



AWARENESS AND KNOWLEDGE OF OCCUPATIONAL THERAPY AMONG MAINSTREAM SCHOOL TEACHERS IN NORTH CHENNAI

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Abstract: Awareness and Knowledge about Occupational Therapy (OT) are essential for the delivery of quality care to all clients and for Occupational Therapy course development and job satisfaction. Occupational Therapists (OTs) practice on Mainstream Schools. In that, Teachers are often the primary referral source for OTs. To make timely and appropriate referrals to OT, it is imperative that the referral sources demonstrate a broader level of understanding of the OT profession. So, this study aimed to determine the awareness and knowledge of Occupational Therapy among Mainstream School Teachers in the North part of Chennai. The Cross-sectional survey was conducted in the North Chennai Schools. The selection of Schools is done by enlisting all the Schools available from North Chennai, later by using table of random number a sum of 6 Schools taken into account. The sum of 20 teachers, where taken as the study participants among each Schools, after getting permission from each School, the list of Teachers were identified, enlisted, by using lottery method. The questionnaire was specifically developed for this study based on prior questionnaires that had been previously constructed in similar and pertinent studies. Teachers from North Chennai mainstream Schools had less awareness and limited knowledge about OT profession, roles, career path, children who get benefit from OT and work settings. The limited awareness contributes to less referrals. Efforts such as awareness program and promotion of the profession, in order to counteract the lack of awareness and knowledge about OT in the teachers, public and among members of the multidisciplinary team to provide the better OT services.

I. INTRODUCTION

School is a major area of participation and productivity for young people. It is the place where they learn, play, do arts and crafts, engage in sports, and build social contacts. The World Health Organization (WHO) defines participation as “a person's involvement in a life situation.. Children's participation at home, at school, and in the community relates to their overall development, well-being, and quality of life. In addition to family, the outcome of a child's social, psychological, and economic well-being is greatly influenced by school experiences. A child's development involves participation in increasingly complex activities which enable them to acquire the basic skills and competencies necessary for their general development and successful transition into adulthood.

Enabling a student's participation at school has been an important focus of pediatric Occupational Therapy services. In countries with inclusive education systems, including all children in regular schools, Occupational Therapists support children with disabilities to perform activities that enable them to participate in the educational and social aspects of student life at school.

School Occupational Therapists and Occupational Therapy assistants are key contributors within the education team. They support a student's ability to participate in desired daily School activities or “occupations.” They help children to fulfill their role as students by supporting their academic achievement and promoting positive behaviors necessary for learning. School Occupational Therapists (and Occupational Therapy assistants, under the supervision of the Occupational Therapist) support academic and non- academic outcomes, including social skills, math, reading and writing (i.e., literacy), behavior management, recess, participation in sports, self-help skills, prevocational/vocational participation, transportation, and more. Because of their expertise in activity and environmental analysis, practitioners are particularly skilled in facilitating student access to curricular and extracurricular activities.

Teachers indicate that Occupational Therapy is an important part of the process of ensuring student success, yet teachers express frustration related to the limitations of the system and therefore the limitations of the Occupational Therapist. Typically, school-based Occupational Therapists have high workloads and little flexibility, which contributes to a reduced level of communication. To provide the best services in an educational context the Occupational Therapist needs to advocate for the profession. It is crucial for School-based Occupational Therapists to have a voice in the educational system, therefore, allowing for improvement in communication and collaboration among team members

School-based Occupational Therapists should educate the teachers, administration, and parents about the role of Occupational Therapy in schools. As awareness of the role of Occupational Therapy increases, system change becomes a possibility. Teachers may also have a limited awareness of the role of Occupational Therapy within the school. This, together with limited resources, may affect the level of

access that a learner who experiences difficulties has to Occupational Therapy services.

A poor understanding of the profession contributes to poor collaboration, as each profession does not understand the way in which each contributes to the educational goals of the learner.

The purpose of this study was therefore to determine the Awareness and Knowledge of Occupational Therapy among the Mainstream School teachers in North Chennai.

II. NEED FOR THE STUDY

Every Teachers should be aware and have basic Knowledge about Occupational Therapy, since they play a major role in children education participation as well as guiding them in the career path and also there is no awareness study conducted among mainstream school teachers.

III. OBJECTIVE

- The objective of the study is to determine the Awareness and Knowledge of Occupational Therapy among Mainstream School Teachers.

IV. REVIEW OF LITERATURE

Wesam Barakat Darawsheh et al (2018) conducted a survey reports on the assessment of Jordanians' awareness and knowledge of Occupational Therapy. Convenience sampling was used. There were 829 participants (474 males, 355 females), with mean age of 32 ± 11.6 yrs. They were recruited from the three main geographical areas of Jordan (northern, central, and southern) and from all educational levels. The sample included 222 (26.8%) healthcare personnel, 146 (17.6%) clients, and 461 (55.6%) lay persons. Participants completed questionnaires, and the results revealed that 48% of the sample had poor or no knowledge about OT, while 28.3% were unaware of it. Also, OT was commonly (50%) perceived to be exclusively targeting people with disabilities (PWDs) and neurological and physical conditions (58% and 53%, resp.) in addition to exclusively providing services for the rehabilitation of the upper extremity (48%). Common misconceptions associated with OT were that OTRs prescribe medication (43%) and OTRs are physiotherapists (44%). to be directed by OTRs, the Jordanian Society of Occupational Therapy (JSOT), and the Ministry of Health to preserve the OT identity and value and promote knowledge about OT in the public and among members of interdisciplinary teams. More inter professional learning needs to be incorporated within the curricula and placements of all healthcare personnels .

Tristram Hooley et al (2015) conducted a research on what role should teachers play in career guidance? Since the Education Act 2011, schools have been required to offer career guidance to their students. Some of this responsibility has inevitably landed at the door of teachers, but their exact role remains a bone of contention. Teachers have had careers of their own. They have made decisions about whether to go to university, what subjects to study and what jobs to do. Their experiences are useful for young people. These things need to be presented carefully, as what worked for the teacher may not work for the students, but teachers should be having career conversations. Teachers also have a well- developed pastoral duty. As trusted adults, young people approach them with concerns and dilemmas, many of which relate to future aspirations. Working through these issues with young people in ways that keep their options open is important. Career is a context for many life decisions and teachers need to be able to offer some solutions when it is important (including referring young people to professionals and other specialists)

Palisano et al (1989) conducted a six-month study with thirty-four children, ages six through nine years of age, with learning disabilities. They were divided into two groups, one receiving intervention twice weekly with the OT in a small and large group setting. The second group received consultation services from the OT through a weekly large group session in the classroom, and one half hour per week consultation with the teacher to provide a monthly lesson plan of follow-up activities to be performed three times per week. Intervention occurred over a six-month period. Both groups received an equal amount of therapeutic intervention each week (75-105 minutes). The children in both groups improved on the standardized assessments of gross motor and fine motor abilities, visual- motor integration and visual-perceptual skills. These skills are necessary for adequate school performance in the areas of reading, writing, mathematics, manipulation of tools (e.g., scissors and rulers) and performance in physical education.

IV. METHODOLOGY

The Cross-sectional survey was conducted in the North Chennai Schools. The selection of Schools is done by enlisting all the Schools available from North Chennai, later by using table of random number a sum of 6 Schools taken into account. The sum of 20 teachers, where taken as the study participants among each Schools, after getting permission from each School, the list of Teachers were identified, enlisted, by using lottery method. The questionnaire was specifically developed for this study based on prior questionnaires that had been previously constructed in similar and pertinent studies. A draft of the questionnaire was reviewed by a group of Occupational Therapists working in the field. Their comments, suggestions, and feedback were taken into account to finalize in order to validate the questionnaire. 120 copies of questionnaire will be distributed and made to be filled by the selected Teachers for this study, by signing the consent to participate in the study.

Description

The Awareness and Knowledge of Occupational Therapy among Mainstream School Teachers – Questionnaire, is the three section questionnaire. It is a self-reported questionnaire that participants should answer the open and close ended questions.

This Questionnaire is formed according to the Teacher's perspective. So, it should be applied only to the Mainstream School Teachers and this specifically denote the questions related to Chennai, Tamil Nadu. This questionnaire will take approximately 10-15 minutes to complete.

SECTION 1 is about the Demographic Data which contains 7 questions,

SECTION 2 is about the Employment Status which contains 3 questions,

SECTION 3 is about the Teacher's Awareness and Knowledge on Occupational Therapy which contains 15 questions.

V. DATA ANALYSIS AND INTERPRETATION

Statistical analysis was performed using SPSS version. Demographic data was compiled and summarized using frequency distribution tables and represented via descriptive analysis. Data were reported as percentage and aggregate numbers to protect identity of respondents. Chi square test were performed to determine the association between the "awareness of Occupational Therapy" and each of the following variables: gender, type of school, current working group, Occupational Therapist can work in school and what Occupational Therapist will do.

When statistical tests yielded significant results ($P < 0.05$), percentage values were examined to determine the direction of association. The data analysis of the open-ended questions utilized the constant comparative method, which began with a line-by-line reading of the text.

Table: 1, Respondents' Demographic Data

Table 1: Respondents' Demographics	
VARIABLES	n(%)
a) GENDER	
Male	17(14.2%)
Female	103(85.8%)
b). LEVEL OF EDUCATION	
Bachelor Degree	45(37.5%)
Master Degree	73(60.8%)
Doctor Of Philosophy	2(1.7%)
c) TYPE OF SCHOOL	
Private	80(66.7%)
Government	20(16.7%)
Others	20(16.7%)
d) CURRENTLY SERVE IN AGE GROUP	
Kinder Garden	12(10%)
Lower Primary (1st-4th Standard)	38(31.66%)
Upper Primary (5th-8th Standard)	38(31.66%)
Higher Primary (9th-10th Standard)	45(37.5%)
Higher Secondary (11th-12th Standard)	38(31.66%)

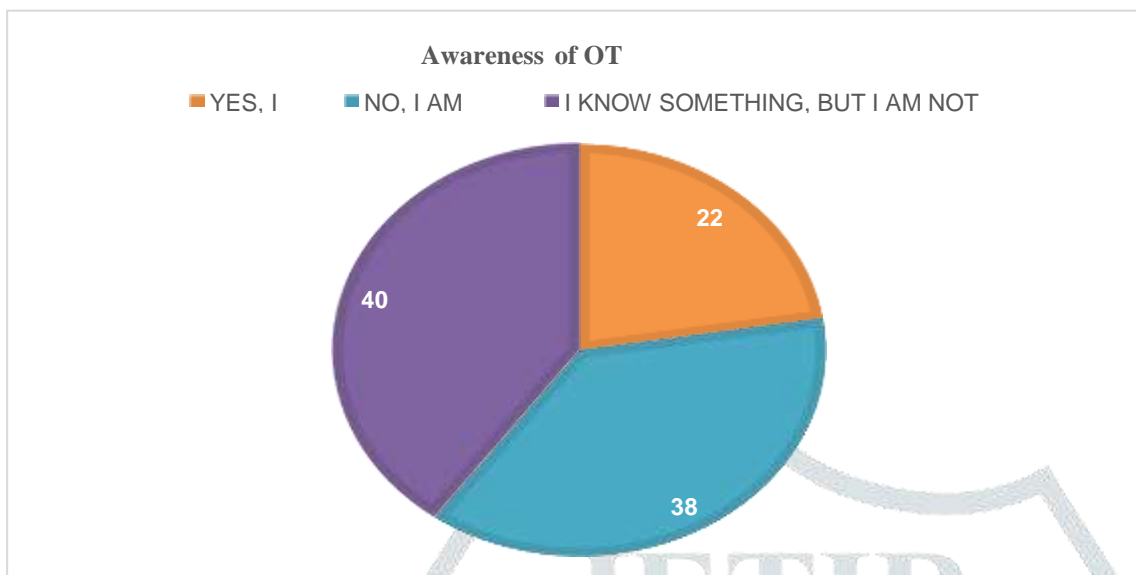
Table: 1.1, Age Group Table

N	Valid	120
	Missing	0
Mean		39.42
Std. Error of Mean		.805
Median		39.00
Std. Deviation		8.824
Skewness		.161
Std. Error of Skewness		.221
Range		34
Minimum		24
Maximum		58

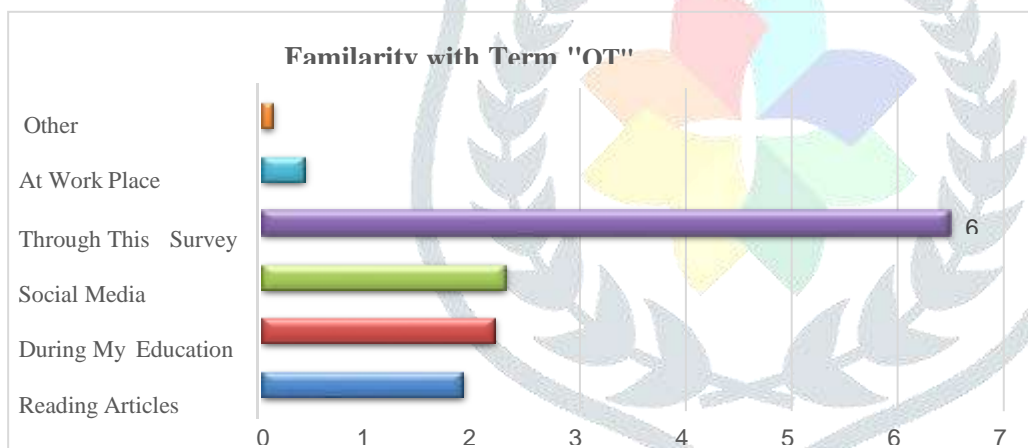
The total number of participants was 120. Table:1 represents the participants demographic and employment status. The mean age group of the participants is (39.42) with the age range between (24 to 58 years), Standard deviation is (8.82) [Table:2] (Fig:1). 14.2% (n=17) of the respondents reported are **male** and 85.8% (n=103) of the respondents reported are **female**.

100% (n=120) of the participants were employed in job as full time. 66.7% (n=80) of the respondents are from the **private school**, 16.7 % (n=20) of the respondents are from **government school** and 16.7% (n=20) of the respondents reported as **other school**. Among 120 teachers, 37.5% (n=45) of them were **bachelor degree holder**, 60.8% (n=73) were **master degree holder** and 1.7% (n=2) were **Ph.D. holder**.

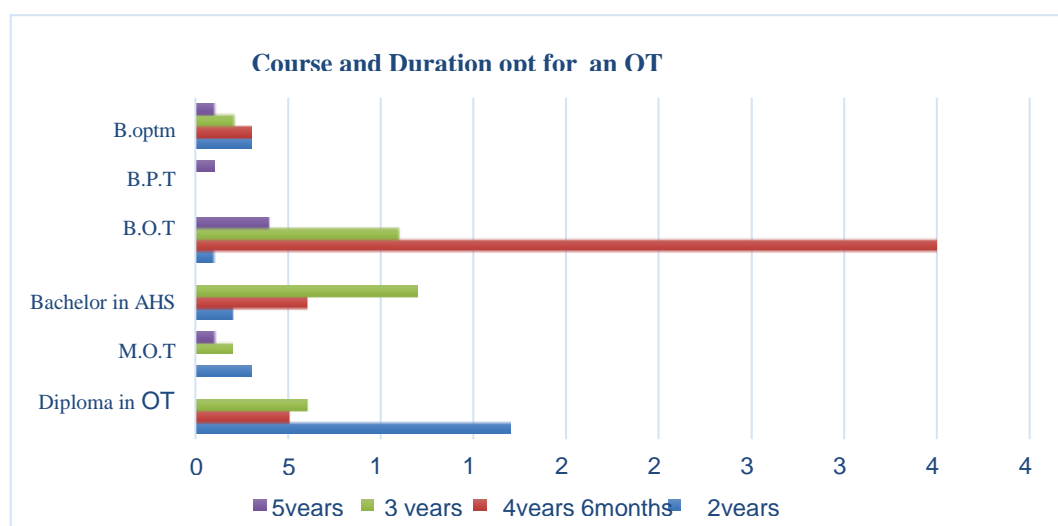
10% (n=12) of the participants reported that they are currently working with **kinder garden group**, 31.66% (n=38) of the participants reported as **lower primary** (1st-4th Standard) group, 31.66% (n=38) of the participants reported as **upper primary** (5th-8th Standard) group, 37.5% (n=45) of the participants reported as **higher primary** (9th-10th Standard) group and 31.66% (n=38) of the participants reported as currently working with **higher secondary** (11th-12th Standard) group.

Figure:1, Level of Awareness About Occupational Therapy

In this study, 22.5% (n=27) of the respondent reported that “Yes” they were aware about Occupational Therapy, 37.5% (n=45) of the respondent reported that “NO” they were not aware about Occupational Therapy and 40% (n=48) of the respondent reported that they know something about Occupational Therapy but they were “Not sure” (Fig:1).

Figure:2, Sources for familiarity with the term “Occupational Therapy”

For an item how did they get familiar with term OT, 15.83% (n=19) of the respondent reported that they got familiar with the term OT by **reading articles**, 18.33% (n=22) of the respondent reported that they got familiar with the term OT **during their education**, 19.1% (n=23) of the respondent reported that they got familiar with the term OT through **social media**, 3.33% (n=4) of the respondent reported that they got familiar with the term OT **at work place**, one of the respondent reported that he/she got familiar with the term OT by other personal means and interesting the highest of 54.16% (n=65) of the respondent reported that they got familiar with the term OT **through this survey**, this shows that most of the participants got familiar through this survey (Fig:2).

Figure:3, Course/Program and Duration of Course/Program Opt to become an Occupational Therapist

In this study, there is a survey question called “what is the course/program opt to become an Occupational Therapist”, 20%(n=24) of the participants selected diploma in Occupational Therapy, 4.16%(n=5) of the participants selected as M.O.T, 17.5%(n=21) of them selected as Bachelor in Allied Health Sciences, 0.83%(n=1) of them selected as B.P.T, 7.5%(n=9) of them selected as B.optm and the highest of 45.83%(n=55) of participants correctly mentioned B.O.T and in that 71.5%(n=40) of the respondent correctly mentioned the duration of the course/program as 4years 6months (Fig:4). Comparatively (n=59) of them were aware about the colleges that offer OT courses/program In Tamil Nadu. And majority (n=61) of the participants were unaware about the colleges that offer OT courses/program In Tamil Nadu

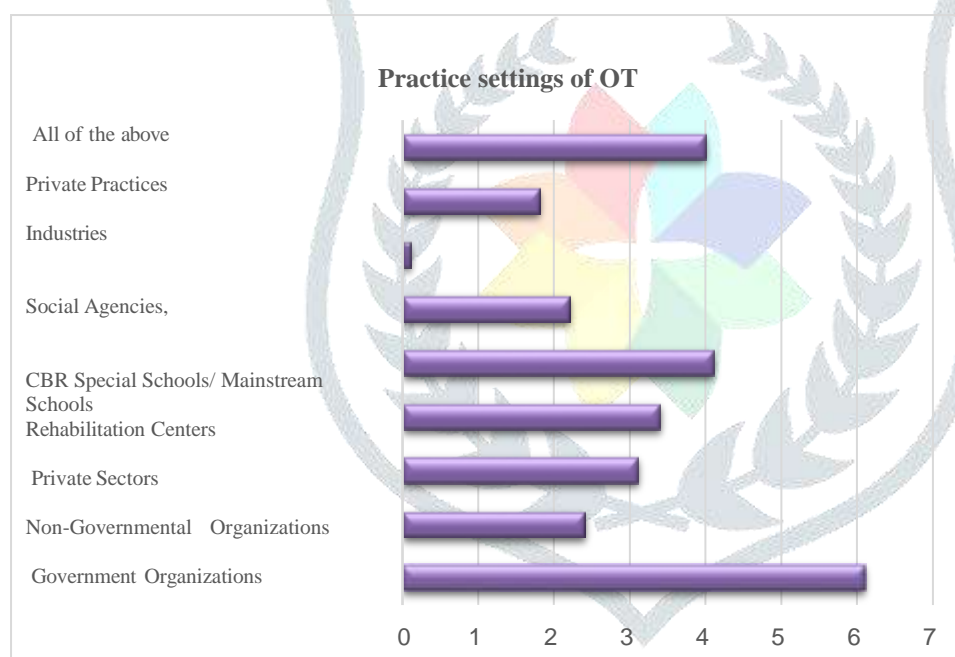
Figure:4, Practice Settings of Occupational Therapy

Fig:4 provides the percentage of respondents who chose each of the practice settings listed as response options for the item on the practice settings of OTs. Majority % (n=) of the respondent reported as government sector, which denotes most of them were only aware that OT can work in government sectors.

VI. RESULTS

Data analysis of the responses from the participants brought to 12 themes that represented the awareness and knowledge of Occupational Therapy among mainstream School Teachers. The themes are described below:

Description of demographic data and employment status

The total number of participants was 120. The participants demographic and employment status. The mean age group of the participants is (39.42) with the age range between (24 to 58 years), Standard deviation is (8.82) [Table:2] (Fig:1). 14.2% (n=17) of the respondents reported are **male** and 85.8% (n=103) of the respondents reported are **female**.

100% (n=120) of the participants were employed in job as full time. 66.7% (n=80) of the respondents are from the **private school**, 16.7 % (n=20) of the respondents are from **government school** and 16.7% (n=20) of the respondents reported as **other school**. Among 120 teachers, 37.5% (n=45) of them were **bachelor degree holder**, 60.8% (n=73) were **master degree holder** and 1.7% (n=2) were **Ph.D. holder**.

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Level of Awareness about Occupational Therapy

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Sources for the familiarity of the term “Occupational Therapy”

For an item how did they get familiar with term OT, 15.83% (n=19) of the respondent reported that they got familiar with the term OT by **reading articles**, 18.33% (n=22) of the respondent reported that they got familiar with the term OT **during their education**, 19.1% (n=23) of the respondent reported that they got familiar with the term OT through **social media**, 3.33% (n=4) of the respondent reported that they got familiar with the term OT **at work place**, one of the respondent reported that he/she got familiar with the term OT by other personal means and interesting the highest of 54.16% (n=65) of the respondent reported that they got familiar with the term OT **through this survey**, this shows that most of the participants got familiar through this survey.

Referral behavior towards Occupational Therapy

The participants who did referral to OT was 6.66% (n=8) and majority 93.33% (n=112) of the participants not did any referral to Occupational Therapy.

What Occupational Therapist will do?

In this study there is a question called, what occupational therapy will do, 22.5% (n=27) of the participants correctly selected what OT will do, 35.83% (n=43) of them reported the option which is relevant to physiotherapy and 7.5% (n=9) of them reported as OT will treat the ill or disease person with medicines and 35% (n=42) of the participants mentioned all the above.

Occupational Therapist can work in school?

46.66% (n=56) of the respondent reported that Occupational Therapist can work in schools a majority 53.33% (n=64) of them reported that Occupational Therapist should not work in Schools.

Level of Awareness and knowledge about the course/program and its duration and colleges that offer Occupational Therapy courses/program.

In this study, there is a survey question called “what is the course/program opt to become an Occupational Therapist”, 20% (n=24) of the participants selected diploma in Occupational Therapy, 4.16% (n=5) of the participants selected as M.O.T, 17.5% (n=21) of them selected as Bachelor in Allied Health Sciences, 0.83% (n=1) of them selected as B.P.T, 7.5% (n=9) of them selected as B.optm and the highest of 45.83% (n=55) of participants correctly mentioned B.O.T and in that 71.5% (n=40) of the respondent correctly mentioned the duration of the course/program as 4years 6months (Fig:4). Comparatively (n=59) of them were aware about the colleges that offer OT courses/program In Tamil Nadu. And majority (n=61) of the participants were unaware about the colleges that offer OT courses/program In Tamil Nadu.

Occupational Therapy services

The percentage of respondents who chose each of the practice settings listed as response options for the item on the practice settings of OTs. Majority % (n=) of the respondent reported as government sector, which denotes most of them were only aware that OT can work in government sectors.

Type of student will be got benefit from OT

For an item, “what type of student will get benefit from OT?” The majority 46.66% (n=56) of the participants reported as **all of the above** which means, Children with Writing, Reading, Calculating Problems, Stress/Depression, Low Self-Esteem And Other Mental Health Problems, Maladaptive, Self-Injurious And Other Behavioral Problems, Attention Deficits And Hyperactivity Behavior Problems, Speech And Hearing Deficit, sensory problems, autistic features and poor social communication skills will get benefit from Occupational Therapy.

Occupational Therapy different from Physiotherapy?

In this study, 88.33% (n=106) of the participants accepted as Occupational Therapy is different from Physiotherapy but 11.66% (n=14) of them reported Occupational Therapy as Physiotherapy.

Teachers who came across children with special needs

According to this study, 36.66% (n=44) of the teachers indicated that they came across children with special needs and 63.33% (n=76) of them had not came across any special child.

Teachers points to know about OT.

The open ended question denotes that teachers commonly like to know, types of therapy OT will provide, role and description of OT, description about the education, to whom it will be beneficial and the role of OT in schools.

VII. DISCUSSION

Type of School versus Awareness about OT

The responses indicate that majority (13.3%) of the participants from private school were aware about OT when compared with government and other schools. The government schools have less percentage (0.8%) of awareness about OT, however in this study most of the participants indicated as they know something about OT but, they were not sure about OT. The data analysis shows that there is highly statistical significance (χ^2 , $P < 0.005$) between the type of school teachers' work and awareness about OT.

Teachers perceiving OT identity and prevent role confusion:

The findings of this study reported that, (8.3%) of the respondent who indicated that they were aware about OT reported the Occupational Therapy role correctly. Same (8.3%) of the respondent who indicated that they know something about OT but not sure about it, reported the Occupational Therapy role correctly. Interesting, the participants who indicated that they were not aware about OT, reported (5.0%) of the Occupational Therapy role correctly. However, majority (35.8%) of participants wrongly perceived physiotherapy as identity of OT [11] and (7.5%) of participants indicated that Occupational Therapist will treat the people who are ill with medicines. This result shows that role of Occupational Therapy is under confusion. To prevent the confusion about the role of OT, many public awareness should be created through (social media, education system and articles) as these are the main sources of spreading knowledge about OT, which was also the case in the studies.

Whether Occupational Therapist can work in school or not?

The data analysis (χ^2 , $P < 0.005$) revealed highly significant for the association between the awareness of OT and whether Occupational Therapist can work in school. Majority (54.2%) of the participants reported that the Occupational Therapist should not work in schools, among that (4.2%) of the respondent reported they were aware about OT. This shows that there is a misconception of OT services in schools among the teachers. The previous studies also defined.

Come across children with special needs versus Referral Behavior

The literature identifies a direct relationship between the referral behavior and the level of awareness about OT among other professionals. The findings of the current study affirm the relationship. There was a statistically significant association (χ^2 , $P < 0.005$) between the teachers who came across children with special needs and referral behavior of teachers. (6.7%) of those respondents who referred patients to OT were come across children with special needs. Interestingly (28.3%) of the teachers who came across children with special needs did not referred any patients to OT. This shows that teachers are not aware of what type of students should be directed to OT.

Where do Occupational Therapist provide services?

This study revealed that maximum (50%) of participants reported that OT provide services in the government sector, and (0.8%) of participants were aware that OT can work in industries.

Occupational therapists in the government sector must make efforts to promote the visibility of the profession in government settings with the help of professional organizations and subject matter experts. They may communicate the value of OT to AMPs, administrators, and relevant others in government settings by aligning OT outcomes with public health outcomes, such as reduced falls, low risk for injuries, reduction in the number of outpatient visits, and self-empowerment of patients to manage their health. In addition, they may explore practice opportunities for OTs in government programs and schemes, and also subsequently private sector services and programs will increase for OT.

VIII. LIMITATIONS AND RECOMMENDATIONS

8.1 Limitations

- A low number of selection of school limits the generalization of the findings.
- In addition, only one region of Chennai was covered in this survey, which limits the generalizability of the results across the Chennai.

8.2 Recommendations

- More Research is needed to validate the conclusion
- The survey may be repeated across the Tamil Nadu as well as the nation with a larger sample size
- The survey may be included the Occupational Therapy treatment modalities to children.
- The survey may be repeated by including all the type of school services equally, which will help to find the proper awareness of OT among the private, public, government and other school settings.

IX. CONCLUSION

Teachers from North Chennai mainstream Schools had less awareness and limited knowledge about OT profession, roles, career path, children who get benefit from OT and work settings. The limited awareness contributes to less referrals. Efforts such as awareness program and promotion of the profession, in order to counteract the lack of awareness and knowledge about OT in the teachers, public and among members of the multidisciplinary team to provide the better OT services.

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