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**Applicability of the Kawa Model as a  
Framework for the Occupational Therapy  
Process**

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# **Applicability of the Kawa Model as a Framework for the Occupational Therapy Process**

Running headline: Kawa as a Framework for the OT Process

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## **Applicability of the Kawa Model as a Framework for the Occupational Therapy Process**

### **Abstract**

**Background:** Kawa is a client-centered and culturally sensitive occupational therapy model. Discussion has aroused if Kawa would be a suitable model for the clientele, which is culturally more diverse than before. **Aim:** To investigate how occupational therapists have applied Kawa for the occupational therapy process. **Material and Methods:** This qualitative study involved 15 occupational therapists, who had applied Kawa to their clients. They got selected on social media by 'snowball sampling'. Data was collected using an electronic questionnaire. Directed content analysis was conducted, guided by The Occupational Therapy Intervention Process Model. **Results:** Kawa was considered a client-centered model enhancing therapeutic relationships. By using Kawa, therapists gained relevant information through the client's subjective self-report. However, observation of the client's occupational performance omitted. Kawa did not provide sufficient tools, and therapists had to apply knowledge from other models. **Conclusions:** Kawa provided a strong starting point for the occupational therapy process by enhancing the therapeutic relationships and the client's subjective self-report, but it did not guide the therapist to complete the whole occupational therapy process. **Significance:** This study proved that Kawa is a useful model for developing therapeutic rapport and gaining information through self-report. The study suggests that Kawa should be developed further or combined with occupation-based models.

Keywords: client-centered; culturally sensitive; directed content analysis; occupation-based; occupational therapy process; OTIPM; qualitative research

## **Introduction**

Occupational therapy clientele is culturally more diverse than ever before. Therefore, occupational therapists have realised that they need to reconsider the models they usually apply. Providing services, that are of the highest quality, is essential, and currently there has aroused a need to find a model that is the most suitable to meet the needs of the clients, who come from various cultural backgrounds.

Due to its culturally sensitive nature, the Kawa model has become increasingly popular among occupational therapists, who are trying to find the most suitable and effective model to use with an increasingly diverse cultural clientele. The Kawa model was first developed in 1999 in Japan, and despite its usefulness it remains relatively unknown among occupational therapists especially in the Western world. Consequently there is little published research available regarding its application.

Occupational therapists have become interested in the possibilities that Kawa might offer. Choosing an effective model to implement occupational therapy, one that is both client-centered and occupation-based, is essential in enabling the client to perform tasks that are meaningful to him/her and that give clients a sense of achievement while participating in them [1,p.126]. Finding as suitable model as possible would help occupational therapists to provide best possible occupational therapy services to their clients.

The Occupational Therapy Intervention Process Model (OTIPM), which is universally accepted and represents an ideal occupational therapy process, was used in this study as a structure to investigate how occupational therapists have applied the Kawa model for the occupational therapy process.

### ***The Kawa Model***

The Kawa (Japanese for river) model aims to be a client-centered, culturally sensitive model, stressing the uniqueness of each client's real world, everyday life and their individual, unique experiences [2,p.1127]. Iwama, Thomson and MacDonald [2,p.1127] have stated that many universal frameworks are generally expected to fit and benefit everyone, shaping each client's world to fit the precise concepts of these models. The Kawa model however, invites clients to describe their circumstances within their own relevant contexts and without the need to squeeze unique experiences and visions into 'someone else's lexicon and rigidly defined concepts' [3,p.221]. This makes Kawa a

client-centered and culturally sensitive model, which identifies and values each client's unique experiences and cultural diversity.

The application of the Kawa model is based on the client's drawing of his/her life in the form of a river [3,p.164], or some other suitable metaphor [2,p.1129;4,p.52]. The river represents the client's journey from birth to the end of their life, and its banks and riverbed, rocks and driftwood all stand for different circumstances in the client's life [3]. The Kawa model is based around the concept of water, which symbolises life and the will to live [3,p.133]. The evaluation process usually begins and ends with an examination of the client's metaphorical drawings about his/her occupational situation [3,p.171-172]. Then, the occupational therapy intervention aims to facilitate life flow by increasing harmony between all the elements in one's river [2,p.1129].

Iwama [3,p.140] has stated that disability is rather a collective than an individual experience, because it affects a wider social scope, 'the entire river and its reaches', than only the person with the disability. Therefore Kawa perceives 'client' either as an individual or as a collective [3,p.141-142]. This quality might be a great opportunity for the application of the Kawa model today, when the occupational paradigm is becoming more community-based [5]. Even though the Kawa model was originally developed for Japanese society, it has subsequently been tested in different cultural and social contexts around the world, and the results regarding its application have been encouraging [3,p.163-164].

In one small case study, Carmody, Nolan, Chonchuir, Curry, Halligan and Robinson [6] described the effectiveness of using the Kawa model with two clients with multiple sclerosis in Ireland. Their findings showed that Kawa enabled the occupational therapy process and facilitated occupation-based practices. However, using Kawa also created unforeseen challenges by causing client uncertainty and affecting the therapist's preconceptions [6,p.231]. Gregg, Howell, Quick and Iwama [7] applied the Kawa model to a member of the military, who was affected by combat and operational stress reactions. In this example, Gregg et al. [7,p.380] conclude that the application of the Kawa model helped therapists to understand the client's complex problems and specific cultural environment. Leadley's [4] case study describes the implementation of the Kawa model in a forensic mental health unit in New Zealand, where the model turned out to have a positive impact on the forensic service-users' recovery and rehabilitation [4,p.53]. The clients felt they were listened to, understood from their own perspective,

and that using Kawa also helped them to remember the good times, have hope for their future and focus on their future goals and dreams [4,p.52]. Paxson, Winston, Tobey, Johnston and Iwama [8] have conducted a pilot study to gather occupational therapists' experience of using the Kawa model in mental health practice in the USA. Two occupational therapists applied the Kawa model to one client for a six-week period. They found that Kawa helped to create a two-way dialogue between the client and therapist, and enabled them to provide an enhanced service that considered the individual's beliefs and values [8,p.348]. Lape and Scaife's [9] exploratory study aimed to identify potential uses of the Kawa model to interprofessional collaboration and teambuilding. Their results show that Kawa was an effective tool to support staff collaboration and teambuilding on a positive, comfortable way [9,p.4-5]. Using Kawa also supported staff to work through problems and resolve conflicts [9,p.4-5].

Not all studies of Kawa have been favourable though. Wada [10,p.232] produced a paper, which was critical of Kawa and discussed the need for it to allow clients to depict their inner self, and consider integrating self and social belonging. Wada [10,p.233] also criticised Kawa for not articulating or identifying occupation clearly as a component of the river.

The samples of existing studies of the application of Kawa within occupational therapy practice are small and focus mostly on different aspects of clients' and therapists' experiences and relationships [4;6-8]. There are as yet no studies focusing on the actual therapy process. Therefore, there was a need for a more precise investigation into the phases of the occupational therapy process in which Kawa can be used as a framework to guide the occupational therapy process.

The aim of this study was to investigate how occupational therapists have applied the Kawa model for the occupational therapy process.

## **Materials and Methods**

### ***Study Design***

The study design of this paper was qualitative with a directed content analysis orientation, guided by the OTIPM. The study utilized an electronic questionnaire including both close-ended and open-ended questions. Qualitative research was most appropriate for this study as the focus was in seeking occupational therapists' subjective

experiences in their own words [11,p.318]. Directed content analysis was identified as a useful approach because it can help to give structure to validate or extend a theoretical framework [12,p.1281]. Electronic questionnaire was selected because it offered an efficient opportunity to reach suitable participants and gather information from a large geographical area in a short period of time [11,p.338].

### ***Participants***

The participants in the study were occupational therapists, who are applying or have applied the Kawa model to their occupational therapy clients. An accessible population [11,p.156] was available through a discussion forum on social media. Participants were selected from this group using nonprobability sampling [11,p.166]. Occupational therapists use a large variety of models of practice, and the group using the Kawa model, the true target population, was unevenly distributed and hard to find and reach [11,p.168]. Thus, the method used was snowball sampling, which results in “chain referral” or “snowballing” when a few subjects who meet the selection criteria go on to identify other subjects, who fulfill the same criteria [11,p.167]. Information letter along with the questionnaire was published on the discussion forum, and anybody who detected it was able to answer it based on their availability and voluntary participation [11,p.166]. Throughout the two weeks that the questionnaire was available online, it was shared widely and reached a worldwide audience of Kawa users, who are also social media users.

Altogether 15 participants (see Table 1), who are applying or have applied the Kawa model, responded to the questionnaire. The 15 participants came from all over the world. Of all the 15 participants 11 were female and 4 were male. They had between 3 and 28 years experience working as occupational therapists giving a median score of 10 working years [11] and a range of 25 [11].

The participants are referred to as P1-P15. They have been given the numbers based on the order they submitted the questionnaire. To ensure the confidentiality, this order does not align with the order that is represented in Table 1 (Demographics of the Participants), which shows the participants in an alphabetical order according to their countries.

### ***The Occupational Therapy Intervention Process Model (OTIPM)***

The OTIPM [1;13] was used in this study as the guiding model to structure the contents of the questionnaire and the analysis. The OTIPM has been shown to make ideal occupational therapy practice possible as it ensures that services are of the highest quality, and both time and cost effective through its client-centered approach, true top-down evaluation process and occupation-based assessments and interventions [1;14-16].

The occupational therapy process, as presented by the OTIPM, is divided into three global phases: 1) *Evaluation and goal-setting*, 2) *Intervention*, and 3) *Re-evaluation*. Developing therapeutic relationship is also an important element of the OTIPM and occurs at every stage of the model. All the main phases are further divided in smaller stages, which are: 1) *Develop therapeutic rapport and work collaboratively with client*, 2) *Establish client-centered performance context*, 3) *Identify and prioritise reported strengths and problems of occupational performance*, 4) *Observe client's task performance and implement performance analysis*, 5) *Define and describe actions the client does and does not perform effectively*, 6) *Establish/ finalise or redefine client-centered goals*, 7) *Define/clarify or interpret the cause*, 8) *Select intervention model and plan and implement occupation-based interventions* and 9) *Re-evaluate for enhanced and satisfying occupational performance* (read more information in Fisher 2009[1]).

The OTIPM adopts a practice, according to which the evaluation of occupational performance is based on both the self-report and professional observation. This has proven to be an ideal approach to evaluation as they both provide very different kinds of information [17]. The OTIPM is strongly an occupation-based model. It invites occupational therapists to adopt an occupational lens to base their reasoning on the core of the profession – engagement in occupation [13,p.3].

### ***Electronic Questionnaire***

The data was collected by means of an online electronic questionnaire in order to reach Kawa users from a wide geographical area in a short period of time [11,p.338]. The questionnaire included an information letter which sought the participants' informed consent and which stated the purpose and importance of the study, and a promise of confidentiality [11,p.343]. Prior to publication, the questionnaire was pilot tested and as a result unclear and misleading questions were modified or reworded [18,p.161]. The questionnaire was published on social media on a Kawa-themed discussion forum,



where it was shared widely from. The questionnaire was available online for two weeks in April 2016.

The questionnaire comprised 19 questions (see Appendix). The first 6 questions were mostly close-ended questions concerning the participants' background information. Twelve questions were open-ended, inquiring about participants' visions and experiences whilst applying the Kawa model. The questions were phrased according to the OTIPM [1;13] to ensure that all aspects of the occupational therapy process were considered. The final question was an open-ended question to glean additional comments and allow participants the opportunity to share extra insights.

The aim was to achieve theoretical saturation, but at the end of the two weeks period there were no more new answers appearing, even though the questionnaire was widely shared and available.

### *Analysis*

The data was analysed by using the content analysis technique, which is used to interpret meaning from the content of text data [12,p.1277]. More specifically the approach used was directed content analysis, which is based around using a theory as guidance for initial codes [12,p.1277]. In this case, the guiding model was the OTIPM.

The data was received in written form, fully anonymously, online. First, the data was organised for analysis by sorting all the answers into the same document. At this stage answers were kept with the original questions. Initially all data was read several times to gain familiarity with the contents of the answers. The data was reduced by removing all irrelevant information that was not pertinent to the research question. Relevant natural units that the participants had written were abridged and divided into text segments, codes, in which the central idea was rephrased in a shorter form [18,p.197-198;19,p.205].

The analysis started through an inductive phase by developing generalisations from the codes [11,p.31]. This was conducted first by organising the codes into relevant subcategories, which corresponded to the different stages of the OTIPM. The contents of the subcategories were reviewed at various times to ensure that all the codes were filed under the correct subcategories. The analysis continued by formulating the main categories, which followed the main phases of the OTIPM. These four main categories were Evaluation, Goal-setting, Intervention and Re-evaluation. Also a fifth category,

Therapeutic Relationship, was created, because the data described this specific stage quite extensively due to its importance for both the OTIPM and Kawa. The inductive phase of the analysis is represented in Table 2.

[Table 2 near here]

The deductive [11,p.30] phase of the analysis included relating the data to the OTIPM. This was implemented by following the OTIPM and strictly applying the model during every stage of the analysis. All conclusions were drawn directly from the data. The deductive phase of the analysis is represented in Table 3.

[Table 3 near here]

### ***Ethical Considerations***

The questionnaire included an information letter seeking informed consent. The information letter consisted of the purpose of the study and information about where and how the answers were going to be used in order to decide whether the participants wanted to participate or not. The information letter invited participants to provide honest opinions and experiences. Participants were assured of total confidentiality from the very beginning of the process. They were also made aware that they could choose not to answer questions if necessary. The researcher's contact information was available both on the information letter and the questionnaire to ensure that the participants could ask questions at any time. [11;20].

As the questionnaire was completed online, the results arrived without any traces of their origins. The data was processed confidentially and it was deleted along with the publication of this study. [11;20].

### **Results**

The findings of this study were based on directed content analysis that was guided by the OTIPM. The results are presented according to the categories shown in Table 3. All of these categories are discussed in the following section. Quoted text segments are drawn from the participants' answers (referred to as P1-P15).

### ***Therapeutic Relationship***

The Kawa model's ability to allow the development of therapeutic rapport and collaborative working with the client was highly praised in participants' answers, making this one of the greatest strengths of the model. Kawa provides a structure, which was described by participants saying that it '*offers a frame of discussion*' (P9) and '*sets up a natural context for discussion*' (P8). Kawa was also praised for helping a therapist to gain insight into a client's history, culture and current life situation from the client's perspective, without any predetermined constraints. One participant stated that '*Kawa helps to walk in the same way*' (P14), meaning the deep understanding that Kawa created between the therapist and the client. Other participants reported similar experiences in their practices showing Kawa's ability to broaden their rapport with clients and enhance their relationships, increasing trust and confidence. The participants also stated that the model's unique idea of asking the client to draft their own river was considered as a factor that improves the relationship by inviting clients to share their life situation in a more informal way.

### ***Evaluation***

The Kawa model was regarded as a useful tool to help clients '*to conceptualise their life and identify their strengths and problems of occupational performance*' (P8). Drawing the river that represented the life and all its elements was reported '*to give clients the power to understand and articulate their strengths and weaknesses*' (P2), and '*to offer them a tool to discuss challenges and opportunities*' (P13). This was felt to be very helpful for the entire occupational therapy process, because when clients were involved in the identification of the obstacles they were facing themselves, they began to take more ownership of the process of therapy. Four participants reported using alternative evaluation tools alongside or instead of the Kawa model to evaluate the situation from the client's perspective. Nevertheless, metaphorical river drawing was mainly felt to be a sufficient and effective method of recognising the situation from the client's perspective.

Evaluation phase was focused on each client's subjective experiences, but Kawa did not provide a means for occupational therapists to continue their evaluation from this point by implementing performance analysis, which would enable them to observe and evaluate a client's occupational skills during the tasks that the client had prioritised for further evaluation. Due to this defect, also analysing what the client does and does

not perform effectively omitted from the occupational therapy process, when using the Kawa model. Occupational therapists drew conclusions based on the client's subjective self-report (drawing and conceptualising their river), which were later refined by evaluating the clients' underlying capacities, like personal factors and body function limitations.

### ***Goal-setting***

Invariably, the Kawa model enabled the clients to participate in formulating their own appropriate goals. One occupational therapist reported using a Goal Attainment Scale [21] alongside Kawa, when setting the goals, but most of the participants reported focusing on the Kawa model only. It was felt that the Kawa model provided a useful framework to find the most important components *'to work with to get a better flow of the river'* (P3) and *'a starting point to reflect present and future expectations'* (P13).

The goals that occupational therapists had set with their clients mostly included a specific task the client was to perform, for example *'going out to temple to honour vows on a particular festival'* (P1) or *'being able to go out to bingo in the car'* (P4). Only two therapists had also defined how well the client was supposed to perform the tasks by stating that the client will *'wash face and upper body independently'* (P5) or *'go on the bus accompanied with another person'* (P15). Most of the goals stayed on a wider scale, for example saying that the client will *'transfer independently'* (P15), *'improve problem solving'* (P9) or *'improve nutrition habits'* (P3).

### ***Intervention***

Participants stated that the planning of the occupational therapy interventions was based on the client's needs, and occupations that were meaningful for the specific client. According to the answers the intervention methods they had used were evenly divided across each of the four models, which are recognized within the OTIPM. Answers explaining *'environmental adaptations'* (P1) and *'assistive devices'* (P1) gave indications about the adaptive model used. Discussion about *'educational approaches'* (P12) or *'knowledge and skill building'* (P4) described educational programs. Intervention based on *'ADL training'* (P3) described mostly the acquisitional model, and descriptions about *'lifestyle modification'* (P1) and *'routine intervention'* (P3) indicated that the restorative model had been used.

Even though meaningful occupations were reported as a starting point for the intervention, descriptions of the intervention methods did not include any occupations. The intervention was not clearly based on occupation, but rather on the client's underlying capacities. Many participants reported that they applied additional knowledge from other models during this phase.

### ***Re-evaluation***

Re-evaluation at the end of the process to ascertain the effectiveness of the intervention was mostly completed redrawing the river and comparing it with the one that was drawn at the beginning of the process *'to see if the sizes of the rocks and driftwood had changed'* (P6) or *'if the water had more space to flow'* (P12). Some occupational therapists also used either client satisfaction questions or surveys to evaluate if the occupational therapy intervention had been sufficient. Four participants reported using also measurable tools to measure the outcome, but the majority (10 out of 15 participants) reported that they used either redrawing the river or client satisfaction questions as tools to measure the effectiveness of the intervention.

### **Discussion**

This qualitative study investigated how occupational therapists have applied the Kawa model for the occupational therapy process. The findings of this paper support the results of previous studies, according to which Kawa forms a solid foundation for the occupational therapy process by creating client-centeredness, and a strong starting point for the evaluation through the client's subjective self-report. The main finding of this study is that the current Kawa model is inadequate to guide occupational therapists throughout the whole occupational therapy process. Kawa does not provide sufficient tools or instruction to complete the evaluation, intervention and re-evaluation phases. In addition, using the Kawa model does not support the therapists to centre all the decision-making and planning on the core of the profession, engagement in occupation.

When concluding the results, the contents were describing three different issues: *client-centered approach, top-down evaluation process and occupation-based assessments and interventions*. These three ideas are described as the main features of an ideal occupational therapy process according to the OTIPM [1;13]. As the phases and stages of the OTIPM gave structure for the analysis and the results, also the

discussion will continue by being based on these three qualities, which are integral ideas of the OTIPM.

### ***Client-centered approach***

The biggest strength of the Kawa model was its ability to help to develop and strengthen the therapeutic relationship between the client and the therapist. This was evident throughout the answers that participants gave concerning all areas of the occupational therapy process. This result aligns with the findings of other studies. Carmody et al. [6,p.232] found that the use of Kawa supported the development of the therapeutic relationship between the client and the therapist. Leadley [4,p.52] states that the use of the Kawa model made clients feel that they were listened to, and it enabled staff members to understand their clients' perspective on their life situation. One of the main findings of Paxson et al. [8,p.344] was that the client-centered nature of the Kawa model helped to create a strong relationship between the client and the therapist, and increased the activation level of the collaborative process. Also, Lape and Scaife's [9,p.6] findings about the model's applicability as a tool to support staff collaboration support Kawa's quality in impacting positively on collaboration and relationships. It can be stated that Kawa's aim to be a truly client-centered model has been verified.

The visual nature of the model and the ability to include all parts of life without any restrictions or limits provided the therapist with an improved understanding of the client's life situation, including also each client's unique cultural context. Similar results have emerged from other studies based on Kawa. Paxson et al. [8,p.348] have praised Kawa for its cultural competency by considering client's beliefs and values without any bounds. Carmody et al. [6] found that the interview based on the Kawa model enhanced clients' ability to describe and evaluate their life situation comprehensively from a personal perspective. These results confirm that Kawa is a culturally sensitive model.

### ***Top-down evaluation process***

The Kawa model proved to be a useful tool for a client's subjective self-report, which creates a strong starting point for a top-down evaluation. However, this study revealed that Kawa did not give therapists sufficient help in the implementation of objective observation of a client's occupational performance, and thereafter to define and describe actions that the client does and does not perform effectively. Some evaluation tools

were used to evaluate client's underlying capacities, but mostly evaluation was based only on client's subjective self-report. In their study, Carmody et al. [6,p.226] mentioned that the use of the Kawa model helped therapists to build comprehensive occupational profiles for the clients. However, this evaluation phase had only included an interview based on Kawa, and no objective observation had taken place. Carmody et al. [6,p.232] admitted that it was challenging at times to understand a client's unique interpretations of their river drawings. This statement can be taken to show the need to continue evaluation by objective observation. In addition, the evaluation undertaken by Gregg et al. [7] was based only on drawing the river and discussing its symbolic attributes, but did not include observation. Fisher [13,p.7] stresses that it would be necessary not just to recognise the key factors, which are resources or limitations, but to identify them within the client's performance context. Nielsen and Wæhrens' [17] findings about the need for both subjective self-reports and objective observations support the importance of this scientifically, as both methods produce different kinds of information. A true top-down approach begins with the client's self-report, and continues through observation and evaluation of the client's occupational performance all the way to interpreting the underlying cause of the impediments [1,p.6]. Evaluation based on Kawa seems to be guided by a top-to-bottom-up approach. When using this technique, the therapist proceeds from the client's self-report to interpreting the underlying causes without observing the client's occupational performance [1,p.9].

Kawa's emphasis on the client's subjective perspective was also evidenced during the re-evaluation phase, which participants in this study based mostly on drawing another river and asking client satisfaction questions. Carmody et al. [6] and Gregg et al. [7] reported in their studies that re-evaluations at the end of the therapy processes were also conducted by drawing another river. Paxson et al. [8,p.349] verified that the use of the Kawa model enabled a successful outcome, which meant that the clients were able to use the model in a way that was clinically beneficial for them. This information was, however, based on interviewing the therapists after a six-week period during which they applied the Kawa model to their clients [8,p.343], but did not include any standardised measurement tools to evaluate therapy outcome. An ideal therapy process should be concluded by a formal evaluation, including both a client's self-report and a professional observation of occupational performance.

Kawa has not been structured for either self-report or observation, and it does

not guide the therapist to use any standardised tools. As discussed by Carmody et al. [6,p.226], the Kawa model has emerged as an effective model of practice, which guides the occupational therapy process. They [6,p.223,231] state that the Kawa model fulfills the aim of a conceptual model to identify a client's difficulties, guide intervention and evaluate the outcome. Nevertheless, both the evaluation and re-evaluation phases omit objective observation of a client's occupational performance. Leadley [4,p.50] stated that the Kawa model does not provide formal interviewing or assessment tools, but the occupational therapist acts as the guide to encourage and enable the clients to tell their story. Based on all of these findings, it would seem that the current version of the Kawa model does not offer sufficient tools for occupational therapists to complete the whole occupational therapy process. Iwama et al. [2,p.1133] justify this by saying that the model is encouraged to be applied across any context to diverse clients, and therefore there is no standard or single correct, universal way to apply it. It seems that the Kawa model is a framework that helps a client to define his/her life. Kawa is based on a client's unique narrative, but it could be argued whether or not narrative alone is effective enough to guide the implementation of a true top-down evaluation and intervention. It would be interesting to investigate further if occupational therapists' are competent enough to interpret narratives and base their reasoning on them.

### ***Occupation-based assessments and interventions***

The results of this study show that the goal-setting phase was occupation-based being based on the needs and relevant, meaningful occupations that the client had defined. Also Carmody et al. [6,p.229,232], Gregg et al. [7,p.377] and Leadley [4,p.52] found that Kawa created possibilities for implementing occupation-based intervention. However, when comparing the implementation of the evaluations based on Kawa with the requirements of the OTIPM, it is obvious that the absence of objective observation of the occupational performance creates a significant limitation in the use of occupation-based methods. Fisher [13,p.3] explains that 'we are employing occupation-based methods when we make use of a person's engagement in occupation as the method of our evaluations and interventions'. This is one of the core ideas of an ideal occupational therapy model. The results of this study did not prove Kawa to be a truly occupation-based model. Also, the goals represented by the participants of this study mostly included the task, which the client was to perform, but not many of them



considered how well the client was supposed to perform it. This may be due to the fact that the tasks were not observed to be able to determine the client's baseline and goals more specifically, but this assumption cannot be proven as the participants gave general examples of their clients' goals, not necessarily specific goals from specific clients.

The concept of occupation as defined in the Japanese Kawa model is actually not as unambiguous as it is according to the Western contexts. Iwama [3,p.19] proposes that the concept of occupation needs to be reconceptualised in order to take into account the wider cultural aspects. Within the Kawa model, occupation is represented as the spaces between the obstacles in the client's river, and the aim of occupational therapy is to enable life flow in the client's river by preventing any further obstruction and enhancing the flow [2,p.1132-1133]. Wada [10,p.233] has criticised Kawa for not presenting the concept of occupation clearly enough, which 'risks therapists' not being able to fully evaluate the outcomes of occupational therapy intervention within and across the clients, and may affect the overall utility of the model'. The results of this study support Wada's concern about the model's utility, if the occupational lens is lacking. Fisher [1,p.10] also states, that if the focus of occupational therapy practice is to be occupation, therapists must ensure that the focus of all the evaluations, interventions and documentation, not just the outcome, are also occupation. Fisher [13,p.3] stresses that the unique perspective of occupational therapists should be occupation-centered, which leads using occupation-based evaluation and intervention methods. Therefore reconceptualising of the concept of occupation should happen carefully, without risking the loss of the occupational lens.

The findings of this study suggest that Kawa does not provide the necessary structure or tools to guide therapists in adopting a top-down approach and to base all their reasoning and planning on a client's occupation. Therefore occupational therapists need to continue to refer to and apply other models. Kawa should either be developed in a more occupation-based direction or its application should be combined with a model that ensures a more occupation-based approach. Occupational therapists must use conceptual practice models that enable them to link their work to the core of the profession – the occupation [13,p.11]. The development of the Kawa model will benefit of further research to study if the occupational therapy intervention is more effective, when Kawa is applied together with a more occupation-based model.

### ***Conclusions***

This study suggested that Kawa is a successful model when it comes to its client-centered and culturally sensitive qualities, and it provides an effective model to evaluate each client's unique life situation through a subjective self-report.

However, it is questionable if Kawa is an occupation-based model as the model does not define or include occupation clearly. When using Kawa, the objective observation of the occupational performance does not take place either during the pre- or the post-evaluation, but the client's subjective perspective guides the process. Currently, the application of the Kawa model is guided by top-to-bottom-up approach.

### ***Significance of Findings***

The results of this study provide insights and information on how occupational therapists have applied the Kawa model for the occupational therapy process. The information obtained in this study provided insight into the fact that Kawa is an efficient model to enhance client-centeredness and to help to gain information through the client's subjective self-report. For occupational therapists this information can give insight to apply Kawa during the occupational therapy process to help to develop therapeutic rapport and when identifying and prioritising the client's strengths and problems through the subjective self-report.

However, the findings reveal a need to develop the model to be a fully successful occupational therapy model by strengthening its occupational lens and adopting a true top-down approach. Occupation should guide occupational therapists' work in order to make their unique proficiency visible and distinct from other professions. Including occupation-based methods into the evaluation stage will help Kawa to adopt a top-down approach to replace the current top-to-bottom-up approach. Thus, this study suggests that Kawa should be developed further in order to provide truly occupation-based services or its application should be combined with other models that provide occupation-based tools or methods.

The Kawa model is still a rather new model, and like all the other models being used today, it is continually under review and further development. It's perception which encompasses an entire collective as a client opens up great opportunities and creates a strong position for the Kawa model in the future of occupational therapy, when the paradigm shift into a more collective practice takes place.

### ***Strengths and Limitations***

Hsieh and Shannon [12,p.1283] have stated that the main advantage to using directed content analysis techniques is that existing theory can be supported and extended. The results of this study support the fact that Kawa is a client-centered and culturally sensitive model. Additionally, results will hopefully contribute to the development of the Kawa model by extending or enriching its practical application. Kawa needs to be combined with another model that ensures a top-down evaluation and occupation-based assessments and interventions, alternatively it should be further developed to include these aspects.

The fact that the OTIPM is originally a Western and Kawa an Eastern model was considered while conducting the study, but this was not regarded as an issue to reduce the quality of the study. Both models are targeted to be used regardless of their origins and both models are universally used today. Construct validation [11,p.119-120] was an ongoing process throughout the study to identify the presence or absence of particular phases and stages of an ideal occupational therapy process by the OTIPM, and the structure of the OTIPM was used to predict how the different phases and stages of the process were expected to occur [11,p.121].

The sample size of this study is a potential limitation. Reaching occupational therapists, who apply or have applied the Kawa model, was challenging. Also the timetable for completion of the study limited the possibility of increasing the sample size. Therefore the theoretical saturation point was most likely not reached, even though the data provided by the participants was, for the most part, surprisingly homogeneous. The use of an electronic questionnaire online created limitations. It was not possible to reach all countries due to their internal policies and technological limitations. Also, as the questionnaire was only available in English, there is the possibility that some potential participants were unable to answer the questions.

The final data was handled only by the researcher. The anonymous data was reviewed by the thesis supervisor at various times during the analysis to ensure that the analysis remained as balanced, objective and accurate as possible in every stage of the process. [20].

### **Conflict of Interest**

No potential conflict of interest is reported by the author.

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Table 1

*Demographic of the Participants*

Country	Gender	Years of Work as OT
Australia	female	17
Chile	female	5
Croatia	female	10
Hong Kong	male	19
Japan	female	28
Malaysia	female	5
South-Africa	female	19
Taiwan	female	10
UK	female	3
UK	male	5
UK	male	12
UK	male	17
USA	female	-
-	female	5
-	female	5

Table 2

Natural Unit	Code	Subcategory	Category
<i>'It (Kawa) helps the client to establish the goals but also how he understands his health situation. This helps to provide a relationship of trust and confidence.'</i> (P3)	structure of Kawa enhances therapeutic relationship	Develop therapeutic rapport and work collaboratively with client	Therapeutic Relationship
<i>'(Kawa) Gives the power to the client to understand their strengths and weaknesses and how to articulate it in a way in which client and OT can understand.'</i> (P2)	Kawa supports understanding the strengths and weaknesses	Identify and prioritise reported strengths and problems of occupational performance	Evaluation
<i>'The client chooses which component to work in order to get a better flow of the river.'</i> (P3)	goals based on client's intentions and desires	Establish/finalise or redefine client-centered goals	Goal-setting
<i>'I usually use lifestyle modification, environmental adaptations, assistive devices to support my clients.'</i> (P1)	adaptive model	Plan and implement adaptive occupation to compensate for decreased occupational skill	Intervention
<i>'As far as my clients are concerned, Kawa Model + everything I do = Occupational Therapy. Happy client = Good occupational therapy. I run my own business so the best judge of outcomes is the client. Client satisfaction is key. Another indicator is discharge – if the client is able to independently self manage their own condition without needing to depend on the OT, then that is a great outcome!'</i> (P1)	client satisfaction, discharging a client	Re-evaluate for enhanced and satisfying occupational performance	Re-evaluation

Table 3

*Deductive Phase of the Analysis: Formulating the Categories and Subcategories*

<i>Category</i>	<i>Therapeutic Relationship</i>	<i>Evaluation</i>	<i>Goal-setting</i>	<i>Intervention</i>	<i>Re-evaluation</i>
<i>Subcategory</i>	Develop therapeutic rapport and work collaboratively with client	Identify and prioritise reported strengths and problems of occupational performance	Establish/ finalise or redefine client-centered goals	Select intervention model and plan and implement occupation-based interventions	Re-evaluate for enhanced and satisfying occupational performance
	Establish client-centered performance context	Observe client's task performance and implement performance analysis			
		Define and describe actions the client does and does not perform effectively			
		Define/clarify or interpret the cause			