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# Malaysian Journal of Medicine and Health Sciences (MJMHS)



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The Malaysian Journal of Medicine and Health Sciences (MJMHS) diterbitkan oleh Fakulti Perubatan dan Sains Kesihatan Universiti Putra Malaysia. adalah menjadi jurnal utama mengenai semua aspek perubatan dan sains kesihatan di Malaysia dan di peringkat antarabangsa. Tumpuan M penyelidikan dan pembangunan saintifik yang asal, isu-isu baru dan analisis dasar yang berkaitan dengan sains perubatan, bioperubatan dan klinikal Medicine and Health Sciences kini diindeks dalam pangkalan data berikut: Scopus, EBSCOhost, ISC, dan Rubrica.

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## ORIGINAL ARTICLE

# Perceptions of Special Educators Towards Occupational Therapy Trainees in a School Setting

Nurul Nabilah Zaid<sup>1</sup>, Rosilah Wahab<sup>2</sup>, Sazlina Kamaralzaman<sup>3</sup>, Hasnah Toran<sup>4</sup>, Kartini Ilias<sup>5</sup>

<sup>1</sup> Centre of Occupational Therapy, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor, 42300, Selangor, Malaysia

<sup>2</sup> Centre of Rehabilitation and Special Needs Studies, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, 50300 Jalan Raja Muda Abdul Aziz, Wilayah Persekutuan Kuala Lumpur, Malaysia

<sup>3</sup> Faculty of Education, Universiti Kebangsaan Malaysia, 43600, Bandar Baru Bangi, Selangor, Malaysia

<sup>4</sup> Department of Basic Sciences, Faculty of Health Sciences, Universiti Teknologi MARA Cawangan Selangor, 42300, Selangor, Malaysia

### ABSTRACT

**Introduction:** Schools in Malaysia have not implemented school-based occupational therapy. However, currently, occupational therapist (OT) trainees are being placed in schools, specifically in Program Pendidikan Khas Integrasi (PPKI) for their clinical education placement, where they work together with special education teachers in classrooms. This study was conducted to explore the special education teachers' perceptions and experience with regards to collaborating with OTs, focussing on their knowledge and perception of OTs and OTs' role. **Methods:** This qualitative study utilized a descriptive phenomenology approach which used in-depth semi-structured interviews with 6 special education teachers from 4 selected schools in the district of Kuala Selangor. The interviews were audio recorded and transcribed verbatim into English and analysed using thematic analysis. **Results:** Three major themes were extracted from the interviews. These themes are; (i) teachers' knowledge and perception on the role and functions of OTs; (ii) relationship with and perceptions of the OT trainees; and (iii) the significance of OTs in schools. **Conclusion:** Special education teachers have high regards for OTs in a school setting and strongly support the placement of OTs in schools for the benefit of their students with special needs. The results of this study will be useful information to the Ministry of Education in considering the importance of placing occupational therapists in schools.

**Key words :** Special education teacher, Occupational therapist, Interdisciplinary, Collaboration.

### Corresponding Author:

Dr Kartini Ilias, PhD

Email:kartini\_iliast@uitm.edu.my

Tel:: +60192559374

### INTRODUCTION

An occupational therapist is a health care professional who assists and supports individuals to participate fully in daily activities including self-care, leisure, independent living and work through therapies which target skills that they may face issues in (1). In general, occupational therapy can be delivered in a variety of settings such as the hospital, community, school, and in private rehabilitation centres. In Malaysia, occupational therapy is a relatively new field. However, with the rapid expansion of the healthcare sectors; both in public and private sectors, the past decade has seen numerous

job opportunities in the field of occupational therapy particularly among graduates (2).

Traditionally, in the hospital, occupational therapy is a unit under the department of rehabilitation with other allied health professionals. There are varieties of cases handled by occupational therapists in the hospital ranging from acute to long term care in orthopaedic, burn, medical, neurological, paediatric and psychiatric cases (3). On the other hand, in a school setting, an occupational therapist's role is to support students towards academic achievement and encourage positive behaviours that are necessary for learning (1). The main objective of school-based occupational therapy is to support the students to master academic skills in mathematics, reading and writing as well as non-academic skills such as social interaction, behaviour management and participation in sport (4). There

are countries such as the United States of America where federal legislation has mandated school-based occupational therapy and it has been implemented successfully in inclusive school settings (5).

While in the European countries such as England, Ireland, Sweden, and Portugal, the school-based occupational therapy is only being introduced in schools that practice inclusive education (6). Most of the schools in these countries included occupational therapists as members of the interdisciplinary team which helps to support the inclusive education efforts. Kaelin et al. (2019) defined interdisciplinary collaboration as incorporating “knowledge and perspectives of different areas of professional expertise in order to consider issues holistically” and considered this collaboration as a requisite to a successful inclusive education service (6). The interdisciplinary team members might comprise of special education teachers, occupational therapists, speech therapists, parents and the child himself. Meanwhile in the special education scenario in Malaysia, neither occupational therapists nor interdisciplinary education teams are found working in schools.

For occupational therapists who work in schools, over one-fifth work together with teachers in school-based and non-clinical based practices (1,7). Ideally, the teachers and occupational therapists need to understand each other's roles, scope of practice and work in a collaborative manner to produce good results for the students (7). Previous studies have shown that OTs' profession was often poorly understood among the teachers; thus, teachers' understanding on the role and scope of occupational therapists' practices should not be assumed (8,9). Although the teachers' and therapists' jobs are to support the child as a student, there are still misunderstandings in their views on each other's roles (10). The significant findings from past research indicated that although the teachers mentioned that they appreciated the work done by OTs in schools, they eventually expressed misperceptions and disagreement over the roles of OTs due to their lack of understanding of the roles of occupational therapists in schools (11,12). Moreover, other significant findings from previous studies highlighted that teachers recognised the importance of OTs in multidisciplinary teams, yet they were unable to explain the role of an occupational therapist (12–14).

In Malaysia, the Special Education Integrated Program (SEIP) or Program Pendidikan Khas Integrasi (PPKI) as it is known in Malay, is an educational program for students with special needs in segregated classes within mainstream government schools (15). There are many categories of students with special needs in this program, such as autism, attention deficit hyperactivity disorder (ADHD), Down syndrome and many others. They are taught by teachers with a degree in Special Education. There are also teachers without a Special Education degree but were given short courses on Special Education

in order to teach in this program. There is no school-based occupational therapy in Malaysian schools, but in recent times OT trainees have started going to schools for their clinical education placement. However, they are only in schools for a short period that is eight weeks to complete their clinical placement.

Given the importance of the roles of OTs in supporting students in terms of academics, behaviour, and adaptive skills in school, this research could be the extension of the previous studies which have been conducted to explore teachers' knowledge and perceptions of OTs and the importance of OTs in the PPKI. Previous studies that have been conducted on this topic have mostly utilised a quantitative research design, while in this study, a qualitative research design is utilized in order to explore the experience of the respondents in a more in-depth manner. This study contributes insights into a topic that is understudied in Malaysia. The findings from this study will help to create a better awareness on the issues in establishing an interdisciplinary team to provide services to students with special needs in government schools.

## MATERIALS AND METHODS

### Design

This descriptive phenomenology study used in-depth semi-structured one-on-one interviews to examine the special education teachers' experience with regards to collaborating with OT trainees in Special Education Integrated Program (SEIP) or Program Pendidikan Khas Integrasi (PPKI). In a descriptive phenomenology study, researchers often bring their perspectives, experiences, values, beliefs, and identity to the data collection and analysis process.

### Study Sample

The respondents of this study were primary special education school teachers in the district of Kuala Selangor. These teachers were chosen due to their experience collaborating with occupational therapy trainees in their school.

There are few guidelines on the sample size used in qualitative research design. In general, the sample size used in qualitative research methods is often smaller than that used in quantitative research methods (14). Another rule of thumb in determining the sample size for qualitative research is the principle of data saturation. In which, the researcher is allowed to stop sampling data and round off their analysis when the point at which no new themes emerge (15).

In this study, we followed the recent guidelines for thematic analysis which recommend that the number of respondents should be determined by the type of data collection and the project size, i.e. 'small', 'medium', or 'large'. For small projects, the recommendations are

6 – 10 respondents; for interviews, 2 – 4 respondents for focus groups, 10 and above (16). In this study, six respondents were interviewed, which fulfilled the recommendation for a small project. The data saturation also was reached after the researcher finished the interview with the fourth respondent. Initially, there were 9 respondents who agreed to participate in the study; however, three of the respondents withdrew from this study, citing the heavy workload as the reason for withdrawal.

### Instruments

This study used an interview guide questionnaire to collect the information needed. The interview guide questionnaire consisted of eight questions that focused on the teachers' knowledge, feelings, experiences, and perceptions on working with the occupational therapy trainees. In addition, teachers were asked about their thoughts on the importance of OTs in schools. The open-ended interview guide was developed by the first author based on the knowledge and literature on this area. Next, this interview guide was crosschecked and validated by other research team members. Following this, it was piloted with two teachers for refinement before it was used for this study.

Following are the questions in the interview guide: (1) Please briefly describe, "What is occupational therapy (OT)?", (2) Please describe your experience in collaborating with occupational therapist/OT trainees, (3) Do you know what are the roles of the occupational therapist in general?, (4) Can you tell me about the occupational therapist's roles in school, (5) What are your perceptions about the OT trainees coming to school?, (6) Right now in Malaysia, there are no OTs in schools. If you agree with the benefits of OTs in schools, would you agree to collaborate with this health professional? Please explain further, (7) If you could have any advice or suggestions about the role of OTs in the PPKI classroom, what would it be?, and (8) Please let me know if you have any other comments about this research topic.

### Data Analysis

As the sample size is small and only involved a single data collection point, the analysis was conducted manually by the first author. The audio recorded interviews were played several times and transcribed verbatim. To obtain the overall impression for interpretation, the researcher listened to the audio-recorded interview, read the transcript and referred to the field notes simultaneously. Overall, the data was analysed using a thematic analysis adopting Colaizzi's seven-step phenomenological approach to analyse the interview data (5)

Several steps and measures were taken to ensure the trustworthiness and credibility of the findings. In order to reduce the subjective elements and increase the trustworthiness, the data were analysed by the

main researcher and cross checked by the research supervisors. The first author (who was a main researcher) met regularly with the research supervisors to discuss and verify the accuracy of the emerging themes and the meaning of each theme. Discrepancies of the codes and categories were reviewed and consensus reached before proceeding. A theme was not accepted until agreement of the three authors were reached 100% of the time. Member checking was used to ensure the rigor and credibility of the analysis.

**Table I. Demographic Characteristic of Special Education Teachers**

PAR-TICIPANT NO	AGE	GEN-DER	EDU-CA-TION	SCHOOL NAME	AREA OF TEACH-ING	NO OF STU-DENTS	AVER-AGE TEACH-ING YEARS IN PPKI
1.	32	Male	Bach-elor's degree	SK DATO MAHA-RAJA LELA	Islamic Teaching	30	> 4
2.	49	Fe-male	SPM	SK PUNCAK ALAM 3	Islamic Teaching	25	> 4
3.	40	Fe-male	Bach-elor's degree	SK PUNCAK ALAM	Special Education (Learning Problems)	43	> 4
4.	38	Male	Bach-elor's degree	SK PUNCAK ALAM 3	Special Education (Math, Physical Education)	50	> 4
5.	31	Fe-male	Bach-elor's degree	SK PUNCAK ALAM 3	Special Education	55	> 4
6.	42	Fe-male	Mas-ter's degree	SK PUNCAK ALAM	Special Education (Learning Problems)	43	> 4

### RESULT

The demographic information of the participants was presented in the Table I. Whereas Table II described the three major themes emerge from the data analysis: teachers' knowledge and perceptions of the OT trainees' roles and functions, the relationship between the teachers and the OT trainees and the teachers' view of the significance of the OT trainees in the school.



**Table II Sub Themes and Themes**

No	Themes	Subthemes
1.	Teachers' knowledge and perceptions of the role and functions of OT trainees	1- General role 2- Specific role
2.	Relationship with and perceptions towards the OT trainees in school	1- Collaborations and quality of work  2- Completing the clinical placement  3- Clear instructions and Standard Procedures
3.	Significance of OTs in schools	1-Enhancing Teachers' Knowledge and Skills  2- Greater contributions to the school

**Teachers' Knowledge and Perceptions of the roles and functions of OT trainees**

**General Role**

Almost all of the respondents were aware of occupational therapy because they learned more about it after the OT trainees came to their schools for clinical placement. Not only that, some of them knew about occupational therapy from the internet, from their further studies in the field of Special Education at teacher training institutes, and from parents whose children have therapy at private therapy centres. When the question about the roles of an OT in general was asked, three of the respondents answered;

*"OT works at the hospital to do rehab treatment on patients..."* – Respondent 1

*"...OTs are not only in schools, but they also work in hospitals."* – Respondent 2

*"OT treats lots of patients in the hospital, like for example; they treat kids, older people and people with disabilities"* – Respondent 3

Based on these answers, only some of the respondents knew about the roles of an OT in general. They knew OTs do not only work in schools, but OTs also work in the hospital treating a variety of patients such as children, older people and people with disabilities. Other non-special education teachers in the schools were also asked the question about the roles of an OT in general. However, most of them could only mention the specific roles of OTs in school.

**Specific Roles in the Classroom**

It is essential for teachers to know the specific roles of OTs in schools when they are collaborating with the OTs in the classroom to ensure that they both can support the students to achieve their learning objectives

academically, and behaviour-wise. The respondents in this study reported an increase in their knowledge on occupational therapy after the presence of the OT trainees for their clinical placement in the school. This increased understanding is due to the collaboration between them as there were more opportunities for OT trainees to explain their roles to the respondents. Below are the respondents' statements on OTs' specific roles in the classroom:

*"From what I know, an OT provides treatments or rehab intervention to help students with disabilities. OT can help these students maintain or achieve their daily activities in terms of cognitive, physical and mental functioning..."* – Respondent 3

*"...role of an OT in school is to help the teacher to improve the students in terms of their cognitive, behaviour, sensory, physical and social skills."* – Respondent 3

*"An OT focusses on the behaviour problem."* – Respondent 4

*"An OT focusses on the physical problem."* – Respondent 6

Almost all of the respondents were exposed to OTs only at the school when they came for their clinical placement. Thus, when asked about OTs, most of them answered based on the roles of the OTs in school. To be more specific, they provided their answers based on their observations of the therapy which the OT trainees provided to the students.

**Relationship with and Perceptions towards the OT Trainees in School**

**Collaborations and Quality of Work**

From the interviews, all of the respondents who had collaborated with the OT trainees found them to be excellent and helpful contributors in the classroom. They reported positive perceptions towards the OT trainees:

*"The OT trainees were excellent because we as teachers, we only teach the students in the classroom. But, the presence of the OT trainees was beneficial to us. They gave therapy to the students, for example, the trainees trained them how to write – I mean like, (they) gave some therapy on the student's hand movement..."* – Respondent 1

*"Before this, my school had received two groups of OT trainees from UiTM. Cooperation between the OT trainees and the teachers were excellent, and they had no problem..."* – Respondent 3

Most of the respondents commented that they had no issues while collaborating with the OT trainees. The respondents never felt that the OT trainees were taking over their jobs, but were helping them instead. Most of them stated that the OT trainees were very helpful to them in the classroom and made their teaching and learning sessions go smoothly.

## Completing the Clinical Placement

However, one of the respondents reported that she felt it would be better if schools have permanent occupational therapists. Although the OT trainees were helpful, she saw that they were mainly focusing on their task to complete their clinical training within the eight weeks of their clinical placement.

Respondent 5 said, *“They were helping us, but it was just for a short period, and the improvements of the students were minimal.”* Respondent 5 felt that, had there been a permanent OT in school, the students would be able to access therapy continuously, and this would be better than having OT trainees who were only at the school for eight weeks.

## Clear Instructions and Standard Procedure

There were some issues that the respondents reported based on a lack of understanding of what the OTs' roles are among the PPKI team members, i.e. the teachers and the aides. The issues arose because a few teachers and aides reported that they witnessed several of the OT trainees delivering therapy to the students in a 'harsh' manner. After the therapy session, they asked the OT trainees why they were treating the students in such a manner. One of the OT trainees clarified that it was part of the student's therapy and she was merely being firm during the session. After the clarification, the teachers and aides then understood what the OT trainees did. However, they felt that had they been given a briefing of the planned therapies by the trainees at the beginning of the clinical placement, this kind of misunderstanding could be avoided. As such, a request for briefing to all PPKI teachers and aides by the trainees before the beginning of the clinical placement was put forward. The PPKI team expressed that this briefing would provide a clear picture to them about the role of the OT trainees and the tasks involved in their clinical placement.

## Significance of OTs in Schools

### Enhancing Teachers' Knowledge and Skills

Most of the respondents commented that during the OT trainees' clinical placement in school, the trainees were very helpful and generously shared their knowledge and skills.

*“I strongly agree that the OT trainee's presence in school was beneficial because we as teachers did not know about therapy.”* – Respondent 2

*“I strongly agree that a collaboration between the OTs and the teachers would be beneficial to the class.”* – Respondent 4

*“Having an OT in the school could help us to achieve our mission and vision...”* – Respondent 3

*“It is essential to place an OT in the school because students could get the therapy in the school – instead of the hospital, and this could save parents' time.”* – Respondent 5

The respondents clearly saw the benefits of their collaboration with the OT trainees on their students who were having problems in the classroom and helped them achieve their teaching objectives. The teachers admitted that they did not know much about therapy, and they were really glad when OT would help them in the class.

Respondent 5 who taught Level 2 students commented; *“It is not fair that the OT trainees shared everything with the teachers who are teaching in Level 1 classes. They need to share the information and knowledge to all PPKI teachers so that all the PPKI teachers know about occupational therapy.”* – Respondent 5

Based on their responses, all the respondents indicated that they were very interested in increasing their knowledge about occupational therapy.

### Greater Contributions to the School

Respondents were asked to identify the most crucial aspect that the OT trainees contributed in the classrooms. Most of the respondents replied that the OT trainees helped them greatly by providing therapy for the students with issues.

*“The critical aspect that I found was that they could help in the classroom, they knew how to do the therapy for the students.”* – Respondent 1

*“The vital aspect was OT can help students improve, such as sensory function, behaviour, creativity, social skills, fine motor and gross motor. All these could help us to achieve our teaching and learning objectives.”* – Respondent 3

Some of the teachers commented that the OT is not only beneficial for the PPKI classes, but she also can contribute to the whole school, for example she could also assist students in the mainstream classes who face difficulties in learning. Apart from this, most of the teachers commented that when they had better knowledge about the role of an occupational therapist, they realized that an OT is necessary for the school.

*“I hope that the upper management, meaning the Education Ministry and the Health Ministry would seriously consider placing OTs in schools. I know it is not easy to achieve this – but the upper management has to do what needs to be done...”* – Respondent 3

Most of the teachers were aware that occupational therapy is not being offered in schools, however, they strongly believe OTs are needed in schools and as such, they hope that in the near future, OTs will be placed in schools. If this were to happen, the teachers shared that they would look forward to collaborating with the OT in the PPKI classes.

Interestingly, a number of respondents showed concern that the misunderstanding of the role of OTs might extend beyond the PPKI team. A few respondents commented

that they were worried that the role of the OTs may be seen as similar to the special education aides'. One of these respondents commented:

*"I see sometimes that the OT (trainee) is just like an aide. This OT (trainee) needs to show their true roles to the school administrator – so that, the school administrators know the importance and benefits of having an OT in the school..."* – Respondent 5

The respondents were concerned that if the school administrators did not understand the roles of an OT clearly, and instead think that OTs' role is similar to the aides', there is a possibility that the Education Ministry would never create OT posts in schools.

## DISCUSSION

Majority of the respondents commented that when the OT trainees were in their school; their knowledge and understanding of occupational therapy increased due to the collaboration and knowledge sharing between teachers and OT trainees. These findings support the recommendations from Fairbairn & Davidson (1993) that occupational therapists need to put in effort to heighten awareness of the needs of occupational therapy in schools (11). According to Nochajski (2012), collaboration between teachers and therapists is crucial to facilitate team members in sharing each other's knowledge, expertise, and experience. Collaboration is the crucial and essential part of inclusive educational programs, and this study proved that it was possible for teachers to collaborate with the OTs in the classroom.

The respondents showed great interest in working together with the OT trainees, which may signal a potential in initiating a future collaborative climate. Orelove & Garner (1994) state that a collaborative climate is described as one in which there is collegiality among team members who are well versed in each other's roles and responsibilities (18). The respondents also highlighted the importance and benefits when there is occupational therapy in the school. Vincent et al. (2008) and Winnie W. Dunn (1991) concurs that professionals must recognise the ceiling of their skills and knowledge so that they know when it is suitable to involve another agency for further support of the child. This is due to the fact that when team members share information with each other and family members, a better understanding of the child is achieved all around including the teachers. This in turn would assist teachers to support students with disabilities in improving their function (20). In sum, collaboration is an activity of cooperating where being able to accept different perspectives, communicate effectively, and sharing the same goals are important (21). Winnie W. Dunn (1991) agrees that providing relevant background information is essential and states that solutions to specific problems in an inclusive classroom can be achieved when the occupational therapist and the classroom teacher both

contribute their specialised knowledge and skills.

The respondents were aware of the importance of their involvement in a more collaborative process with the OT trainees, especially the positive impact on their students. However in order to establish a collaborative team between teachers and therapists, administrative support would be needed from the Malaysian Ministry of Education (MOE) and the Malaysian Ministry of Health (MOH). This administrative support is crucial because release time is needed for the planning of this collaboration and both professionals would need in-service training on understanding team members' roles and responsibilities, collaboration, and team process' (17). As it is, getting OTs placed in schools is an uphill task as awareness on the need of school based OTs is still low in Malaysia. This study is an early effort to create more awareness of this issue. To continue this effort, more research and documentation of the OTs' experience in school-based settings are needed.

## CONCLUSIONS

The results of this study highlight special education teachers' awareness of the importance of the collaboration between teachers and occupational therapists which can produce a positive impact on the students. The teachers articulated a strong willingness to work collaboratively with the OTs in order to help their students develop and overcome issues that they face. Additionally, the teachers were also willing to learn from the OTs in order to upgrade their skills so that they can teach their students better. They expressed their hope for OTs to be placed in schools for the benefits of their students. These findings suggest that it may not be too difficult to set up interdisciplinary teams to provide a comprehensive service for students with special needs in schools as teachers have positive perceptions of OTs. However further research is needed to probe deeper on this issue. For example, more exploration is needed on the technicalities involved in teacher/OT collaborations and the training needed for a successful interdisciplinary team.

## ETHICAL CLEARANCE

The ethical approval had been obtained from the ethical committee of Universiti Teknologi MARA (UiTM) (REC/639/19), Ministry of Education (MOE) (KPM-600-3/2/3-eras(7257)) and Selangor State Education Department (JPNS.SPD. 600 - 1/1/2 JLD.5 (26)). The interviews conducted among PPKI teachers were still considered confidential.

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