Perspectives of OTs on knowledge transfer.docx

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Title: Occupational therapists' perspectives on knowledge transfer in clinical practice in central South Africa

Abstract

Background: Transfer of knowledge in occupational therapy practice is complex, and there is little agreement globally on the most important types of knowledge that inform clinical practice. The aim of this study was to uncover the perspectives of occupational therapists in central South Africa on knowledge transfer in clinical practice.

Methodology: Q methodology was used to collect data from 15 participants by means of QMethod Software.

Results: Factor analysis revealed two factors with eigenvalues of greater than 1. Factor 1 had an eigenvalue of 2.97, and factor 2 an eigenvalue of 1.48. These two factors were constructed from six and five participants' Q Sorts respectively, with the highest factor loads for factor 1 and factor 2. Thematic content analysis identified four themes on knowledge perceived as being transferred in occupational therapy practice: theory and research, practice experience, patient–therapist relationship, and the patient's voice.

Conclusion: The strategic use of Q methodology presents empirical evidence of the transfer and utilisation, through clinical reasoning, of all types of knowledge in evidence-based occupational therapy clinical practice in central South Africa. Furthermore, the results indicate an interdependence between the types of knowledge, meaning that it is important that therapists utilise all types of knowledge and not rely on only one form of knowledge when they work with patients to promote wellbeing.

Key words: Q methodology, Theory and research, Practice experience, Patient–therapist relationship, Patient voice, Knowledge transfer, Occupational therapy clinical practice

INTRODUCTION

Occupational therapists use different types of knowledge to understand the complexity of human occupation and to guide clinical reasoning for assessment and intervention, and inform ethical practice[1–3]. Often in, in clinical practice, the occupational therapist draws on a combination of client, personal and practice experience knowledge[4,5].

Law[6] postulates that occupational therapists mainly use interrelated types of knowledge in their practice to constantly negotiate the relationship between the person, environment, and occupation, to ensure meaningful occupational engagement for the client. These interrelated types of knowledge include propositional (or *theoretical/empirical*) knowledge,[2,7], procedural knowledge (*practice experience*),[7,8] personal theory (referred to as *personal knowledge* henceforth),[2,7] and espoused knowledge[6]. There are, however, differing perspectives on what is the ideal type of knowledge to inform clinical practice and deliver optimal patient care.

Over the past few decades, researchers have strongly advocated for the use of propositional knowledge (evidence-based knowledge) to inform clinical practice[9-12]. These authors argue that, to inform practice and ensure quality service delivery. evidence-based knowledge is necessary. However, the knowledge that is transferred to clinical practice might also include (or be derived from) clinical skills, such as judgement, problem-solving, and decision-making that developed from practical experience,[13] contextual knowledge acquired from clients (client-knowledge),[6] and the personal values and beliefs of the occupational therapist. It could, thus, be dangerous to focus on a single form of knowledge transfer, and to ignore the interrelated nature of knowledge transfer.

Metzler and Metz,[14] hence, suggest that propositional, procedural, and client knowledge is transferred to clinical practice. Knowledge transfer in clinical practice is a dynamic process that involves occupational therapists, their patients, other relevant stakeholders, such as other team members, family, and/or caregivers accessing and sharing knowledge. The transfer of knowledge is, therefore, considered to be a bilateral activity or a "two-way process"[13:16] of knowledge informing practice, which suggests collaboration between the occupational therapist and patient in clinical practice.[14] Davis and Polatajko[15] and Park et al.[16] also refer to the value of collaboration, where the occupational therapist acknowledges the clients' occupational stories, and use it to inform occupation-based practice. Indeed, it has been argued that it is often the transfer of the expert knowledge of a client or their caregivers about their context and occupational realities that informs practice[14,17] and allows for client-centred service delivery.

Yet, understanding the interrelated nature of knowledge transfer is a complex undertaking, especially given the varied perspectives on the transfer of the different types of knowledge in clinical practice. What authors do agree on, however, is the importance of knowledge for informing

clinical practice. To date, limited documentation exists on the perspectives of South African occupational therapists on the type and content of the different types of knowledge that is transferred in clinical practice. The aim of this article is to determine the perspectives of occupational therapists practicing in central South Africa regarding knowledge transfer in clinical practice.

METHODOLOGY

Ethical approval for the study was received from the Health Science Research Ethics Committee (XXX-HSD2021/1454/2610) of the XXX.

To determine occupational therapists' perspectives on knowledge transfer in clinical practice, Q methodology was utilised. Q methodology was developed by psychologist William Stephenson in 1935,[18] and (4)identifies participants' subjective perspectives regarding a specific topic of interest, about which different opinions may exist[19,20]. The Q methodology consists of five steps, and the work of Webler et al. [21] is referenced in this study.

Step 1: Determine the objective of conducting the Q methodology

The objective was to determine the perspectives of occupational therapists in central South Africa on knowledge that is transferred in their clinical practice.

Step 2: Preparation to create the concourse

A concourse is a collection of possible statements that, for this study, related to occupational therapy knowledge transfer in clinical practice. To build the concourse for the Q sample, published resources and participant interviews are included, as recommended[20]. For this study, a scoping review was undertaken to determine the landscape of knowledge transfer in occupational therapy clinical practice. The scoping review was followed by semi-structured, digitally audio-recorded interviews with nine occupational therapists from different practice settings in central South Africa, to gain insight into the content of the knowledge that is transferred in their clinical practice.

Participants were provided with a definition and, where needed, an explanation of each of the four types of knowledge that had been identified in occupational therapy literature, namely, propositional knowledge (*theoretical/empirical*), procedural knowledge (*practice experience*),

personal knowledge (*own world view, values, and beliefs*), and client knowledge. Inductive thematic analysis was performed to extract statements made by participants in the interviews, to form the concourse[21]. Statements were also extracted from the literature identified by the scoping review. From the concourse, a Q sample of statements was developed.

Including only participants from central South Africa was a limitation of this study. It is recommended that a follow-up study is conducted amongst occupational therapists practicing in the whole of South Africa.

Step 3: Identify, select, and edit Q statements

The concourse initially consisted of 80 statements representing the four types of knowledge: propositional (n = 20), procedural (n = 32), personal (n = 14), and client (n = 14) knowledge. To identify, select, and edit the Q statements, the researcher and a co-coder, who is familiar with Q methodology, went through all the statements to keep, combine, or remove statements. The included statements adhered to the qualities of a "good Q statement" in (a) being meaningful to the participants (occupational therapists), (b) understandable, (c) having the potential to be interpreted in various ways, and (d) giving participants something to think about[21:16]. The final Q sample consisted of 42 statements relating to the four types of knowledge: propositional (n = 8), procedural (n = 15), personal (n = 10), and client (n = 8) (see Table II).

After finalising the Q sample, each statement was allocated a number between 1 and 42. The study was set up using QMethod Software,[22] and the statements were loaded onto the platform in the same sequence as each statement had been numbered during the preparation phase. A Q grid was set up in an inverted pyramid comprising 42 blocks (Figure 1).

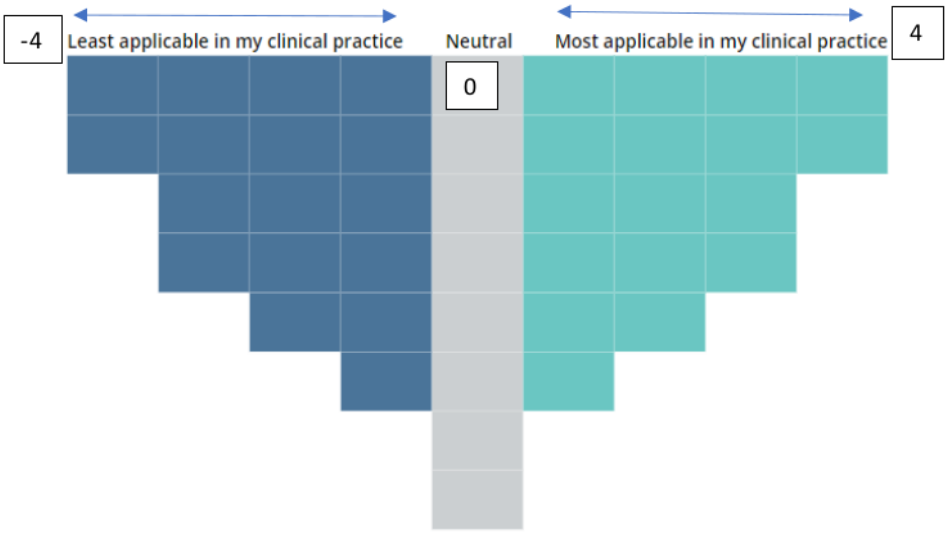

Figure 1: Q Grid

(https://app.qmethodsoftware.com/admin/study/dashboard/10407/structure)

QMethod Software provide a forced normal distribution with an equal number of blocks on either side of the neutral column. This normal distribution forces participants to carefully reflect on their perspectives of knowledge transfer in their specific clinical practice[21] and place a statement in the applicable block of the Q grid (see Figure 1).

Step 4: Recruit participants

Convenience and snowball sampling were used to recruit participants. Occupational therapists known to the researcher and practicing in central South Africa were invited to take part in the Q method survey. The participants were requested to share the invitation with colleagues who might be interested in the study. Webler et al.[21] suggest that participants should hold various perspectives on the topic under investigation, and that there are areas of agreement between them. For this reason, occupational therapists were recruited from various clinical fieldwork settings in central South Africa, including state and private hospitals, private practices, a retirement facility, and special schools.

Step 5: Conducting the Q sorts

Participants used a link provided by the researcher to access the QMethod Software platform and were requested to provide a participation code (also provided by the researcher). The first landing

page of the survey requested participants to consent to participation in the study by choosing between the options 'agree' or 'not agree'. In the next step, participants were instructed to rank each of the statements by choosing an icon (thumbs up, neutral, thumbs down) with regard to the applicability of the statement to their clinical practice setting (Figure 2). The statements were automatically placed in three piles, to be used in the next step.

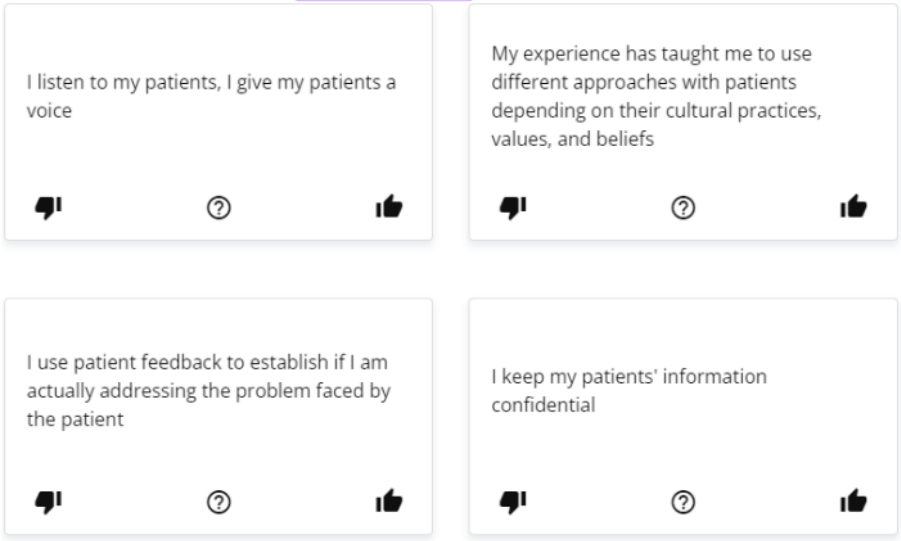

Figure 2: Example of Statements with Icons
(https://app.qmethodsoftware.com/admin/study/dashboard/10407/codes)

Once the initial sorting had been done, participants continued to a page where the Q grid appeared. Each of the statements in the three piles were subsequently placed on the grid, by each participant, according to perception of a statement — from most to least applicable to the participant's clinical practice. Statements could be removed and replaced until the participants were satisfied with the placement of their statements. The final placement of the statements by each participant is known as the participant's Q sort. The last landing page of the survey, a short post-sort section, invited participants to comment on their Q sorts and the placements of the statements on the Q grid. This section was voluntary and participants were given other options to provide feedback than commenting in the QMethod software, namely, to either send a reflection to the researcher via email or to have a short online discussion with the researcher. Only six

participants provided feedback, which is a limitation of the study. The researcher recommends the feedback is a compulsory part of the Q method survey.

Step 6: Using factor analysis to arrive at perspectives of knowledge transfer in clinical practice

Factor analysis was used to identify patterns from the Q sorts of each participant[21]. The final sorts, also known as factors, are combinations of the different participants' Q sorts.

The first step of the factor analysis was to decide on a method to extract the factors, either centroid or principal components analysis. In this study, centroid analysis was used[21] to account for the indeterminacy of its solutions. This means that the same participants would not have the same Q sort twice[23]. The second step was to choose a rotation method to ensure the best results. In this study, Pearson correlation and Varimax rotation were done to ensure that participants' Q sorts were considered for only one factor. The last step of the factor analysis was to decide on the number of factors. The Kaiser-Guttman criterion was used to determine the number of factors to be extracted. Two factors with eigenvalues greater than 1.00[22] were chosen, the statements from these two factors (with eigenvalues greater than 1.00) were then thematically analysed by the researcher to determine the participants' perspectives on knowledge transferred in their clinical practice.

Q methodology was designed as a rigorous method to determine participants' subjective opinions or perspectives on specific matters,[24] which made this the most suitable research method for this study. Content validity was assured by using literature and interviews to compile the final Q sample. The natural-language statements and statements from literature assured face validity. A pilot study was conducted to further assure content and face validity. No changes were required, and the results of the pilot study were included in the main study. Q sort validity was obtained, and each participant's Q sort represents their own perspectives. Reliability had been confirmed through test-retest procedures in previous studies[25].

RESULTS

Results of the two data collection processes described above are included in this paper. The first is based on the qualitative data obtained from the semi-structured interviews conducted with nine experienced occupational therapists, to determine the initial Q statements, and its

integration with literature (see Methodology). These participants did not take part in the Q methodology survey. The second set of results was obtained from the Q methodology survey itself, with 14 occupational therapists from central South Africa. Henceforth, the qualitative evidence drawn from participants during the semi-structured interviews will be referred to as that of I participants, whilst data from participants included in the post survey comments of the Q methodology will be referred to as from Q participants.

In total 20 occupational therapists in central South Africa indicated their interest in taking part in the study, and were sent an information document, a link to the QMethod Software web page, and a participation code randomly created by the platform. In the end, only 14 occupational therapists from different clinical practice settings completed the Q sort and were included in the study. Webler et al.[21] recommends recruiting one participant for every three Q statements; therefore, 14 participants were deemed sufficient for this phase of the study. Six participants provided written reflective feedback and three participants opted for an online reflection session regarding their Q sorts. At this stage, it was not known whether a participant's Q sort would be flagged for inclusion in the final factors.

Two factors with eigenvalues greater than 1.00 were extracted. Factor 1 had an eigenvalue of 2.97, while factor 2 had an eigenvalue of 1.48. A factor represents the collective perspectives of a group of participants[23]. The final factors are combinations of the statements used in the study. The factors were constructed from 6 and 5, respectively, of participants' Q Sorts, with the highest factor loads for factor 1 and factor 2 (see Table I).

Automatic flagging of a Q sort is done to, first, indicate which participants' Q sorts have the highest factor loads and, second, to correlate a participant's Q sort with the final factor[21,26].

Table I: Factor Matrix with Defining Sorts Flagged

Participant No.	z scores for Factor 1		z scores for Factor 2	
1	-0,10207		**0,53211**	**flagged**
2	-0,08887		0,23908	
3	**0,79353**	**flagged**	-0,08959	
4	0,3465		**0,35593**	**flagged**
5	0,23712		**0,52276**	**flagged**

6	0,04181		0,24935	
7	0,2699		**0,73245**	**flagged**
8	0,15148		**0,59115**	**flagged**
9	**0,63028**	**flagged**	0,47045	
10	**0,57251**	**flagged**	-0,09303	
11	-0,09395		0,20845	
12	**0,68618**	**flagged**	0,17636	
13	**0,32609**	**flagged**	0,14532	
14	**0,43583**	**flagged**	-0,12427	

Table II shows the final factors with the z scores and sort values of each statement that contributed to the factor. A sort value of 4 represents a statement that is **most applicable** to a participant's clinical practice. Only statements with a sort value between 4 and 1 are included in Table II; statements with sort values of 0 to -4, which represent neutral or **least applicable** to a participant's clinical practice, are not included.

The results indicate a low correlation of 0.334 between factors 1 and 2. This is of importance, because it indicates that there are differences between the two sets of factors. The z sores in Table II indicate the priority statements of each factor. The final factors represent participants' perspectives and include all the types of knowledge transferred in occupational therapy clinical practice in central South Africa. For this reason, the factors are not named, instead, a thematic content analysis was performed on the factors. The thematic analysis yielded four themes: (a) theory and research, (b) practice experience, (c) patient-therapist relationship, and (d) patient's voice in clinical practice . These themes align with the four types of knowledge described in this paper (see Introduction). The four themes each included a different number of statements (also see Table II), namely

- Four statements associated with theory and research (statements 1, 16, 24, 30).
- Eight statements associated with practice experience (statements 6, 13, 21, 28, 34, 36, 38, 40).
- Ten statements associated with patient-therapist relationship (statements 2, 7, 15, 23, 24, 25, 26, 27, 32, 35).
- Five statements associated with the patient's voice in clinical practice (statements 10, 14, 18, 20, 31).

These four themes are colour-coded in Table II for ease of reference.

Table II: Factor scores

Factor 1 scores				
Statement No.	**Statement**	**Z-score**	**Sort Values**	**Themes**
15	I put my patients first, I have their best interest at heart	2,14504	4	Patient-therapist relationship
26	Collaboration between my patients and me, through sharing of experiences and reflective practices, facilitates knowledge transfer that improves my service delivery	1,7739	4	Patient-therapist relationship
25	I demonstrate different skills to my patients or simulate the patients' environment	1,54671	3	Patient-therapist relationship
1	I use borrowed theories such as NDT, Behavioural, Cognitive behavioural, Client-centred, or Cognitive perceptual theoretic frames of reference, ICF, and Gestalt therapy in my clinical practice	1,30989	3	Theory and research
6	I use my experience, gut feeling and intuition to guide and adapt my therapy	1,17331	3	Practice experience
13	I use a combination of practical experience and theory knowledge in my clinical practice	1,09216	3	Practice experience
27	I listen to my patients; I give my patients a voice	0,92036	2	Patient-therapist relationship
21	My colleagues and I reflect, hypothesise and solve problems together, we share new ideas with each other	0,89184	2	Practice experience
18	Patients provide information such as their background, occupational profiles, role expectations, support systems, and home environment that I use in my clinical practice	0,81915	2	Patient's voice in clinical practice
28	My experience has taught me to use different approaches with patients, depending on their cultural practices, values, and beliefs	0,7287	2	Practice experience
23	I am authentic in my clinical practice and share my own stories and examples with my patients	0,68209	2	Patient-therapist relationship
35	I do not let my personal values and beliefs influence my clinical practice and relationship with my patients	0,59685	1	Patient-therapist relationship
32	I keep my patients' information confidential	0,58476	1	Patient-therapist relationship

16	I apply the theory of activity analysis in my clinical practice	0,54135	1	Theory and research
2	I use real life examples provided by my patients in my clinical practice	0,47246	1	Patient-therapist relationship
30	My clinical practice is based on research evidence to ensure quality service delivery to my patients	0,42869	1	Theory and research
34	I use observation as an evaluation method a lot	0,37823	1	Practice experience

Factor 2 scores

Statement Number	Statement	Z-score	Sort Values	Themes
13	I use a combination of practical experience and theory knowledge in my clinical practice	1,99126	4	Practice experience
21	My colleagues and I reflect, hypothesise and solve problems together, we share new ideas with each other	1,89884	4	Practice experience
24	The patients' pathology influences the choice of theory I use in my clinical practice	1,64481	3	Patient-therapist relationship
15	I put my patients first, I have their best interest at heart	1,58007	3	Patient-therapist relationship
38	My clinical reasoning is influenced by the knowledge I gain in my clinical practice	1,34444	3	Practice experience
31	I use patient feedback to establish if I am actually addressing the problem faced by the patient	1,12461	3	Patient's voice in clinical practice
28	My experience has taught me to use different approaches with patients depending on their cultural practices, values, and beliefs	1,12063	2	Practice experience
40	I use the knowledge that I have gained from negative experiences in my clinical practice	0,94771	2	Practice experience

6	I use my experience, gut feeling and intuition to guide and adapt my therapy	0,9336	2	Practice experience
34	I use observation as an evaluation method a lot	0,82764	2	Practice experience
10	My patients teach me more about their culture, values, and beliefs than what I can learn from theory	0,69287	2	Patient's voice in clinical practice
20	The patients' physical and socio-economic environments influence the choice of theory I use in my clinical practice	0,68237	1	Patient's voice in clinical practice
14	Patients contribute to the problem-solving process and their therapy	0,67311	1	Patient's voice in clinical practice
27	I listen to my patients; I give my patients a voice	0,6612	1	Patient-therapist relationship
32	I keep my patients' information confidential	0,58043	1	Patient-therapist relationship
36	I apply the knowledge that I gained from one patient to the next patient who has similar problems	0,44925	1	Practice experience
7	The patients' cultures influence the transfer of knowledge between me and my patients	0,14067	1	Patient-therapist relationship

DISCUSSION

Q methodology was designed to measure the participant's subjective perspectives on an issue, and often challenges participants' thoughts on the matter[21]. Participants commented that most of the statements pertaining to knowledge transfer were applicable to their clinical practice, which confirms the existing perspective that different types of knowledge informs clinical practice[1-3,14,27]. In the following paragraphs, perspectives on the types of knowledge informing clinical practice in central South Africa will be discussed according to the themes identified in the study.

Theory and research

In contrast to the popular view that theory and research are important to inform clinical practice, the results of this study might indicate theory and research are perceived as less important than practice experience (procedural knowledge), due to the few statements that contributed to the theme (see Results; Table II). However, participants did acknowledge the transfer of propositional knowledge (i.e., *theoretical/empirical knowledge*), such as occupational therapy conceptual models, in clinical practice. Participants mentioned that models guide the exploration and analysis of patients' environments. Occupational therapists choose theory according to what works best for patients.

> *"Usually it's what will suit, what explains our patient population, what connects all the dots, the best. So, it's not necessarily what you're most comfortable with, but where you can plot your patient the best and what motivates or explains your clinical reasoning in terms of choosing aims. So, it's really about your patient and which theory will explain the problems to be able to connect all the dots to make your treatment plan more specific for the patient or the patient population that you work with."* (I Participant 5)

Even though existing conceptual models are not contextually relevant, participants explained that they do not change the theory to fit the central South African context, instead, they use a combination of two or more theories, because the burden of disease and what happens in clinical practice are not always as clear cut as it is portrayed by theory. Ikiugu et al.[28] realised this as well, and even designed a framework that would assist occupational therapists to use a combination of practice models to guide clinical decision-making.

Participants' integration of theory knowledge with the patient's pathology might indicate a medical model focus in practice. However, statement 24 (see Table II) indicates a client-centred mindset that adapts practice to each patient's needs – in this case, choosing theory to meet the patient's needs brought on by their pathology. Utilising theory pertaining to pathology, combined with applicable theoretical frames of references, has allowed occupational therapists to understand the impact of a pathology better, and has given them the opportunity to work towards functional treatment outcomes with their patients[29].

Some of the participants said they do not necessarily consciously "visit" occupational therapy theory daily. Occupational therapists have internalised the knowledge, taken ownership of the theory, and are using it intuitively in their practice:

> *"I don't necessarily visit a model or a theory when I manage my patients … And then I think the reason for that is for me, my models and theories are a foundation, and I don't necessarily go and revisit them, but I already have the information, I have the foundation and I know where I'm going with a patient. It's kind of set the foundation. I know where my thoughts are going."* (Q Participant 3)

Unsworth and Baker[30] agree that propositional knowledge (theory) supports therapists' knowing, and is often seen in their actions in clinical practice. Other participants voiced the value of theory in guiding their clinical practice.

> *"Well, the reason why I use it [theory] is it actually just gives me a base to work from. If you go back to those basics and it actually really guides you in in the development of your treatment plans and in how to approach each specific case that you're working with."* (I Participant 2)

One participant mentioned that they utilise research evidence in their clinical practice, while another said when they have time, they consult research on a specific pathology to assist with the intervention plan of a patient.

> *"I tend to read up a lot because there's so much change happening the whole time. So, evidence-based practice is something that I focus on. There's a hypothesis that I create and then I try and find solutions to it using evidence and reading, talking to colleagues, and then one applies it."* (I Participant 2)

Ketelaar et al.[31] report that time is one of the reasons why research evidence is not utilised in clinical practice. Because therapists' main focus is on service delivery, few make time to consult journals, and if they do, they find it difficult to implement the research evidence in their clinical practice.

It would, thus, seem that propositional knowledge (*theoretical/empirical knowledge*) is not the only type of knowledge to inform clinical practice and lead to optimal service delivery. Besides not being the only type of knowledge utilised, participants in this study also indicated that they used theoretical and/or empirical (or research) knowledge in different ways. Turpin and Iwama[7] refer to the tension around evidence-based practice (EBP). On the one hand, the EBP movement largely accepts research evidence over procedural and personal knowledge to inform clinical practice. On the other hand, Sackett et al.[32] define EBP as the "*use of current best evidence in making decisions. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research".* This definition of EBP emphasises the importance of acknowledging the transfer of theory and research and practice experience in clinical practice. Law[6] supports this notion and argues that occupational therapy scholars have not made optimal use of the wealth of practice experience.

Practice experience

When then focused specifically on practice experience, participants in the current study felt comfortable with procedural knowledge (i.e. *practice experience*) transfer in their respective clinical practices. Occupational therapists developed procedures to follow when they see patients with similar diagnosis, because it is knowledge that is transferred on a daily basis. For example, therapists doing work potential evaluations know what aspects to assess and possible factors that must considered.

> *"By doing assessments daily, you get to a mind map in your own brain because you understand what are the things that you need to consider? What things do you have to look out for? How do you need to reason it through and what are possible answers to solve the problem that the client presents with? So I think I feel very comfortable with procedural knowledge and it's just by experience because you get people with the same diagnosis, different settings, but you get to understand it a bit better the more you deal with it. And I think then you*

can problem solve and come up with a solution for your patient." (I Participant 9)

Therapists make clinical decisions on the basis of their tacit knowledge, which they obtained through experience[33]. Authors recognise the value of practice experience for understanding patients' contexts, pathologies and informed interventions[5,29,34]. Occupational therapists who work in a practice setting for some time gain experience of the types of pathologies, the challenges they present, and the different contexts of patients. Therapists often become experts in that field and use the experience to inform their clinical practice. Participants found statement 6 (see Table II), which referred to the occupational therapist's experience, gut feeling, and intuition, applicable in their clinical practice:

"I think, we can call it your gut feeling or your intuition where you let that guide you. I think it's a combination of you know the experience you've acquired." (I Participant 1)

"*I rely on my existing experience that I do have. So, for example, for my stroke patients, I do have kind of a set way that I start my therapy in and I've got set questions that I ask my patients, and from there I start my treatment and that is influenced by my patient's physical and economic environment, something that I said was very important for me."* (Q participant 3)

Practice experience also guides the occupational therapist to use different approaches, not only with regard to the patients' pathology, but also, for example, their cultural or socio-economic backgrounds. To the researcher's knowledge, no literature has been published on occupational therapists' practice experience of patients' birth order or specific cultural beliefs on the therapeutic process. This study found that, when a patient's birth order is considered, it may play a role in therapy. In some cultures, if a patient is the first-born male, a patient-directed approach will be followed to work towards an optimal treatment outcome.

"The eldest son is really looked after and taken care of. So, if you expect this person to really work hard [in physical rehabilitation], it's quite difficult to get them motivated, because they're used to everything being done for them. And then you have to try and find alternative approaches. But through the experience of working with it quite often, it really helps with how you approach your patients. You've got a completely different approach from the beginning,

from the onset, and also then, you know, tend to let the patient direct the therapy." (I Participant 2)

Participants reported their experience influences and informs their clinical reasoning and decision-making skills. Participant 1 explained how, through experience, they learnt to accommodate patients in their groups, for instance, to know when someone is losing focus or needs more support. Occupational therapists' clinical reasoning is influenced by a complex relationship between propositional knowledge, clinical experience and reflective practices[35].

"It's really thinking about the clients, thinking about the sessions throughout the day. So not necessarily doing it in writing, but in my mind, trying to see, did I do this child justice today in terms of the session?" (I Participant 7)

Reflection and shared problem-solving with colleagues were also identified as applicable methods to transfer knowledge in clinical practice. Colleagues discussed difficulties they experienced in sessions. They reflected on the influence of patients' contexts on therapy and came up with solutions to adapt, for example, the content that is presented in a life skills group.

"I would go to my colleagues, and we reflect and problem solve together needs differ and their environments differ." (Q participant 3).

Teoh[36] points out that knowledge has the potential to be created through an integration of theory knowledge and clinical experience through reflective practice. An EBP is reliant on reflection that considers the different types of knowledge that could inform clinical practice[11].

Patient–therapist relationship

The clinical experience and personal values, beliefs, and world views of an occupational therapist contribute to unique patient–therapist relationships (see Table II). No two patients are the same and a relationship must be developed with each of the patients to inform an occupation-based intervention plan for the patient.

"I think one of the ways that one gets the [client] knowledge is actually through building relationships with the patient and having a lot of conversation with them and asking a little bit more about who they are or where they live or the situations that they faced with." (I Participant 2)

Demonstrating the client-centred philosophy of the occupational therapy profession might lead to a patient–therapist relationship developing. This relationship is dependent on the engagement of both the patient and their therapist. The occupational therapy process is, subsequently, reliant on an effective patient–therapist relationship[37].

From the perspective of factor 1, statement 15 (see Table II), putting the patient first is the most applicable statement in the patient–therapist relationship. The participants' self-awareness, self-knowledge, emotional intelligence, and values (personal knowledge), amongst others, informed this theme. Participant 1 emphasised that an awareness of one's own emotions is needed to put the patient first.

> "*I think within yourself, if you not OK and you need to see a patient for assessment, maybe it's going to trigger things in you, you're not going to put that patient first and provide the best care for them that they deserve. So, I think it's necessary that we also constantly check in with ourselves, how is our well-being influencing or impact [clinical practice].*" (I Participant 1)

A lack of self-knowledge might be detrimental to the patient–therapist relationship, which can be remedied through self-knowledge training and development[38].

Participants stated that, when the patient's pathology allows, collaboration between the occupational therapist and the patient takes place. They, the patient and therapist, discussed the patient's context and occupational challenges to decide on the outcomes of therapy.

> "*I really use a patient-directed approach in the way I give my therapy. So I try to involve my patients in goal setting and really try to meet their needs and their goals as well.*" (Q participant 8).

Shared problem-solving gives autonomy back to the patient and restores their dignity, because patients contribute to discussions about the total care process of which they are the recipient.

> *"It's a very important part you should facilitate, speak to them, try and come up with a solution together, guide them. Because ultimately, I think it's important for the patient or your client to really buy into the solutions."*
> (I Participant 9).

The evidence presented above of Q Participant 8 and I Participant 9 is supported by Sumsion and Law,[39] who argue that, in a patient–therapist relationship, the therapist should be aware of the power relationship in the therapeutic process. By collaborating and communicating treatment goals, the balance of the power relationship might be more equal[39].

Participants stated that, in this collaborative relationship, they used examples from their own experiences, which further demonstrates the equalisation attempt suggested by Sumsion and Law[39]. Therapists shares their experiences to help explain concepts to patients. In the psychiatric field, sharing personal knowledge and practice experiences with patients contributes to the group dynamic and patient involvement in the group process.

> *"And then we [occupational therapists] share our own experiences. [We share] What works for you in in your own life. What are you struggling with. How would you usually deal with this situation.* T*he group dynamic is something that is something nice to have, and once you understand it [patient–therapist relationship]."* (I Participant 1)

Enabling occupational participation through transferring skills to a patient is an everyday occurrence in clinical practice. Activities of daily living skills can only be improved through doing the activities, either with assistive devices or adaptive method skills training. Both the therapist and patient are, thus, involved in the process. Interview Participant 2 explained that they often demonstrated a skill to patients to facilitate their independence:

> *"I sometimes even get into a wheelchair and do demonstrations because often just by giving verbal instructions, it's very difficult for that [knowledge] transfer to actually happen. Where I've seen a lot of the time when if I do it, patients often say, wow, I now for the first time actually understand what you're trying to tell me."*

Building the patient–therapist relationship creates trust in the therapeutic process and might bring about compliance with treatment. Patients might be honest in feedback on their own progress, which will allow the therapist to determine if the patient's needs are addressed.

Patient's voice in clinical practice

The therapist often relies on practice experience but is cognisant of the occupational profile of their patient and the influence it has on service delivery. A patient's occupational engagement is often guided by their cultural roles, rituals, and/or routines (see Table II). For a mother whose role it is to prepare meals for her family it would, firstly, be important listen to her occupational story and secondly, to understand the manner in which she goes about the task.

> *"But what I learned is that even though she appreciated all this adjustment and all these assistive devices that we can provide and stuff, but she really wanted to fulfil this role without any of all this assistive device or this adaptation … it interferes with that natural role of being a mother and she's used to cooking pap with her own hands."* (I Participant 8)

Clients bring their expert knowledge to the clinical practice and participants acknowledged that this type of knowledge informs their clinical practice. Each patient's environment and context are unique, and intervention plans should not be blindly duplicated from one patient to the next because of on similar pathology or geographical context[15]. Differences in, amongst others, role expectations, cultures, contexts, and environments, should always be considered. Q Participant 4 presented an all-encompassing testimony on the unique influence of culture on clinical practice:

> *"Every client is so individual and so unique that there's no one size fits all treatment plan or way forward. So I really depend on their background, their experience, their level of motivation, the environment that they grew up in, the environment that they work in, and also the support that they have and their background to direct my thoughts and recommendations to plan a way forward."*

The patient's voice is a valuable source of knowledge that is transferred in clinical practice, and patients teach occupational therapists about their cultural values and beliefs. Participants shared how a patients' culture influences the transfer of knowledge between therapist and patients:

> *"I have learnt in certain situations; people aren't going to actually listen to or follow you because they don't think that you know what you're speaking about. So like, for example, the males in the Xhosa population don't like getting information from females."* (I Participant 2)
>
> *"There's always stuff to learn from the patients and things to learn that maybe you didn't realise. That's how things work in their culture."* (I Participant 1)

Thus, occupational therapists should acknowledge and be open, so that they can learn about the influence of a patient's cultural values and the way they dictate the patient's role expectations and rituals.

CONCLUSION

Empirical evidence from the current study confirms that all types of knowledge are relevant and should be utilised to inform quality service delivery in clinical practice. In line with the findings of this study, Buchanan et al.[40] confirm that EBP in occupational therapy includes empirical evidence, client knowledge and the practice experience of the occupational therapist. Buchanan et al. refer to this as evidence-based occupational therapy. When one considers an evidence-based occupational therapy practice setting, occupational therapists are encouraged to integrate all the relevant types of knowledge through clinical reasoning, to inform their clinical practice. They should not rely only on theory and research knowledge to inform their clinical practice. Knowledge transfer would imply a collaboration between, amongst others, occupational therapists, other members of the multidisciplinary team, patients, and caregivers. Procedural, personal and client knowledge have been presented as evidence, but not yet viewed as evidence in EBP by all scholars. The definition of EBP of Sackett et al.[32], thus, reflect the perspectives of knowledge transfer by the occupational therapists in central South Africa who participated in this study, better. This conclusion become evident from the interrelated nature of the themes that depict their perspectives on knowledge transfer.

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Conflict of interest

The authors have no conflicts of interest to declare.

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