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## **Perceived Barriers in Implementing Occupation-Based Intervention (OBI) among Malaysian Occupational Therapists: Mixed-methods study**

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### **Abstract**

Malaysian occupational therapists perceived occupation-based intervention (OBI) as the occupation as a means and an end. This study aimed to identify and explore perceived barriers to implementing OBI in Malaysia's diverse areas of occupational therapy practice context. A sequential explanatory mixed-method design with a cross-sectional survey and three focus group discussions (FGD) were performed sequentially. The results from the survey corresponded with the FGD findings, and new barriers emerged namely, occupational therapy personnel, bureaucratic system and economic challenge. These results may help in the discovery of solutions to enhance OBI implementation in Malaysia.

**Keywords:** occupation-based intervention; barriers; area of occupational therapy practice; sequential explanatory mixed-method

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### **1.0 Introduction**

Occupation-based intervention (OBI) is an imperative effort to centralise occupation in occupational therapy. Despite the mandate to return to the root of occupation in the contemporary paradigm, ongoing challenges to centralise occupation are confronted by occupational therapists persistently. Many studies have addressed a wide range of barriers in the diverse practice areas such as hand therapy (Che Daud et al., 2016b; Colaianni & Provident, 2010; Klerk et al., 2016), paediatrics (Estes & Pierce, 2012; Moore & Lynch, 2018) and acute setting (Murray et al., 2020). However, little is known about the perceived barriers in different areas of occupational therapy practice in Malaysia. Malaysia is a developing country in the South-East Asian region. The healthcare system commensurates its developmental level while occupational therapy service is available in the public hospital and clinics, private sectors, non-governmental organisations, and independent providers. The educational institutions that offer this course are very few in Malaysia, thus resulting in a disproportionate number of occupational therapists relative to its approximately 33 million population. The minimum entry qualification is diploma level compared to a master's degree in the developed countries such as the United States and the United Kingdom. In Malaysia, occupational therapy is placed under the governance of medical rehabilitation physicians and merged with physiotherapists, thus reducing the professional autonomy of this profession. The society of Malaysian lives in a multi-racial environment and adopting various cultural norms and values. As an Asian country, the culture emphasizes collectivism rather than individualism, unlike western society (Abu Bakar et al., 2018). Given that the occupational therapy profession developed in western countries, little is known regarding how the practice occurred in the non-western context.

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### **1.1 Purpose of the study**

This study aimed to discover and explore perceived barriers to implementing OBI in the diverse areas of occupational therapy from both quantitative and qualitative views. The result then merged to provide conclusive and holistic findings of the issues in implementing OBI.

### **1.2 Objectives of the study**

The objective of this study was to identify the barriers to implementing OBI through a cross-sectional study. Subsequently, it aimed to reconfirm while further exploring the perceived barriers in the diverse areas of occupational therapy practice through focus group discussions.

## **2.0 Literature Review**

From a Malaysian perspective, OBI is defined as occupation as a means and an end (Che Daud et al., 2015), which means using the client's meaningful occupation as the therapeutic healing agent and having an occupation as the end goal which involves participation in the client's context. Reflecting on the definition itself, the process of providing OBI includes the client's active participation and involvement in sound decision-making. For a client to recognise their priority and meaningful occupation despite disabilities inflicted, they should inhibit the sense of autonomy, mastery, and competency of themselves (Gerlach et al., 2018). Nonetheless, these values are more relevant to individualist culture that might not translate well to the Malaysian context, which is more collectivist. Apart from the issue of becoming culturally competent, other physical barriers such as the departmental setting, logistic issues, the perception of public and healthcare team members towards the occupation, and the use of occupation as the treatment modality were widely addressed in the existing studies, which mainly conducted in the western countries. However, to find more relevancy of these issues within the Malaysian developmental level and system, it is more appropriate to discover the issues from the local points of view because the barriers to implementing OBI vary according to culture, family beliefs, team mindset, proper settings, context and policy (Kaunnil et al., 2020). Occupational therapy serves a wide range of clients from new-born to the elderly, who are either physically or cognitively impaired. The types of occupational therapy intervention depend on the practice context (American Occupational Therapy Association, 2020) and are based on the environment in which the treatment occurs (Skubik-Peplaski et al., 2016). The set-up of the department is varied based on the areas and the setting itself and even the sector. Previously, the barriers from the Malaysian context were identified from the perspectives of occupational therapists experts who were practising in the public sector (Che Daud et al., 2016a). Therefore, the results may be inconclusive to the diverse areas of occupational therapy practice while considering the different types of clients and settings. Therefore, to explore relevant perspectives regarding the issues from an idiosyncratic Malaysian practice context, this study was needed so that more pragmatic solutions can be done to enhance OBI implementation.

## **3.0 Methodology**

### **3.1 Study design**

This study used a sequential explanatory mixed-method design by integrating two distinct phases of research; quantitative and qualitative study (Ivankova et al., 2006). Phase I of this study implemented a cross-sectional online survey followed by phase II using focus group discussion (FGD). The integration approach was applied at the design, data collection and interpretation, and reporting level (Fetters et al., 2013). The research question that further lead to the study design was developed based on the research gap that signifies the scarcity of studies on the challenges to practise OBI within the diverse areas of occupational therapy practice in Malaysia. Therefore, the online survey was conducted to gain a general picture of the barriers, and the subsequent qualitative inquiry has refined, explained, and elaborated the statistical results from the online survey by exploring the participant's views and interaction. The focus group was built on the online survey and the synthesis of results from both studies complements each other for a deeper understanding and enables interpretation of the experiences from different perspectives (Eriksson et al., 2020).

### **3.2 Data collection**

The survey was done using a four-point Likert scale questionnaire and distributed online through the Google form application from April to December 2018. Integration at the method level between both studies occurred through connecting the sampling frame by having a few participants from phase I of this study participated in phase II of the study (Fetters et al., 2013). Other than those who already participated in the online survey, the FGD participants were recruited through a snowball sampling method. Three focus group discussions were conducted until saturation was achieved. The credibility of FGD was gained by having member checking and the transcription and data analysis were done by this study's researchers. The description of the steps and procedures of this study ensured the FGD dependability and confirmability. In addition, the first researcher conducted the data analysis and then checked and confirmed by the second researcher. To corroborate the transferability of the findings, it was emphasised in this study that the context where this study was conducted is in Malaysia as one of the developing countries. Furthermore, the barriers perceived by Malaysian occupational therapists also have been described in a detailed manner. The details of the data collection method are explained further in Figure 1.

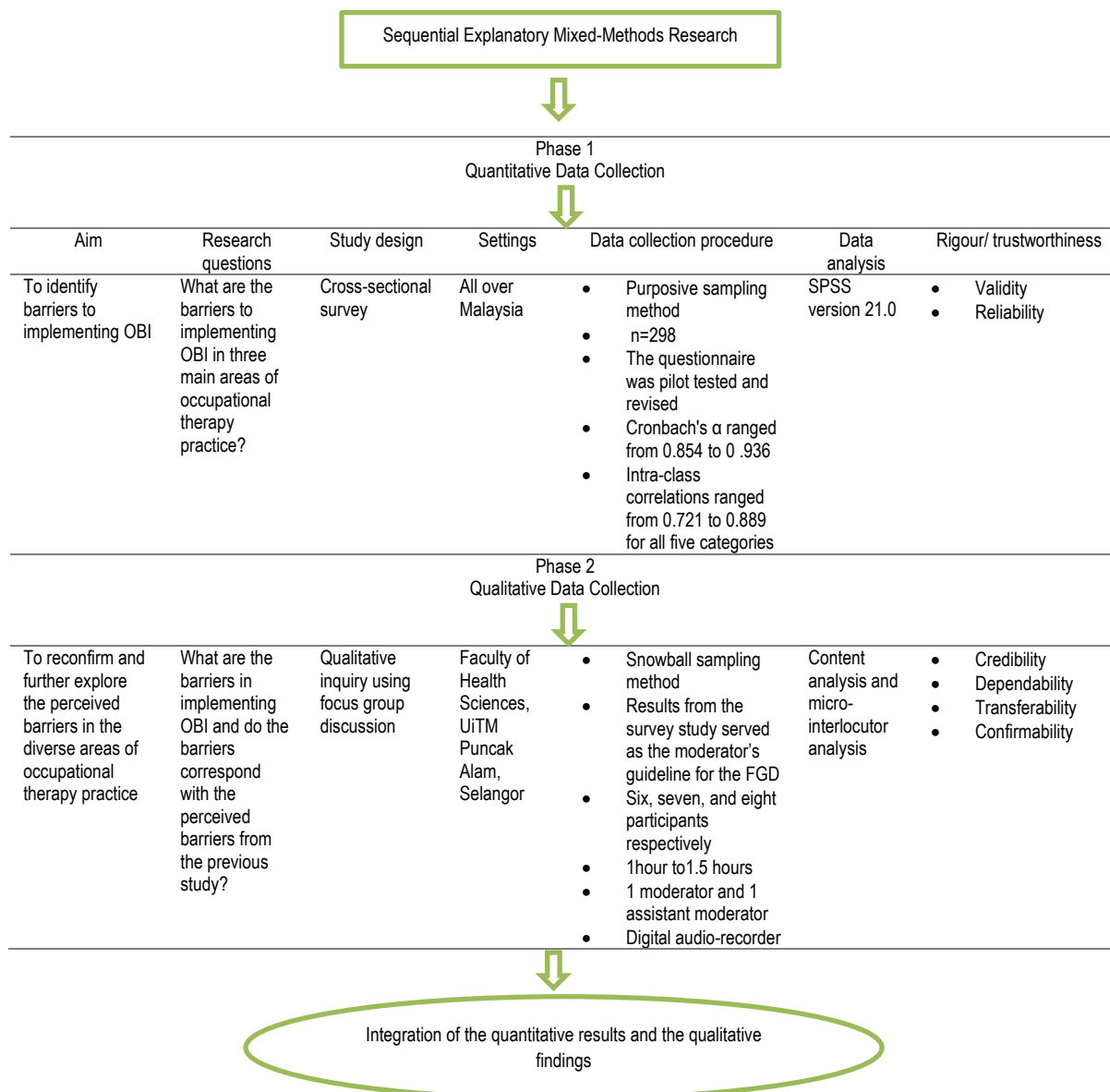


Figure 1: The detailed explanation of the methodology

### 3.3 Participants

Participants for the survey were Malaysian occupational therapists who were: (1) working either in physical dysfunction, paediatric, or psychiatry, and mental health areas; (2) working either in hospitals, independent centres, or non-government organisations in Malaysia; (3) able to read and understand simple English. The participants recruited for the FGD were occupational therapists who fulfilled the following criteria: they (1) were nominated by others or identified themselves as occupation-based practitioners, (2) had the experience of using occupation, either as an end or a means in practice, (3) had held a senior position with at least five years clinical experience, and (4) worked either in the government or private sector and, (5) consented to participate in a focus group discussion.

### 3.4 Data analysis procedure

Data were analysed using Statistical Package for Social Sciences version 21.0. Prior to the analysis, data were cleaned and organised in a meaningful way. Missing data were treated using expectation maximisation (Kang, 2013), and the normality of the data was examined. The survey statements were considered barriers if the proportions in which participants agree to totally agree with the statements were higher than 50%, achieved a simple majority (Novak, 2014). The FGD was analysed by incorporating two frameworks for analysing focus group study which is the content analysis that was performed according to a framework suggested by Nili et al. (2017), and the micro-interlocutor analysis, which was used to analyse the interaction data (Onwuegbuzie et al., 2009). Audio Recordings were transcribed verbatim, and the transcripts of the focus groups were organised according to the content areas. The content data were then analysed using either manifest content analysis (MCA) or latent content analysis (LCA). MCA refers to content with clear meaning,

while LCA is the content that requires a thorough discussion among the research team to achieve understanding and agreement regarding the speech content (Nili et al., 2017). The final group and sub-groups emerged after integrating all the categories and sub-categories from the MCA and the themes and subthemes from the LCA.

#### 4.0 Findings

Table 1 shows the agreement on the survey statements of the barriers in implementing OBI. Fifteen out of twenty-seven statements surveyed have achieved the simple majority. Logistic issues, such as time constraints, heavy workload, unavailability of a specific guideline, context and environment of the intervention, set-up of the department, and lack of equipment and resources were the most perceived barriers to implementing OBI. Findings from the FGD also supported these barriers and emerged a category for governance and policy with the sub-category as organisational policy and operating system as shown in Table 2.

Table 1. Descriptive statistics of perceived barriers to implementing OBI (n=298)

Statements	Agree to totally agree n (%)
<b>Category 1: Client Factors</b>	
The client is more impressed and motivated by sophisticated and advanced equipment.	66 (22.1)
The client does not understand the purpose of the occupation-based intervention.	128 (43.0)
The client's understanding of the recovery process; e.g., the client is not ready to engage in occupations until they gain the maximal level of strength, and are fully recovered is an issue in applying occupation-based intervention.	188 (63.1)
<b>Category 2: Occupational Therapist Factors</b>	
Rarely use a client-centred approach in practice.	48 (16.1)
Skill and knowledge in applying a client-centred approach are lacking.	114 (38.3)
Lack of creative skills to practise occupation-based intervention.	102 (34.2)
Lack of skill in grading activities/tasks/occupations.	76 (25.5)
Basic skills in activity/task analysis are lacking.	82 (27.5)
Rarely use occupation-based assessment in daily clinical practice.	72 (24.2)
Limited knowledge and understanding of occupation-based intervention.	110 (36.9)
Not sufficiently well prepared and well trained to practise occupation-based intervention.	106 (35.6)
<b>Category 3: Contextual Factors</b>	
Malaysian cultural value of relying on family members to serve "the sick/dependent client" is a challenge to implement the occupation-based intervention.	258 (86.6)
Bureaucracy and power differential in Malaysia Healthcare System; e.g., occupational therapists must follow the doctor's order.	130 (43.6)
The dominance of the biomedical model in healthcare delivery makes it difficult to practice occupation-based intervention.	186 (62.4)
Lack of awareness about the role of the occupational therapists by other professionals, limits referral for occupation-based intervention.	254 (85.2)
Multidisciplinary members always perceive that movements and strength are essential requirements for function.	270 (90.6)
Multidisciplinary members do not understand the purpose of the occupation-based intervention.	228 (76.5)
Lack of cooperation from other multidisciplinary members makes it difficult to practise occupation-based intervention.	222 (74.5)
<b>Category 4: Occupation as Treatment Modalities</b>	

Limited evidence on the efficacy of the occupation-based intervention.	70 (23.5)
Occupation-based intervention is less practical in an acute care setting.	184 (61.7)
Providing good, observable, and measurable outcomes in the domain of occupation is difficult.	164 (55.0)

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**Category 5: Logistic Issues**

Practising occupation-based intervention consumes a lot of time.	206 (69.1)
Practising occupation-based intervention is difficult due to time constraints and heavy workloads.	202 (67.8)
Lack of specific guidelines on occupation-based intervention.	172 (57.7)
Providing a similar context and environment in which the client's occupations take place is challenging.	232 (77.9)
The department is not set up to practise occupation-based intervention.	186 (62.4)
Appropriate equipment and resources for practising occupation-based intervention are lacking.	238 (79.9)

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Participants, especially from the public sector, stressed the need to comply with organisational policies such as the standard operating procedure (SOP), key performance indicators (KPI), and workload. The need to adhere to the SOP has reduced the flexibility of occupational therapists to implement OBI in practice as the existing SOP is more focused on impairment-based treatment.

*"I think the existing SOP is more towards impairment-based practice" (PP 13, FGD 2).*

Organisational policy such as time-constraint was recognised as the main barrier perceived in the public sector. It was noted through the micro-interlocutor analysis that most of the participants from the public sector raised concern on this issue, and more interaction on this happened between public sector's occupational therapists.

*"In the government setting, we have a long waiting list of patients and new cases hence we have no time to implement the OBI" (PP 14, FGD 3).*

The operating system, such as the set-up of the department and the fragmented practice explained the survey's result, where participants from FGD mentioned the facilities that were set up based on the medical model,

*"The barrier to perform both occupations as a means and as an end in the hospital is the setting itself" (PP 7, FGD 2).*

From the survey, occupational therapists identified there was the unavailability of specific guidelines for OBI and this was also mentioned and discussed further in the FGD.

*"I think we have limited access to resources. Resources mean experts, reading materials, and classes which we can attend to improve our knowledge and skills to implementing OBI" (PP 18, FGD 3).*

The accessibility to resources such as guidelines and expert references was perceived as a barrier from the FGD. In addition, difficulty to access continuous care is also regarded as a barrier to implement OBI.

Table 2. The integration of manifest content analysis (MCA) and latent content analysis (LCA)

Group: Barriers to Implementing OBI					
Sub-group 1: The Governance and policy	Sub-group 2: The challenges to an ideal practice of OBI	Sub-group 3: Occupational therapy personnel	Sub-group 4: The non-recognition of roles	Sub-group 5: The accessibility to resources	Sub-group 6: Economic challenge

Organizational policy	Operating system	Bureaucratic system	The difficulty for knowledge translation	Challenges to integrating client-centred practice	The discrepancy between cultural values and the concept of independence	The intrinsic motivation and professional values	Workplace culture	Lack of awareness and knowledge of OBI among MDT	Non-recognition of roles by multi professionals	The accessibility to references and guidelines	The accessibility to continuous care	The reimbursement issue
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The bureaucracy and power differential in the Malaysian healthcare system was not recognised as barriers from the survey, however, it was mentioned in the focus group that the superiority of the medical doctor made them hard to exercise their professional autonomy. According to the latent content analysis, the implicit meaning of this statement is bureaucracy within occupational therapy practice.

*"Regarding the referral issue, in terms of the administration itself, even though you are an expert in your field, when we are in a setting where there is someone superior, sometimes it could limit your right to give an opinion" (PP 6, FGD 1).*

The Malaysian cultural value of serving sick clients, the dominance of the biomedical model, awareness of occupational therapists' roles, and the view of multidisciplinary members about the function and their understanding of OBI were among the barriers perceived by participants in the contextual factor category. Most of the participants from the survey agreed that multidisciplinary members always perceive movements and strength as essential for function, and they did not understand the purpose of OBI. From the FGD, the non-recognition of roles encompasses the non-awareness of roles among other multidisciplinary professionals. Working in the multidisciplinary team was said to focus more on remediating impairments rather than looking at the participation as a whole.

*"Another barrier is when working in the multidisciplinary team, we focused more on the client factors [impairment-based]". (PP 5, FGD 1).*

From the client factors, Malaysian occupational therapists mostly perceived the client's understanding of the recovery process as an issue to implementing OBI. While for the occupation as treatment modalities, OBI is less practical in an acute setting and providing good, observable, and measurable outcomes is challenging were among the barriers perceived by participants.

A similar issue was discussed in the FGD and emerged as a category of the challenges to practise OBI ideally. Difficulty in knowledge translation was one of them, such as the use of occupation as a treatment modality. Other than that, it included the discrepancy between Malaysian cultural values with the concept of independence in occupational therapy and the challenges of integrating a client-centred practice.

*"Based on my personal experience, there were still many clients who were unable to decide their goals. In the end, it would be back to us as they would rely on our decision as to the expert. The problem is when we still want to apply the client-centred approach, but we cannot gain the input from clients" (PP 3, FGD 1).*

Results from the cross-sectional study identified no barriers perceived by participants from the occupational therapist factor. In contrast, findings from the FGD have classified occupational therapy personnel as one of the barriers to implementing OBI in practice. It encompasses the intrinsic motivation and professional values of the therapists and the workplace culture.

*"I think the work culture is a problem sometimes. Senior occupational therapists should be more open to learning the new knowledge brought by juniors and transform their practice" (PP 6, FGD 1).*

A new barrier also emerged from FGD through latent content analysis, which is the economic barrier. This barrier, however, was not identified from the survey. The participant's narrative on the difficulty they encountered in practice could add insight into the economic challenge to implementing OBI. The budgeting issue has caused it laborious for occupational therapists to implement a context-specific intervention,

*"When the treatment is individualised, we could identify a new problem in the middle of therapy...like when the context occurred in the school setting needing us to go to the school. So, how to charge since this would involve additional budget and we can't get all of a sudden to add charges to the clients" (PP 21, FGD 3).*

## 5.0 Discussion

This study aimed to discover and explore perceived barriers in implementing OBI in the diverse areas of occupational therapy practice from both quantitative and qualitative views. The survey identified barriers from four factors; (1) client factor, (2) contextual factor, (3) occupation as treatment modalities, and (4) logistic issues. Findings from the FGD have confirmed, expanded, and discorded the results from the online survey. The outcomes from the integration of both studies may provide the overall picture of barriers from different perspectives.

The most perceived barriers identified from the survey were logistic issues that include time-constraint and heavy workloads. Meanwhile, the FGD findings have grouped these barriers under the governance and policy of the healthcare system. Public sector practitioners predominantly encountered these limitations as they were subjected to the organisational policy of the workplace. OBI, which was deemed as time-consuming and complex were hard to be practised in the bureaucratic system. Juggling between workloads, productivity measures, and client intervention might eventually lead therapists to be less motivated in practising OBI as they can opt for a more straightforward option such as the impairment-based treatment. Aligned with a study by Chai et al. (2017) it postulated that work motivation among Malaysian occupational therapists in the public sector was lesser than its private counterpart due to the bureaucratic system, which focused on complicated procedures.

Another drawback of the bureaucratic system is the reduction in professional autonomy (Loh et al., 2017), which might affect therapists' ability to exercise their professional judgment. Although the survey has not identified the bureaucratic system and the occupational therapy factor as the barriers, participants from the FGD agreed that bureaucracy and occupational therapy personnel are the barriers in implementing OBI. It might affect novice occupational therapists with lower academic qualifications and lack of experience as practising OBI is associated with therapists' knowledge, skills, and professional education (Murray et al., 2020).

The operating systems of the healthcare facilities, which include the departmental set-up, lack of appropriate equipment, and resources for OBI have made the provision of a similar context in which the client's occupation occurs is challenging. The departmental set-up of the hospital that is unable to simulate the client's environment will further limit the OBI practice (Skubik-Peplaski et al., 2016). Another issue that has not been addressed in the survey is the fragmented implementation of the practice, especially in the public facilities when the multidisciplinary team is not working in an integrated manner because the department is separated from each other. This situation will make occupational therapists' roles alienated and not well recognised by other team members. This unrecognition of role might explain the lack of referrals for OBI.

OBI involves the client's participation in owns' environment. Nevertheless, FGD findings have discovered that budgeting and economic challenges have limited its implementation, especially among private and independent practitioners. Even though OBI was only done by using commonplace occupations of daily life, it would impose some financial implications when therapists need to provide intervention in the client context. Reimbursement, which is regarded as a pragmatic factor, is one of the many barriers addressed in the literature as billing for OBI is complex and not straightforward (Colaianni & Provident, 2010). Occupational therapy roles are not widely recognised in Malaysia. Therefore, it is hard for third-party sources to pay for treatments that did not address the limitations but instead focus on occupation, which looks insignificant.

Lack of specific guidelines on OBI is another identified barrier from the studies. According to the FGD, more than a guideline, the accessibility to resources such as expert references and training also was unavailable, thus limiting the ability to practise OBI. OBI is an evidence-based practice, and it is vital to have a reference for practice to ensure its congruency with the conceptual foundations (Joosten, 2015). The contextual factor from the survey identified Malaysian cultural values of taking the sick role as another barrier to practising OBI and the FGD has extensively discussed this cultural-related issue. It has been found that the culture, which not valuing independence, especially among sick individuals, and the inability to decide on own's meaningful activity has made the ideal practice of OBI challenging in the Malaysian norms. It was acknowledged in studies from other Asian countries that the OT's philosophical foundation is difficult to translate into the Asian collectivist culture (Kaunnil et al., 2020; Yang et al., 2006).

## 6.0 Limitation of study

The limitation of the study was the heterogeneity of the FGD participants' socio-demographic resulting in variability of perceptions, which makes the analysis an arduous process. However, at the same time, different perspectives from a broad range of experiences are needed for this study. The FGD's participants' area of practice is more diverse than the survey's participants that might explain the incongruency in some findings between both studies.

## 7.0 Conclusion and recommendation

Occupation-based is an imperative effort to centralise occupation in occupational therapy. Despite the mandate to return to the root of occupation in the contemporary paradigm, ongoing challenges to centralise occupation are persistently confronted by occupational therapists. Many studies have addressed various barriers in diverse practice areas such as hand therapy, paediatrics, and acute settings.

However, little is known about the perceived barriers in different areas of occupational therapy practice in Malaysia. This study highlights multifaceted barriers occupational therapists face to implementing OBI, which require solutions beyond the individual level. Therefore, a future study from the Malaysian context should be conducted to explore solutions to eliminate the barriers that have been identified from this study to enhance OBI practice in Malaysia.

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## Paper Contribution to Related Field of Study

The integration of quantitative results and the qualitative findings from this study could provide an overarching view regarding perceived barriers in implementing OBI in the diverse areas of Malaysian occupational therapy practice. Thus, it could help occupational therapists to gain insight and provide comprehensive views regarding barriers in implementing OBI from Malaysian perspectives by comparing data from both quantitative and qualitative studies.

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