item	% of agreement	I-CVI score
Motivation		
Shared meaning	85.71	0.86
Shared intentionality	85.72	0.86
Action		
Co-creating	85.72	0.86
Symbiotic action	71.43	0.71
Equal action	71.43	0.71
Shared time and physical space	71.43	0.71
Ability to take initiative	85.72	0.86
Effort	85.72	0.86
Handling of tools and resources	85.71	0.86
Product		
Tangible product	85.71	0.86
Intangible product	57.15	0.57
Collective formation	66.67	0.67
Relations		
Interaction	85.72	0.86
Cohesion	85.72	0.86
Accountability	85.72	0.86
Responsibility	85.71	0.86
Communication	85.72	0.86
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	85.72	0.86
Openness of collective to new members/situations/ ideas	85.72	0.86

As seen in the table above, fourteen (73.68%) out of the nineteen item descriptors received an I-CVI rating of 0.86 (85.71% or 85.72% agreement) and were, thus, considered valid. Three (15. 78%) item descriptors received ratings of 0.71 (71.43% agreement), and item descriptors for *intangible product* and *collective formation* received ratings of 0.57 and 0.67 respectively. On this level, five items received content validity index ratings of less than 0.8 and were, thus, considered invalid. None of the item descriptors were given an I-CVI rating of 1.0.

Table 6.14 below presents the frequency of the ratings for the inappropriate items for the level of competitive participation.

Table 6.14: Frequency of ratings for invalid descriptors of items on the competitive level of collective participation (n=7)(n=6 for collective formation)

Item	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	% of agreement	I-CVI
Intangible product	1 (14.29%)	2 (28.57%)	1 (14.29%)	3 (42.86%)	57.15%	0.57
Collective formation	1 (16.67%)	1 (16.67%)	0	4 (66.67%)	66.67%	0.67
Symbiotic action	1 (14.29%)	1 (14.29%)	2 (28.57%)	3 (42.86%)	71.43%	0.71
Equal action	1 (14.29%)	1 (14.29%)	0	5 (71.43%)	71.43%	0.71
Shared time and physical space	1 (14.29%)	1 (14.29%)	0	5 (71.43%)	71.43%	0.71

From the above table, it can be seen that the opinions of participants varied since ratings were distributed over most of the categories. All the item descriptors received one rating of one (not relevant). For all the item descriptors on this level, the rating of four (highly relevant) received more votes than any other rating.

- Contributive participation level

Table 6.15: Rating of descriptor of observable actions for each item on the contributive participation level (n=7)

Item	% of agreement	I-CVI score
Motivation		
Shared meaning	85.72	0.86
Shared intentionality	85.71	0.86

Action		
Co-creating	85.72	0.86
Symbiotic action	71.43	0.71
Equal action	85.72	0.86
Shared time and physical space	71.43	0.71
Ability to take initiative	85.72	0.86
Effort	85.71	0.86
Handling of tools and resources	85.71	0.86
Product		
Tangible product	85.72	0.86
Intangible product	85.72	0.86
Collective formation	71.43	0.71
Relations		
Interaction	85.71	0.86
Cohesion	85.72	0.86
Accountability	85.71	0.86
Responsibility	85.72	0.86
Communication	85.72	0.86
Emotional functioning		
Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making	85.72	0.86
Openness of collective to new members/situations/ ideas	85.72	0.86

The majority of the item descriptions (84.2% of items) on this level received a 0.86 I-CVI rating and were all, therefore, considered valid, while three (15.78%) item descriptions received a 0.71 rating. These item descriptors were for *symbiotic action* and *shared time and physical space* (in the *action* domain) as well as c*ollective formation* (in the *product* domain). These last three item descriptors were, therefore, considered invalid. None of the items received an I-CVI of 1.0.

Table 6.16: Distribution of ratings for invalid descriptors of items on the contributive participation level (n=7)

Item	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	% of agreement	I-CVI
Symbiotic	1	1	0	5	71.43	0.71

action	(14.29%)	(14.29%)		(71.43%)		
Shared time and physical space	1 (14.29%)	1 (14.29%)	1 (14.29%)	4 (57.14%)	66.67	0.71
Collective formation	1 (14.29%)	1 (14.29%)	0	5 (71.43%)	71.43	0.71

Table 6.16 above, presents the frequency of the ratings for the inappropriate items for this level. All the invalid items mentioned above were given a rating of one (not relevant) by one participant, while all the item descriptors received more ratings of four (highly relevant) than any other rating.

Three comments were received for this section. The comments were as follows:

Comment 1 (related to *leadership*): **"Descriptor indicate that this kind of collectives manages without a strong leadership. I am not sure that I agree with that the leader does not have to be on site but they must have an overarching and motivating and creative role."**

Comment 2 (related to the item of *shared intentionality*): **"suggest review concept of all for benefit/can do more - framed totally positively- realistic?"**

Comment 3 (related to the item of *intangible product*/*collective formation*): **"individualistic features now, may be strong supportive of collective but not necessarily?"**

The first two comments were related to item descriptors that received a valid rating, thus, there was no need for changes to these items.

In summary, at the end of round one, twenty-eight item descriptors were rated as invalid by the panel of experts. Figure 6.1. below represents the frequency of invalid ratings over all the levels of collective participation. As evident in the graph, the item of *collective formation* was rated invalid by the panel of experts most frequently (in

five of the seven levels), followed by the item of *symbiotic action* (in four out of seven levels) and the item of *intangible product* (in three of the seven levels).

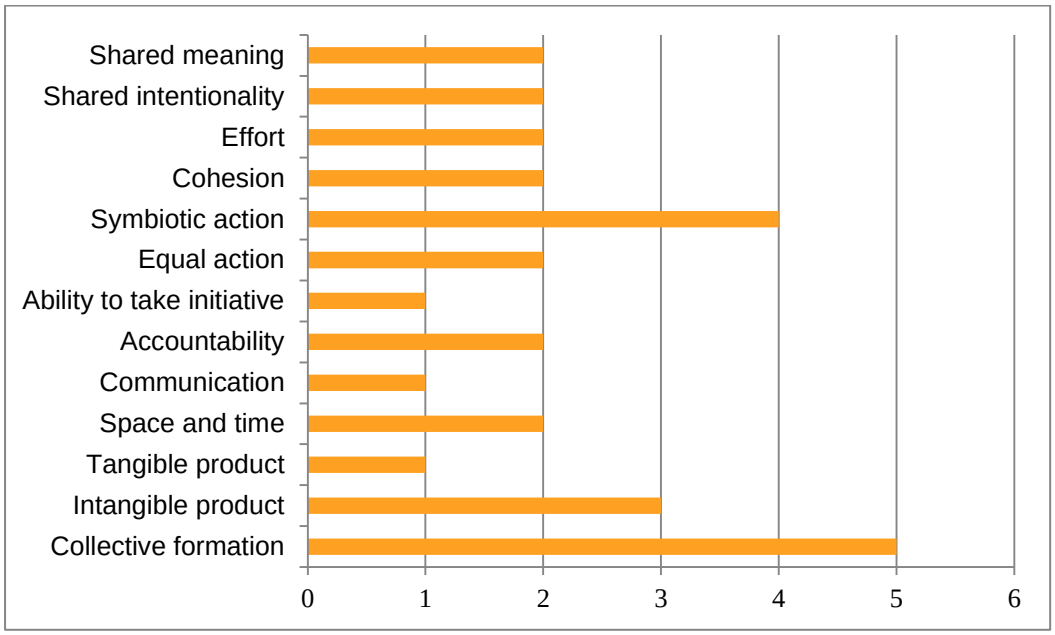

Figure 6.1: Frequency of invalid ratings

6.3.2.2 Round 2

Item descriptors found to be invalid were modified using the comments from the participants and then sent to the same participants for re-rating. (See appendix L for new item descriptors.) All seven participants responded to the request and scored the item descriptors.

Results for round 2

Table 6.17: I-CVI scores for items: round 2

Item number	Item	%	I-CVI Score
	Self-differentiation level		
1	Shared meaning	57.14	0.57
2	Shared Intentionality	100	1.00
3	Symbiotic action	71.43	0.71
4	Equal action (symmetrical action)	85.71	0.86
5	Shared time and space	71.43	0.71
6	Effort	85.71	0.86

7	Collective formation	71.43	0.71
8	Cohesion	57.14	0.57
	Self-presentation level		
9	Shared meaning	57.14	0.57
10	Tangible product	57.14	0.57
11	Collective formation	100	1.00
12	Accountability	42.86	0.43
	Passive participation level		
13	Shared intentionality	100	1.00
14	Symbiotic action	100	1.00
15	Equal action (symmetrical action)	100	1.00
16	Ability to take initiative	100	1.00
17	Effort	71.43	0.71
18	Collective formation	100	1.00
19	Cohesion	71.43	0.71
20	Accountability	100	1.00
21	Communication	100	1.00
	Competitive participation level		
22	Symbiotic action	100	1.00
23	Equal action (symmetrical action)	100	1.00
24	Shared time and physical space	85.71	0.86
25	Collective formation	100	1.00
	Contributive participation level		
26	Symbiotic action	100	1.00
27	Shared time and physical space	100	1.00
28	Collective formation	100	1.00

Of the twenty-eight item descriptors sent out during this round, eighteen items received item content validity scores greater than 0.8, meaning that all were rated as valid. Ten item descriptors were found to be invalid since they received scores less than 0.8. (Please see appendix M for final I-CVI ratings.)

One comment was received related to the descriptor for the item of *symbiotic action* on the self-differentiation level of collective participation. The comment was as follows:

“Guided by leadership but also found by default through sense of solidarity in ‘our being different.’”

Two comments were received related to the item of *collective formation* on the self-differentiation level. These included:

Comment 1**: "Needs can be as simple as hunger, but also more complex like in case of a need to be acknowledged, praised, etc."**

As part of her descriptors of the self-differentiation level, the researcher emphasised that motivation and action are driven by basic needs and vulnerabilities. The above comment underlined the need for this view to be broadened to include needs other than basic biological and physiological needs such as hunger. This is a valid comment and will be considered in future in the modification of this item descriptor.

Comment 2: **"Collective formation is incidental for individuals but externally driven for collective, reaction to common need, etc. may be common to several individuals but without their awareness of this."**

This comment was not in disagreement with the descriptor; however, it highlights the fact that the reaction to common needs may be unconscious. This appears to be a valid statement by the rater but the point needs further investigation.

6.3.3 SCALE CONTENT VALIDITY INDEX (S-CVI)

As seen in the table below, the domains, items and all the levels of collective participation received S-CVI ratings above 0.78 and can all, thus, be considered as valid and appropriate to the scale. When combining all the I-CVI ratings and averaging them, an overall rating of 0.91 was obtained, which means the overall scale can be considered as valid from the perspective of the expert opinion.

Table 6.18: S-CVI ratings

	S-CVI ratings
Domains	1
Items	0.98
Self-differentiation level	0.81
Self-presentation level	0.81
Passive participation level	0.89
Imitative participation level	0.98

Active participation level	0.96
Competitive participation level	0.88
Contributive participation level	0.88
Average I-CVI rating for all domains, items and descriptors on levels of collective participation	0.91

6.4. DISCUSSION

6.4.1 DEMOGRAPHY OF PARTICIPANTS

In this phase, the majority of the participants have master's degrees with more than twenty years' experience as occupational therapists. The majority have also worked with collectives for more than ten years. These figures indicate that the participants have had adequate time to become familiar with collectives and the concept of occupation. As seen in the writings of Dreyfus and Dreyfus (1986), an expert should preferably have more than ten years' experience in a specific field to be classified as such (252). According to this definition by Dreyfus and Dreyfus (1986), participants in this study could be considered as experts, especially since the majority of them had an additional post-graduate degree. Boyt Schell (2014) suggested that experts' clinical reasoning become well-developed and intuitive, thereby, increasing their understanding of various phenomena and their effectiveness in intervention (253). In light of the suggestion by Boyt Schell, it seems as if the participants of this phase had the expertise to take part in the validation process.

6.4.2 VALIDITY OF DOMAINS, ITEMS AND DESCRIPTORS FOR LEVELS OF COLLECTIVE PARTICIPATION

Round one of the analysis focused on the establishing of item content validity for levels of collective participation. Of the 180 definitions and item descriptors participants had to rate, twenty-eight item descriptors had an I-CVI rating of less than 0.78 and were, thus, invalid.

All domains and their related items were considered as valid. When considering ratings for item descriptors for the different levels of collective participation, the level of passive participation had the highest number (47.4%) of invalid descriptors for items (nine out of the nineteen items). The level with the second highest number (42.1%) of invalid descriptors for items was the self-differentiation level followed by the self-presentation and the competitive levels, which each had five (26.3%) invalid item descriptors. The level of active participation was the only level in which all item descriptors were considered as valid.

The items of *collective formation*, *symbiotic action*, *shared space and time* and *intangible product* received the highest number of invalid ratings. Changes were made to the descriptors of these items and they were sent out again with the other descriptors during round two. However, the item of *intangible product* was excluded as an item from each level since this item was found to be vague and lacking in specific detail. It was thought (by the researcher and her supervisors) that this lack of detail may make it difficult for occupational therapists to assess this item. Comments from participants indicated that they thought that the item descriptor for *intangible product* was similar to that of *collective formation*. This could be the reason for the low scores received by the last-mentioned item descriptor.

During round two analysis, twenty-eight items were modified and sent out for re-rating. Of these, ten remained invalid. Similarly to the results of round one, the item descriptors of *symbiotic action* and *collective formation* were the two items that were rated as invalid most frequently. Reasons for the low scores received by the item descriptor of *symbiotic action* are unknown as only one comment, related to this item descriptor, was received as reported on above under section 6.3.2.2.

At first glance, the comment given by the participant suggests an evaluative ability by the collective, which is not in line with the characteristics of this level (self-differentiation). However, the comment is in line with the VdTMoCA since, on this level, the individuals differentiate themselves. The participant could mean that the collective is attempting to differentiate themselves.

Additionally, comments for the item of *collective formation* were all related to the descriptor for the item on the self-differentiation level, which suggests that collective formation on this level is not always basic and needs-based but could be due to the need for praise or acknowledgement. In development of the descriptors on this level, the researcher considered, in part, the writings of Du Toit, Maslow, Engleberg and Wynn, and Thomas and Thomas and Blumer. The first three authors based their lowest levels on biological or basic needs, which is similar to what this researcher did. However, when considering the comment mentioned above, the question arises of whether Max-Neef's fundamental human needs on this level should be

considered. Max-Neef, a Chilean economist, identified fundamental human needs as consisting of subsistence, protection, affection, understanding, participation, recreation/leisure, creation, identity and freedom (254). Considering Max-Neef's fundamental human needs might be appropriate since one of the objectives of these identified needs is for countries and communities to use them to measure their wealth. These needs differ from Maslow's hierarchy since they can be applied as easily to collectives as to individuals (254).

The ten invalid items were within three levels of participation - self-differentiation, self-presentation and passive participation levels - with the majority of the invalid item descriptors being within the self-differentiation level. A reason for why these three levels received so many invalid ratings could be that these are the most common levels currently seen by occupational therapists working in the public sector (255). They may be more familiar with these levels, thus, might be more critical in their evaluation.

Another reason for the invalid ratings is that the concept of collective participation in occupations is a relatively new concept in occupational therapy. As explained previously, the focus in occupational therapy has often been on the understanding of the individual client. Similarly, the VdTMoCA has always been used to understand the functioning of individuals. The occupational therapists who took part in this sample are either experts in the use of the model or are experienced in working with collectives. They are, however, not experts in the use of the VdTMoCA with collectives of people participating in collective occupations. Their reasoning process could have been influenced by the individualistic focus currently existing in occupational therapy. According to Du Toit's description of individual functioning on the self-differentiation level, clients do not take part in collective functioning since action and motivation are very egocentric (32). The difficulty in aligning Du Toit's descriptors to the descriptors of items for collective participation might be one of the reasons why the self-differentiation level, in particular, had so many invalid item descriptors. Further exploration of these item descriptors is, thus, essential.

6.5 CONCLUSION

In this phase, 170 domains, items and descriptors for items on seven levels of collective participation were found to be valid according to the opinions of a panel of experts. Ten items were found to be invalid. The panel of experts also rated the content of the scale as valid for what it intended to measure, that is, collective participation in occupational therapy.

In conclusion, using the four steps for validation, the content for a possible instrument for measuring levels of collective participation has been validated from the perspective of expert opinion.

CHAPTER 7: REFLECTION ON THE FINDINGS OF THE STUDY

"Success comes when people act together; failure tends to happen alone." (Deepak Chopra)

7.1 INTRODUCTION

In this chapter, the results of the study are reflected on in order to interrogate their alignment with the fundamentals of occupational therapy and occupational sciences. This is followed by a reflection on the social context and conditions in which results were generated. The intended use of the newly developed levels of collective participation in occupation is described and lastly, the way forward is discussed.

7.2 EPISTEMIC REFLEXIVITY

All disciplines, including occupational therapy, have an obligation to interrogate and defend their epistemology. In order to do so, Kinsella and Whiteford (2009) proposed that there should constantly be engagement in *epistemic reflexivity*, which is a process that reflects on how knowledge is generated and utilised in the profession (256). Not only should the profession reflect on the social context and conditions in which information is generated as well as the applicability of knowledge to the practice context, but it should also review the alignment with the fundamentals of the profession. This process is especially important in research since this is one of the main sources, if not the main source, of knowledge generation in occupational therapy.

Kinsella and Whiteford (2009) suggested that epistemic reflexivity should be a collective responsibility and forums should be created for it (256). However, the researcher proposes that this process should also be a grassroots, bottom-up process where occupational therapists are critical of the theory and evidence they use to base their practice on. This suggestion is supported by evidence-based practice literature that proposes a critical interrogation of the theory before it is

applied in practice (257). In line with the above-mentioned proposal, the researcher had to engage in an epistemic reflexivity process of her own study.

7.2.1 ALIGNMENT OF RESULTS TO FUNDAMENTALS OF OCCUPATIONAL THERAPY AND OCCUPATIONAL SCIENCES

When contemplating the philosophy of occupational therapy, Hooper and Wood (2014) urged occupational therapists not only to consider ontology, but also the epistemology and the axiology to guide thinking (258). In occupational therapy, ontology is about considering what is *most real* for occupational therapy (258).

For collectives, just as for individuals, what is *most real* is that human beings are interconnected with each other and their environment (258). This interconnectedness with the environment has been described and considered by various authors in occupational therapy, including Yerxa (1998) who said that to separate the person from his/her environment is like separating water into hydrogen and oxygen and still expecting it to be drinkable (259). Earlier beliefs around the relationship between the person and his/her environment have evolved from the idea that the two are separate, to current belief that the two are interrelated, and that one without the other should not be considered (28). Dickie et al. (2006) argued this interrelatedness from a transactional point of view and urged a consideration of "organism-in-environment-as-a-whole" (28)(p. 83), highlighting the impact of the environment, not only on the person, but also on how he/she performs his/her occupations. How people perform occupations is not only based on personal capacity but is strongly influenced by their environment.

Similarly, from a collective viewpoint, the link between the socio-cultural perspectives, for example, the African perspective that is linked to collectivism, has been made explicit in the literature reviewed for this thesis. Linking with the socio-cultural perspective, participants of this research study specifically mentioned ubuntu and how it develops a collective consciousness that influences action or, in this case, the collective participation in occupations. The philosophy of ubuntu, as highlighted in chapter two, focuses more on the individual's openness to other people and putting the needs of others before his/her own (7, 25). This openness is often

influenced by the collective consciousness of the community in which the person lives. Therefore, if ubuntu is a common value in the community, it could be a value of the people who live in that community and, in turn, influence their actions. This is in line with a statement by Van Marle and Cornell (2005) who described the concept of ubuntu as a dynamic process where "…the individual and community are always in the process of coming into being" (260)(p. 206). With this quote, the authors emphasised the interactive nature of the relationship between people and their environment. The presence of ubuntu can facilitate collective participation since there would be an openness to participate collectively by members of the collective and an openness to accept the collective by the rest of the community.

Ramugondo and Kronenberg (2015) linked the philosophy of ubuntu with collective occupations when they said, "Ubuntu, as an ontological stance and epistemological offering on the nature of being human from the South [Southern world view] …therefore presents a strong moral philosophy on the basis of which a social orientation of occupational therapy may be expanded, emphasizing collective occupational well-being as a principal focus of practice" (12)(p. 12). With this quote, they not only supported the fundamental argument of this research project that more focus needs to be placed on collective occupations in occupational therapy but also supported the findings that ubuntu and the Southern world view need to be explored when trying to understand collective participation from a South African perspective. This argument is supported by Iwama (2006) who cautioned that being part of a collective is part of the nature of the culture in Eastern cultures and should be understood and explored within that context (27).

However, with collectives, we should consider Eisenburg's (1999) warning that modern collectives are more heterogenic, which means that it should be taken into account that some members of the collective would be there for egocentric reasons rather than for a belief in the principles of ubuntu (75). In response to this warning, one of the conclusions of this research study is that people can join a collective for individualistic reasons including a need to survive or improve their own situation or that of their family (see phase one results: *innate need as a human being*). However, what must be present is an intentionality to be part of a collective because the

individuals in the collective believe in the strength of collective participation. This belief could have developed through previous experience of achieving goals due to collective participation or through the collective ethos of the community. Similarly, Ramugondo and Kronenberg (2015) stressed the importance of intentionality to participate collectively in occupations (12).

This research study also found that an enabling environment (within and outside of the collective) makes collective participation easier. Open acceptance and support by others in the collective contribute to the willingness of the members of the collective to participate. Additionally, the openness of the community, and especially the leadership of the community, to accept the collective creates an environment that makes collective participation possible.

Finally, having access to adequate resources within the environment could also influence the collective's ability to participate. This is in line with organisational theory that highlights the importance of access to appropriate resources and infrastructure for optimal collective participation (159). How a collective responds to resourcing issues in a community would depend on the level of the group.

In support of the importance of considering the environment, Scaffa (2014b) reported that it should be the primary focus for occupational therapy intervention when working with collectives, communities and populations, and addressing environmental determinants of health and well-being should take precedence (35). Although this researcher agrees with Scaffa's views on the importance of the environment, she also supports the argument that the person and his/her environment are interconnected and, therefore, intervention should not focus solely on the environment but also on the people within the environment.

The second point that needs to be considered when exploring the ontology of occupational therapy is the *interconnectedness between people* and that this connectedness shapes their occupations (261). Within occupational therapy literature, Humphry and Womack (2014) linked this connectedness to the life course perspective, suggesting that people are born into a specific collective, community and environment and both the other people in the environment and the environment itself shape the occupations in which people participate (261).

Results of this study reported on this connectedness (mentioned above) in two ways. Firstly, wanting to connect with others is, in part, motivated by an individual's *need to belong*. This need was highlighted in phase one of this study. The need to belong is an important reason for people to choose to participate in collectives and was described as an innate need of human beings. This innate need was partly linked by participants to collective consciousness, that is, being part of a collective and understanding the value of being connected with others as discussed above. Within the literature review (chapter two) and the discussion section of chapter four, literature was referred to from psychology and sociology in support of this finding of the research study. Additionally, in these sections many reasons for this need within human beings to belong were discussed. The conclusion was reached that this need is not only an innate biological need but also due to learnt behaviour since previous successes of working in collectives could press for future collective participation. No research findings within the occupational therapy literature could be found to support this finding; however, within psychology literature similarities were found. For example, the need to belong was found to be a common item in collective scales reviewed by Oyserman, Coon and Kammelmeier (2002) who carried out a meta-analysis of studies that focused on scales for assessing individualism and/or collectivism (66).

Secondly, in phase one, *connectedness with others* in the collective was also highlighted as an essential component of collective participation in occupations. This connectedness was described as more than a physical or cognitive connection - the better the connection in a collective, the more cohesive the collective is, which in turn leads to increased productiveness. Results from phase one suggest that the connection is enhanced by commonalities between members of the collective. These include mutual needs, vulnerabilities, visions and feelings of responsibilities that link members together and enhance cohesion amongst them. These findings are in line with writings of Yalom (1980) who reported on curative factors to enhance the therapeutic value of group therapy (53). Mutuality can be linked to Yalom's (1980) curative factor of universality, which states that commonalities between group members can, firstly, make group members more at ease in the group since they feel that they are not the only ones with this problem or situation. Secondly, commonalities make members connect to others in the group since they feel that

they can relate to them and their situation. Yalom (1980) thus, suggested that group facilitators need to facilitate universality in a group to enhance the cohesion (connectedness to others) in the group (53). Within occupational therapy group work literature, group cohesiveness is identified as being important for optimal functioning of the group with the reasons for this importance being similar to those of Yalom (4, 54). Similarly, the importance of cohesion to collective functioning has been highlighted by other disciplines including sociology and psychology (155, 162, 163).

In examining the ontology and epistemology of occupational therapy, it is not only important to explore what is *most real,* but occupational therapists also need to explore what is the most important to know. The question then comes up: What knowledge is essential for the profession (258)? Although in the early sixties, Reilly (1962) argued that it is knowledge of how the body and mind function, including anatomy, physiology and psychology, she did propose that the philosophy of occupational therapy should be centred around purposeful activities (262). Weimer (1979) urged occupational therapy to focus its epistemology by saying that "ours [occupational therapy] is, and must be, the basic knowledge of occupation" (263)(p. 43), thereby placing the spotlight on knowledge of occupations. Weimer's argument has been supported by many in occupational therapy since then including Wilcock (2006), Hasselkus (2011) and Townsend (1999).

Over the last few decades, knowledge related to occupations has expanded and the profession has even seen the birth of occupational science, which focuses on exploring what people do, that is, the occupations in which they engage and how they engage in these. However, as argued in occupational science literature, the knowledge that was developed was focused on the individual and an argument was made for this focus to be expanded to collectives (18, 28, 78), thus, highlighting an epistemological gap that needed further exploration.

In summary, when considering the ontology and the epistemology of occupational therapy, it is the proposal of this research that the axiology, that is, the right action to take, is to expand the occupational therapy knowledge base on collective occupations, which is similar to the knowledge base on individual occupations. This could, in part, contribute to addressing north/south identity differences in occupational therapy but could also contribute to the emerging Southern

epistemology in occupational therapy which is part of the current discourse (264). This research study is an attempt to fill the epistemology gap.

7.2.2 REFLECTION ON THE SOCIAL CONTEXT AND CONDITIONS IN WHICH RESULTS WERE GENERATED

Part of the epistemic reflexivity proposed above is a reflection on the social context and conditions in which discipline-specific knowledge is generated.

In this current study, data were generated through interviews, a literature review and a content validity process. The samples in both phases one and three of this study consisted of occupational therapists with a range of experience – between five and thirty years of experience working with collectives of people and/or engaging with the VdTMoCA within their practice. The limitations in terms of diversity of this sample were examined in the discussion section of phase one and these were similar to the limitations of the sample in phase three of the study. In this discussion, the researcher has no intention of repeating what has already been said in the previous discussion, intending instead to reflect on the implications thereof.

The participants consisted of predominantly white, female occupational therapists. The demographics of this sample could be considered problematic when considering the social context of South Africa. South Africa is part of Africa and part of the proverbial South (Southern world view), which could mean that the indigenous population in South Africa could have expressed views based on values and beliefs situated within the African humanism perspective and within the concept of ubuntu. These two constructs, as reported on in chapter two of this study, included foundation principles similar to those of collectivism. Iwama (2006) argued that this collectivism falls within the Eastern/Southern world view.

The white population in South Africa was introduced to this country through colonialism, coming from northern countries that are believed to have predominant values and beliefs based on the Western world view focusing on the individual. This world view could have impacted on the participants' opinion of the topic under discussion since the two world views, a Western and a Southern, are antithetical. However, not having interrogated the participants' world view, an assumption that they have a Western world view would be based on stereotypical inferences in which

the researcher would be hesitant to engage. It is safe to say that the researcher would have preferred a more representative sample; however, it cannot be assumed that results were limited due to limitations in the racial diversity of the sample.

On the positive side, the majority of the participants in this study had more than ten years working experience in occupational therapy. A study by Owen (94) that explored which models South African occupational therapists use and why, found that experienced therapists rely more on their clinical reasoning and previous experience when making clinical decisions. Their experience makes them more confident in their ability to explore the use of different models, instead of relying on what they were taught. In line with Owen's conclusion, it can be said that the higher level of experience of the participants in this current study could make them more open-minded to the differences in world views and more understanding of constructs such as ubuntu and collectivism. This suggestion is supported by writings by Benner, Hugh and Sutphen (2008) who said that a high level of experience should not be linked to a rigidity in thinking and behaviour but should be linked to an openness to new ideas and experiences (265).

In addition, from discussions with participants during interviews and at profession-based events, it appears as if all the participants have worked with a diversity of clients from all walks of life. This could have exposed them to both Western and Eastern values and beliefs. A culturally competent occupational therapist attempts to understand the culture, values and beliefs of clients whose culture differs from his or hers (266). Participants could have attempted to do so, thereby, expanding their own knowledge, values and beliefs.

Lastly, as noted in the previous discussion (chapter six), the participants were either experts on the VdTMoCA or in working with collectives. They were not experts on the use and application of the model with collectives and, thus, did not have practical experience to which they could refer. This study, therefore, relied heavily on their clinical reasoning ability rather than their actual practical experience. Although their past experiences guided their clinical reasoning, measurement of collective

participation is still an unknown concept for them. Field testing of these levels is, thus, important.

7.3 COLLECTIVE OCCUPATION VS COLLECTIVE ACTION VS COLLECTIVE PARTICIPATION

The concept of collective occupation has been comprehensively defined in the first two chapters of this thesis. It is a term that is becoming familiar within occupational science literature and has been increasingly mentioned at national and international congresses. However, Frank and Muriithi (2015) suggested that from an occupational reconstruction theory perspective, the term 'collective action' would be more appropriate. The above-mentioned authors do not justify this statement; however, they made the suggestion in the context of a discussion on occupational reconstruction theory that focuses on social justice, occupational justice, collective action, political approaches and critical theories (267)(p. 11).

In an attempt to conceptualise collective action, Meinzen-Dick, Di Gregorio and McCarthy (2004) summarised common reported characteristics of collective action within literature (23). These included that collective action is performed by a collection of people, that there must be a shared interest within the collective that the collective must be involved in common action and that the action must be voluntary. The collective must make decisions together and collectively contribute to achieving goals (23). All of these characteristics were identified by this current research study as important for successful participation in collective occupations. This begs the question: are the two concepts the same? Are they interchangeable?

This researcher chose to use the term *participation in collective occupations* rather than simply *collective occupations* or *collective action*. She did this, firstly, to stay true to her profession and, thus, used *occupation* instead of *action*. As stated above, for occupational therapists, understanding occupations has been the main focus since the inception of the profession. Secondly, *action* is defined as the exertion of both physical and mental effort (168), while *collective action* is described as a dynamic process that is dependent on social relationships for its success (23).

Similarly, participation within the concept of community participation, is defined as a dynamic process through which community members actively contribute to the planning and implementation of programmes to improve their community (226, 268). Comparing the two definitions of collective occupation and collective action, they were found to be similar. However, it appears as if the term *participation* is indicative of a process that has various components rather than just an action. The complexity associated with the process of participation is, for this researcher, similar to the process of participating in collective occupations.

7.4 IMPLEMENTATION OF THE NEWLY DEVELOPED LEVELS OF COLLECTIVE PARTICIPATION IN OCCUPATIONS

The traditional view in occupational therapy is that occupational performance is influenced by the interdependent transaction between the person, the environment and the task demands of occupations (107, 109). The holy trinity in occupational therapy is, thus, the person, the occupation and the environment. The body functions (client factors and performance skills) as well as values, beliefs, habits and routines impact on the ability of the person to engage in an occupation within a specific environment. Similarly, the requirements of the occupation might not be in line with the client's abilities, or environmental influences might negatively or positively affect the person's ability to engage in the occupation (107). All three of these would be suspended in and influenced by the individual's socio-cultural context (269). A dysfunction in any one or more of these components would cause an imbalance that can negatively influence the interdependent transaction between the three components, which, in turn, negatively influence the occupational performance causing dysfunction. As seen in the initial literature review of this thesis, most of the current models in occupational therapy support this theory.

As seen in figure 7.1, this researcher proposes that there is a similar interdependent relationship between the collective, the occupations in which it participates and its environment. This relationship is shaped by the socio-cultural context in which the collective operates. The proposal is in line with writings by Mainzen-Dick, DiGregorio and McCarthy (2004) who, in their attempt to operationalise collective action,

reported that culture, socio-cultural context of the community and temporality can influence collective action (23). This, they reported would make it difficult to compare the collective action of one collective with another (23). This point supports the suggestion by the researcher of this current study that participation in collective occupations cannot be studied in isolation, that it should be explored and assessed taking into account the context and those participating in the occupation.

When considering the above theory, determining a collective's participation is not enough for a comprehensive assessment. The researcher proposes that levels of collective participation be used as part of the broader assessment of collective participation in occupations or collective occupational performance. The levels can guide the clinician to understand collective functioning, in a similar way to that of the individual client. The therapist needs to consider the interdependent relationship between the collective, the occupations of choice and the environment. Just as the environment can impact on what an individual does, the environment can impact on what a collective does and on whether collectives achieve their goals.



Figure 7.1: Diagrammatical representation of the interdependent relationship between the collective, the occupations and the environment

It is also the intention of the researcher that these levels are used with natural groups. A natural group, also known as an emergent group, forms spontaneously due to common needs or interpersonal attraction between members (6). Members in these groups gradually get to know each other as they start interacting over a period of time.

Justification for this suggestion by the researcher is that natural groups are considered to be less artificial and can function notwithstanding outside influences. The collective formation is able to proceed without influence or manipulation from outside forces. An example of groups like this would be a group of mothers of disabled children who choose to form a support group or a group of community members concerned about their safety within the community. These people choose to form a group that can work together to address this problem. Even a family or friendship group can fall into this category. Howe and Schwartzberg (2001) reported that these groups are often interactive in nature and form in communities (4) where there are mutual needs, vulnerabilities and other commonalities that can press collective formation. In these groups, there are less outside influences or manipulations that can impact on the dynamics of the collective than in formed groups (6).

7.5 CONCLUSION

Results of this study align with fundamentals of occupational therapy and occupational sciences. In 1958, Reilly proposed a philosophy for occupational therapy that centred on purposeful activities and occupations as well as considering a person as a holistic being (270). This research focused on both these aspects and suggested that the interconnectedness between people and their environment, as well as between people in the environment, is important when viewing people from a holistic perspective.

This study also created knowledge that contributes to the epistemology of occupational therapy with the intention of lessening the epistemological gap in information in collective participation in occupation.

CHAPTER 8: CONCLUSION

"A single stick may smoke, but it will not burn" (African proverb: Original author unknown)

8.1 INTRODUCTION

This chapter summarises the main findings of the study in relation to the aim and objectives. It further reports on the limitations of the study and makes recommendations for future research.

This study set out to develop and validate domains, items and descriptors for levels of collective participation in occupations by:

- conceptualising collective occupations from the perspectives of South African occupational therapists
- conceptualising collective occupations from the perspective of profession-specific literature
- developing domains and items for collective participation in occupations
- developing descriptors for levels of collective participation in occupations
- investigating the content validity of the domains, items and descriptors for levels of collective participation.

8.2 CONCLUSIONS FOR THE RESULTS OF THIS STUDY

In conclusion, the study found that collective participation is a common occurrence that happens daily. It is an occupation performed by two or more people and is a dynamic process that requires active responses from all involved. This dynamic process is a symbiotic interaction between various parties that can benefit a collective and the individuals in a collective. Mutual vulnerabilities, visions, benefits and accountability create a connection that makes it possible for a collective to co-create; however, similar goals by all are not essential for successful collective participation in occupations. What is essential is intentionality to participate collectively in the occupations. In addition, the benefits that the collective

experiences through collective participation are motivators for continued participation in collective occupations.

The core characteristics that were identified describe the important components that need to be considered when attempting to understand collective participation in occupations. These include two or more people engaging together, the fact that shared space and time are not essential, the interactive nature of collective participation and the necessity of a response from another person or persons involved in the occupation. Responses need to be reciprocal in nature; however, they do not have to be symmetrical in nature. Additionally, meaning and shared intentionality are important.

The study also found that people participate in collective occupations due to innate needs as well as personal needs, and an enabling collective environment makes it possible to continue collective participation. However, participation can be a learnt behaviour as well.

This research study developed five domains and eighteen items (see table below), which were used as a basis to develop descriptors for seven levels of collective participation in occupations.

Table 8.1 Domains and items for collective participation in occupations

Domains	Items
Motivation	Shared meaning Shared intentionality
Action	Co-creating Symbiotic action Equal action Shared time and physical space Ability to take initiative Effort Handling of tools and resources
Product	Tangible product Collective formation
Relations	Interaction Cohesion Accountability Responsibility

	Communication
Emotional functioning	Handling of situations Openness to new members/ situations/ideas Openness to changes to existing situations

The development of the levels was based on Du Toit's (1991) creative ability theory (32) as well as community participation theory.

The seven levels of collective participation in occupations that were developed and described are sequential. They range from incidental collective formations, where guidance is needed for actions, to independent action of the collective where motivation and action are geared towards improvement of the community and society.

During the content validity process, all domains and items were found to be valid according to the opinions of a panel of experts. Ten descriptors were found to be invalid. The panel of experts also rated the content of the scale valid for what it intends to measure, that is, collective participation in occupational therapy. The outcome of this phase of the study was a final draft of domains, items and descriptors for levels of collective participation in occupations (appendix N).

This research contributes to the knowledge on occupation and argues for viewing a person holistically, which is in line with the philosophy of the profession and aligns with fundamentals of occupational therapy and occupational sciences. The study also created knowledge that contributes to the epistemology of occupational therapy.

8.3 LIMITATIONS OF THE STUDY

Review of the study highlighted limitations that needed to be reflected on. Firstly, as reported on earlier, there was limited diversity in terms of race and gender amongst the participants of phases one and three. The implications of these limitations could have been that the phenomenon was explored from a Western perspective or from a limited perspective.

Secondly, although the domains and items were all rated as valid, it might have been beneficial to validate these before descriptors for the various levels were developed. At this point, participants might have suggested additional domains and/or items.

Thirdly, the input of collectives and community members was not solicited during data collection. Although it was the researcher's intention to conceptualise the phenomenon from an occupational therapy perspective, the input of community members and members of collectives could have brought another dimension to the data collected that might have enhanced the end product.

Lastly, in line with the above limitation, observation and analysis of successful collectives in the community might also have added valuable information that might have enhanced the end product. Identifying reasons for the success of the collectives and analysing characteristics that set them apart from other less successful collectives might have been beneficial.

8.4 THE WAY FORWARD

The intention of the researcher was to develop a measurement tool that can be used to measure a collective's ability to participate in occupations. However, in occupational therapy and occupational science literature the concept of collective occupation is a relatively new concept that is not well defined and described. The researcher felt that it needed to be explored and described (conceptualised) before it could be measured. This led to the development of domains, items and descriptors for levels of collective participation in occupations that could enhance the occupational therapist's understanding of a collective's ability to participate. However, this is still not a fully developed measurement tool.

Steps for constructing measurement tools are well described in literature. This research study used the three steps proposed by Hudak, Amadio and Bombadier (1996) since they focused on the development and validation of domains and items (228). However, authors, for example, Creswell and Clark (2007) and Laver Fawcett (2007), added additional steps to this process that included field-testing of the measurement tool, determining its statistical properties, developing a method for scoring and interpretation and, lastly, developing guidelines for administration of the tool (271, 272). These additional steps would ensure that the measurement tool was ready for use by clinicians in the field.

For the newly developed descriptors of levels of collective participation in occupations to be fully operationalised for use by occupational therapists in the communities, the above-mentioned steps need to be followed. The process from here would be, firstly, to review the ten invalid items. Only then can the other steps be taken.

8.5 RECOMMENDATIONS

8.4.1 FOR OCCUPATIONAL THERAPISTS

This researcher recommends that when assessing a collective's participation in occupations and planning subsequent intervention, clinicians need to ensure that the collective's members are an active part of the assessment. The opinions, goals and vision of the collectives should be taken into consideration during assessment. In addition, assessment of the collective should include a variety of assessment modalities such as interviews and observations and should also include participatory appraisal techniques, for example, the solution tree (273, 274). This would ensure that members of the collective are active participants in the assessment.

8.4.2 SUGGESTIONS FOR FUTURE RESEARCH

Further research related to these levels is needed in three areas.

- The 10 invalid item descriptors need to be review and validated. This could be done through the use of a Delphi technique.
- Secondly, development of a method for scoring and interpretation needs to be developed.
- As soon as the measurement tool is finalised, field-testing of the tool should start. Statistical analysis including a Rasch analysis to investigate the psychometric properties of the measurement tool should be done on results of the field-testing.
- Following development of the above, levels need to be field-tested. In the process of field-testing, analysis of current functional successful collectives in communities should be performed using these newly developed levels of collective participation. This should be done to determine what characteristics the collective demonstrates and should be compared to levels on the scale to

see whether there is congruity. Field-testing must be done by clinicians from diverse backgrounds and a diverse range of communities.

- Further research is also needed on occupational intervention programmes for collectives, especially how improvement in collective functioning can be facilitated.

8.6 CONCLUDING THE RESEARCH

This research developed and validated levels for collective participation in occupations. These levels will help occupational therapists to understand a collective's behaviour but also to understand their potential. Understanding the collective's ability and potential is essential if occupational therapists want to collaborate with communities to plan and implement intervention programmes that can lead to community development and empowerment. Working with community organisations and other groups in both urban and rural settings in South Africa was the inspiration for developing these levels. The researcher felt that these collectives have the power to address and solve many problems in the country, yet we, in occupational therapy, do not always understand collective participation in occupations and we do not always have sufficient knowledge to harness their effectiveness. These levels have the potential to do this.

The last five years were an interesting journey for this researcher. It started off with her unease about the epistemological gap (related to collective participation in occupations) and a need to contribute to filling this gap. This section of the journey, thus, concludes in the developing of the seven levels to describe collective participation in occupations. However, this is not the end of the journey. Understanding and measuring collective participation is essential knowledge for occupational therapy in general and, specifically, for those occupational therapists working in community-based settings. Therefore, it is important that the final steps are taken to operationalise this measurement tool. At this point, the words *aluta continua* come to mind. However, for this researcher it is not the struggle that is continuing but simply the next part of this exciting journey.

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Appendix A: Information letter for member-checking: Phase 1

Title of the Study: Developing a measuring tool to aid occupational therapists to measure a community's level of collective participation.
Name of the researcher: Fasloen Adams
Institution: Occupational Therapy Department
University of Witwatersrand

Dear research participant

Thank you for participating in phase 1 of the above mentioned research project. As stated previously, the research intends to contribute to the development of a tool that could be used by occupational therapists to assess a community's collective participation in order to understand the community's occupational potential better so they could use this when they planning a project or programme. An understanding of a community's collective participation would guide an OT to plan and implement community participation. This could contribute significantly toward ensuring sustainability of programmes and projects within a public health setting.

The aim of my letter to you is two-folded. Firstly, I have included the themes that emerged out of the interview I conducted during phase 1. As participants of that phase, I would like you to check the themes and verify whether they are a reflection of our discussion during the interview. My aim with this is to enhance the trustworthiness of the project.

Secondly, during analysis of the information gained during phase 1, it became clear that the applicability of the principles of the Vona du Toits Model of Creative Ability to measure collective participation were not explored in enough detail. I thus request that you complete the attached questionnaire. The questionnaire consists of two open-ended questions and should not take you longer than 30 minutes to compete.

Feedback on the results of the research will be available on request. If you have any questions please contact me on the details below. If you have any complaints or ethical queries, please contact the secretary of the Human Research Ethics Committee, Anisa Keshav on 011 717 1234.

If you agree to participate, please review codes and themes and return the document with suggested changes to me. Your response to the email would imply consent.

Regards,
Fasloen Adams

Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
073 258 6535

Applicability of the principles of the Vona du Toit Model of Creative Ability to measure a collective's participation. What must be measured.

1. Currently, the Vona du Toit Model of Creative Ability is being used to guide occupational therapy assessment and intervention for individual clients. In your opinion can the underlying principles of the Vona du Toit Model of Creative Ability be used to measure a collective's participation ability? Justify your answer.
   (Please answer below)

   If "Yes", please continue with the questionnaire.

2. Currently, when determining an individual's creative ability, a clinician looks at their volition and action. She/he specifically looks at the client's ability to engage in tasks and to engage with others to gain insight into a client's creative ability. In your opinion, what should a clinicians look at when determining a collective's ability to participation in occupations? Justify your answer.

   (Please answer below)

Appendix B: Time line

	2011	2012	2013	2014	2015
Obtained ethical approval					
Phase 1					
Interviews					
Analysis of interviews					
Literature review					
Phase 2					
Develop domains and items					
Check my understanding of individual creative ability levels					
Develop descriptors for levels of collective participation					
Phase 3					
Validate domains, items and descriptors for levels of collective participation: 1st round					
Validate domains, items and descriptors for levels of collective participation: 2nd round					
Write up of information					
Complete 1st draft of write-up of phase 1					
Complete 1st draft of write-up of phase 2					
Complete 2nd draft of write-up of phases 1 and 2					
Complete 1st and 2nd draft of write-up of phase 3					
Complete final draft of thesis					

Appendix C: Participant information Sheet and consent sheet for phase 1

Title of the Study: Developing a measuring tool to aid occupational therapists to measure a community's level of collective participation.
Name of the researcher: Fasloen Adams
Institution: Occupational Therapy Department
University of Witwatersrand

Good morning/ good afternoon,

I am Fasloen Adams, a PhD student in occupational therapy at the University of Witwatersrand. I am currently doing a research project to develop a measuring tool to aid occupational therapists to measure a community's level of collective participation. The principles and underlying theory of the Vona du Toit Model of Creative ability will be used to guide the development of the tool.

The research intends to contribute to the development of a tool that could be used by occupational therapists to assess a community's collective participation in order to understand the community's occupational potential better so they could use this when they planning a project or programme. An understanding of a community's collective participation would guide an OT to plan and implement community participation. This could contribute significantly toward ensuring sustainability of programmes and projects within a public health setting.
The study consists of three phases. I am inviting you to be a participant in phase one.
The objective of this study is:

- To conceptualise the concept of collective occupations from the perspectives of South African occupational therapists in order to develop the constructs that needs to be included in development of domains and items for understanding of collective participation in occupations.

As a participant, you would be expected to participate in a semi-structure interview to explore your understanding and perceptions of community participation, collective occupations and collective participation.

The interview will take place at a venue and time that is convenient for you. If you agree to participate, you are free to withdraw from the research at any time without negative consequences to yourself.
If you agree to participate in this research, your qualification and experience level would be published and not your specific contribution to the study.

Interview will be audio recorded. These recording will remain in the possession of the researcher and only the researcher and her supervisors would have access to them. The recordings would be locked in a lock cupboard and destroyed after 6 years in compliance with the HPCSA regulations.

Feedback on the results of the research will be available on request. If you have any questions please contact me on the details below. If you have any complaints or ethical queries, please contact the secretary of the Human Research Ethics Committee, Anisa Keshav on 011 717 1234.
If you agree to participate, please complete the Informed Consent sheet on the next page:

The researcher
Fasloen Adams
Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
073 258 6535

Informed Consent Form

I, _____hereby agree to participate in this research study of my own free will. I have read the research information sheet and understand what would be expected from me as a participant in this research. I have been informed about my right to not take part in the study as well as to withdraw at any time during the study without negative consequences.

Participant Consent:

Printed Name	Signature	Date and Time

Witness confirmation

Printed Name	Signature	Date and Time

The researcher
Fasloen Adams
Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
073 258 6535

Participant information: Phase 1,
Stage 1

Participant's code:

1 Current working environment ☐ Academia
☐ Private
☐ Public

Year of graduation:
2 Undergraduate: _____

3 Level of education ☐ Diploma in occupational therapy
☐ Occupational therapy degree
☐ Master's degree
☐ PHD

Complete questions applicable to your experie

For how long have you used the VdTMCA in your
4 practice?
_____(in years)

For how long have your been working / did you work in a
5 community setting?

_____(in years)

Appendix D: Participation information: Phase 2

Title of the Study: Developing a measuring tool to aid occupational therapists to measure a community's level of collective participation.
Name of the researcher: Fasloen Adams
Institution: Occupational Therapy Department
University of Witwatersrand

Good morning/ good afternoon, I am Fasloen Adams, a PhD student in occupational therapy at the University of Witwatersrand. I am currently doing a research project to develop a measuring tool to aid occupational therapists to measure a community's level of collective participation. The principles and underlying theory of the Vona du Toit Model of Creative ability (VdTMoCA) will be used to guide the development of the tool.

The research intends to contribute to the development of a tool that could be used by occupational therapists to assess a community's collective participation in order to understand the community's occupational potential better so they could use this when they planning a project or programme. An understanding of a community's collective participation would guide an OT to plan and implement community participation. This could contribute significantly toward ensuring sustainability of programmes and projects within a public health setting.

I am inviting you to participate in this research as a key informant in the second phase of this research study. During this phase I intend to develop categories to measure collective participation. As the first step of this phase, I have compiled summary of the key descriptors for the different levels of creative ability as outline by the VdTMoCA. As a participant, you would be expected review these descriptors and suggest changes. These key descriptors will be used as a basis to develop descriptors for collective participation.

The descriptors will be sent to you via email. You will have a week to review the information and can return your comments via email. Please complete attached questionnaires.
As this is an academic discussion, disclosure of your level of experience and title could contribute to the credibility of the research. It is therefore your choice whether you want to give permission for disclosure of your experience and title. If you agree to allow the researcher to publish your title and experience level, your specific contribution to the study will not be published.

Feedback on the results of the research will be available on request. If you have any questions please contact me on the details below. If you have any complaints or ethics queries, please contact the secretary of the Human Research Ethics Committee, Anisa Keshav on 011 717 1234.

If you agree to participate, please review descriptors and return the document with suggested changes to me. Your response to the email would imply consent.

Regards,
The researcher
Fasloen Adams
Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
073 258 6535

Feedback on descriptors

Code of participants:

1. Please complete demographic form below.

			Year of obtaining degree
Highest level of education (please tick applicable block(s))	Diploma in Occupational Therapy		
	Bachelor's degree Occupational Therapy		
	Master's Degree in Occupational Therapy		
	PhD in Occupational Therapy		
	Other		
Current engagement with the Vona du Toit Model of Creative Ability (please tick applicable block(s)	Applying model in practice as a practising clinician.		
	Teaching VdTMoCA in a tertiary institution.		
	Currently on the VdTMoCA Foundation committee		
	Clinicians who have published on CA (either article or contribute to books, manuals, etc.)		
For how long have you used the VdTMoCA in your practice (answer in years)			
Current or previous area of practice Ability (please tick applicable block(s))	Mental Health		
	Physical		
	Paediatrics		
	Vocational Rehabilitation		
	Public Health		
	Medico-legal		
	Other		

2. Please complete the questions below:

2.1. According to knowledge, are the key words correct for each level of creative ability? (please tick applicable block)

YES		NO	

If NO, continue to question 2.2.

2.2. What changes would you suggest? Please make suggested changes as a comment on the original document.

Appendix E: Participant information letter and consent form: Phase 3: Round 1

Aim of the study: This study aims to develop and validate domains, items and descriptors for levels of collective participation in occupations.

Name of the researcher: Fasloen Adams
Institution: Occupational Therapy Department
University of Witwatersrand

Dear Participant

Good morning/ good afternoon, I am Fasloen Adams, a PhD student in occupational therapy at the University of Witwatersrand. I am currently doing a research project that aims to develop and validate domains, items and descriptors for levels of collective participation in occupations. The principles and underlying theory of the Vona du Toit Model of Creative ability will be used to guide the development of these levels.

The objectives of this study are:

- To explore the concept of collective occupation.
- To identify domains, items and observable behaviours for the most common levels of participation for a collective in a community based setting.
- To determine the content validity of the collective levels of participation.

The research intends to contribute to the understanding within occupational therapy of collective behaviour in occupations. This understanding could guide an OT to plan and implement groups or collective interventions for example prevention and promotion programmes. This could contribute significantly toward ensuring sustainability of programmes and projects within a public health setting.

I would like to invite you to participate in the last phase of this research as a participant study. During this phase the research focus on determining content validity of the domains, items and observable actions.

As a participant you would be expected to access the domains, items and observable actions on Survey Monkey. The link will be provided to you. You then have review and rate the appropriateness and validness of each domain, item and observable actions. Each item must be rated on a 4 point scale that consists; 1= not relevant, 2 = somewhat relevant, 3 = quite relevant and 4 = highly relevant. If you have suggestions for items or observable actions that need to be included, please include this at the end of the survey.

It should take you approximately 2 hours to complete the task. Due to the fact that this task is completed on Survey Monkey, your contribution will be completely confidential. You can also withdraw from the study at any point without any negative consequences to you.

Feedback on the results of the research will be available on request. If you have any questions please contact me on the details below. If you have any complaints or ethics queries, please contact the secretary of the Human Research Ethics Committee, Anisa Keshav on 011 717 1234.

If you agree to participate, please complete the Informed Consent sheet on the next page and return to me. I will then forward you the link to Survey Monkey.

Thank you,

The researcher
Fasloen Adams
Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
073 258 6535

Informed Consent Form

I, _____hereby agree to participate in phase 3 of this research study of my own free will. I have read the research information sheet and understand what would be expected from me as a participant in this research. I have been informed about my right to not take part in the study as well as to withdraw at any time during the study without negative consequences to myself.

I agree/ do not agree to the disclosure of my title, qualification and level of experience. (Please circle your choice).
Participant Consent:

Printed Name	Signature	Date and Time

Witness confirmation

Printed Name	Signature	Date and Time

The researcher
Fasloen Adams
Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
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Appendix F: Phase 1: Questions for interview

(Questions would depend on person's experience)

1. If I say term 'collective action" to you, what would your thoughts be around it?
2. Your thoughts about collective occupations.
3. What facilitate participation for groups of people/ community's
4. What inhibits participation for groups of people/ community's
5. What is good collective participation in occupations? Give me examples from your experience.
6. What is poor collective participation in occupations? Give me examples from your experience.
7. What measuring tools do you know of to assess community participation or participation in collective occupations?

Appendix G: Summary of levels of creative ability for individual clients according to the Vona du Toit Model of Creative Ability

LEVEL	DESCRIPTOR OF THE LEVEL	VOLITION	ACTION (observable action)
TONE	Existence.	Energy and drive is focus on existenced of basic life and survival. Minimal and sporadic motivation. The will to live.	Actions are geared towards awareness of self and survival. Abnormal sleep/wake cycle. No attempt to contact others. Poverty of actions. Actions are: • Unplanned actions. • Haphazard. • Purposeless.
SELF DIFFERENTIATION	No task concept. No concept of procedures.	Motivation is incidental. Motivation is directed to maintaining basic life.	Dependant in nature. Action could be destructive/ unconstructive or incidentally constructive (not actively seeking out). Purposive actions are starting to be constructive. Actions are directed towards maintaining basic life and/or protecting self. Basic awareness of self and fleeting awareness of others. Incidental contact with material, objects and people. Product: Incidental. Incomplete
SELF PRESENTATION	Task concept developing. Show little interest in end product unless a basic need e.g. food Motivation to find out.	Motivation is erratic but guided by egocentricity. Motivation is directed to presenting self to others.	Constructive explorative. Exploration of: • Self in relation to others. • Elements of handling of characteristics of materials, objects and situations(that grows in complexity) Development of task concept. Shows little interest in end-product.

			Product: • Poor quality of end product compared to societal norms. • Presentation of self.
PASSIVE PARTICIPATION	Behaviour is appropriate but limited. Depends on others to initiate meaningful relationships.	Motivation is consistent but needs to be directed for action in unknown activities (passive). Motivation is directed (external) to participation.	Norm awareness/ Experimenting with norms. Action is passive. Directed towards experimenting with norms. Experimenting with tool handling. Actions are directed towards productivity. Task concept is present which facilitates/ enhances productivity. Full task concept but not consolidated yet. Inconsistent norm-compliance: • Norm compliance is appropriate in groups and known situations and activities. • Able to maintain effort if no problems is uncounted. Product: • Participation in prepared tasks. • Interest in the end product • Shows interests in all activities, but sustain interests in known and preferred activities. • End product might not be according to accepted norms.

IMITATIVE PARTICIPATION		Motivation is consistent in known and unknown activities. Intrinsic motivation for participation (independent)	Norm compliance. Action is directed towards: • Outcomes. • Comparing to others and imitating them. Consolidated task concept. Product: Product is outcomes centred and norms compliant.
ACTIVE PARTICIPATION	Able to be a leader and does not need to follow others.	Motivation is consistent and robust. Directed towards: • Meeting socially accepted norms. • Independence according to own aptitude and skills, (not according to role-model). • wants to add something original	Norm transcendence. Actions are active, original, individualistic, inventive and competent. Directed towards: • Following own interests(to the benefit of others- transcending self) • Managing new situations Internalised norms which allows for originality within accepted norms (personalising norms) Leadership qualities emerge. Tool handling is advance. Product is original according to interest(s).
COMPETATIVE PARTICIPATION	Self-actualization. Leadership qualities are consistent. Still product centred and known situation focussed.	Motivation is consistent and robust and can withstand failure. Motivation is directed towards surpassing standards and norms.	Competitive centred in nature. Action is disciplined, competitive and responsible. Product: Can handle complex situations. Can take responsibility. Product surpasses norms and standards. Maximum effort is consistent in various areas and situations.
Contribution	Focus on needs of others around.	Motivation is centred towards dealing with situation.	Situation centred action. Staring to transcend own needs therefore action focussed on needs of others

			around.
Competitive contribution	Focus on needs of society.	Motivation is centred towards helping others.	Society centred action. Exceptional leadership qualities. Work towards short-term and long-term outcomes.

Adapted from du Toit (32) and de Witt (168)

Appendix H: Summary of descriptions of domains and items for collective participation

Domain	Descriptor of domain	Items	Definition of Item
Motivation	Motivation is related to goal-directed behaviour and is defined as biological, social, emotional and/or cognitive forces that drives, guides, initiate and maintain goals directed behaviour and it drives our actions (202). Therefore it is considered to be the inner drive or internal state of a person that drives, behaviour, action and initiation (157, 203).Motivation is dynamic and is dependent on the stage of human development (32). This domain focusses on the motivation of the collective.	**Shared meaning**	With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them
		Shared Intentionality	Members of the collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal
Action	Action is defined as “the exertion of mental and physical effort which results in occupational behaviour” (168)(page 7). It is a process of being active or doing something and of translating motivation into	**Co-create**	The concept of ‘create’ is commonly understood as ‘to make’ or ‘to produce’. Doing this collectively is to co-create. Through collective participation, the collective is working together to

	effort (203). According to the VdTMoCA, motivation drives action (32, 168) and action results in tangible or intangible products. Within a collective one looks at their ability to perform action collectively.		create.
		Symbiotic action	Symbiotic action should be mutually beneficial- Collective action should benefit the collective and not just some in the collective.
		Equal action (Symmetrical action)	Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.
		Shared time and physical space	All participants or members are together in the same place at the same time for collective action to take place
		Ability to take initiative	Initiative is defined as the power to start or continue a process, task, plan, task, etc. (199). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.
		Effort	Effort is the use of energy (physical or mental) to do or produce something. To produce through exertion(232).
		Handling of tools and resources.	This is related to the manipulation and use of tools and use of resources within the community

			the collective is situated in(32).
Product	A product is something that is produced either through human, natural or mechanical effort (233). It is the outcome or consequence of action and effort. The product can be tangible or intangible. Formation of a collective can be a product and it can be an end result of a process. Within a collective the product should be related to their purpose (what they wanted to achieve) and their collective formation.	**Tangible product**	An end product that can be touched or a concrete end product.
		Intangible product	An end product that cannot be perceived by the senses. Could be a process, a relationship, etc.
		Collective formation	Forming of a collective or group to participate in occupations.
Relations	This looks at relations/ associations between members in the collectives and collectives outside of the collective. How they relate to each other.	**Interaction**	Interaction is reciprocal or mutual action that could enhance collective participation. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.
		Cohesion	Cohesion is a connection that is defined as a connection that goes

			beyond just being together physically or cognitively. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc.
		Accountability	To be answerable to each other in the collective. To accept responsibility and account for your part.
		Responsibility	Obligation or duty to contribute as part of the collective engaging in occupations.
		Communication	The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and	How the collective handle situations on an emotional level or common situations that involves affect.	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	Awareness and handling of the following: anxiety • conflict • problem solving • Decision making
		Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	This relates to the collective's ability to be open and embrace new members, ideas and situations.

decision making)			

Appendix I: Phase 3: I-CVI: Round 1

Domains, items and descriptors for understanding collective participation in occupations

Descriptions of domains and items

Domain	Descriptor of domain	Items	Definition of Item
[10] **Motivation** (Taken directly for VdTMoCA)	[11] Motivation is related to goal-directed behaviour and is defined as biological, social, emotional and/or cognitive forces that drives, guides, initiate and maintain goals directed behaviour and it drives our actions(202). Therefore it is considered to be the inner drive or internal state of a person that drives, behaviour, action and initiation(157, 203).Motivation is dynamic and is dependent on the stage of human development(32). This domain focusses on the motivation of the collective.	[20] **Shared meaning**	[21] With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them
		[22]**Shared Intentionality**	[23] Members of the collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal
[12] **Action (Taken directly for VdTMoCA but co-creating was a**	[13] Action is defined as "the exertion of mental and physical effort which results in occupational behaviour" (10) (page 7). It is a	[24] **Co-Creating**	[25] The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create.

category from the interviews)	process of being active or doing something and of translating motivation into effort (46). According to the VdTMoCA, motivation drives action (1, 10) and action results in tangible or intangible products. Within a collective one looks at their ability to perform action collectively.		Through collective participation, the collective is working together to create.
		[26] **Symbiotic action**	[27] Symbiotic action should be mutually beneficial- Collective action should benefit the collective and not just some in the collective.
		[28] **Equal action (Symmetrical action)**	[29] Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.
		[30] **Shared time and physical space**	[31] All participants or members are together in the same place at the same time for collective action to take place
		[32] **Ability to take initiative**	[33] Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.
		[34] **Effort**	[35] Effort is the use of energy (physical or mental) to do or produce something. To produce through exertion.
		[36] **Handling of tools and**	[37] This is related to the

		resources.	manipulation and use of tools and use of resources within the community the collective is situated in.
[14] **Product** (From VdTMoCA):	[15] A product is something that is produced either through human, natural or mechanical effort. It is the outcome or consequence of action and effort. The product can be tangible or intangible. Formation of a collective can be a product as it can be an end result of a process. Within a collective the product should be related to their purpose (what they wanted to achieve) and their collective formation.	[38] **Tangible product**	[39] An end product that can be touched or a concrete end product.
		[40] **Intangible product**	[41] An end product that cannot be perceived by the senses. Could be a process, a relationship, etc.
		[42] **Collective formation**	[43] Forming of a collective or group to engage in occupations.
[16] **Relations** (group relations): (From VdTMoCA: Quality of relation to people. As well as from suggestions from participants.	[17] This looks at relations/ associations between members in the collective and with other individuals and collectives outside of the collective. How they relate to each other.	[44] **Interaction:**	[45] Interaction is mutual or reciprocal engagement. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.

		[46] **Cohesion**	[47] Cohesion is a connection that is defined as a connection that goes beyond just being together physically or cognitively. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)
		[48] **Accountability**	[49] **To** be answerable to each other in the collective. To accept responsibility and account for your part.
		[50] **Responsibility**	[51] Obligation or duty to contribute as part of the collective engaging in occupations.
		[52] **Communication**	[53] The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.
[18] **Emotional functioning** (VdTMoCA talks about handling of situations, anxiety and participants	[19] How the collective handle situations on an emotional level or common situations that involves affect.	[54] **Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	[55] Awareness and handling of the following: anxiety • conflict • problem solving • Decision making

suggested handling of conflict situations, problem solving and decision making)		**[56] Openness of collective to new members/ situations/ideas**	**[57]** This relates to the collective's ability to be open and embrace new members, ideas, and situation.

Self-differentiation Level

Descriptor of level: Collective action is directed towards self-preservation of individuals in collective. Forming of the collective itself to engage in occupations is:

- Situational (for basic needs. The collective forms due to mutual/collective vulnerabilities and needs).
- Action is in response to a threat or/ and a basic need.

Thus, engagement in collective occupations is incidental. Actions are dependent in nature. The collective demonstrate no task concept or concept of procedures.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** Descriptor: With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them	**[58]** Collective engagement is incidental. Focus is on surviving within the context and self-preservation. Fear, self-preservation and common vulnerability (e.g. fear, hunger) drives collective action. Mutual vision (vision of the collective) is basic and reactive due to mutual vulnerability. Energy and drive is focused on existence of basic needs, maintenance of basic life and basic resources and satisfying immediate needs of individuals within the collective.
	Shared Intentionality Descriptor: Members of the	**[59]** No shared intention to engage collectively. Due to reactive nature of actions and fleeting awareness of others on

	collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal	this level individuals will not have an intention of collective engagement. Collective engagement and formation is reactive and/ or guided by leadership.
Action **(Taken directly for VdTMoCA but co-creating was a category from the interviews)**	**Co-Creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create. Through collective participation, the collective is working together to create.	**[60]** Co-creating is incidental and unplanned. Actions are directed towards: maintaining basic life and/or protecting self as an individual in a collective (self-preservation) Collective is dependent on leadership. Action is reactive, fleeting and only if it will satisfy basic needs of the collective and individuals in collective. Action can be constructive if guided by leadership.
	Symbiotic action Descriptor: Mutually beneficial-Collective participation can benefit the individuals who participate in the collective	**[61]** Action is not equal in nature between members within a collective (it is dependent on individual's levels and must be guided by leadership on this level)
	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they	**[62]** Action is not equal in nature between members within a collective (it is dependent on individual's levels).

	collectively co-create. Equal action refers to symmetry in effort to create.	
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	**[63]** Collective action only occurs in a shared time and physical space.
	Ability to take initiative Descriptor: Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.	**[64]** Cannot show initiative as a collective.
	Effort Descriptor: The use of energy (physical or mental) to do or produce something. To produce through exertion.	**[65]** Fleeting effort, unplanned, reactive and only if it will satisfy basic needs of the collective and individuals in collective. Effort does not have to be equal in nature between members within a collective.
	Handling of tools and resources. Descriptor: Manipulation and	**[66]** Not able to identify resources in surroundings and use appropriately. No knowledge of tools and materials

	use of tools and use of resources within the community.	
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product** Descriptor: An end product that can be touched or a concrete end product.	**[67]** No collective product unless guided by leader.
	Intangible product Descriptor: An end product that cannot be perceived by the senses. Could be a process, a relationship, etc.	**[68]** No collective product unless guided by leader.
	Collective formation Descriptor: Forming of a collective or group to engage in occupations.	**[69]** Engagement in a collective is a reaction to a common stimulus.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** Descriptor: Mutual or reciprocal engagement. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there	**[70]** Interaction is incidental and either facilitated (by leadership) or reactive due to common vulnerabilities/ needs. Responsiveness is superficial and incidental.

	needs to be mutual benefit.)	
	Cohesion Descriptor: A connection that is defined a connection that goes beyond just being together physically or cognitively. Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	**[71]** Cohesion is superficial, reactive or incidental due to a common/mutual basic need(s) and not intentional. The need presses the forming of a collective. Connectivity (connecting with others) is incidental, reactive, superficial and will be to mutual/collective needs and vulnerability. Collective identity is reactive and due to a press in the community.
	Accountability Descriptor: To be answerable to each other in the collective. To accept responsibility and account for your part.	**[72]** No accountability on this level, due to the egocentric nature and superficial cohesion and interaction taking place of this level.
	Responsibility Descriptor: obligation or duty to contribute as part of the collective engaging in occupations.	**[73]** None due to the egocentric nature and superficial cohesion and interaction taking place of this level.
	Communication Descriptor: The exchange of	**[74]** No awareness of dynamic interactions in situations. Not able to read cues in each other's responses and fleeting

	thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.	awareness of others within the collective. Communication between members of a collective is superficial and individual needs driven. Communications with other collectives is non-existent or incidental.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective** • anxiety • conflict • problem solving • Decision making	**[75] C**ollectively, cannot actively control anxiety, conflict situations, make collective informed decisions and problem-solving is non-exciting (in the collective and external). Dependency on others especially leaders or dependency on immediate people/family/friends (might not even be aware of leaders.)
	Openness of collective to new members/ situations/ideas Descriptor: The collective's ability to be open and embrace new members, ideas, situation.	**[76]** Not possible on this level.

Self-Presentation Level

Descriptor of level:

Collective engagement in occupations is due to:

- Convenience. E.g. all at the tap at the same time.
- Opportunity created by circumstances or environmental presses
- Leader(s)

Collective is still very egocentric.

Focus is on collective's own needs.

Cannot yet function independently.

The collective receives (able to demand) services but contributes nothing.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** Descriptor: With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them	**[77]** Collective engagement is geared towards surviving or presenting themselves to others. Motivation is egocentric for the benefit of the collective. Mutual vision is egocentric relative to the collective i.e. what would be beneficial for the collective.
	Shared Intentionality Descriptor: Members of the collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal	**[78]** Intentionality to engage collectively starts becoming evident especially if task is simple, familiar and a habituated task and/ or guided by leadership.
Action **(Taken directly for VdTMoCA but co-creating was a category from the interviews)**	**Co-Creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this	**[79]** Co-creating is possible if task is simple, familiar, habituated and/ or guided by leadership. Co-creating is guided by leadership and in response to recognised social norms. Actions are directed towards presenting collective to others.

	collectively is to co-create. Through collective participation, the collective is working together to create.	
	Symbiotic action Descriptor: Mutually beneficial- Collective participation can benefit the individuals who participate in the collective	**[80]** Symbiotic action is mutually beneficial and occurs if participants engage in a familiar or habituated task or if organised by leader. In unfamiliar tasks, not equal in nature between members within a collective (it is dependent on individual‘s levels and must be guided by leadership on this level)
	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.	**[81]** Equal action occurs in familiar tasks, equal action is possible if it was previously guided by leadership. In unfamiliar tasks, not equal in nature between members within a collective (it is dependent on individual‘s levels and must be guided by leadership on this level)
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	**[82]** Collective action (co-creating) only occurs in a shared time and physical space.
	Ability to take initiative	**[83]** Cannot show initiative as a collective.

	Descriptor: Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.	
	Effort Descriptor: The use of energy (physical or mental) to do or produce something. To produce through exertion.	**[84]** Effort is egocentrically motivated. If the collective benefit and it fits within their skills, they will be able to put in the effort as a collective with guidance from leadership. Effort does not have to be equal in nature between members within a collective depending on skills of individual members.
	Handling of tools and resources. Descriptor: Manipulation and use of tools and use of resources within the community.	**[85]** Can handle basic, familiar tools and can engage superficially with familiar resources in their own community.
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product** Descriptor: An end product that can be touched or a concrete end product.	**[86]** Being a collective is a product. Presenting self as a collective to others.
	Intangible product	**[87]** Focus on functional outcomes for the benefit of the

	Descriptor: An end product that cannot be perceived by the senses. Could be a process, a relationship, etc.	collective (egocentric for the collective itself).
	Collective formation Descriptor: Forming of a collective or group to engage in occupations.	**[88]** Collective action/formation is due to convenience and not actively sought out.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** Descriptor: Mutual or reciprocal engagement. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	**[89]** **I**nteraction is possible in a simple, familiar, and habituated task or if facilitated. The process is reactive due to common vulnerabilities/ needs or familiarity. Basic and superficial interaction between members in a collective is possible at this level. Individuals in a collective are starting to respond to each other's basic needs but it is still very superficial and egocentric for the individual. So will be responsive to others if it is in line with own needs.
	Cohesion Descriptor: A connection that is defined a connection that goes beyond just being together	**[90]** Cohesion is superficial in reaction to common needs, vulnerabilities and interests (bonding due to commonalities). Cohesion may be preceded by imitative behaviour within the collective for personal benefit (they copy the behavior of

	physically or cognitively. Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	others within the collective if they think it is correct or if that person gets positive feedback.). Individuals in a collective are starting to respond to each other's basic needs but it is still very superficial and egocentric for the individual. Connectivity with each other is superficial and egocentric and will be due to basic needs and vulnerability. Collective identity is reactive and due to a press in the community.
	Accountability Descriptor: To be answerable to each other in the collective. To accept responsibility and account for your part.	**[91]** Taking of mutual accountability occurs if participating in a simple, familiar, or habituated task.
	Responsibility Descriptor: obligation or duty to contribute as part of the collective engaging in occupations.	**[92]** Mutual responsibility is taken according to recognised social norms in familiar or habitual tasks , for example, not be late for meetings or cooking soup together if we have done it before.
	Communication Descriptor: The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.	**[93]** Communication is often between group members and leader. It can be between members with guidance and structure from leadership or if the situation is familiar. Members of the collective are becoming aware of each other and begin communicating on a concrete and superficial level. Members are able to read cues in people's reactions but cannot respond appropriately unless they are in a familiar

		situation. Dominant members and leaders lead conversation. No awareness of dynamic interactions in situations Communications focus on intra- collective communication rather than inter-collective communication. Communication with other collectives is very egocentric.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	**[94]** Control of anxiety and conflict situations is leadership dependent, members of the collective are not able to achieve collective decision making and problem solving. The collective demonstrates awareness of intergroup anxiety or conflict in open threats to the collective's ability to be successful. Dependency on others, especially leaders, to handle difficult situations and make decision or solve problems.
	Openness of collective to new members/ situations/ideas Descriptor: The collective's ability to be open and embrace new members, ideas, situation.	**[95]** Openness to and inclusion of new members, situations and ideas are leadership driven. Without leadership new situations may be explored.

Passive Participation Level

Descriptor of level:

Engagement in a collective due to guidance (through leadership).
Becoming more productive in achieving the collective's goals.
The collective makes contributions but is not involved in the decision-making process for services or programmes for their communities.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)	**[96]** Passive participation in a collective. Motivated to be part of a collective, but still follow on this level. Egocentricity still drives the collective to engage collectively in occupations. Motivated by mutual vision but mutual vision is still egocentric relative to the collective i.e. what would be beneficial for the collective.
	Shared Intentionality to engage collectively in occupations.	**[97]** Intentionality to engage collectively on a passive level is evident but guidance in the form of leadership is needed for active collective participation. Intentionality is not only related to familiar tasks, but to some unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action (Taken directly for VdTMoCA but co-creating was a category from the interviews)	**Co-Creating**	**[98]** Co-creating and collective engagement in occupations can take place on this level, but participation is passive and not active. Members follow directions. Independent co-creating is possible on this level if participating in a familiar or a simple unfamiliar activities or situations. Action is in response to recognised social norms and identified outcomes

		of collective. Action is directed towards: • Achieving goals as set by collective • Following others, for example the leader or strong members in the group. • Following protocol. • Becoming more productive in achieving the collective's goals. Collective engagement in occupations could still be erratic in unfamiliar or active situations and are dependent on others to initiate, for example a leader. Guidance by leader is still important for collective participation on this level.
	Symbiotic action (Mutual benefit.)	**[99]** Symbiotic action (mutually benefit) occurs if participants engage in a familiar or simple unfamiliar activities or situations. Guidance by leadership still important.
	Equal action (Symmetrical action)	**[100]** Equal action occurs in familiar and simple unfamiliar situations and activities equal action is possible if it was previously guided by leadership. In unfamiliar tasks, not equal in nature between members within a collective (it is dependent on individual‘s levels and must be guided by leadership on this level)
	Shared time and physical space	**[101]** Familiar activities do not need shared space and time. Unfamiliar activities still need shared space and time.
	Ability to take initiative	**[102]** Cannot show initiative as a collective. Still follows.
	Effort	**[103]** Collective effort can be sustained on this level in passive participation, but needs support in active participation. Maximum effort is still egocentric on this level,

		but collective becomes aware of need for and social norms requiring exertion of maximum effort. Effort does not have to be equal in nature between members within a collective but members become more aware of the social norm of equal participation (everyone has to do their share).
	Handling of tools and resources.	**[104]** Knowledge of and handling of tools is extending and becomes product-directed. Explores with unfamiliar tools and equipment for the benefit of the collective reaching goals. Interact appropriately with familiar resources in their own community.
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	**[105]** Participation (passive product). Participation according to a given set of norms; with guidance. Focus is on task as task concept is developed.
	Intangible product	**[106]** Focus on functional outcomes for the benefit of the collective (egocentric for the collective itself).
	Collective formation	**[107]** Collective formation still guided by leadership with positive participation by members. Collective participation could be voluntary in a familiar situation.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there	**[108]** Interaction is an active process if participating in familiar and simple unfamiliar activities or situations under guidance of leadership. Can respond to each other's needs in above mentioned activities and situations but often through leadership. Interactive responses easier when related to achievement of collectives goals.

	needs to be mutual benefit.)	
	Cohesion: (a condition in which people or things are closely united). (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	**[109]** Cohesion is superficial and concrete. Connecting with others can occur on this level due to formation of stable interpersonal relationships between members. Connecting with other collectives still only for egocentric reasons or if required by social norms. Starting to form a collective identity. Cohesion may be preceded by imitative behaviour within the collective for personal benefit (they copy the behavior of others within the collective if they think it is correct or if that person gets positive feedback.)
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	**[110]** Mutual accountability is possible if participants engage in familiar and simple unfamiliar activities or situations.
	Responsibility: (obligation or duty to contribute)	**[111]** Mutual responsibility is taken according to recognised social norms and identified outcomes of collective, thus mutual responsibility can be taken if in line with basic social norms and/ or familiar and simple unfamiliar activities or situations.
	Communication	**[112]** Communication between members occurs on a constant basis but is superficial. Dominant members of the collective will lead communication. Members starting to become aware of dynamic interactions in situations and can respond to these on a superficial level.

		Able to read cues in people's reactions and can respond to it appropriately on a superficial level. Communications still focus on intra-collective communication rather than inter-collectives. Communication with other collectives is egocentric.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	**[113]** Aware of anxiety within the collective, the need to make decisions as a collective, becoming aware of the need to solve problems as a collective and conflict situations (in the collective and external), but cannot resolve independently. Guidance is needed. Collectively, due to increased cohesion, they can make concrete decisions and solve simple problems. Dependency on others especially leaders to handle difficult situations and make more complex decision or solve problems is still evident.
	Openness of collective to new members/ situations/ideas	**[114]** Open to new members and ideas if guided by leadership.

Imitative Participation Level

Descriptor of level:

Engagement in a collective occupation is planned.
Compliant with norms.
The collective engages in low-level decision making only, otherwise do as they are told.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)	**[115]** Voluntary participation in collectives and collective participation. Outcome centred for established collective. On a collective level actions are directed towards achieving goals as set by the collectives. Mutual vision is still egocentric relative to the collective i.e. what would be beneficial for the collective. The mutual vision could have been imitated from another collective if it is similar to what the collective wanted to do.
	Shared Intentionality to engage collectively in occupations.	**[116]** Intentionality to engage collectively is evident (they want to be in a collective because they think they can do more). Intentionality to engage collectively is not only related to familiar tasks, but to unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action **(Taken directly for VdTMoCA but co-creating was a category from the interviews)**	**Co-Creating**	**[117]** Co-creating and active participation in collectives and collective engagement is possible on this level in familiar and unfamiliar activities or situations. Collective actions are directed towards: • Following/ adhering to internalised norms (collective's and social). • Following actions of equivalent collectives.

		Productive in achieving the collective's goals. Collective interaction could still happen in the absence of a leader. Collective participation is independent. Starting to demonstrate initiative as a collective.
	Symbiotic action (Mutual benefit.)	**[118]** Symbiotic action to the benefit of the collective and individuals in collective, however often imitation of other collectives.
	Equal action (Symmetrical action)	**[119]** On this level action does not have to be equal in nature between members within a collective, but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Shared time and physical space	**[120]** Do not need shared space and time.
	Ability to take initiative	**[121]** Starting to demonstrate initiative as a collective.
	Effort	**[122]** Collective effort can be sustained on this level by imitating existing role-models (will do what the role-models do). Group pressure is important for sustained effort. Effort does not have to be symmetrical/equal in nature between members within a collective but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Handling of tools and resources.	**[123]** Experience in handling of diverse tools. Interact appropriately with resources in their own community.
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and	**Tangible product**	**[124]** Like others/not original Compliant with norms. In line with equivalent collectives.

their collective formation		
	Intangible product	**[125]** Equivalent to other collectives.
	Collective formation	**[126]** Collective formation is voluntary as they think it will help and they see it being beneficial with other collectives.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	**[127]** Interactive responses can take place on this level as communication is on a deeper level. Responses not original but according to recipe or imitating role-model. Active process is possible. Members of the collective can engage interactively for the benefit of the collective in familiar and unfamiliar activities or situations. Respond to each other's needs in familiar tasks and unfamiliar tasks and situations. Interactive responses easier when related to achievement of collectives goals.
	Cohesion: (a condition in which people or things are closely united). (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	**[128]** Cohesion within a collective evident. Collective work together cohesively. Connecting with others occur on this level. Connecting with other collective still only for egocentric reasons (for imitation of that collective's behaviour). Form a collective identity.
	Accountability (To be answerable to each other in the collective. To accept	**[129]** Due to this connection, mutual accountability is evident.

	responsibility and account for your part.)	
	Responsibility: (obligation or duty to contribute)	**[130]** Due to this connection, taking of responsibility is evident. Sharing of responsibility evident.
	Communication	**[131]** Able to connect with each other in the collective on a deeper level, yet dominant members of the collective will still communicate the most. Communications between members evident. Collective required to handle dynamic interactions in situations and can respond to these on an appropriate level. Able to read cues in people's reactions and can respond to it appropriately. Communications still focus on intra-collective communication rather than inter-collectives. Communication with other collectives is still egocentric.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	**[132]** Aware of anxiety within the collective, the need to make decisions as a collective, becoming aware of the need to solve problems as a collective and conflict situations (in the collective and external), require initiation of conflict and anxiety management in the collective (from leader or imitate methods used by other collectives). Collectively, due to increase cohesion, they can make low-level decision and solve simple problems otherwise do as they are told. Increase in independence to handle difficult situations and make more complex decision or solve problems.
	Openness of collective to new members/	**[133]** Open to new members and ideas.

	situations/ideas	

Active Participation Level

Descriptor of level:

Engagement in collective occupation is planned.
Work according to a strategy. Participate more in activities that benefits the collective more than the community the community is situated in.
Takes more initiative and consider the bigger picture.
Increase awareness of community's needs.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	**[134]** Motivation is interest driven (the collective's interests), while adhering to social norms. However, starting to want to surpass social norms and standards (do better). It is collective oriented. Collective's need drives actions. Mutual vision is starting to become less egocentric relative to the collective i.e. what would be beneficial for the collective. The mutual vision original to the collective.
	Shared Intentionality to engage collectively in occupations.	**[135]** Intentionality to engage collectively is evident (they want to be in a collective because they think they can do more). Intentionality to engage collectively is not only related to familiar tasks, but to unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action (Taken directly for VdTMoCA	**Co-Creating**	**[136]** Co-creating and active collective participation is possible on this level in familiar and unfamiliar activities or

but co-creating was a category from the interviews)		situations. Collective action directed towards: • Collaborative action (within the collective) to achieve the collective's goals. • Following community norms. Need for constant leadership and guidance reduces. Collective becoming a role model (imitated by other collectives). Unique in actions as they want to surpass. Interactive responses can take place on this level as communication is on a deeper level. Responses are original.
	Symbiotic action (Mutual benefit.)	**[137]** Engagement in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	**[138]** Equal action does not have to be symmetrical/equal in nature between members within a collective but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Shared time and physical space	**[139]** Collective participation is independent. Do not need shared space and time.
	Ability to take initiative	**[140]** Takes initiative and considers the bigger picture still very much focused on collective's outcomes.
	Effort	**[141]** Collective effort can be sustained on this level if related to the interests of the collective or in-line with identified outcomes. Group pressure continues to be important for sustained effort. Effort does not have to be symmetrical/equal in nature

		between members within a collective but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Handling of tools and resources.	**[142]** Experience in handling a variety of diverse tools. Interact appropriately with resources in their own community and other communities.
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	**[143]** Product: • Contributive/ collective oriented. • Based on collective's interest and needs.
	Intangible product	**[144]** Quality of the product is original. Not just imitating but bring originality to end product and/or processes.
	Collective formation	**[145]** Collective formation is voluntary but still egocentric. Although they are still very much focused on collective's outcomes, they are considering the bigger picture.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	**[146]** **I**nteraction as an active process is possible. Members respond appropriately and voluntarily to each other's actions. Responses are original and can happen in the absence of a leader. Members of the collective can engage interactively for the benefit of the collective in all activities and situations within own community. Respond to each other's needs in all activities and situations.
	Cohesion: (a condition in which people or things are closely united).	**[147]** Cohesion within a collective evident. Collective work together cohesively in the absence of a leader. Collective identity formed.

	(Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	Connecting with others occurs on this level. Connecting with other collectives still only for egocentric reasons, but starting to connect with other collectives for the benefit of the community.
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	**[148]** Due to developed level of communication and connecting, mutual accountability is possible on this level is possible. Members will hold each other accountable.
	Responsibility: (obligation or duty to contribute)	**[149]** Collective can take shared responsibility for their outcomes.
	Communication	**[150]** Able to connect with each other in the collective on an appropriate level with more equal distribution of communication (not only dominant members of collectives). Communications between members evident. Collective required to handle dynamic interactions in situations and can respond to these on an appropriate level. Able to read cues in people's reactions and can respond to it appropriately. Communications still focusses on intra- collective communication rather than inter- collectives. Communication with other collectives is still egocentric (interest driven by collective), but due to increase awareness

		of community's needs they starting to connect with other collectives for the benefit of the community (less egocentric).
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	**[151]** Able to manage inter-collective conflict and anxiety without reliance on leadership. Able to make collective decisions and problem-solving effectively. Able to control conflict and anxiety in the collective without leadership intervention. The collective not only participates in decision-making but also participates in some monitoring and some implementation.
	Openness of collective to new members/ situations/ideas	**[152]** Open to new members and ideas.

Competitive Participation Level

Descriptor of level:

Engagement in collective occupation is planned.
Work according to a strategy. Participate more in activities that benefits the collective more than the community the community is situated in.
Takes more initiative and consider the bigger picture.
Increase awareness of community's needs.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	**[153]** Motivation geared towards doing better than other collectives. Although they still want to achieve egocentric goals, they are now motivated to work on community's needs as well. Collective's need is as important as that of

		community. Motivation is robust. Active collective participation can take place on this level (want to engage collectively).
	Shared Intentionality to engage collectively in occupations.	**[154]** Intentionality to engage collectively is evident (they want to be in a collective because they think they can do more for the community). Intentionality to engage collectively for the benefit of the community but also to surpass other similar collectives. Mutual vision is starting to become less egocentric relative to the collective i.e. what would be beneficial for the collective. The mutual vision original to the collective.
Action **(Taken directly for VdTMoCA but co-creating was a category from the interviews)**	**Co-Creating**	**[155]** Co-creating is possible on this level in familiar and unfamiliar activities or situations. Co-creating is voluntary as members understand the benefits of working together. Collective participation is directed towards: • Norm transcendence. • Achieving goals as set by collective • Competitive and disciplined to achieve outcomes and to surpass expectations. • Competing with other collectives to surpass them. No need for leadership and guidance, however, may elect a leader to ensure that they surpass standards and norms.
	Symbiotic action (Mutual benefit.)	**[156]** Symbiotic action occurs and engagement in collective occupations is mutually beneficial to collective and individuals in collective.

	Equal action (Symmetrical action)	**[157]** Equal action does not have to be equal in nature between members and is based on an understanding of strengths and weaknesses of each in the collective so ensures that it is used for the benefit of the collective and the community.
	Shared time and physical space	**[158]** Collective participation is independent. Do not need shared space and time. At times can work independently (individually or in smaller groups) on task needed for successful collective occupations.
	Ability to take initiative	**[159]** Takes initiative and consider the bigger picture and to surpass actions of other similar collectives.
	Effort	**[160]** Collective effort can be sustained on this level if related to the interests of the collective or in-line with identified outcomes. Group pressure continues to be important for sustained effort.
	Handling of tools and resources.	**[161]** Experienced in handling a variety of diverse tools. Interact appropriately with resources in their own community and other communities.
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	**[162]** Product: • Community oriented. • Based on the needs of the community as well as the collective's interest and needs. Surpasses product of other collectives with similar membership and visions.
	Intangible product	**[163]** Quality of the product is outstanding.
	Collective formation	**[164]** Collective formation is voluntary. Although they are

		focused on collective's outcomes, the community's needs are just as important. Less egocentric.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	**[165]** Interaction is an active process. Members understand the importance of interacting and responding to each other for the benefit of the collective in all activities and/or situations. Respond to each other's needs take place in all activities and situations within own community. Responses are original and can happen in the absence of a leader. Interactive responses automatic (works like a well-oiled machine).
	Cohesion: (a condition in which people or things are closely united). (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	**[166]** Active collective participation can take place on this level. Cohesion within a collective evident. Collective work together cohesively without the dependence on a leader. Collective identity formed. Connecting easily with other collectives for the benefit of the community.
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	**[167]** Mutual accountability on this level is possible. Members will hold each other accountable. This will be done in a social appropriate way.

	Responsibility: (obligation or duty to contribute)	**[168]** Collective can take shared responsibility for their outcomes (outcomes related to own needs and community's needs).
	Communication	**[169]** Able to connect with each other in the collective on an appropriate level with equal distribution of communication. Collective can handle dynamic interactions in situations and can respond to these on an appropriate level. As a collective, they can compensate for each other's limitations in communication for the benefit of the collective without leadership intervention. Adequate communication with intra-collectives and for the benefit of the community.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	**[170]** Able to manage and control situations intra-collective and between collectives (between them and other collectives) conflict and anxiety without reliance on leadership. Able to make collective decisions and problem-solving effectively. Able to control conflict and anxiety in the collective without leadership intervention. The collective participates in decision-making and also participates in monitoring of achievement of own outcomes and planning and implementation on a community level.
	Openness of collective to new members/ situations/ideas	**[171] I**nvite new members and ideas.

Contributive Participation Level

Descriptor of level:

Move from egocentricity to community focused

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMoCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	**[172]** Motivation is to improve the community. The community's need is more important than that of the collective. Motivation is robust. Active collective participation can take place on this level (want to engage collectively).
	Shared Intentionality to engage collectively in occupations.	**[173]** Intentionality to engage collectively is evident (they want to be in a collective because they think they can do more for the community). Intentionality to engage collectively for the benefit of the community. Shared mutual vision focus on community's vulnerability and not collective's shared vulnerability.
Action **(Taken directly for VdTMoCA but co-creating was a category from the interviews)**	**Co-Creating**	**[174]** Co-creating happens automatically due to motivation to contribute. Collective action is: • Community centred. To improve conditions in the community. • Disciplined to achieve outcomes and to surpass expectations and meet community's needs. • No need for leadership and guidance, but might elect to have leadership to surpass standards and norms.

		The collective participates in decision-making and also participates in monitoring of achievement of outcomes and policy development and implementation on a community level. Actions are directed at achieving goals as set by collective for the benefit of the community. Collective participation is independent.
	Symbiotic action (Mutual benefit.)	**[175]** Engagement in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	**[176]** Action does not have to be symmetrical/equal in nature between members and is based on an understanding of strengths and weaknesses of each in the collective so ensure that it is used for the benefit of the collective and the community
	Shared time and physical space	**[177]** Collective participation is independent. Do not need shared space and time. At times can work independently (individually or in smaller groups) on task needed for successful collective occupations.
	Ability to take initiative	**[178]** Takes initiative and consider the bigger picture and improve conditions on a community level.
	Effort	**[179]** Collective effort can be sustained on this level if related to the needs of the community. Effort does not have to be symmetrical/equal in nature between members and is based on an understanding of strengths and weaknesses of each in the collective so ensures that it is used for the benefit of the collective and the community

	Handling of tools and resources.	**[180]** Experienced in handling a variety of diverse tools. Interact appropriately with resources in their own community and other communities.
Product (From VdTMoCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	**[181]** The product is: • Community oriented. • Based on the needs of the community's needs.
	Intangible product	**[182]** Quality of the product is outstanding. Surpasses product of other collectives with similar membership and visions.
	Collective formation	**[183]** Collective formation is voluntary. Community's needs are more important than that of the collective.
Relations (group relations): (From VdTMoCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	**[184]** Collective interaction happens in the absence of a leader. Interactive responses automatic. Responsive to each other's needs as they understand the importance of interacting and responding to each other for the benefit of the community and for achieving outcomes in all activities and/or situations. Respond to each other's needs in all activities and situations within own community. Interactive responses automatically (works like a well-oiled machine).
	Cohesion: (a condition in which people or things are closely united). (Cohesion in a collective is essential for all the rest. The level of cohesion within a	**[185]** Active collective participation can take place on this level. Cohesion within a collective evident. Collective work together cohesively. Connecting easily with other collective for the benefit of the community. Collective identity is present.

	collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	**[186]** Mutual accountability on this level is possible. Members will hold each other accountable on issues related to the collective and community. This will be done in a social appropriate way.
	Responsibility: (obligation or duty to contribute)	**[187]** Collective takes shared responsibility for their outcomes (outcomes related to own needs and community's needs).
	Communication	**[188]** Able to connect with each other in the collective on an appropriate level with equal distribution of communication. Collective can handle dynamic interactions in situations on an appropriate level. As a collective, they can compensate for each other's limitations in communication for the benefit of the group and without leadership intervention. Adequate communication with other collectives and for the benefit of the community.
Emotional functioning (VdTMoCA talks about handling of situations, anxiety and participants suggested handling of conflict situations,	**Handling of situations within a collective:** • anxiety • conflict • problem solving	**[189]** Able to manage and control intra-collective and inter collectives (between them and other collectives) conflict and anxiety without reliance on leadership. Able to control conflict and anxiety in the collective without leadership intervention. Able to make collective decisions and problem-

problem solving and decision making)	• Decision making	solving effectively. Able to make complex decisions that will be more beneficial for community than for collective. Able to problem-solve as a collective, taking in consideration the needs of the community and not the needs of the collective.
	Openness of collective to new members/ situations/ideas	**[190]** Invite new members and ideas. Consult other collectives and role-players for new ideas and suggestions.

Competitive contributive Participatory Level

Same as previous level, but on a society level.

Appendix J: Participant information letter: Phase 3: Round 2

Aim of the study: This study aims to develop and validate domains, items and descriptors for levels of collective participation in occupations.

Name of the researcher: Fasloen Adams
Institution: Occupational Therapy Department
University of Witwatersrand

Dear _____

Good morning/ good afternoon,

Hope you are well. As you know, my research project intends to contribute to the understanding within occupational therapy of collective behaviour in occupations. This understanding could guide an OT to plan and implement groups or collective interventions for example prevention and promotion programmes. This could contribute significantly toward ensuring sustainability of programmes and projects within a public health setting.

During analysis of the last content validity of the levels of collective participation, 28 of the 171 items were dispute (meaning they received ratings of “not relevant” and “somewhat relevant”). According to research literature I could opt to either exclude these items or change them to and resend them for content validity.

Could I therefore please ask you to re-evaluate these 28 items and rate them again? As there are only 28 items, it should not take you longer than 40 minutes.

If you agree to please access the attached documents:

- Word document: Changes for round 2. In this document the new items descriptors are given. In order to ensure that these items descriptors are evaluated in context, I opted to leave it in its original table. The Items needed to needs re-rated start from page 3.
- Excel document: Round 2 content validity. Within this document you record your rating. You then have review and rate the appropriateness and validity of each observable action. Each item must be rated on a 4 point scale that consists; 1= not relevant, 2 = somewhat relevant, 3 = quite relevant and 4 = highly relevant.

To ensure confidentiality, the scoring sheet does not have space for your name and you are requested to email the scoring sheet back to the departmental secretary Zanele Mokoena at Zanele.Mokoena2@wits.ac.za who will forward it to me anonymously. Please put “Fasloen Research” as the title of the email to Zanele.

Feedback on the results of the research will be available on request.

If you have any questions please contact me on the details below. If you have any complaints or ethics queries, please contact the secretary of the Human Research Ethics Committee, Anisa Keshav on 011 717 1234.

If you agree to participate, the return of the scoring sheet will be considered consent by you to participate in this research.

Thank you,

The researcher
Fasloen Adams
Occupational Therapy Department
University of Witwatersrand
Johannesburg
Email: fasloen.adams@wits.ac.za
Telephone: 011 7173701
073 258 6535

Appendix K: Round 2 of content validity: Changes to items

Rating of item descriptor: Please rate by putting an X in the appropriate box. Please only rate once per item.

Number of item to rate	Not relevant	Somewhat relevant	Quite relevant	Highly relevant	If you give a rating of "not relevant" or "Somewhat relevant", please suggests specific changes below.
1					
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Appendix L: Phase 3: I-CVI: Round 2

Domains, items and descriptors for levels of collective participation in occupations

Descriptions of domains and items

Domain	Descriptor of domain	Items	Definition of Item
Motivation (Taken directly for VdTMCA)	Motivation is related to goal-directed behaviour and is defined as biological, social, emotional and/or cognitive forces that drives, guides, initiate and maintain goals directed behaviour and it drives our actions(202). Therefore it is considered to be the inner drive or internal state of a person that drives, behaviour, action and initiation(157, 203).Motivation is dynamic and is dependent on the stage of human development(32). This domain focusses on the motivation of the collective.	**Shared meaning**	With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them
		Shared Intentionality	Members of the collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal
Action (Taken directly for VdTMCA but co-creating was a category from the interviews)	Action is defined as "the exertion of mental and physical effort which results in occupational behaviour" (10) (page 7). It is a process of being active or doing something and of translating motivation into effort (46). According to the	**Co-Creating**	The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create. Through collective participation, the collective is working together to create.

	VdTMCA, motivation drives action (1, 10) and action results in tangible or intangible products. Within a collective one looks at their ability to perform action collectively.	**Symbiotic action**	Symbiotic action should be mutually beneficial- Collective action should benefit the collective and not just some in the collective.
		Equal action (Symmetrical action)	Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.
		Shared time and physical space	All participants or members are together in the same place at the same time for collective action to take place
		Ability to take initiative	Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.
		Effort	Effort is the use of energy (physical or mental) to do or produce something. To produce through exertion.
		Handling of tools and resources.	This is related to the manipulation and use of tools and use of resources within the community the collective is situated in.

Product (From VdTMCA):	A product is something that is produced either through human, natural or mechanical effort. It is the outcome or consequence of action and effort. The product can be tangible or intangible. Formation of a collective can be a product as it can be an end result of a process. Within a collective the product should be related to their purpose (what they wanted to achieve) and their collective formation.	**Tangible product**	An end product that can be touched or a concrete end product.
		Intangible product	An end product that cannot be perceived by the senses. Could be a process, a relationship, etc.
		Collective formation	Forming of a collective or group to engage in occupations.
Relations (group relations): (From VdTMCA: Quality of relation to people. As well as from suggestions from participants.	This looks at relations/ associations between members in the collective and with other individuals and collectives outside of the collective. How they relate to each other.	**Interaction:**	Interaction is mutual or reciprocal engagement. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.
		Cohesion	Cohesion is a connection that is defined as a connection that goes beyond just being together physically or cognitively. The level

			of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)
		Accountability	To be answerable to each other in the collective. To accept responsibility and account for your part.
		Responsibility	Obligation or duty to contribute as part of the collective engaging in occupations.
		Communication	The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.
Emotional functioning (VdTMCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	How the collective handle situations on an emotional level or common situations that involves affect.	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	Awareness and handling of the following: • anxiety • conflict • problem solving • Decision making
		Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	This relates to the collective's ability to be open and embrace new members, ideas, and situation.

Self-differentiation Level

Descriptor of level: Collective action is directed towards self-preservation of individuals in collective. Collective action is directed towards self-preservation of individuals in collective. The individuals attempt to differentiate themselves from whatever pre-existing conditions/characteristics were placed on them. Forming of the collective itself to engage in occupations is:

- Situational (for basic needs. The collective forms due to mutual/collective vulnerabilities and needs).
- Action is in response to a threat or/ and a basic need.

Thus, engagement in a collective occupation is incidental. Actions are dependent in nature. The collective demonstrate no task concept or concept of procedures.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMCA)	**Shared meaning** Descriptor: The collective has a shared or mutual vision/ purpose which is based on shared or mutual vulnerabilities/ needs amongst members.	**[1]** Shared meaning is incidental. Shared meaning is focused on surviving within the context and self-preservation. Mutual vision (vision of the collective) is basic and reactive due to mutual vulnerability/ need. Energy and drive is focused on existence of basic needs and satisfying immediate needs of individuals within the collective. An additional focus is on maintenance of basic life and basic resources.
	Shared Intentionality Descriptor: Members of the	**[2]** No shared intention to engage collectively. Collective participation and formation is reactive and/ or guided by

	collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal	leadership.
Action **(Taken directly for VdTMCA but co-creating was a category from the interviews)**	**Co-Creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create. Through collective participation, the collective is working together to create.	
	Symbiotic action Descriptor: Mutually beneficial- Collective participation can benefit the individuals who participate in the collective	**[3]** Symbiotic action is incidental and/or directed and guided by leadership.
	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they	**[4]** Action is not equal in nature (it is dependent on individual's action and is directed and guided by leadership on this level).

	collectively co-create. Equal action refers to symmetry in effort to create.	
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	**[5]** Collective action only occurs in a shared time and physical space. Face to face contact is essential.
	Ability to take initiative Descriptor: Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.	
	Effort Descriptor: The use of energy (physical or mental) to do or produce something. To produce through exertion.	**[6]** Fleeting effort results in momentary action. Effort is unplanned, reactive and only if it will satisfy basic needs of the collective and individuals in collective. Effort can be erratic at time. Effort does not have to be equal in nature between members within a collective.
	Handling of tools and resources. Descriptor: Manipulation and	

	use of tools and use of resources within the community.	
Product (From VdTMCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product** Descriptor: An end product that can be touched or a concrete end product.	
	Collective formation Descriptor: Forming of a collective or group to engage in occupations.	**[7]** **C**ollective formation is incidental. Participation in a collective is a reaction to a common need. Fear, self-preservation and common vulnerability (e.g. fear, hunger) drives collective formation.
Relations (group relations): (From VdTMCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** Descriptor: Mutual or reciprocal engagement. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	
	Cohesion Descriptor: A connection that is defined a connection that goes beyond just being together	**[8]** Cohesion is superficial, reactive or incidental. Connectivity (connecting with others) is incidental, reactive and superficial. No collective identity.

	physically or cognitively. Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	
	Accountability Descriptor: To be answerable to each other in the collective. To accept responsibility and account for your part.	
	Responsibility Descriptor: obligation or duty to contribute as part of the collective engaging in occupations.	
	Communication Descriptor: The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.	
Emotional functioning (VdTMCA talks about handling	**Handling of situations within a collective**	

of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	• anxiety • conflict • problem solving • Decision making	
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	

Self-Presentation Level

Descriptor of level

Collective engagement in occupations is due to:

Collective participation is geared towards surviving or presenting themselves to others.

- Convenience. E.g. all at the tap at the same time.
- Opportunity created by circumstances or environmental presses
- Leader(s)

Collective is still very egocentric.

Focus is on collective's own needs.

Cannot yet function independently.

The collective receives (able to demand) services but contributes nothing.

Domain	Items within domain	
Motivation Motivation is egocentric for the benefit of the collective.	**Shared meaning** Descriptor: With the collective there needs to be shared or mutual vision/ purpose of the	**[9] Shared meaning is egocentric in nature.** Mutual vision is egocentric relative to the collective i.e. what would be beneficial for the collective.

	group which is based on shared or mutual vulnerabilities amongst members that links them	
	Shared Intentionality Descriptor: Members of the collective should have a shared intentionality to engage collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal	
Action **(Taken directly for VdTMCA but co-creating was a category from the interviews)**	**Co-Creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create. Through collective participation, the collective is working together to create.	
	Symbiotic action Descriptor: Mutually beneficial-Collective participation can benefit the individuals who participate in the collective	

	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.	
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	
	Ability to take initiative Descriptor: Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.	
	Effort Descriptor: The use of energy (physical or mental) to do or	

	produce something. To produce through exertion.	
	Handling of tools and resources. Descriptor: Manipulation and use of tools and use of resources within the community.	
Product (From VdTMCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product** Descriptor: An end product that can be touched or a concrete end product.	**[10]** No tangible end product, however Group formation is a product. Additionally, explorative action as a collective is also a product. Presenting self as a collective to others.
	Collective formation Descriptor: Forming of a collective or group to engage in occupations.	**[11]** Collective formation is due to convenience and leadership and not actively sought out.
Relations (group relations): (From VdTMCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** Descriptor: Mutual or reciprocal engagement. Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there	

	needs to be mutual benefit.)	
	Cohesion Descriptor: A connection that is defined a connection that goes beyond just being together physically or cognitively. Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	
	Accountability Descriptor: To be answerable to each other in the collective. To accept responsibility and account for your part.	**[12]** Mutual accountability occurs if participating in a simple, familiar, or habituated task.
	Responsibility Descriptor: obligation or duty to contribute as part of the collective engaging in occupations.	
	Communication Descriptor: The exchange of	

	thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.	
Emotional functioning (VdTMCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations. Descriptor: The collective's ability to be open and embrace new members, ideas, situation.	

Passive Participation Level

Descriptor of level:

Passive participation in a collective due to guidance (through leadership). Motivated to be part of a collective, but still follow leadership on this level. Egocentricity still drives collective participation in occupations.
Becoming more productive in achieving the collective's goals.
The collective makes contributions but is not involved in the decision-making process for services or programmes for their communities.
On this level collective need direct leadership.

Domain	Items within domain	
Motivation (Taken directly for VdTMCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)	
	Shared Intentionality to engage collectively in occupations.	**[13]** Intentionality to form a collective need to be guided by leadership. Intentionality is not only related to familiar tasks, but to some unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action **(Taken directly for VdTMCA but co-creating was a category from the interviews)**	**Co-Creating**	
	Symbiotic action (Mutual benefit.)	**[14]** Symbiotic action (mutually benefit) is under guidance of leadership
	Equal action (Symmetrical action)	**[15]** Equal action occurs in familiar and simple unfamiliar situations under guidance of leadership.
	Shared time and physical space	

	Ability to take initiative	**[16]** Cannot show initiative as a collective. Still follows i.e. guidance by leadership needed.
	Effort	**[17]** Collective effort is erratic and leadership is needed to sustain effort. Maximum effort is still egocentric on this level, but collective becomes aware of need for and social norms requiring exertion of maximum effort. Effort does not have to be equal in nature between members within a collective but members become more aware of the social norm of equal participation (everyone has to do their share).
	Handling of tools and resources.	
Product (From VdTMCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	
	Collective formation	**[18]** Collective formation still guided by leadership. Focus on functional outcomes for the benefit of the collective (egocentric for the collective itself).
Relations (group relations): (From VdTMCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	

	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	**[19]** Cohesion is superficial and concrete. Connecting with others can occur on this level due to formation of stable interpersonal relationships between members. Starting to form a collective identity. Cohesion may be preceded by imitative behaviour within the collective for personal benefit (they copy the behavior of others within the collective if they think it is correct.)
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	**[20]** Mutual accountability passive according to norms and rules set by leadership.
	Responsibility: (obligation or duty to contribute)	
	Communication	**[21] Limited communication between members in activity.** Communication between members occurs on a constant basis but is superficial. Dominant members of the collective will lead communication. Members starting to become aware of dynamic interactions in situations and can respond to these on a superficial level. Able to read cues in people's reactions and can respond to it appropriately on a superficial level. Communications still focus on intra-collective communication

		rather than inter-collectives. Communication with other collectives is egocentric. A form of communication is reflection on own behavior as a collective, which is guided by leadership.
Emotional functioning (VdTMCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	

Competitive Participation Level

Descriptor of level:

Engagement in collective occupation is planned.

Work according to a strategy. Participate more in activities that benefits the collective more than the community the community is situated in.

Takes more initiative and consider the bigger picture.

Increase awareness of community's needs.

Takes more initiative and consider the bigger picture and consider the needs of the community in goals setting and planning.

Action is starting to transcend norms (as they want to do better than the norm) and they want to adapt to their situation and conditions effectively.

On this level dependence on leadership decreases and leaders (161) are often selected to lead norm transcendence, thus leadership is not a necessity, but used to enhance performance. Motivation geared towards doing better than other collectives. Although they still want to achieve egocentric goals, they are now motivated to work on community's needs as well. Collective's need is as important as that of community.

Motivation is robust. Although actions are geared towards the need of the community, the need of the collective is still important. Surpassing standards is still a motivator.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	
	Shared Intentionality to engage collectively in occupations.	

Action (Taken directly for VdTMCA but co-creating was a category from the interviews)	**Co-Creating**	
	Symbiotic action (Mutual benefit)	**[22]** Symbiotic action occurs and engagement in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	**[23]** Action does not have to be equal in nature between members. It is based on an understanding of strengths and weaknesses of each in the collective so ensures that it is used for the benefit of the collective and the community.
	Shared time and physical space	**[24]** Do not need shared space and time. At times smaller groups within the collective can work independently on task needed for successful collective occupations.
	Ability to take initiative	
	Effort	
	Handling of tools and resources.	
Product (From VdTMCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	
	Collective formation	**[25]** Active collective participation can take place on this level (want to engage collectively). Although they are focused on collective's outcomes, the community's needs are just as important. Less egocentric.
Relations (group relations): (From VdTMCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process	

individuals and collectives outside of the collective.	as people need to respond to each other. Preferably there needs to be mutual benefit.)	
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	
	Responsibility: (obligation or duty to contribute)	
	Communication	
Emotional functioning (VdTMCA talks about handling of situations, anxiety and participants suggested handling of conflict situations,	**Handling of situations within a collective:** • anxiety • conflict • problem solving	

problem solving and decision making)	• Decision making	
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	

Contributive Participation Level

Descriptor of level:

Move from egocentricity to community focused. Motivation is to improve the community. The community's need is more important than that of the collective. Motivation is robust.

Choose to have a leader that can ensure achievement of goals and that is altruistic.

Domain	Items within domain	Observable action
Motivation (Taken directly for VdTMCA)	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	
	Shared Intentionality to engage collectively in occupations.	
Action (Taken directly for VdTMCA but co-creating was a category from the interviews)	**Co-Creating**	
	Symbiotic action (Mutual benefit.)	**[26]** Engagement in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	
	Shared time and physical space	**[27]** Do not need shared space and time. At times can work independently (individually or in smaller groups) on task needed for successful collective occupations.
	Ability to take initiative	
	Effort	

	Handling of tools and resources.	
Product (From VdTMCA): Related to their purpose(what they wanted to achieve) and their collective formation	**Tangible product**	
	Intangible product	
	Collective formation	**[28]** Active collective participation can take place on this level (want to engage collectively). Community's needs are more important than that of the collective.
Relations (group relations): (From VdTMCA: People and relations. As well as from suggestions from participants. This looks at relations within the collective and with other individuals and collectives outside of the collective.	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective engagement. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective engagement (same as definition for cohesion)	

	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	
	Responsibility: (obligation or duty to contribute)	
	Communication	
Emotional functioning (VdTMCA talks about handling of situations, anxiety and participants suggested handling of conflict situations, problem solving and decision making)	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	

Appendix M: Phase 3: Final I-CVI ratings

Rating of appropriateness of domains and definitions of domains for collective participation

	Rating of appropriateness of domains identified for collective participation		**Rating of definitions of Domains**	
Domains	**% of agreement**	**I-CVI score**	**% of agreement**	**I-CVI score**
Motivation	100	1	83.33	0.83
Action	100	1	100	1
Product	100	1	100	1
Relations	100	1	100	1
Emotional functioning	100	1	83.34	0.83

Rating of appropriateness of items for each item

	Rating of appropriateness of items for each domain		Rating of the definition of each item	
Items	**% of agreement**	**I-CVI score**	**% of agreement**	**I-CVI score**
Motivation				
1. Shared meaning	100	1	100	1
2. Shared intentionality	100	1	100	1
Action				
1. Co-creating	100	1	83.34	0.83
2. Symbiotic action	83.34	0.83	83.34	0.83
3. Equal action	100	1	83.34	0.83
4. Shared time and physical space	100	1	100	1
5. Ability to take initiative	100	1	83.34	0.83
6. Effort	100	1	100	1
7. Handling of tools and resources	100	1	100	1
Product				
1. Tangible product	100	1	100	1
2. Intangible product	83.34	0.83	83.34	0.83
3. Collective formation	100	1	100	1
Relations				
1. Interaction	100	1	100	1
2. Cohesion	100	1	100	1
3. Accountability	100	1	100	1
4. Responsibility	100	1	100	1
5. Communication	100	1	100	1
Emotional functioning				
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	100	1	100	1
2. Openness of collective to new members/ situations/ ideas.	100	1	100	1

Rating of descriptor for levels of collective participation

- **Self-differentiation level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	57.15	0.57
2. Shared intentionality	100	1.00
Action		
1. Co-creating	85.71	0.86
2. Symbiotic action	71.43	0.71
3. Equal action	85.71	0.86
4. Shared time and physical space	71.43	0.71
5. Ability to take initiative	85.71	0.86
6. Effort	85.71	0.86
7. Handling of tools and resources	85.71	0.86
Product		
1. Tangible product	85.71	0.86
2. Collective formation	71.43	0.71
Relations		
1. Interaction	85.72	0.86
2. Cohesion	57.15	0.57
3. Accountability	85.72	0.86
4. Responsibility	85.72	0.86
5. Communication	85.71	0.86
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	85.72	0.86
2. Openness of collective to new members/ situations/ ideas.	85.71	0.86

- **Self-Presentation level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	57.15	0.57
2. Shared intentionality	85.72	0.86
Action		
1. Co-creating	85.71	0.86
2. Symbiotic action	85.72	0.86
3. Equal action	85.72	0.86

4. Shared time and physical space	85.71	0.86
5. Ability to take initiative	85.71	0.86
6. Effort	85.72	0.86
7. Handling of tools and resources	85.72	0.86
Product		
1. Tangible product	57.15	0.57
2. Collective formation	100	1.00
Relations		
1. Interaction	83.33	0.83
2. Cohesion	85.71	0.86
3. Accountability	42.86	0.43
4. Responsibility	85.71	0.86
5. Communication	85.72	0.86
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	85.72	0.86
2. Openness of collective to new members/ situations/ ideas.	85.72	0.86

- **Passive Participation level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	85.72	0.86
2. Shared intentionality	100	1.00
Action		
1. Co-creating	85.72	0.86
2. Symbiotic action	100	1.00
3. Equal action	100	1.00
4. Shared time and physical space	85.71	0.86
5. Ability to take initiative	100	1.00
6. Effort	71.43	0.71
7. Handling of tools and resources	85.72	0.86
Product		
1. Tangible product	85.71	0.86
2. Collective formation	100	1.00
Relations		

1. Interaction	85.72	0.86
2. Cohesion	71.43	0.71
3. Accountability	100	1.00
4. Responsibility	85.71	0.86
5. Communication	100	1.00
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	85.72	0.86
2. Openness of collective to new members/ situations/ ideas.	85.72	0.86

- **Imitative Participation Level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	100	1
2. Shared intentionality	100	1
Action		
1. Co-creating	100	1
2. Symbiotic action	85.72	0.86
3. Equal action	85.71	0.86
4. Shared time and physical space	100	1
5. Ability to take initiative	100	1
6. Effort	100	1
7. Handling of tools and resources	85.72	0.86
Product		
1. Tangible product	100	1
2. Collective formation	100	1
Relations		
1. Interaction	100	1
2. Cohesion	100	1
3. Accountability	100	1
4. Responsibility	100	1
5. Communication	100	1
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-	100	1

solving and decision-making.		
2. Openness of collective to new members/ situations/ ideas.	100	1

- **Active Participation Level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	100	1
2. Shared intentionality	100	1
Action		
1. Co-creating	100	1
2. Symbiotic action	85.72	0.86
3. Equal action	85.71	0.86
4. Shared time and physical space	100	1
5. Ability to take initiative	100	1
6. Effort	100	1
7. Handling of tools and resources	100	1
Product		
1. Tangible product	85.72	0.86
2. Collective formation	85.72	0.86
Relations		
1. Interaction	85.72	0.86
2. Cohesion	100	1
3. Accountability	100	1
4. Responsibility	100	1
5. Communication	100	1
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	100	1
2. Openness of collective to new members/ situations/ ideas.	100	1

- **Competitive Participation Level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	85.71	0.86

2. Shared intentionality	85.72	0.86
Action		
1. Co-creating	85.72	0.86
2. Symbiotic action	100	1.00
3. Equal action	100	1.00
4. Shared time and physical space	85.71	0.86
5. Ability to take initiative	85.72	0.86
6. Effort	85.72	0.86
7. Handling of tools and resources	85.71	0.86
Product		
1. Tangible product	85.71	0.86
2. Collective formation	100	1.00
Relations		
1. Interaction	85.72	0.86
2. Cohesion	85.72	0.86
3. Accountability	85.72	0.86
4. Responsibility	85.71	0.86
5. Communication	85.72	0.86
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	85.72	0.86
2. Openness of collective to new members/ situations/ ideas.	85.72	0.86

- **Contributive Participation Level**

Motivation	**% of agreement**	**I-CVI score**
1. Shared meaning	85.72	0.86
2. Shared intentionality	85.71	0.86
Action		
1. Co-creating	85.72	0.86
2. Symbiotic action	100	1.00
3. Equal action	85.72	0.86
4. Shared time and physical space	100	1.00
5. Ability to take initiative	85.72	0.86
6. Effort	85.71	0.86
7. Handling of tools and	85.71	0.86

resources		
Product		
1. Tangible product	85.72	0.86
2. Collective formation	100	1.00
Relations		
1. Interaction	85.71	0.86
2. Cohesion	85.72	0.86
3. Accountability	85.71	0.86
4. Responsibility	85.72	0.86
5. Communication	85.72	0.86
Emotional functioning		
1. Handling of situations within a collective: anxiety, conflict, problem-solving and decision-making.	85.72	0.86
2. Openness of collective to new members/ situations/ ideas.	85.72	0.86

Appendix O: Final descriptors for levels for collective participation in occupation

Self-differentiation Level

Descriptor of level: Collective action is directed towards self-preservation of individuals in collective. The individuals attempt to differentiate themselves from whatever pre-existing conditions/characteristics were placed on them. Forming of the collective itself to participate in occupations is:

- Situational (for basic needs. The collective forms due to mutual/collective vulnerabilities and needs).
- Action is in response to a threat or/ and a basic need.

Thus, participation in a collective occupation is incidental. Actions are dependent in nature. The collective demonstrate no task concept or concept of procedures. Strong leadership is needed on this level for constructive action.

Domain	Items within domain	Observable action
Motivation	**Shared meaning** Descriptor: With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them	Shared meaning is incidental. Shared meaning is focused on surviving within the context and self-preservation. Mutual vision (vision of the collective) is basic and reactive due to mutual vulnerability/ need. Energy and drive is focused on existence of basic needs and satisfying immediate needs of individuals within the collective. An additional focus is on maintenance of basic life and basic resources.
	Shared Intentionality Descriptor: Members of the collective should have a	No shared intention to engage collectively. Collective participation and formation is reactive and/ or guided by leadership.

	shared intentionality to participate collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal	
Action	**Co-Creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this collectively is to co-create. Through collective participation, the collective is working together to create.	Co-creating is incidental and unplanned. Actions are directed towards: maintaining basic life and/or protecting self as an individual in a collective (self-preservation) Collective is dependent on leadership. Action is reactive, fleeting and only if it will satisfy basic needs of the collective and individuals in collective. Action can be constructive if guided by leadership.
	Symbiotic action Descriptor: Mutually beneficial-Collective participation can benefit the individuals who participate in the collective	Symbiotic action is incidental and/or directed and guided by leadership.
	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they	Action is not equal in nature (it is dependent on individual's action and is directed and guided by leadership on this level).

	collectively co-create. Equal action refers to symmetry in effort to create.	
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	Collective action only occurs in a shared time and physical space. Face to face contact is essential.
	Ability to take initiative Descriptor: Initiative is defined as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.	Cannot show initiative as a collective.
	Effort Descriptor: The use of energy (physical or mental) to do or produce something. To produce through exertion.	Fleeting effort results in momentary action. Effort is unplanned, reactive and only if it will satisfy basic needs of the collective and individuals in collective. Effort can be erratic at time. Effort does not have to be equal in nature between members within a collective.
	Handling of tools and resources. Descriptor: Manipulation and	Not able to identify resources in surroundings and use appropriately. No knowledge of tools and materials

	use of tools and use of resources within the community.	
Product	**Tangible product** Descriptor: An end product that can be touched or a concrete end product. Related to achievement of goals and occupations performed	No collective product unless guided by leader.
	Collective formation Descriptor: Forming of a collective or group to participate in occupations.	Collective formation is incidental. Participation in a collective is a reaction to a common need. Fear, self-preservation and common vulnerability (e.g. fear, hunger) drives collective formation.
Collective relations	**Interaction:** Descriptor: Mutual or reciprocal participation. Interaction is needed for participation in collective occupation. Without the interaction there is not collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	Interaction is incidental and either facilitated (by leadership) or reactive due to common vulnerabilities/ needs. Responsiveness is superficial and incidental.
	Cohesion Descriptor: A connection that is	Cohesion is superficial, reactive or incidental. Connectivity (connecting with others) is incidental, reactive and superficial.

	defined a connection that goes beyond just being together physically or cognitively. Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as definition for cohesion)	No collective identity.
	Accountability Descriptor: To be answerable to each other in the collective. To accept responsibility and account for your part.	No accountability on this level, due to the egocentric nature and superficial cohesion and interaction taking place of this level.
	Responsibility Descriptor: obligation or duty to contribute as part of the collective engaging in occupations.	None due to the egocentric nature and superficial cohesion and interaction taking place of this level.
	Communication Descriptor: The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.	No awareness of dynamic interactions in situations. Not able to read cues in each other's responses and fleeting awareness of others within the collective. Communication between members of a collective is superficial and individual needs driven. Communications with other collectives is non-

		existent or incidental.
Emotional functioning	**Handling of situations within a collective** • anxiety • conflict • problem solving • Decision making	**C**ollectively, cannot actively control anxiety, conflict situations, make collective informed decisions and problem-solving is non-exciting (in the collective and external). Dependency on others especially leaders or dependency on immediate people/family/friends (might not even be aware of leaders.)
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations. Descriptor: The collective's ability to be open and embrace new members, ideas, situation.	Not possible on this level.

Self-Presentation Level

Descriptor of level: Collective participation in occupations is due to:

- Convenience. E.g. all at the tap at the same time.
- Opportunity created by circumstances or environmental presses
- Leader(s)

Collective is still very egocentric.
Focus is on collective's own needs.

The collective is still dependent on leadership to guide constructive action.
The collective receives (able to demand) services but contributes nothing.

Domain	Items within domain	Observable action
Motivation	**Shared meaning** Descriptor: With the collective there need to be shared or mutual vision/ purpose of the group which is based on shared or mutual vulnerabilities amongst members that links them	Shared meaning is egocentric in nature. Mutual vision is egocentric relative to the collective i.e. what would be beneficial for the collective.
	Shared Intentionality Descriptor: Members of the collective should have a shared intentionality to participate collectively in occupations. Participants need to have an intention to want to participate in collective occupation or to achieve a certain goal	Intentionality to participate collectively starts becoming evident especially if task is simple, familiar and a habituated task and/ or guided by leadership.
Action	**Co-Creating** Descriptor: The concept of 'create' is commonly understood as 'to make' or 'to produce'. Doing this	Co-creating is possible if task is simple, familiar, habituated and/ or guided by leadership. Co-creating is guided by leadership and in response to recognised social norms. Actions are directed towards presenting collective to others.

	collectively is to co-create. Through collective participation, the collective is working together to create.	
	Symbiotic action Descriptor: Mutually beneficial- Collective participation can benefit the individuals who participate in the collective	Symbiotic action is mutually beneficial and occurs if participants engage in a familiar or habituated task or if organised by leader. In unfamiliar tasks, not equal in nature between members within a collective (it is dependent on individual‘s levels and must be guided by leadership on this level)
	Equal action (Symmetrical action) Descriptor: Members of a collective respond to each other in action and they collectively co-create. Equal action refers to symmetry in effort to create.	Equal action occurs in familiar tasks, equal action is possible if it was previously guided by leadership. In unfamiliar tasks, not equal in nature between members within a collective (it is dependent on individual‘s levels and must be guided by leadership on this level)
	Shared time and physical space Descriptor: All participants or members are together in the same place at the same time for collective action to take place	Collective action (co-creating) only occurs in a shared time and physical space.
	Ability to take initiative Descriptor: Initiative is defined	Cannot show initiative as a collective.

	as the power to start or continue a process, task, plan, task, etc. (40). Initiative is related to a collective's readiness to take action and the ability to make the decision to start.	
	Effort Descriptor: The use of energy (physical or mental) to do or produce something. To produce through exertion.	Effort is egocentrically motivated. If the collective benefit and it fits within their skills, they will be able to put in the effort as a collective with guidance from leadership. Effort does not have to be equal in nature between members within a collective depending on skills of individual members.
	Handling of tools and resources. Descriptor: Manipulation and use of tools and use of resources within the community.	Can handle basic, familiar tools and can participate superficially with familiar resources in their own community.
Product	**Tangible product** Descriptor: An end product that can be touched or a concrete end product.	No tangible end product, however Group formation is a product. Additionally, explorative action as a collective is also a product. Presenting self as a collective to others.
	Collective formation Descriptor: Forming of a collective to participate in occupations.	Collective formation still guided by leadership. Focus on functional outcomes for the benefit of the collective (egocentric for the collective itself).
Collective relations	**Interaction:**	**I**nteraction is possible in a simple, familiar, and habituated

	Descriptor: Mutual or reciprocal participation. Interaction is needed for participation in collective occupation. Without the interaction there is not collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	task or if facilitated. The process is reactive due to common vulnerabilities/ needs or familiarity. Basic and superficial interaction between members in a collective is possible at this level. Individuals in a collective are starting to respond to each other's basic needs but it is still very superficial and egocentric for the individual. So will be responsive to others if it is in line with own needs.
	Cohesion Descriptor: A connection that is defined a connection that goes beyond just being together physically or cognitively. Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as definition for cohesion)	Cohesion is superficial and concrete. Connecting with others can occur on this level due to formation of stable interpersonal relationships between members. Starting to form a collective identity. Cohesion may be preceded by imitative behaviour within the collective for personal benefit (they copy the behavior of others within the collective if they think it is correct.)
	Accountability Descriptor: To be answerable	Mutual accountability occurs if participating in a simple, familiar, or habituated task.

	to each other in the collective. To accept responsibility and account for your part.	
	Responsibility Descriptor: obligation or duty to contribute as part of the collective engaging in occupations.	Mutual responsibility is taken according to recognised social norms in familiar or habitual tasks , for example, not be late for meetings or cooking soup together if we have done it before.
	Communication Descriptor: The exchange of thoughts, ideas, etc. The act of communicating. Includes verbal and non-verbal skills.	Communication is often between group members and leader. It can be between members with guidance and structure from leadership or if the situation is familiar. Members of the collective are becoming aware of each other and begin communicating on a concrete and superficial level. Members are able to read cues in people's reactions but cannot respond appropriately unless they are in a familiar situation. Dominant members and leaders lead conversation. No awareness of dynamic interactions in situations Communications focus on intra- collective communication rather than inter-collective communication. Communication with other collectives is very egocentric.
Emotional functioning	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	Control of anxiety and conflict situations is leadership dependent, members of the collective are not able to achieve collective decision making and problem solving. The collective demonstrates awareness of intergroup anxiety or conflict in open threats to the collective's ability to be successful. Dependency on others, especially leaders, to handle difficult

		situations and make decision or solve problems.
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations. Descriptor: The collective's ability to be open and embrace new members, ideas, situation.	Openness to and inclusion of new members, situations and ideas are leadership driven. Without leadership new situations may be explored.

Passive Participation Level

Descriptor of level:

Participation in a collective due to guidance (through leadership).
Becoming more productive in achieving the collective's goals.
The collective makes contributions but is not involved in the decision-making process for services or programmes for their communities.

Domain	Items within domain	Observable action
Motivation	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)	Passive participation in a collective. Motivated to be part of a collective, but still follow on this level. Egocentricity still drives the collective to participate collectively in occupations. Motivated by mutual vision but mutual vision is still egocentric relative to the collective i.e. what would be beneficial for the collective.

	Shared Intentionality	Intentionality to form a collective need to be guided by leadership. Intentionality is not only related to familiar tasks, but to some unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action	**Co-Creating**	Co-creating and collective participation in occupations can take place on this level, but participation is passive and not active. Members follow directions. Independent co-creating is possible on this level if participating in a familiar or a simple unfamiliar activities or situations. Action is in response to recognised social norms and identified outcomes of collective. Action is directed towards: • Achieving goals as set by collective • Following others, for example the leader or strong members in the group. • Following protocol. • Becoming more productive in achieving the collective's goals. Collective participation in occupations could still be erratic in unfamiliar or active situations and are dependent on others to initiate, for example a leader. Guidance by leader is still important for collective participation on this level.
	Symbiotic action (Mutual benefit.)	Symbiotic action (mutually benefit) is under guidance of leadership
	Equal action (Symmetrical action)	Equal action occurs in familiar and simple unfamiliar situations under guidance of leadership.

	Shared time and physical space	Familiar activities do not need shared space and time. Unfamiliar activities still need shared space and time.
	Ability to take initiative	Cannot show initiative as a collective. Still follows i.e. guidance by leadership needed.
	Effort	Collective effort is erratic and leadership is needed to sustain effort. Maximum effort is still egocentric on this level, but collective becomes aware of need for and social norms requiring exertion of maximum effort. Effort does not have to be equal in nature between members within a collective but members become more aware of the social norm of equal participation (everyone has to do their share).
	Handling of tools and resources.	Knowledge of and handling of tools is extending and becomes product-directed. Explores with unfamiliar tools and equipment for the benefit of the collective reaching goals. Interact appropriately with familiar resources in their own community.
Product	**Tangible product**	Participation (passive product). Participation according to a given set of norms; with guidance. Focus is on task as task concept is developed.
	Collective formation	Collective formation still guided by leadership. Focus on functional outcomes for the benefit of the collective (egocentric for the collective itself).
Collective relations	**Interaction:** (Interaction is needed for participation in collective occupation. Without the interaction there is not	Interaction is an active process if participating in familiar and simple unfamiliar activities or situations under guidance of leadership. Can respond to each other's needs in above mentioned activities and situations but often through

	collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	leadership. Interactive responses easier when related to achievement of collectives goals.
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as definition for cohesion)	Cohesion is superficial and concrete. Connecting with others can occur on this level due to formation of stable interpersonal relationships between members. Starting to form a collective identity. Cohesion may be preceded by imitative behaviour within the collective for personal benefit (they copy the behavior of others within the collective if they think it is correct.)
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	Mutual accountability passive according to norms and rules set by leadership.
	Responsibility: (obligation or duty to contribute)	Mutual responsibility is taken according to recognised social norms and identified outcomes of collective, thus mutual responsibility can be taken if in line with basic social norms and/ or familiar and simple unfamiliar activities or situations.
	Communication	Limited communication between members in activity. Communication between members occurs on a constant

		basis but is superficial. Dominant members of the collective will lead communication. Members starting to become aware of dynamic interactions in situations and can respond to these on a superficial level. Able to read cues in people's reactions and can respond to it appropriately on a superficial level. Communications still focus on intra-collective communication rather than inter-collectives. Communication with other collectives is egocentric. A form of communication is reflection on own behavior as a collective, which is guided by leadership.
Emotional functioning	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	Aware of anxiety within the collective, the need to make decisions as a collective, becoming aware of the need to solve problems as a collective and conflict situations (in the collective and external), but cannot resolve independently. Guidance is needed. Collectively, due to increased cohesion, they can make concrete decisions and solve simple problems. Dependency on others especially leaders to handle difficult situations and make more complex decision or solve problems is still evident.
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	Open to new members and ideas if guided by leadership.

Imitative Participation Level

Descriptor of level:

Participation in a collective occupation is planned.
Compliant with norms.
The collective participates in low-level decision making only, otherwise do as they are told.

Domain	Items within domain	Observable action
Motivation	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)	Voluntary participation in collectives and collective participation. Outcome centred for established collective. On a collective level actions are directed towards achieving goals as set by the collectives. Mutual vision is still egocentric relative to the collective i.e. what would be beneficial for the collective. The mutual vision could have been imitated from another collective if it is similar to what the collective wanted to do.
	Shared Intentionality to participate collectively in occupations.	Intentionality to participate collectively is evident (they want to be in a collective because they think they can do more). Intentionality to participate collectively is not only related to familiar tasks, but to unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action	**Co-Creating**	Co-creating and active participation in collectives and collective participation is possible on this level in familiar and unfamiliar activities or situations. Collective actions are directed towards:

		• Following/ adhering to internalised norms (collective's and social). • Following actions of equivalent collectives. Productive in achieving the collective's goals. Collective interaction could still happen in the absence of a leader. Collective participation is independent. Starting to demonstrate initiative as a collective.
	Symbiotic action (Mutual benefit.)	Symbiotic action to the benefit of the collective and individuals in collective, however often imitation of other collectives.
	Equal action (Symmetrical action)	On this level action does not have to be equal in nature between members within a collective, but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Shared time and physical space	Do not need shared space and time.
	Ability to take initiative	Starting to demonstrate initiative as a collective.
	Effort	Collective effort can be sustained on this level by imitating existing role-models (will do what the role-models do). Group pressure is important for sustained effort. Effort does not have to be symmetrical/equal in nature between members within a collective but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Handling of tools and resources.	Experience in handling of diverse tools. Interact appropriately with resources in their own community.
Product	**Tangible product**	Like others/not original

		Compliant with norms. In line with equivalent collectives.
	Collective formation	Collective formation is voluntary as they think it will help and they see it being beneficial with other collectives.
Collective relations	**Interaction:** (Interaction is needed for engagement in collective occupation. Without the interaction there is not collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	Interactive responses can take place on this level as communication is on a deeper level. Responses not original but according to recipe or imitating role-model. Active process is possible. Members of the collective can participate interactively for the benefit of the collective in familiar and unfamiliar activities or situations. Respond to each other's needs in familiar tasks and unfamiliar tasks and situations. Interactive responses easier when related to achievement of collectives goals.
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as definition for cohesion)	Cohesion within a collective evident. Collective work together cohesively. Form a collective identity. Connecting with others occur on this level. Connecting with other collective still only for egocentric reasons (for imitation of that collective's behaviour). Form a collective identity.
	Accountability (To be answerable to each other in	Due to this connection, mutual accountability is evident.

	the collective. To accept responsibility and account for your part.)	
	Responsibility: (obligation or duty to contribute)	Due to this connection, taking of responsibility is evident. Sharing of responsibility evident.
	Communication	Able to connect with each other in the collective on a deeper level, yet dominant members of the collective will still communicate the most. Communications between members evident. Collective required to handle dynamic interactions in situations and can respond to these on an appropriate level. Able to read cues in people's reactions and can respond to it appropriately. Communications still focus on intra-collective communication rather than inter-collectives. Communication with other collectives is still egocentric.
Emotional functioning	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	Aware of anxiety within the collective, the need to make decisions as a collective, becoming aware of the need to solve problems as a collective and conflict situations (in the collective and external), require initiation of conflict and anxiety management in the collective (from leader or imitate methods used by other collectives). Collectively, due to increase cohesion, they can make low-level decision and solve simple problems otherwise do as they are told. Increase in independence to handle difficult situations and make more complex decision or solve problems.

	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	Open to new members and ideas.

Active Participation Level

Descriptor of level:

Participation in collective occupation is planned.
Work according to a strategy. Participate more in activities that benefits the collective more than the community the community is situated in.
Takes more initiative and consider the bigger picture.
Increase awareness of community's needs.

Domain	Items within domain	Observable action
Motivation	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	Motivation is interest driven (the collective's interests), while adhering to social norms. However, starting to want to surpass social norms and standards (do better). It is collective oriented. Collective's need drives actions. Mutual vision is starting to become less egocentric relative to the collective i.e. what would be beneficial for the collective. The mutual vision original to the collective.
	Shared Intentionality to participate collectively in occupations.	**I**ntentionality to participate collectively is evident (they want to be in a collective because they think they can do more). Intentionality to participate collectively is not only related to familiar tasks, but to unfamiliar tasks as well as long as it is related to the collective's outcomes.
Action	**Co-Creating**	Co-creating and active collective participation is possible on this level in familiar and unfamiliar activities or situations. Collective action directed towards: • Collaborative action (within the collective) to achieve

		the collective's goals. • Following community norms. Need for constant leadership and guidance reduces. Collective becoming a role model (imitated by other collectives). Unique in actions as they want to surpass. Interactive responses can take place on this level as communication is on a deeper level. Responses are original.
	Symbiotic action (Mutual benefit.)	Participation in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	Equal action does not have to be symmetrical/equal in nature between members within a collective but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Shared time and physical space	Collective participation is independent. Do not need shared space and time.
	Ability to take initiative	Takes initiative and considers the bigger picture still very much focused on collective's outcomes.
	Effort	Collective effort can be sustained on this level if related to the interests of the collective or in-line with identified outcomes. Group pressure continues to be important for sustained effort. Effort does not have to be symmetrical/equal in nature between members within a collective but members ensure symmetry if it is evident in role-model (everyone has to do their share).
	Handling of tools and	Experience in handling a variety of diverse tools. Interact

	resources.	appropriately with resources in their own community and other communities.
Product	**Tangible product**	Product: • Contributive/ collective oriented. • Based on collective's interest and needs.
	Collective formation	Collective formation is voluntary but still egocentric. Although they are still very much focused on collective's outcomes, they are considering the bigger picture.
Collective relations	**Interaction:** (Interaction is needed for participation in collective occupation. Without the interaction there is not collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	**I**nteraction as an active process is possible. Members respond appropriately and voluntarily to each other's actions. Responses are original and can happen in the absence of a leader. Members of the collective can participate interactively for the benefit of the collective in all activities and situations within own community. Respond to each other's needs in all activities and situations.
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as	Cohesion within a collective evident. Collective work together cohesively in the absence of a leader. Collective identity formed. Connecting with others occurs on this level. Connecting with other collectives still only for egocentric reasons, but starting to connect with other collectives for the benefit of the community.

	definition for cohesion)	
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	Due to developed level of communication and connecting, mutual accountability is possible on this level is possible. Members will hold each other accountable.
	Responsibility: (obligation or duty to contribute)	Collective can take shared responsibility for their outcomes.
	Communication	Able to connect with each other in the collective on an appropriate level with more equal distribution of communication (not only dominant members of collectives). Communications between members evident. Collective required to handle dynamic interactions in situations and can respond to these on an appropriate level. Able to read cues in people's reactions and can respond to it appropriately. Communications still focusses on intra- collective communication rather than inter- collectives. Communication with other collectives is still egocentric (interest driven by collective), but due to increase awareness of community's needs they starting to connect with other collectives for the benefit of the community (less egocentric).
Emotional functioning	**Handling of situations within a collective:** • anxiety • conflict • problem solving	Able to manage inter-collective conflict and anxiety without reliance on leadership. Able to make collective decisions and problem-solving effectively. Able to control conflict and anxiety in the collective without leadership intervention.

	• Decision making	The collective not only participates in decision-making but also participates in some monitoring and some implementation.
	Openness of collective to new members/ situations/ideas	Open to new members and ideas.

Competitive Participation Level

Descriptor of level:

Participation in collective occupation is planned.
Work according to a strategy. Participate more in activities that benefits the collective more than the community the collective is situated in.
Takes more initiative and consider the bigger picture and consider the needs of the community in goals setting and planning.
Action is starting to transcend norms (as they want to do better than the norm) and they want to adapt to their situation and conditions effectively.
On this level dependence on leadership decreases and leaders (168) are often selected to lead norm transcendence, thus leadership is not a necessity, but used to enhance performance

Domain	Items within domain	Observable action
Motivation	**Shared meaning** (Mutual vision/ purpose of the group) (Mutual vulnerability)*	Motivation geared towards doing better than other collectives. Although they still want to achieve egocentric goals, they are now motivated to work on community's needs as well. Collective's need is as important as that of community. Motivation is robust. Active collective participation can take place on this level (want to participate collectively).
	Shared Intentionality to participate collectively in occupations.	Intentionality to participate collectively is evident (they want to be in a collective because they think they can do more for the community). Intentionality to participate collectively for the benefit of the community but also to surpass other similar collectives. Mutual vision is starting to become less egocentric relative

		to the collective i.e. what would be beneficial for the collective. The mutual vision original to the collective.
Action	**Co-Creating**	Co-creating is possible on this level in familiar and unfamiliar activities or situations. Co-creating is voluntary as members understand the benefits of working together. Collective participation is directed towards: • Norm transcendence. • Achieving goals as set by collective • Competitive and disciplined to achieve outcomes and to surpass expectations. • Competing with other collectives to surpass them. No need for leadership and guidance, however, may elect a leader to ensure that they surpass standards and norms.
	Symbiotic action (Mutual benefit.)	Symbiotic action occurs and engagement in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	Action does not have to be equal in nature between members. It is based on an understanding of strengths and weaknesses of each in the collective so ensures that it is used for the benefit of the collective and the community.
	Shared time and physical space	Do not need shared space and time. At times smaller groups within the collective can work independently on task needed for successful collective occupations.

	Ability to take initiative	Takes initiative and consider the bigger picture and to surpass actions of other similar collectives.
	Effort	Collective effort can be sustained on this level if related to the interests of the collective or in-line with identified outcomes. Group pressure continues to be important for sustained effort.
	Handling of tools and resources.	Experienced in handling a variety of diverse tools. Interact appropriately with resources in their own community and other communities.
Product	**Tangible product**	Product: • Community oriented. • Based on the needs of the community as well as the collective's interest and needs. Surpasses product of other collectives with similar membership and visions. On this level the collective can evaluate end product and adapt actions of end-product to improve end product when needed.
	Collective formation	Active collective participation can take place on this level (want to engage collectively). Although they are focused on collective's outcomes, the community's needs are just as important. Less egocentric.
Collective relations	**Interaction:** (Interaction is needed for participation in collective occupation. Without the interaction there is not	Interaction is an active process. Members understand the importance of interacting and responding to each other for the benefit of the collective in all activities and/or situations. Respond to each other's needs take place in all activities

	collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	and situations within own community. Responses are original and can happen in the absence of a leader. Interactive responses automatic (works like a well-oiled machine).
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as definition for cohesion)	Active collective participation can take place on this level. Cohesion within a collective evident. Collective work together cohesively without the dependence on a leader. Collective identity formed. Connecting easily with other collectives for the benefit of the community.
	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	Mutual accountability on this level is possible. Members will hold each other accountable. This will be done in a social appropriate way.
	Responsibility: (obligation or duty to contribute)	Collective can take shared responsibility for their outcomes (outcomes related to own needs and community's needs).
	Communication	Able to connect with each other in the collective on an appropriate level with equal distribution of communication. Collective can handle dynamic interactions in situations and can respond to these on an appropriate level.

		As a collective, they can compensate for each other's limitations in communication for the benefit of the collective without leadership intervention. Adequate communication with intra-collectives and for the benefit of the community.
Emotional functioning	**Handling of situations within a collective:** • anxiety • conflict • problem solving • Decision making	Able to manage and control situations intra-collective and between collectives (between them and other collectives) conflict and anxiety without reliance on leadership. Able to make collective decisions and problem-solving effectively. Able to control conflict and anxiety in the collective without leadership intervention. The collective participates in decision-making and also participates in monitoring of achievement of own outcomes and planning and implementation on a community level.
	Openness of collective to new members/ situations/ideas. Also openness to changes to existing situations.	**I**nvite new members and ideas.

Contributive Participation Level

Descriptor of level:

Move from collective focused to community focused.

Domain	Items within domain	Observable action
Motivation	Shared meaning (Mutual vision/ purpose of the group) (Mutual vulnerability)*	Motivation is to improve the community. The community's need is more important than that of the collective. Motivation is robust. Active collective participation can take place on this level (want to participate collectively).
	Shared Intentionality to participate collectively in occupations.	Intentionality to participate collectively is evident (they want to be in a collective because they think they can do more for the community). Intentionality to participate collectively for the benefit of the community. Shared mutual vision focus on community's vulnerability and not collective's shared vulnerability.
Action	Co-Creating	Co-creating happens automatically due to motivation to contribute. Collective action is: • Community centred. To improve conditions in the community. • Disciplined to achieve outcomes and to surpass expectations and meet community's needs. • No need for leadership and guidance, but might elect to have leadership to surpass standards and norms. The collective participates in decision-making and also

		participates in monitoring of achievement of outcomes and policy development and implementation on a community level. Actions are directed at achieving goals as set by collective for the benefit of the community. Collective participation is independent.
	Symbiotic action (Mutual benefit.)	Engagement in collective occupations is mutually beneficial to collective and individuals in collective.
	Equal action (Symmetrical action)	Action does not have to be symmetrical/equal in nature between members and is based on an understanding of strengths and weaknesses of each in the collective so ensure that it is used for the benefit of the collective and the community
	Shared time and physical space	Do not need shared space and time. At times can work independently (individually or in smaller groups) on task needed for successful collective occupations.
	Ability to take initiative	Takes initiative and consider the bigger picture and improve conditions on a community level.
	Effort	Collective effort can be sustained on this level if related to the needs of the community. Effort does not have to be symmetrical/equal in nature between members and is based on an understanding of strengths and weaknesses of each in the collective so ensures that it is used for the benefit of the collective and the community
	Handling of tools and resources.	Experienced in handling a variety of diverse tools. Interact appropriately with resources in their own community and

		other communities.
Product	Tangible product	The product is: Community oriented. Based on the needs of the community's needs.
	Collective formation	Active collective participation can take place on this level (want to engage collectively). Community's needs are more important than that of the collective.
Collective relations	Interaction: (Interaction is needed for participation in collective occupation. Without the interaction there is not collective participation. This needs to be an active process as people need to respond to each other. Preferably there needs to be mutual benefit.)	Collective interaction happens in the absence of a leader. Interactive responses automatic. Responsive to each other's needs as they understand the importance of interacting and responding to each other for the benefit of the community and for achieving outcomes in all activities and/or situations. Respond to each other's needs in all activities and situations within own community. Interactive responses automatically (works like a well-oiled machine).
	Cohesion: (a condition in which people or things are closely united# (Cohesion in a collective is essential for all the rest. The level of cohesion within a collective will enhance effort, action, motivation, relations, etc. Mutual/ collective participation (same as definition for cohesion)	Active collective participation can take place on this level. Cohesion within a collective evident. Collective work together cohesively. Connecting easily with other collective for the benefit of the community. Collective identity is present.

	Accountability (To be answerable to each other in the collective. To accept responsibility and account for your part.)	Mutual accountability on this level is possible. Members will hold each other accountable on issues related to the collective and community. This will be done in a social appropriate way.
	Responsibility: (obligation or duty to contribute)	Collective takes shared responsibility for their outcomes (outcomes related to own needs and community's needs).
	Communication	Able to connect with each other in the collective on an appropriate level with equal distribution of communication. Collective can handle dynamic interactions in situations on an appropriate level. As a collective, they can compensate for each other's limitations in communication for the benefit of the group and without leadership intervention. Adequate communication with other collectives and for the benefit of the community.
Emotional functioning	Handling of situations within a collective: • anxiety • conflict • problem solving • Decision making	Able to manage and control intra-collective and inter collectives (between them and other collectives) conflict and anxiety without reliance on leadership. Able to control conflict and anxiety in the collective without leadership intervention. Able to make collective decisions and problem-solving effectively. Able to make complex decisions that will be more beneficial for community than for collective. Able to problem-solve as a collective, taking in consideration the needs of the community and not the needs of the collective.
	Openness of collective to new members/ situations/ideas.	Invite new members and ideas. Consult other collectives and role-players for new ideas and suggestions.

	Also openness to changes to existing situations.	

Competitive contributive Participatory Level

Same as previous level, but on a society level.

Appendix O: Ethics Clearance Certificate

M110219

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Miss Fasloen Adams

CLEARANCE CERTIFICATE	**M110219**
PROJECT	Developing a measuring tool to aid occupational therapists to measure a community's level of creative participation.
INVESTIGATORS	Miss Fasloen Adams.
DEPARTMENT	School of Therapeuatic Sciences/ Occupa Therapy
DATE CONSIDERED	25/02/2011
DECISION OF THE COMMITTEE*	Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 31/05/2011 **CHAIRPERSON** .....
(Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable
cc: Supervisor : Mrs Daleen Castleleijn

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...