

TO ASSESS THE ASSOCIATION BETWEEN THE KNOWLEDGE SCORES OF PRIMARY SCHOOL TEACHERS' OF SELECTED RURAL AREAS WITH SELECTED DEMOGRAPHIC VARIABLES REGARDING AUTISM AMONG PRIMARY SCHOOL TEACHERS IN SELECTED SCHOOLS OF BANGALORE

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ABSTRACT:

People with autism can have very different features or symptoms; thus, health care providers think of autism as a spectrum disorder. Some children with autism make no eye contact and seem aloof, while others may show intermittent engagement with the environment and may make inconsistent eye contact, smile, and hug. the first two-and-a-half years of life. Research approach keeping in view the nature of problem and objectives of the study a quantitative evaluative research approach was found to be the most appropriate. Sample size is 300 nursing students (150 in experimental group and 150 in control group). Convenient sampling technique was considered appropriate for this study. Findings of the present study show that majorities 55 (55%) autistic people were in the age group of 20-25 years. The least numbers of autistic people i.e. 2 (2%) were in the age group of above 35 years. It shows that majority 63 (63%) people are males and test 37 are the females. Maximum 33 people are from Christian religion followed by 31 muslims, 29 hindu and least number is 7 from other religions. It depicts that majority 39 (39%) autistic people are graduate with B.Ed and the least numbers is 05 (05%) with educational qualification of Post-Graduation with M.Ed. The overall experience of conducting this study was satisfying one. The study was a new learning experience for the investigator.

Key Words: Autism, primary school teacher, Bangalore, demographic variables.

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INTRODUCTION

Depression and anxiety are common associated problems, and sleep disorders are frequently reported. Autism spectrum disorder includes conditions that were previously considered separate — autism, Asperger's syndrome, childhood disintegrative disorder and an unspecified form of pervasive developmental disorder.

Tomaszewski, B., Kraemer, B., Steinbrenner, J. R., Smith DaWalt, L., Hall, L. J., Hume, K., & Odom, S. (2020) found that Self-determination refers to the abilities and opportunities for students to make choices, plans, and set goals. The current study examined self-determination from multiple perspectives in a large, diverse sample of high school students with ASD. Students, parents, and their teachers each completed a questionnaire on self-determination and had little to some agreement across reporters. Providing support to families and help for students to increase independent skills may promote self-determination.

Jung, M., & Lee, E. (2020) explored and described the perception of specialized teachers regarding the management of aggressive behaviors in children and adolescents with autism spectrum disorders. Data were collected from 13 specialized teachers working in primary and secondary schools, using focus group interviews, and interview data were analyzed using an open coding method. The analysis of the specialized teachers' perceptions of the management of aggression in children and adolescents with autism revealed the following results. Based on the specialized teachers' perceptions examined in this study, more effective education and training intervention programs and support systems can be developed and provided for the management of aggressive behaviors in children and adolescents with autism.

DaWalt, L. S., et al., (2020). Found that there is lack of consensus in the literature regarding sex differences in social outcomes for individuals on the autism spectrum. Furthermore, little research has focused on the social experiences of high school students with autism spectrum disorder (ASD) during the school day. Males and females were very similar in their social interactions both at school and outside of school, based on reports by teachers and parents. Level of autism symptoms was also similar for males and females. However, standardized scores of autism symptoms, which take into account age and sex specific norms, suggested that females with ASD may have behaviors that are more divergent from their same-sex peers than males with ASD.

Adams, D., MacDonald, L., & Keen, D. (2019) found that at least 50% of students on the autism spectrum experience clinical or subclinical levels of anxiety but there is scant research on how teachers respond to anxiety in children on the spectrum. To compare teacher responses to anxiety-related behaviour in students who do and do not have a diagnosis on the spectrum using the Teacher Responses to Anxiety in Children (TRAC). Teachers report they are likely to respond differently to anxiety-related behaviours of students on the autism spectrum but the impact of this on the behaviour of these students is yet to be determined. Professional development is a priority to increase teacher knowledge about anxiety-related behaviours in students with autism and the ways in which teachers' responses may promote or reduce anxiety and autonomy.

People with autism can have very different features or symptoms; thus, health care providers think of autism as a spectrum disorder. Some children with autism make no eye contact and seem aloof, while others may show intermittent engagement with the environment and may make inconsistent eye contact, smile, and hug.

the first two-and-a-half years of life.

Wright, Cheryl et al (2018) Explained that few autism programmes address the needs of adolescents and young adults, and those that do are unlikely to include individuals with autism in the design and evaluation of the Programme. This study involved nine youth with autism (ages 16–25) in the development and evaluation of a peer teaching Programme where they taught three-dimensional modeling to other students with autism spectrum disorder. The methodology was participant-oriented research where the students with autism were co-designers and Programme evaluators in the research. This approach highlighted their unique strengths and abilities and shifted the power such that they were leaders and not simply the recipients of knowledge from instructors. Four themes emerged through the qualitative analysis of the students' perceptions of the peer teaching Programme: 1) the meaning of peer teaching, 2) motivations for peer teaching, 3) challenges and 4) coping with the challenges of the role.

RESEARCH METHODOLOGY

Research approach keeping in view the nature of problem and objectives of the study a quantitative evaluative research approach was found to be the most appropriate. Pre experimental research approach, which is a subset of quasi experimental research using the one group pretest post test design, was adopted for the study. Present study was conducted on primary school teachers in selected schools of Bangalore. In my study, the sample

comprise of primary school teachers in selected schools of Bangalore. Sample size is 300 nursing students (150 in experimental group and 150 in control group). Convenient sampling technique was considered appropriate for this study. Non probability samples were selected based on the judgments of research to achieve particular objective of the researcher at hand.

Description of socio demographic characters of school teachers

Table .1: Distribution of subjects by age

N=300

1. Age in years	FREQUENCY	PERCENTAGE
a) 20-25 years	55	55
b) 26-30 years	31	31
c) 31-35 years	12	12
d) Above 35 years	02	02

Table No .1 Findings of the present study show that majorities 55 (55%) autistic people were in the age group of 20-25 years. The least numbers of autistic people i.e. 2 (2%) were in the age group of above 35 years.

Table .2: Distribution of subjects by sex

N=300

2. SEX	Frequency	PERCENTAGE
A) MALE	63	63
B) FEMALE	37	37

Table .2 shows that majority 63 (63%) people are males and test 37 are the females.

Table .3: Distribution of subjects by religion

N=300

3. Religion	Frequency	PERCENTAGE
a) Hindu	29	29
b) Muslim	31	31
c) Christians	33	33
d) Others	07	07

Table No .3 shows that maximum 33 people are from Christian religion followed by 31 muslims, 29 hindu and least number is 7 from other religions.

Table .4: Distribution of subjects by educational qualification

N=300

4. Educational Qualification	FREQUENCY	PERCENTAGE
a) GRADUATION	33	33
b) GRADUATION WITH B.ED	39	39
c) POST GRADUATION WITH B.ED	23	23
d) POST GRADUATION WITH M.ED	05	05

Table no .4 depicts that majority 39 (39%) autistic people are graduate with B.Ed and the least numbers is 05 (05%) with educational qualification of Post-Graduation with M.Ed.

Table .5: Distribution of subjects by marital status

N=300

5. Marital Status	FREQUENCY	PERCENTAGE
Unmarried	28	28
Married	42	42
Separated	30	30

Table .5 shows that majority 42 (42%) are married and minimum 28 (28%) are unmarried.

Table .6: Distribution of subjects by teachers monthly income

N=300

6. Teachers Monthly Income	FREQUENCY	PERCENTAGE
5000-10000	29	29
10000-15000	25	25
15000-20000	20	20
Above 20000	16	16

Table No .6 depicts that majority 29 (29%) are having monthly income between 5000 to 10000 followed by 25 (25%) having income between 10000-15000, followed by 20 (20%) who are earning between 15000-2000 and least 16 (16%) are earning more than 20000,

Table .7: Distribution of subjects by type of family

N=300

7. TYPE OF FAMILY	FREQUENCY	PERCENTAGE
NUCLEAR	53	53
JOINT	32	32
EXTENDED	15	15

Table No: .7 shows that 53 (53%) belongs to nuclear family followed by 32 (32%) belongs to joint family and rest 15(15%) belongs to extended family.

Table .8: Distribution of subjects by place of residence

N=300

8. Place of Residence	FREQUENCY	PERCENTAGE
RURAL	61	61
URBAN	39	39

Table No .8: shows that majority 61 (61%) belongs to rural areas and rest 39 (39%) belongs to urban areas.

Table .9: Distribution of subjects by source of information

N=300

9. SOURCE OF INFORMATION	FREQUENCY	PERCENTAGE
FRIENDS AND RELATIVES	58	58
MASS MEDIA	30	30
SELF READING	11	11
ANY OTHER SPECIFY	01	01

DISCUSSION

Findings of the present study show that majorities 55 (55%) autistic people were in the age group of 20-25 years. The least numbers of autistic people i.e. 2 (2%) were in the age group of above 35 years. It shows that majority 63 (63%) people are males and rest 37 are the females. Maximum 33 people are from Christian religion followed by 31 muslims, 29 hindu and least number is 7 from other religions. It depicts that majority 39 (39%) autistic people are graduate with B.Ed and the least numbers is 05 (05%) with educational qualification of Post-Graduation with M.Ed.

Majority 42 (42%) are married and minimum 28 (28%) are unmarried. Majority 29 (29%) are having monthly income between 5000 to 10000 followed by 25 (25%) having income between 10000-15000, followed by 20 (20%) who are earning between 15000-2000 and least 16 (16%) are earning more than 20000, 53 (53%) belongs to nuclear family followed by 32 (32%) belongs to joint family and rest 15(15%) belongs to extended family. Majority 61 (61%) belongs to rural areas and rest 39 (39%) belongs to urban areas. Majority of people i.e. 58 (58%) got the information through friends and relatives and minimum 1 (1%) got from other sources.

As per the knowledge, there were 3 good, 26 average and 0 poor in Hindu. 2 found good, 29 average and 0 poor were Muslims. 9 good, 23 average and 1 poor in Christians. In others 1 good, 6 average and none found poor. Their Chi-square value is 6.94 which is insignificant.

As per the knowledge, there were 9 good, 24 average and 0 poor who completed graduation. 1 found good, 38 average and 0 poor Graduation with B.Ed. 6 good, 17 were average and 0 poor in post graduation with B.Ed. None found good or poor, 5 found average in Post Graduation with M.Ed. Their Chi-square value is 8.22 which is insignificant.

As per the knowledge, there were 4 good, 24 average and 0 poor who were unmarried. 2 found good, 39 average and 1 poor who were married. 9 good, 21 were average and 0 poor who were separated. Their Chi-square value is 8.82 which is insignificant.

As per the knowledge, there were 6 good, 23 average and 0 poor who earns between 5000-10000. 2 found good, 32 average and 1 poor who earns between 10000-15000. 4 good, were average and 0 poor who earns between 15000-20000. 3 found good, 13 found average and 0 poor who earns above 20,000. Their Chi-square value is 4.46 which is insignificant.

As per the knowledge, there were 9 good, 45 average and 0 poor in nuclear family. 3 found good, 29 average and 0

poor in joint family. 4 were good, 10 were average and 1 poor in extended family. Their Chi-square value is 6.81 which is insignificant.

As per the knowledge, there were 8 good, 52 average and 1 poor in Rural. 7 found good, 32 average and 0 poor in Urban. Their Chi-Square value is 0.54 which is insignificant.

As per the knowledge, there were 6 good, 50 average and 2 poor who got information from friends and relatives. 7 found good, 23 average and 0 poor in mass media. 1 good, 10 were average and 0 poor in self reading. Their Chi-square value is 4.56 which is insignificant.

As per Attitude, there were 4 good, 44 average and 7 poor in the age between 20-25 years. 2 found good, 28 average and 1 poor in the age between 26-30 years. 2 good, 9 were average and 1 poor between age of 31-35 years. None found good or poor, 2 found average who were above 35 years. Their Chi-square value is 3.76 which is insignificant.

As per Attitude, there were 5 good, 52 average and 6 poor in males. 3 found good, 31 average and 3 poor in females. Their Chi-square value is 0.04 which is insignificant.

As per the ATTITUDE, there were 1 good, 26 average and 2 poor in Hindu. 3 found good, 26 average and 2 poor were Muslims. 3 good, 25 average and 5 poor in Christians. In others 1 good, 6 average and none found poor. Their Chi-square value is 3.94 which is insignificant.

As per the Attitude, there were 1 good, 24 average and 3 poor who were unmarried. 1 found good, 35 average and 3 poor who were married. 3 good, 24 were average and 3 poor who were separated. Their Chi-square value is 1.28 which is insignificant.

As per the knowledge, there were 2 good, 28 average and 3 poor who completed graduation. 4 found good, 4 average and 31 poor who were Graduation with B.Ed. 1 good, 20 were average and 2 poor in post-graduation with B.Ed. 1 good, 4 found average and 0 poor in Post-Graduation with M.Ed. Their Chi-square value is 49.97 which is significant.

As per the Attitude, there were 3 good, 22 average and 4 poor who earns between 5000-10000. 2 found good, 30 average and 3 poor who earns between 10000-15000. 2 good, were average and 1 poor who earns between 15000-20000. 1 found good, 14 found average and 1 poor who earns above 20,000. Their Chi-square value is 2.22 which is insignificant.

As per the Attitude, there were 5 good, 51 average and 5 poor in Rural. 3 found good, 32 average and 4 poor in Urban. Their Chi-Square value is 0.10 which is insignificant.

As per the Attitude, there were 8 good, 45 average and 0 poor in nuclear family. 3 found good, 29 average and 0 poor in joint family. 4 were good, 10 were average and 1 poor in extended family. Their Chi-square value is 2.95 which is insignificant.

As per the knowledge, there were 5 good, 45 average and 8 poor who got information from friends and relatives. 4 found good, 26 average and 0 poor in mass media. 0 good, 10 were average and 1 poor in self reading. Their Chi-square value is 13.64 which is insignificant.

CONCLUSIONS

Findings about the comparison of level of pre-test & post test knowledge and attitude based on knowledge and attitude regarding autism among primary school teachers in selected schools of Bangalore, India. shows that, in pre-test the majority of primary school teachers had Inadequate level of knowledge and in post-test, the most of primary school teachers had moderate level of knowledge.

The overall experience of conducting this study was satisfying one, as there was good co-operation from primary school teachers and higher authority. The study was a new learning experience for the investigator. The result of the present study showed that primary school teachers lack adequate knowledge regarding autism among selected schools of Bangalore, India. Primary school teachers of experimental group had experienced gain in knowledge in post-Intervention assessment compared to control group. Thus knowledge regarding prevention of autism was successful in increasing the level of knowledge regarding autism among primary school teachers in selected schools of Bangalore, India. There was no association between pre-test knowledge scores and demographic variables.

REFERENCES

1. Cardon, T. A., & Wilcox, M. J. (2011). Promoting imitation in young children with autism: a comparison of reciprocal imitation training and video modeling. *Journal of autism and developmental disorders*, 41(5), 654–666. <https://doi.org/10.1007/s10803-010-1086-8>.
2. DaWalt, L. S., Taylor, J. L., Bishop, S., Hall, L. J., Steinbrenner, J. D., Kraemer, B., Hume, K. A., & Odom, S. L. (2020). Sex Differences in Social Participation of High School Students with Autism Spectrum Disorder. *Autism research: official journal of the International Society for Autism Research*, 13(12), 2155–2163. <https://doi.org/10.1002/aur.2348>.
3. Gattas, Michael. (2015). GENETICS AND AUTISM SPECTRUM DISORDER. *Australian and New Zealand Journal of Psychiatry*. 49. 15-16.
4. Jung, M., & Lee, E. (2020). Specialized Teachers' Perceptions on the Management of Aggressive Behaviours in Children and Adolescents with Autism Spectrum Disorders. *International journal of environmental research and public health*, 17(23), 8775. <https://doi.org/10.3390/ijerph17238775>.
5. Newschaffer, C. J., Croen, L. A., Daniels, J., Giarelli, E., Grether, J. K., Levy, S. E., Mandell, D. S., Miller, L. A., Pinto-Martin, J., Reaven, J., Reynolds, A. M., Rice, C. E., Schendel, D., & Windham, G. C. (2007). The epidemiology of autism spectrum disorders. *Annual review of public health*, 28, 235–258. <https://doi.org/10.1146/annurev.publhealth.28.021406.144007>
6. Nor, Zaleha & md isa, Zaleha & Ghazi, Hasanain & Jaafar, Mohd. (2020). The Development and Validation of Questionnaire on Autism Spectrum Disorders and its Association with Plastic-Based Food Materials. *Journal of Nepal Paediatric Society*. 38. 182-189. 10.3126/jnps.v38i3.20671.
7. Olagunju, Andrew & Oshodi, Yewande & Umeh, Charles & Aina, OlatunjiF & Oyibo, Wellington & Lamikanra, AnnaE & Lesi, F.E.A. & Adeyemi, JosephD. (2017). Children with neurodevelopmental disorders: The burden and psychological effects on caregivers in Lagos, Nigeria. *Journal of Clinical Sciences*. 14. 2. 10.4103/2468-6859.199162.
8. O'Connor, I. M., & Klein, P. D. (2004). Exploration of strategies for facilitating the reading comprehension of high-functioning students with autism spectrum disorders. *Journal of autism and developmental disorders*, 34(2), 115–127.
9. Paul, Nsirimobu & Gabriel-Brisibe, Christine. (2014). Awareness of autism amongst primary school teachers in Yenagoa city, Bayelsa State. *Nigerian Journal of Paediatrics*. 42. 46. 10.4314/njp.v42i1.10.
10. Petrina, N., Carter, M., & Stephenson, J. (2017). Teacher Perception of the Importance of Friendship and Other Outcome Priorities in Children with Autism Spectrum Disorder. *Education and Training in Autism and Developmental Disabilities*, 52(2), 107–119. <https://www.jstor.org/stable/26420383>
11. Wright, Cheryl & Diener, Marissa & Wright, Scott & Rafferty, Deborah & Taylor, Carly. (2018). Peer Teachers With Autism Teaching 3D Modeling. *International Journal of Disability, Development and Education*. 66. 1-16. 10.1080/1034912X.2018.1540770.