Vol 13, Issue 12, (2023) E-ISSN: 2222-6990

# An Exploratory Study Of Occupational Therapys' Assessment Competence: Competencies Of Occupational Therapy Dealing With Autism Spectrum Disorder (ASD)

Ruwinah Abdul Karim, Nur Husna Abd Wahid, Nornazirah Suhairom

School of Education Faculty of Social Sciences and Humanities Universiti Teknologi Malaysia 81310 Skudai, Johor MALAYSIA husna@utm.my, p-nazira@utm.my Corresponding Author Email: ruwinah@hospitalpenawar.com

**To Link this Article:** http://dx.doi.org/10.6007/IJARBSS/v13-i12/20053 DOI:10.6007/IJARBSS/v13-i12/20053

Published Date: 12 December 2023

## Abstract

Background: Occupational Therapist (OTs) dealing with Autism Spectrum Disorder (ASD) professions face new challenges and opportunities as service delivery contexts expand. The landscape for the profession of OTs dealing with ASD is an ongoing development and delivery of services is in new or underdeveloped practise settings. Assessment of occupational therapist competence in dealing with autism spectrum disorder (ASD) patient is required to ensure occupational therapists are highly competent and provide and deliver a quality health service. As a result, the current competencies of OTs dealing with ASD patients must be explored. **Objectives:** The primary goal of this study is to explore competencies that could be used to assess occupational therapist competence in autism settings. To explore the competencies, the following research objectives was explored; 1) To identify competencies of occupational therapy dealing with autism spectrum disorder (ASD) through document analysis and 2) To identify competencies of occupational therapy dealing with autism spectrum disorder (ASD) through from the perceptions of occupational therapist specialist. Methods: This study used a qualitative method design that included document analysis and interviews with six experts, including two clinician therapists and four academic professionals. Atlas.ti software was used to explore themes in the data. Data was also subjected to two types of validation procedures: Fleiss-kappa and expert content validation. Results: Thematic analysis of the data revealed six main competencies assessment constructs for OTs working with ASD patients: professionalism, performance and communication, clinical knowledge, clinical skills, patient management, and therapist contributions. Conclusions: To ensure the quality of occupational therapist services, competency assessments will allow for the

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

evaluation of potential or existing therapists' skills, knowledge, and performance in relation to defined performance standards in order to determine their aptitude and suitability for dealing with autism spectrum disorder (ASD) patients.

Keywords: Autism Spectrum Disorder, Competence Assessment, Occupational Therapist

## Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that affects communication, social interaction, and behavior. It is a complex disorder that manifests in different ways and severity levels, hence the term "spectrum" (Ali et al., 2023). Each autistic child supposedly has distinctive traits. Additionally, individuals with autism spectrum disorder may have sensory sensitivities and struggle with changes in routines or environments. The occurrence of autism spectrum disorder (ASD) is gradually increasing worldwide. The prevalence of ASD has been steadily rising over the years, with current estimates suggesting that it affects approximately one in forty-four children aged eight and older in the United States (Agha Mohammad Hasani, Sheikh Fathollahi, Gerami Fard, & Mokhtari, 2020) Malaysia is not exception to this phenomenon. The number of children enrolled in special needs services more than doubled between 2006 and 2013 (New Straits Times, 2018). Given the implications of this trend for the national education system, health care system, economy, and society, a more in-depth understanding of these issues is critical. ASD is becoming more common around the world. ASD has been classified as a Learning Disability (LD) and ranked the first type of disability in Malaysia (Department of Social Welfare, 2021). It is estimated that one in every 600 children is born with autism in Malaysia (Ministry of Health, 2016). As a result, the role of occupational therapists dealing with ASD in Malaysia is becoming increasingly important.

Occupational therapists bring a unique and comprehensive perspective to the treatment of people with ASD because they are highly educated and experienced in evaluating and providing intervention, both direct treatment and consultation to families, educators, and caregivers, in the areas of physical, sensory processing, and social-emotional health in a person with an ASD's all environments (AOTA, 2018). According to research conducted by the Interactive Autism Network (2009), occupational therapy is the second most frequently provided service for people with autism in the United States, trailing only speech and language. Based on trends and statistics, this scenario may become a reality in Malaysia within the next few years. Occupational therapists working with ASD in Malaysia must be prepared and confident in their abilities, so competence assessments must be performed on a regular basis.

Occupational therapists, like other health professions, must follow and maintain specific requirements for the profession role in order to provide the best service. Assessment of competence and standard maintenance in many health care professions, including occupational therapy, have been growing areas of discussion and interest in many countries since the early 2000s (Myres et al., 2017). According to the American Occupational Therapy Association (AOTA), occupational therapists and occupational therapy assistants must maintain their competence in order to fulfil their roles and abilities across experience, context, and time (AOTA, 2019). Continuing competence, or the development of one's capacity to perform a task, function, or role, necessitates an ongoing process throughout one's career to keep up with new developments related to the profession and specialty area (i.e., early, mid, late, change, or re-entry). To build capacity, occupational therapists and specialty area (i.e., early, mid, late, change, or re-entry). To build capacity, occupational therapists and occupational therapists and occupational therapists must commit to a self-assessment process that includes

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

reflection on, in, and toward action in order to advance their knowledge, professional reasoning, interpersonal skills, performance skills, and ethical practise required to perform current and future roles and responsibilities within the profession (Lang et al., 2012). However, according to current research, there is no standardized assessment model of occupational therapists' performance in general settings or in autism settings for the private and public sectors in Malaysia (Malaysian Occupational Therapy Association (MOTA), 2019).

#### Methodology

#### Document Analysis Phase

Document analysis was performed on 16 journal articles about occupational therapy competencies. These documents include skill standards and journals. A list of competencies is constructed and established through extensive document analysis. Following that, a frequency table is created to summarized the competencies.

## Interview Phase

Six experts participated in the in-depth interview, including two clinician therapists and four academic professionals. The interviewee is chosen based on their knowledge and experience in clinical management of patients with autism spectrum disorder, as well as knowledge in job competence assessment All respondents who took part in the interview phase had at least a bachelor's degree in occupational therapy or related field and at least 15 years of experience in the profession.

The instrument used for the collection of the qualitative data for the purpose of this study was semi-structured interview protocol. The interview was organised and conducted by the researcher to the selected occupational therapist and academician to solicit their views and information as regards to the objectives of the study. The questions reflected in the interview protocol were open-ended questions (semi-structure). The audio-taped interview was conducted with the participants among the lecturers and occupational therapists in the selected universities and hospitals elected in order to apprehend and support the main issue at stake. The interview was evaluated through transcription, coding, categorizing and thematic content analysis, (Creswell, 2011); and consequently, frequencies were drawn for the responses. Qualitative construct validity was checked through validation from a panel of experts. The content validity approach of codes and themes resulting from the interview process was carried out using the Cohen Kappa approach (value 0.98).**Results** 

After systematically draw together the data collected from both techniques, it was observed that there are six main constructs of competencies which deemed important for occupational therapy professionals in Autism setting. Each of the constructs are discussed in detail such as following (Table 1)

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

#### Table 1:

#### **Competencies to Assess Occupational Therapist Competence in Autism Settings**

Competencies	Sub- Competencies
Professionalism	Recognition
	Qualification
	Moral & Belief
	Leadership
	Responsibility
Performance & Communication	Communication skills
	Time Management
	Creativity & Innovation Relationship
	Motivation
Clinical Knowledge	Confident & Self-esteem
	Theories & Evidence-based
	Critical Thinking
	Treatment Planning
	Development Resources
Clinical Skills	Treatment Effectiveness
	Protocol Assessment & Intervention
	Holistic Approach
	Task Analysis
Patient's Management	Emotion & Psychology
U	Observation
	Motivation
	Decision Making
	Problem Solving
Therapist's Contribution	General Publication
······	Community Services
	<ul> <li>Promotion &amp; Marketing</li> </ul>
	<ul> <li>Training to Non-OTs</li> </ul>

#### Discussion

The development of the competency-based framework for occupational therapist dealing with ASD emphasizes on the establishment and construction of competencies and items. This includes the study of related literature, concepts, models and constructs related to the competencies for Occupational Therapy profession in Autism setting. The qualitative methods involve individual interviews expert which include four educators and two high performers occupational therapist in the autism industry. This systematic literature review includes articles from Occupational Therapy Association around the globe such as MOTA, AOTA, CAOT related to occupational therapist competencies, reports, working papers, journals and electronic references. Items were constructed based on the transcription of the interviews as well as identification from related documents. There are six constructs of competencies that are identified from the document analysis which are then empirically refined through the interview findings. Finally, the framework suggested five key-

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

competencies are Professionalism, Communication, Clinical Knowledge, Clinical Skills, Patient's Management and Contribution.

For an individual to perform the best at workplace, they need to have a synergy of competencies along with experience in delivering job task on any given day, even on any given circumstances (Workitect, 2006). Competencies can be gathered through education, training or experience. Experience is the duration of life within work. Nevertheless, to learn a lesson from experience gained at the workplace also requires certain amount of competency (Anders Ericsson, Roring & Nandagopal, 2007; Anders Ericsson & Towne, 2010). In line with these ways of competency acquisition is the behavior (understanding of the consequences of the action taken and having the right attitude towards work performance). One of the concerns is to develop a competency framework for occupational therapy that is well-suited with our Malaysian context. Research in the area of occupational therapy profession is scarce, and so as the research in identifying competencies required for the occupational therapy professionals" superior work performance. Several studies related to occupational therapy's competencies were conducted in other countries such as in Canada (Zopiatis, 2018), Australia (Aguirre & Andrade, 2013), World Federation of Occupational Therapy (Hu, 2017; Ko, 2018), United Kingdom (Bisset, Cheng & Brannan, 2018) and United States (Birdir, 1998; Birdir & Pearson, 2019) which provides a preliminary view on what is expected from the occupational therapy professions globally. Thus, the current study employed qualitative study to explore competencies perceived as important for the profession in Malaysian context.

The development of competency constructs using qualitative lens is supported by previous studies. Integrating document analysis with interviews in the process of building and consolidating resources for the development of the Competency Assessment Framework for Occupational Therapy in Autism setting has effectively yield rich data on competencies. After systematically draw together the data collected from both techniques, it was observed that there are five main constructs of competencies which deemed important for occupational therapy professionals in Autism setting. Each of the constructs are discussed in detail such as following.

## Professionalism

The majority of respondents stated that occupational therapists dealing with ASD cases must act professionally. Professionalism is a multifaceted skill defined by the manifestation of distinct attitudes and behaviours that promote excellence in occupational therapy practise. A Canadian survey found that 88% of occupational therapists consider professionalism to be "very important" for their practise (Drolet & D'esormeaux-Moreau, 2014). Putting patients first, managing conflicts of interest, disclosing errors, self-regulating, and advocating are examples of how professionalism manifests itself (Tobin &Truskett, 2020).

## Performance & Communication

As a patient-facing clinician, occupational therapists are almost always in contact with a patient, caregiver, or other healthcare providers. As a result, it is critical for OTs to improve their communication skills in order to provide the best possible care and treatment. According to the majority of respondents, communication skills are critical for occupational therapists. The majority of respondents stated that these professionals collaborate closely with patients to develop an exercise or other therapeutic regimen to improve their mobility and overall health. They must be able to effectively communicate with all types of people who may be in pain or frustrated, and they must do so in a way that encourages the patient's participation.

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

They must also have strong written communication skills, as case documentation is required. Negative communication skills may create an uncomfortable environment for the patient, preventing them from expressing their discomfort and lack of understanding (Charnley, 2016).

"Communication skills are very important. We work with other professions. We need to communicate a lot with nurses, for example to know the condition of this patient can help us to make a treatment plan' (R04).

"A therapist's ability to communicate well with colleagues can help facilitate everything in helping our patients' healing process" (R05)

## Clinical Knowledge

Most respondents agreed that OTs' clinical knowledge should be evaluated on a regular basis to ensure their capabilities. This is because the profession of OTs dealing with ASD is evolving and constantly encounters new discoveries. The ability to understand clinical knowledge is an important part of learning process to become an occupational therapist. Clinical knowledge is particularly important in occupational therapy for educational, technical, scientific, and interdisciplinary reasons. OTs education relies on theory to provide a conceptual rational for why a proposed therapeutic effort is in fact presumed to be therapeutic. It also supports the technical practice of OT by guiding the nature and sequence of its methods, measures, and adaptations. For example, children with autism spectrum disorder (ASD) frequently report sensory integration processing problems and often receive intervention relevant for that problem.

"During consultation is very important for the therapist to use all the evidence based while explaining all the conditions even though sometimes we are not going to use all the medical terms while explaining. But the explanations, will be based on the theories and evidence based. so that, our statements become stronger and easier to be understanding by the parents" (R04)

"Therapist must know knowledge behind all the therapy for the ASD patients. Schooling, motor skills, activity daily living (ADL), the reason behind motor planning activity for example, social skills and behaviour problems for these patients" (R05)

## **Clinical Reasoning Skills**

Clinical reasoning is a skill that all clinicians are expected to have and use, and that all students are expected to learn. Based on the interview data, most of the interview respondent noted that clinical reasoning is essential in occupational therapy because it allows therapists to accurately identify clients' problems and determine effective treatment protocols. The extent to which a therapist can effectively use clinical reasoning is the method by which therapists put theory into practise (and therefore conduct theory-based therapy). Sound clinical reasoning is one such skill that is essential for safe practice across the spectrum of occupational therapy work. This is one of the hardest areas to assess regarding the competency issue. Clinical reasoning is also defined as the process used by OT practitioners to understand the patient's occupational needs, make decisions about intervention services, and think about what they do.

"The therapist needs to know the final diagnosis of the patient. There are other complications aside from Autism for example. It is also necessary to know what factors led to the diagnosis. All of this is related to the clinical reasoning skills of an OT" (RO1)

"Therapists need to know the general protocol for assessment and intervention for children with autism. Can't just do it without clinical reasoning skills" (RO2)

"what evidence supports the use of specific interventions to encourage occupational performance? These are all questions that therapists need to answer in the early stages" (R05)

According to Gillen and Schell (2019), research and literature on clinical reasoning in occupational therapy is a growing field of knowledge that helps occupational therapists understand the mechanisms that govern the selection and evaluation of occupational therapy interventions, particularly in Autism settings.

## Patient's Management

Occupational therapy can serve as a sounding board and a liaison between a patient and their family. At times, there may be a gap between what the patient believes is possible and what the caregiver anticipates from the patient's recovery. According to the interview respondents, occupational therapists must be able to tailor a treatment plan to the specific needs of each patient. Occupational therapists are trained to assess a patient's participation in functional and meaningful activities and to implement interventions to help the patient achieve their goals. Therefore, the ability to manage patients must be assessed in regular basis.

"OTs need to be sensitive when it comes to patient care. It seems simple but this is very important to ensure that the therapy journey goes well. For us to achieve the set goals & objectives. Documentation is very important as a practitioner" (RO4)

"Patient handling is very important. Especially when related to child patients such as autism. Many precautions must be taken into account. The role of OT is very important in treating autism. We play profession" (R06)

## Therapist's Contribution to the Profession

In addition to the core competencies described, the majority of the literature and respondents agree that OTs' additional contributions, such as publication, community service, and continuous training, should be recognised in the assessment process.

"If the therapist has made a publication, this is a bonus to measure his competence. Writing is a high level for a therapist" (R01)

"Publication is an extra point for a therapist. Occupational therapy, which has many publications, means that he prepared a new book for the reference of other therapists. This is not easy" (RO2).

Occupational therapy began to conduct related research in the early 1990s and recently initiated more transdisciplinary work with health services researchers to benefit from their perspectives to enhance efforts to demonstrate the cost-effectiveness and efficacy of occupational therapy services. Evidence-based research and practice has become a mantra within occupational therapy academic settings. However, many occupational therapies practice environment have yet to adopt this emphasis, despite the required of demonstrating need for services and the cost-effectiveness of interventions. Evidence-based practice relates to using existing research findings or having conducted research to determine the efficacy and effectiveness of treatments and other types of interventions. Occupational therapy also encourages to actively participates in programs and services to promote the health of communities and populations, developing and implementing occupational-based approaches that pursue the involvement and participation of a population in occupations that promote

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

health in the community (Townsend et al., 2004). This community perspective of health and its relationship with occupation has given rise to an abundant source of literature in recent years concerning various theoretical concepts that are proposed as a basis for the practice of Community Occupational Therapy (AOTA, 2020).

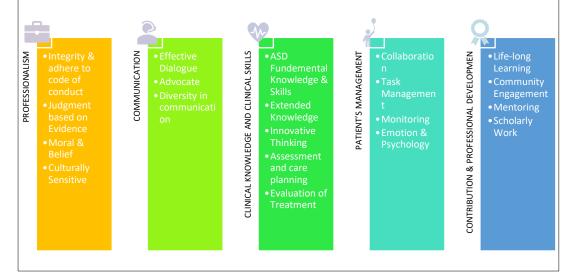


Figure 1: Competency Assessment Elements for Occupational Therapy in Autism Setting in Malaysia

# Conclusion

This exploration study revealed five area of assessment for occupational therapist dealing with autism spectrum disorder (ASD) namely clinical knowledge and skill, patient's performance and communication, professionalism and therapist's management, contribution. Clinical knowledge and clinical skills have been observed during the interview's session with experts as the most important areas of assessment for occupational therapist. This is due to the dynamic and evolving nature of ASD cases. Occupational therapist dealing with autism spectrum disorder (ASD) patients must be assessed and monitored in order to ensure occupational therapists are highly competent, provide and deliver a quality health service. These findings can be used as a basis in the future to design a variety of strategies or assessment models. Furthermore, this study could serve as a foundation for future research examining the level of competencies of individual employees in the workplace. Quantitative methodology approaches are needed to validate the competencies assessment construct. In the future, this effort will provide a more accurate picture of occupational therapy professionals' competencies by developing an assessment tool that can be used to measure OTs' competencies dealing with ASD.

# Acknowledgments

The authors would like to acknowledge the financial support from Univerisiti Teknologi Malaysia for the funding under UTM Encouragement Research Grant (UTMER) (Q.J130000.3853.19J75). We would also like to acknowledge Dr Mohd Adnan Sulaiman, Director of Hospital Penawar; who have been supportive of this study

Vol. 13, No. 12, 2023, E-ISSN: 2222-6990 © 2023

## References

Kadar, M., McDonald, R., & Lentin, P. (2015). Malaysian occupational therapists' practices with ch ildren and adolescents with autism spectrum disorder. British Journal of Occupational Therapy, 78(1), 33-41.

New Straits Times (2018). With 300,000 M'sians on autism spectrum, more awareness needed: Yeoh Retrieved from

https://www.nst.com.my/news/nation/2018/11/434085/300000-msians-autism-spectrum-more-awareness-needed-yeoh

Department of Social Welfare (2021). Number Of Disabled Persons Registered By Type Of Disability, Malaysia. Retrieved from

https://www.data.gov.my/data/ms\_MY/dataset/number-of-disabled-persons-registered-by-type-of-disability-malaysia

Ministy of Health Malaysia. (2017). Health Fact 2017.

American Occupational Therapy Association. (2018). Occupational Therapy Role's with autism. Retrieved from

https://www.aota.org/-/media/corporate/files/aboutot/professionals/whatisot/cy/fact-sheets/autism%20fact%20sheet.pdf

Myres, C., Nancy, S., Ashley, C. (2017). Continuing competence assessment and maintenance in occupational therapy: Scoping review with stakeholder consultation. Australian Occupational Therapy Journal, 64(6), 1440-1630. https://doi.org/10.1111/1440-1630.12398

American Occupational Therapy Association. (2019). Occupational therapy practice framework: Domain and process (4th ed.). American Journal of Occupational Therapy, 74(Suppl. 2), 7412410010. https://doi.org/ 10.5014/ajot.2020.74S2001

Lang R, O'Reilly M, Healy O, Rispoli M, Lydon H, Streusand W, Davis T, Kang S, Sigafoos J, Lancioni G, Didden R, Giesbers S. (2012). Sensory integration therapy for autism spectrum disorders: a systematic review. Research in Autism Spectrum Disorders, 6(3), 1004-1018

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). London: Sage Publications Ltd.

Drolet, M.-J., &D'esormeaux-Moreau, M. (2016). The values of occupational therapy: Perceptions of occupational therapists in Quebec. Scandinavian Journal of Occupational Therapy, 23(4), 272–285. <u>http://doi.org/10.3109/11038128.2015.1082623</u>

Tobin, S. A., Truskett, P. G. (2020). Professionalism for surgeons. ANZ Journal of Surgery, 90(6), 1153–1159. <u>http://doi.org/10.1111/ans.15956</u>

Charnley, F. (2016). A Conceptual Framework for Circular Design. 8, 937; doi:10.3390/su8090937.

file:///C:/Users/ruwin/Downloads/A Conceptual Framework for Circular Design.pdf

Gillen, G., & Schell, B. A. B. (2019). Introduction to evaluation, intervention, and outcomes for occupations. In B. A. B. Schell & G. Gillen (Eds.), Willard and Spackman's occupational therapy (13th ed., pp. 710–713). Philadelphia: Wolters Kluwer.

American Occupational Therapy Association. (2020b). Guidelines for supervision, roles, and responsibilities during the delivery of occupational therapy services. American Journal of Occupational Therapy, 74(Suppl. 3), 7413410020. https://doi.org/10.5014/ajot.2020.74S3004

Workitect (2007). Competency Dictionary. Retrieved August 6, 2008 from Workitect Inc. website: http://www.workitect.com/pdf/Competency\_Dictionary.pdf (Accessed: August 2008).