References

Adeyemi, O. J., Bouillon-Minois, B., Siman, N., Cuthel, A. M., Goldfeld, K. S., & Grudzen, C. R. (2022). Knowledge and Attitudes Toward Hospice and Palliative Care: Instrument Validation Among Emergency Providers. *American Journal of Hospice and Palliative Medicine*. https://doi.org/10.1177/10499091221098664

Agarwal, K. N., Agarwal, D. K., Upadhyay, S. K., & Singh, M. (1991). Learning disability in rural primary school children. *Indian J Med Res*, 94, 89-95. https://pubmed.ncbi.nlm.nih.gov/1879892/

Ainscow, M., et al. (2021). "Impact of Inclusive Education on School Culture." *Educational Review*.

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Alahmad, N. A., & El Keshky, M. E. S. (2019). Assessing Primary School Teachers' Knowledge of Specific Learning Disabilities in the Kingdom of Saudi Arabia. *Journal of Educational and Developmental Psychology, 9*(1), 9-22. https://doi.org/10.5539/jedp.v9n1p9

Alahmadi, A. N., & Keshky, M. E. S. E. (2019). Assessing primary school teachers. *Journal of Educational and Developmental Psychology*, 9(1). https://econpapers.repec.org/article/ibnjedpjl/v_3a9_3ay_3a2019_3ai_3a1_3ap_3a9.htm

AlKhateeb, J. M. (2007). A survey of general education teachers' knowledge of learning disabilities in Jordan. *International Journal of Special Education (IJSE), 22*(1), 72-76. https://www.researchgate.net/publication/271516628_A_survey_of_general_education_teachers'_knowledge_of_learning_disabilities_in_Jordan

Altarac, M., & Saroha, E. (2007). Lifetime prevalence of learning disability among US children. *Pediatrics*, 119 Suppl 1:S77-83. DOI: 10.1542/peds.2006-2089L

Al-Yagon, M., Cavendish, W., Cornoldi, C., Fawcett, A. J., Grunke, M., Hung, L. Y., et al. (2013). The proposed changes for DSM-5 for SLD and ADHD: International perspectives—Australia, Germany, Greece, India, Israel, Italy, Spain, Taiwan, United Kingdom, and United States. *Journal of Learning Disabilities* 46(1), 58-72. DOI: 10.1177/0022219412464353

Alyaha, D. O., & Mbogo, R. W. (2017). Demographic Factors Affecting Teachers' Job Satisfaction and Performance in Private Primary Schools in Yei Town, South Sudan. *IRA International Journal of Education and Multidisciplinary Studies, 8*(1), 142-148. https://doi.org/10.21013/jems.v8.n1.p14

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., DSM-5). Arlington, VA: American Psychiatric Publishing.

American Psychological Association. (2018). https://dictionary.apa.org/psychological-scale

American Speech-Language-Hearing Association. (2016). Speech-language impairments rank first, second highest by age. *The ASHA Leader, 21*(4), 13. https://doi.org/10.1044/leader.NIB4.21042016.13

Andrade, C. (2018). Internal, External, and Ecological Validity in Research Design, Conduct, and Evaluation. *Indian Journal of Psychological Medicine, 40*(5), 498-499. https://doi.org/10.4103/IJPSYM.IJPSYM_334_18

Appa Rao, A. P., et al. (2017). Role and responsibilities of teacher and student in building modern India. *International Journal of Current Advanced Research*, *6*(9), 5971-5973. https://www.journalijcar.org/sites/default/files/issue-files/2873-A-2017.pdf

Arain, M., Campbell, M.J., Cooper, C.L., & Lancaster, G.A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology, 10*, 67. https://doi.org/10.1186/1471-2288-10-67

Arifa, S., & Siraj, S. S. (2019). A Descriptive Study to Assess the Knowledge and Attitude of Primary School Teachers Regarding Learning Disabilities Among Children in Selected Schools of District Pulwama Kashmir. *Journal of Paediatrics and Nursing Science, 2*(10), 19-32. https://www.jpns.in/article-details/8719

Arun, P., Chavan, B. S., Bhargava, R., Sharma, A., & Kaur, J. (2013). Prevalence of specific developmental disorder of scholastic skill in school students in Chandigarh, India. *Indian Journal of Medical Research, 138*(1), 89-98. https://pubmed.ncbi.nlm.nih.gov/24056561/

Ashraf, A., & Najam, A. (2014). Validation of Learning Disability Checklist in Public Sector Schools of Pakistan. *Pakistan Journal of Psychological Research, 29*(2), 223-244. https://www.researchgate.net/publication/304626761_Validation_of_Learning_Disability_Checklist_in_Public_Sector_Schools_of_Pakistan

Asok, S. A., Akoijam, P., Gupta, A., & Akoijam, B. S. (2021). Knowledge and Attitude of School Teachers Towards Learning Disabilities in Bishnupur District, Manipur: A Cross-Sectional Study. *International Journal of Community Medicine and Public Health*, *8*(2). https://doi.org/10.18203/2394-6040.ijcmph20210246

Bakadorova, O., & Raufelder, D. (2018). The essential role of the teacher-student relationship in students' need satisfaction during adolescence. **Journal of Applied Developmental Psychology*, *58*, 57-65. https://doi.org/10.1016/j.appdev.2018.08.004

Bandla, S., Mandadi, G. D., & Bhogaraju, A. (2017). Specific Learning Disabilities and Psychiatric Comorbidities in School Children in South India. *Indian Journal of Psychological Medicine*, *39*(1), 76-82. https://doi.org/10.4103/0253-7176.198950

Basim Ali, C. T., Fysal, N., Akhila Thasneem, A., & Aswathy, P. S. (2019). Assessment of knowledge level on learning disability among primary school teachers. *International Journal of Contemporary Paediatrics*, *6*(2), 431-435. https://doi.org/10.18203/2349-3291.ijcp20190545

Baumert, J., Kunter, M., Blum, W., Brunner, M., Voss, T., Jordan, A., Klusmann, U., Krauss, S., Neubrand, M., & Tsai, Y.-M. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. *American Educational Research Journal*, 47(1), 133–180. https://doi.org/10.3102/0002831209345157

Berninger, V. W., & O'Malley May, M. (2011). Evidence-Based Diagnosis and Treatment for Specific Learning Disabilities Involving Impairments in Written and/or Oral Language. *Journal of Learning Disabilities*, *44*, 167-183. https://doi.org/10.1177/0022219410391189

Bird, C. (1940). *Social Psychology*. Appleton Century Crafts, Inc., New York, pp.155.

Black-Hawkins, K., & Florian, L. (2019). "Inclusive Education Policies: A Comparative Study." *International Journal of Inclusive Education*.

Booth, T., & Ainscow, M. (2011). *Index for Inclusion: Developing Learning and Participation in Schools*. Centre for Studies on Inclusive Education, Bristol. Pg 120. https://prsinstitute.org/downloads/related/education/IndexforInclusion.pdf

Bowers, P. G., & Wolf, M. (1993). Theoretical links among naming speed, precise timing mechanisms and orthographic skill in dyslexia. *Reading and Writing: An Interdisciplinary Journal*, *5*(1), 69-85. https://doi.org/10.1007/BF01026919

Bozath, L., Aykutlu, H. C., Giray, A. S., & Atas, T. (2024). Children at risk of specific learning disorder: A study on prevalence and risk factors. *Children, 11*(7), 759. DOI: 10.3390/children11070759

Briggs, L. J. (1977). *Instructional Design: Principles and Applications*. Englewood Cliffs, NJ: Educational Technology Publications.

Burroughs, N., et al. (2019). A review of the literature on teacher effectiveness and student outcomes. In: *Teaching for Excellence and Equity* (Vol. 6, pp. 1-20). Springer, Cham. https://doi.org/10.1007/978-3-030-16151-4_2

Cattell, R. B. (1966). The Scree Test for the Number of Factors. *Multivariate Behavioral Research, 1*, 245-276.

Census 2011. https://www.census2011.co.in/census/metropolitan/436-coimbatore.html

Central Board of Secondary Education. (2023). https://www.cbse.gov.in/cbsenew/documents/CWSN_Circular_06032023.pdf

Chacko, D., & Vidhukumar, K. (2020). The prevalence of specific learning disorder among school-going children in Ernakulam District, Kerala, India: Ernakulam Learning Disorder (ELD) Study. *Indian Journal of Psychological Medicine, 42*(3), 250-255. DOI: 10.4103/IJPSYM.IJPSYM_199_19

Chan, D. W., Ho, C. S., Tsang, S., Lee, S., & Chung, K. K. H. (2004). Screening for Chinese children with dyslexia in Hong Kong: The use of the Teachers' Behaviour Checklist. *Educational Psychology*, 24(6), 811–824. https://doi.org/10.1080/0144341042000271769.

Chauhan, B.N., et al. (2017). Scales to measure attitude towards various components of rural & agricultural development. *Gujarat Journal of Extension Education, Special issue on measurement of attitude*, Society of Extension Education Gujarat, India, pp. 27-28.

Chauhan, K. R. (2017). A Study of Thinking on Education System of Dr. APJ Abdul Kalam. *Journal of Research in all Subjects in Multi Languages, 5*(8), 17-22. https://www.raijmr.com/ijrsml/wp-content/uploads/2017/11/IJRSML_2017_vol05_issue_08_Eng_04.pdf

Chen, S. Y., Lindo, N. A., Blalock, S., Yousef, D., Smith, L., & Hurt-Avila, K. (2021). Teachers' perceptions of teacher–child relationships, student behavior, and classroom management. *Journal of Educational Research and Practice, 11*, 153-167. https://doi.org/10.5590/JERAP.2020.11.1.11

Chennat, S., & Singh, A. (2014). Labeling children with specific learning disabilities (SLD): A critique. *International Journal of Advance Research, 2*(2), 1-19. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=otRq4DgAAAAJ&citation_for_view=otRq4DgAAAAJ:u-x6o8ySG0sC

Cherry, K. (2020). The Components of Attitude. *Verywell Mind*. https://www.verywellmind.com/attitudes-how-they-form-change-shape-behavior-2795897

Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. *A*merican *Economic Review*, 104(9), 2633–2679. DOI: 10.1257/aer.104.9.2633

Chordia, S. L., Thandapani, K., & Arunagirinathan, A. (2019). Children 'at risk' of developing specific learning disability in primary schools. *Indian Journal of Pediatrics*, *87*, 94–98. https://doi.org/10.1007/s12098-019-03130-z.

Cook, B. G., Tankersley, M., & Harjusola-Webb, S. (2008). Evidence-based special education and professional wisdom: Putting it all together. *Intervention in School and Clinic, 44*(2), 105-111. http://isc.sagepub.com/cgi/content/abstract/44/2/105

Cornoldi, C., Capodieci, A., Colomer Diago, C., Miranda, A., & Shepherd, K. G. (2018). Attitudes of primary school teachers in three Western countries toward learning disabilities. *Journal of Learning Disabilities*, *51*(1), 43-54. DOI: 10.1177/0022219416678408

Cortiella, C. (2011). *The State of Learning Disabilities*. New York, NY: National Centre for Learning Disabilities. http://illinoiscte.org/PDF/research_and_reports/state_of_learning_disabilities.pdf?lbisphpreq=1

Cortiella, C., & Horowitz, S. H. (2014). *The State of Learning Disabilities: Facts, Trends, and Emerging Issues*. https://www.ncld.org/wp-content/uploads/2014/11/2014-State-of-LD.pdf

Cunningham, S. (2013). Teaching a diverse student body—A proposed tool for lecturers to self-evaluate their approach to inclusive teaching. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education, 8*(1), 3-27. https://repository.mdx.ac.uk/download/2b2c4e5a3ee5b6a9eeeb0f5f4ec322d0259f67bbc46033fd1e56dd8d9ce34c8a/502004/PESTLHE%20article.pdf

Dani, A. P., Dagdiya, K. R., & Deshmukh, V. R. (2024). Evaluating the impact of training teachers to identify learning disabilities: A pre-experimental study on knowledge enhancement. *Cureus*, 16(3). https://doi.org/10.7759/cureus.55685

Davies, P. L., Schelly, C. L., & Spooner, C. L. (2013). Measuring the effectiveness of universal design for learning intervention in postsecondary education. *Journal on Postsecondary Education and Disability, 26,* 195-220. https://files.eric.ed.gov/fulltext/EJ1026883.pdf

Deb, S. (2018). Positive Schooling and Child Development – International Perspectives. Springer Nature Singapore Pte Ltd, p. 255. https://doi.org/10.1007/978-981-13-0077-6

Del'Homme, S., Smalley, S. L., McGough, J. J., Delman, J. N., Gordon, E., Kim, T., Liu, A., & McCracken, T. J. (2000). Familial clustering of symptoms and disruptive behaviors in multiplex families with attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(9), 1135-1143. DOI: 10.1097/00004583-200009000-00013

Department of School Education & Literacy, Ministry of Education. **Unified District Information on School Education (UDISE)*. https://udiseplus.gov.in/#/home (2020, accessed November 3, 2021).

Desai, N., & Patel, N. (2020). ABC of Face Validity for Questionnaire. *International Journal of Pharmaceutical Sciences Review and Research, 65*(1), 164-168. https://doi.org/10.47583/ijpsrr.2020.v65i01.025

DeVellis, R. F. (1991). *Scale development: Theory and applications*. Newbury Park, CA: Sage.

Dhindsa, H., Borana, H., Yadav, J., Jangid, J., Gharu, K., Khawa, S. P., & Kumar, A. (2022). Knowledge Regarding Learning Disabilities in Children Among Primary School Teachers. *International Journal of Community Medicine and Public Health, 9*(1), 235-239. https://doi.org/10.18203/2394-6040.ijcmph20215003

Dilshad, H. (2006). Prevalence of learning difficulties/disability among primary school children: effect on emotional problems and academic achievement. Department of Human Development, College of Rural Home Science, University of Agricultural Sciences, Dharwad.

Director of School Examinations, Chennai, Tamil Nadu. https://www.ripples-cel.com/media/School%20and%20Boards_TN.pdf

DSF Literacy Service. (2018). *Understanding Learning Difficulties: A Guide for Parents* (Revised ed.). Australia. https://uldforparents.com/wp-content/uploads/2021/01/DSF10839_Auspeld_Learning-Difficulties_PARENTS_WEB.pdf

Dziuban, C. D., & Shirkey, E. C. (1974). When Is a Correlation Matrix Appropriate for Factor Analysis? Some Decision Rules. *Psychological Bulletin, 81*, 358-361. https://doi.org/10.1037/h0036316

Education for All in India. (2023). Teacher Training in India. Retrieved from https://educationforallinindia.com/teacher-training-in-india/

Edwards, A.L., & Kalpatrick, F.P.A. (1948). Technique for the construction of attitude scales. *Journal of Applied Psychology, 32*, 374-384.

Elizabeth, K. T., & Seema, P. (2019). Knowledge and attitude of primary school teachers towards inclusive education of children with specific learning disabilities. *Journal of Social Work Education and Practice, 4*(2), 23-32. https://www.academia.edu/76658385/Knowledge_and_Attitude_of_Primary_School_Teachers_Towards_Inclusive_Education_of_Children_with_Specific_Learning_Disabilities

Emery, E. E., Woodhead, E. L., Molinari, V., & Hunt, M. G. (2010). Treatment adherence in late-life. In P. A. Lichtenberg (Ed.), *Handbook of assessment in clinical gerontology* (2nd ed., pp. 427-457). Elsevier. https://doi.org/10.1016/B978-0-12-374961-1.10017-X

Essa, H. A. G. E., & El-Zeftawy, A. M. A. (2015). Teachers' knowledge, attitudes, and reported strategies to assess and support the students with learning difficulties. *IOSR Journal of Nursing and Health Science (IOSR-JNHS), 4*(2), 79-92. http://www.iosrjournals.org/iosr-jnhs/papers/vol4-issue2/Version-1/N04217992.pdf

Ferlazzo, L. (2014). Response: A Teacher-Counselor Partnership Is 'Essential' For Student Success. *Larry Ferlazzo's Blog*. https://larryferlazzo.edublogs.org/2014/05/27/a-teacher-counselor-partnership-is-essential-for-student-success/

Fletcher, J. M., & Foorman, B. R. (1994). Issues in Definition and Measurement of Learning Disabilities: The Need for Early Intervention. In G. R. Lyon (Ed.), *Frames of Reference for the Assessment of Learning Disabilities* (pp. 185-200). Baltimore: Brookes.

Fortes, I. S., Paula, C. S., Oliveira, M. C., et al. (2016). A cross-sectional study to assess the prevalence of DSM-5 specific learning disorders in representative school samples from the second to sixth grade in Brazil. *Eur Child Adolesc Psychiatry, 25*, 195–207. https://doi.org/10.1007/s00787-015-0708-2.

Foster, G. C., Lane, D., Scott, D., Hebo, M., Guerra, R., Osherson, D., & Zimmer, H. (2018). *An Introduction to Psychological Statistics*. University of Missouri's Affordable and Open Access Educational Resources Initiative. https://irl.umsl.edu/cgi/viewcontent.cgi?article=1000&context=oer

Framingham, J. (2016). What is psychological assessment? *Psych Central*. https://psychcentral.com/lib/what-is-psychological-assessment/

Froiland, J. M., Worrell, F. C., & Oh, H. (2019). Teacher–student relationships, psychological need satisfaction, and happiness among diverse students. *Psychology in the Schools, 56*(5), 856-870. https://doi.org/10.1002/pits.22245

Gagare, A. S. (2018). Role of teacher in inclusive education. *Aayushi International Interdisciplinary Research Journal (AIIRJ), 5*(1), 229-232. https://www.aiirjournal.com/uploads/Articles/2018/01/2769_47.Dr.%20Amitkumar%20S.%20Gagare.pdf

Gandhimathi, & Eljo (2010). Awareness about Learning Disabilities Among The Primary School Teachers. *Cauvery Research Journal*, *3*(1), 71-78.

Garrison-Wade, D. F. (2012). Listening to their voices: Factors that inhibit or enhance postsecondary outcomes for students with disabilities. *International Journal of Special Education, 27*(2), 113-125. https://eric.ed.gov/?id=EJ982866

Gates, G. S. (1922). The Meaning of the Term "Practice". *Psychological Review, 29*(1), 63–74. https://doi.org/10.1037/h0069948

Gayen, S. (2017). Role of teachers in the changing scenario in Indian society. *Changing Role of Teachers, 2*, 81-83. https://www.harvestjournal.net/wp-content/uploads/2017/12/Srabanti-1.pdf

GBD 2019 Diseases and Injuries Collaborators. (2020). Global burden of 369 diseases and injuries in 204 countries and territories, 1990-2019: A systematic analysis for the global burden of disease study 2019. *Lancet*, 396, 1204–22. DOI: 10.1016/S0140-6736(20)30925-9

Gelbar, N. W., Jaffery, R., Stein, R., & Cymbala, H. (2014). Case study on the implementation of school-wide positive behavioral interventions and supports in an alternative educational setting. *Journal of Educational and Psychological Consultation, 25*(4), 287-313. https://doi.org/10.1080/10474412.2014.929958

Gelbar, N. W., Shefyck, A., & Reichow, B. (2015). A comprehensive survey of current and former college students with autism spectrum disorders. *Yale Journal of Biology and Medicine, 88*(1), 45-68. https://pubmed.ncbi.nlm.nih.gov/25745374/

George, D., & Mallery, P. (2003). *SPSS for Windows Step by Step: A Simple Guide and Reference*. 11.0 Update (4th ed.). Boston: Allyn & Bacon.

George, D., Nagarajan, P., Rajkumar, R. P., & Kavitha, R. R. (2015). Effect of Structured Teaching Programme on Knowledge Regarding Specific Learning Disabilities Among Primary School Teachers. *International Journal of Psychiatric Nursing, 1*(1). https://doi.org/10.5958/2395-180X.2015.00017.1

Ghimire, S. (2017). Knowledge of Primary School Teacher Regarding Learning Disabilities in School Children. *Journal of Nobel Medical College, 6*(1), 29. https://doi.org/10.3126/jonmc.v6i1.18084

Ghimire, S. (2017). Knowledge of Primary School Teacher Regarding Learning Disabilities in School Children. *Journal of Nobel Medical College, 6*(1), 29. https://doi.org/10.3126/jonmc.v6i1.18084

Gilgun, J. F. (1999). Methodological pluralism and qualitative family research. In S. K. Steinmetz, M. B. Sussman, & G. W. Peterson (Eds.), *Handbook of Marriage and the Family* (pp. 219-261). Plenum.

Gilgun, J. F. (2004). Qualitative Methods and the Development of Clinical Assessment Tools. *Qualitative Health Research, 14*(7), 1008-1019. https://doi.org/10.1177/1049732304266819

Gorker, I., Bozatli, L., Korkmazlar, Ü., Yücel Karadağ, M., Ceylan, C., Söğüt, C., Aykutlu, H. C., Subay, B., & Turan, N. (2017). The probable prevalence and sociodemographic characteristics of specific learning disorder in primary school children in Edirne. *Noro Psikiyatr Ars 54*(4), 343-349. DOI: 10.5152/npa.2016.18054

Guidance "Learning Disability - Applying All Our Health" (2023). https://www.gov.uk/government/publications/learning-disability-applying-all-our-health/learning-disabilities-applying-all-our-health

Guttman, L. (1954). Some Necessary Conditions for Common-Factor Analysis. *Psychometrika, 19*, 149-161.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. R., & Tatham, R. L. (2006). *Multivariate Data Analysis. Technometrics*, *31*(3), Pearson Prentice Hall.

Hallahan, D. P., & Kauffman, J. M. (1978). *Exceptional Children: Introduction to Special Education*. Englewood Cliffs, N.J.: Prentice-Hall.

Hanan Abo El-Gamelen E., Essa, & Amaal Mohamed Ahmed El-Zeftawy. (2015). Teachers' knowledge, attitudes, and reported strategies to assess and support students with learning difficulties. *IOSR Journal of Nursing and Health Science (IOSR-JNHS), 4*(2), 79-92.

Handler, S. M., Fierson, W. M., Section on Ophthalmology; Council on Children with Disabilities; American Academy of Ophthalmology; American Association for Pediatric Ophthalmology and Strabismus; American Association of Certified Orthoptists. (2011). Learning Disabilities, Dyslexia, and Vision. *Pediatrics, 127*(3), e818-856. https://doi.org/10.1542/peds.2010-3670

Hari, R., & Kiesila, P. (1996). Deficit of temporal auditory processing in dyslexic adults. *Neuroscience Letters, 205*(2), 138-140. https://doi.org/10.1016/0304-3940(96)12393-4

Hehir, T., et al. (2016). "A Summary of the Evidence on Inclusive Education." Harvard Graduate School of Education. Pg 2. https://alana.org.br/wp-content/uploads/2016/12/A_Summary_of_the_evidence_on_inclusive_education.pdf

Helm, D. T., & Katz, J. S. (2011). Creating an Inclusive School. Alexandria, VA: ASCD.

Hilgart, M.M., Ritterband, L.M., Thorndike, F.P., & Kinzie, M.B. (2012). Using instructional design process to improve design and development of internet interventions. *Journal of Medical Internet Research, 14*(3), e89. https://doi.org/10.2196/jmir.1890

Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied Statistics for the Behavioral Sciences* (5th ed.). Boston: Houghton Mifflin.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural Equation Modeling: Guidelines for Determining Model Fit. *The Electronic Journal of Business Research Methods, 6*(1), 53–60. https://academic-publishing.org/index.php/ejbrm/article/view/1224

Hove, N., & Phasha, N. T. (2023). Inclusion of Learners with Learning Disabilities in the Vaal Triangle Mainstream Classrooms. *African Journal of Disability, 12*. https://doi.org/10.4102/ajod.v12i0.1163

Howlin, P. (2002). Specific Learning Disabilities and Difficulties in Children and Adolescents: Psychological Assessment and Evaluation. In A. S. Kaufman & N. L. Kaufman (Eds.), *Psychological Medicine*, *32*(3), 555-558. https://doi.org/10.1017/S0033291702215615

India Today Web Desk. (May 2023). https://www.indiatoday.in/education-today/featurephilia/story/why-do-we-see-more-female-teachers-in-indian-schools-1806042-2021-05-23

Indian Certificate of Secondary Education (ICSE) and Indian School Certificate (ISC). https://www.cisce.org/Concessions.aspx

Javaid, H., Roheen, A., Saleem, S., Kanwal, S., Afzal, F., & Qamar, R. (2022). Awareness and knowledge of learning disabilities among school teachers. *Rawal Medical Journal, 47*(2), 451-453.

Javaid, H.I., Roheen, A., Saleem, S., Kanwal, S., & Qamar, R. (2022). Awareness and knowledge of learning disabilities among school teachers. *Rawal Medical Journal, 47*(2), 451-451. https://www.rmj.org.pk/?mno=58900

Jebakumar, D., Marconi, S., Kattula, D., & Priscilla, R.A. (2023). Knowledge of schoolteachers on learning disabilities in urban Vellore - A cross-sectional study. *Journal of Family Medicine and Primary Care, 12*(8), 1582-1587. https://doi.org/10.4103/jfmpc.jfmpc_2018_22

Jolly, R., & Chacko, C. M. (2021). Knowledge regarding learning disability among primary school teachers. *International Journal of Indian Psychology* 9. doi: 10.25215/0902.122. https://ijip.in/articles/knowledge-regarding-learning-disability-among-primary-school-teachers/

Jose, S., & Solomon, S. G. (2016). A study to evaluate the effectiveness of self-instructional knowledge regarding learning disabilities of primary school children among primary school teachers of selected schools at Indore, M.P. *International Journal of Current Research, 8*(10), 39991-39998. http://www.journalcra.com/sites/default/files/issue-pdf/18063.pdf

Joseph, J. K., & Devu, B. K. (2022). Prevalence and pattern of learning disability in India: A systematic review and meta-analysis. *Indian Journal of Psychiatric Nursing, 19*(2). https://doi.org/10.4103/iopn.iopn_7_22

Joshi, N. A., & Vanaja, C. S. (2016). Checklist to screen children with reading difficulty (CSRD) for classroom teachers. *Language in India, 16*(1), 185-197. http://languageinindia.com/jan2016/namitavanajaCSfinal.pdf

Kalyanpur, M. (2020). Disrupting the narrative of universality of inclusive education: The new marginalization of low-income, English language learners in India. *The Educational Forum*, *84*(4), 296–308. https://doi.org/10.1080/00131725.2020.1796071.

Kapur, M. (1995). *Mental Health of Indian Children*. New Delhi: Sage Publications.

Kapur, M., John, A., Rozario, J., et al. (1991). NIMHANS index of specific learning disabilities. Department of Clinical Psychology, NIMHANS Publication.

Karande, S. (2008). Current challenges in managing specific learning disabilities in Indian children. *Journal of Postgraduate Medicine, 54*, 75-77. DOI: 10.4103/0022-3859.40765

Karande, S., Sholapurwala, R., & Kulkarni, M. (2011). Managing specific learning disability in schools in India. Indian Pediatrics, 48(7), 515-520. https://doi.org/10.1007/s13312-011-0090-1

Karanth, P. (2003). Language and learning disability or language learning disability. In P. Karanth & J. Rozario (Eds.), *Learning disabilities in India: Willing the mind to learn* (pp. 17-29). New Delhi: Sage Publications.

Karnath, P. (2001). Scheme of Integrated Education for the Disabled Children (IEDC) India, 1986: section, 3.1; updated in 1992. https://www.actionresearch.net/living/rawalpdf/Chapter3.pdf

Kaur, S. (2019). Role of a teacher in the student learning process. *International Journal of Business and Management Invention (IJBMI), 8*(12), 41-45. https://ijbmi.org/papers/Vol(8)12/Series-1/G0812014145.pdf

Kim, T. R., Ross, J. A., & Smith, D. P. (1969). KOREA: Trends in Four National KAP Surveys, 1964-67. *Studies in Family Planning, 1*(43), 6. https://doi.org/10.2307/1965090

Kirk, S. A. (1993). *The Foundations of Special Education: Selected Papers and Speeches of Samuel A. Kirk* (G. A. Harris & W. D. Kirk, Eds.). The Council for Exceptional Children.

Klassen, R. M., Perry, N. E., & Frenzel, A. C. (2012). Teachers' relatedness with students: An underemphasized component of teachers' basic psychological needs. *Journal of Educational Psychology, 104*(1), 150-165. https://doi.org/10.1037/a0026253

Kohli, A., Sharma, S., & Padhy, S. K. (2018). Specific Learning Disabilities: Issues that Remain Unanswered. *Indian Journal of Psychological Medicine, 40*(5), 399-405. https://doi.org/10.4103/IJPSYM.IJPSYM_86_18

Kohli, A., Sharma, S., & Padhy, S. K. (2018). Specific learning disabilities: Issues that remain unanswered. *Indian Journal of Psychological Medicine, 40*, 399–405. https://doi.org/10.4103/IJPSYM.IJPSYM_86_18 .

Kudryashova, A., Gorbatova, T., Rybushkina, S., & Ivanova, E. (2015). Teacher's Roles to Facilitate Active Learning. *Mediterranean Journal of Social Sciences*. https://doi.org/10.5901/mjss.2016.v7n1p460

Kulkarni, M., Gopakumar, K. V., & Patel, S. (2018). How Effective Are Disability Sensitization Workshops? *Employee Relations, 40*(1), 58-74. https://doi.org/10.1108/ER-08-2016-0165

Lalitha, & Padmavathi. (2009). *A study to assess the effectiveness of video teaching programme on knowledge regarding dyslexia among teacher trainees in selected teacher training institutions at Erode* (Unpublished master's dissertation). Dr. M.G.R. Medical University, Chennai, India.

Launiala, A. (2009). How Much Can a KAP Survey Tell Us About People's Knowledge, Attitudes and Practices? *Anthropology Matters, 11*(1), 1-13. DOI: https://doi.org/10.22582/am.v11i1.31

Lavrakas, P. W. (2008). *Encyclopedia of Survey Research Methods*. International Business Journal, 345-357.

Lawshe, C. H. (1975). A Quantitative Approach to Content Validity. *Personnel Psychology, 28*, 563-575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Learner in Socio-Cultural Context. In *Understanding the Learner* (2024), p. 7. Retrieved from: https://egyankosh.ac.in/bitstream/123456789/47115/1/Unit-5.pdf

Learning Disabilities Association of America. Non-Verbal Learning Disabilities. http://ldaamerica.org/types-of-learning-disabilities/non-verbal-learning-disabilities/

Learning Disabilities Association of Canada (LDAC, 2024). https://www.ldac-acta.ca/prevalence-of-learning-disabilities/

Lee, J. S. (2019). Teacher as change agent: attitude change toward varieties of English through teaching English as an international language. *Asian Englishes, 21*(2), 87–102. https://doi.org/10.1080/13488678.2018.1434396

Leung, C., Lindsay, G., & Lo, S. K. (2007). Early identification of primary school students with learning difficulties in Hong Kong: The development of a checklist. *European Journal of Special Needs Education*, *22*(3), 327-339. https://files.eric.ed.gov/fulltext/EJ1101774.pdf

Li, C. (2022). Foreign language learning boredom and enjoyment: The effects of learner variables and teacher variables. *Language Teaching Research*. 1362168822. https://doi.org/10.1177/13621688221090324

Li, Y., Li, Q., Zheng, J., Zeng, X., Shen, T., Chen, Q., & Yang, W. (2023). Prevalence and trends in diagnosed learning disability among US children and adolescents from 1997 to 2021. *JAMA Pediatr*, 177(9), 969-972. DOI: 10.1001/jamapediatrics.2023.2117

Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology, No.140*.

Lingeswaran, A. (2013). Assessing Knowledge of Primary School Teachers on Specific Learning Disabilities in Two Schools in India. *Journal of Education and Health Promotion, 2*, 30. https://doi.org/10.4103/2277-9531.115177

Lombardi, A. R., Murray, C., & Gerdes, H. (2011). College faculty and inclusive instruction: Self-reported attitudes and actions pertaining to universal design. *Journal of Diversity in Higher Education, 4*(4), 250-261. https://www.researchgate.net/publication/232491872_College_Faculty_and_Inclusive_Instruction_Self-Reported_Attitudes_and_Actions_Pertaining_to_Universal_Design

Luis, J. (2020). Teaching Attitudes towards Students with Disabilities. *Mathematics*, *9*(14), 1637. https://doi.org/10.3390/math9141637

Lynn, M. R. (1986). Determination and Quantification of Content Validity. *Nursing Research, 35*(6), 382-385.

Lyon, G. R. (1996). Learning Disabilities. In E. Marsh, & R. Barkley (Eds.), *Child Psychopathology* (pp. 390-434). New York: Guilford Press. The Future of Children, 6(1), Special Education for Students with Disabilities (Spring, 1996), pp. 54-76. http://dx.doi.org/10.2307/1602494

Madhamani, A., & Joseph, A. (2021). Assessment of Knowledge and awareness on public school teachers towards Learning Disabilities in Children – An institutional Based Cross-Sectional study in Dharmapuri District, Tamil Nadu. *Journal of Family Medicine and Primary Care*, *10*(7), 524-2528. https://doi.org/10.4103/jfmpc.jfmpc_1869_20

Madriaga, M., Hanson, K., Heaton, C., Kay, H., Newitt, S., & Walker, A. (2010). Confronting similar challenges? Disabled and non-disabled students' learning and assessment experiences. *Studies in Higher Education*, *35*(6), 647-658. https://doi.org/10.1080/03075070903222633

Manna, A. K., & Maiti, N. C. (2020). Concept of Teacher as conceived by Dr. A. P. J. Abdul Kalam. *IJSRR International Journal of Research*, *6*(3), 135. https://www.iisrr.in/mainsite/wp-content/uploads/2021/01/14.-Nimai-Chand-Maiti-Aojy-kumar-Manna-Concept-of-Teacher-as-conceived-by-Dr.-A.-P.-J.-Abdul-Kalam.pdf

Maqbool, B., Saleem, S., & Kumar, D. (2022). Learning Disabilities: Barriers for Inclusion. *International Journal of Autism*, *2*(1), 11–13. https://www.rehabilitationjournals.com/autism-journal/archives/2022.v2.i1.A.10

Mariana, A. M. A., & Wong, S. L. (2011). Children with Learning Disabilities in the Paediatric Clinic, Hospital Tuanku Ja'afar Seremban: An Overview. *Med J Malaysia, 66*(5), 487-490. https://pubmed.ncbi.nlm.nih.gov/22390107/

McHugh, M. L. (2012). Interrater Reliability: The Kappa Statistics. *iochem Med (Zagreb), 22*(3), 276-282.

Mehta, D. H., & Swarup, S. (2004). The Diagnostic Test of Reading Disorders (DTRD). *Asia Pacific Disability Rehabilitation Journal, 15*(1), 50-58.

Mehta, M., & Sagar, R. (2014). *Specific Learning Disability Comprehensive Diagnostic Battery (SLD-CDB)*. New Delhi: Psychomatrix Publication.

Metzler, D. (2023). Statistics for EES and others: Comparing more than two groups: Multiple testing, ANOVA, and Kruskal-Wallis. *EES Handout*, 8 pp. https://evol.bio.lmu.de/_statgen/StatEES/anova_handout.pdf

Ministry of Education. (2024). Advisory to States/UTs to ensure RTE entitlements and nutritional support under PM-Poshan to Children with Special Needs. 13 JUN 2024, 4:45 PM by PIB Delhi. https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2025044#:~:text=The%20National%20Education%20Policy%202020,the%20objectives%20of%20NEP%202020.

Ministry of Education. (2024, June 13). Issues advisory to States/UTs to ensure RTE entitlements and nutritional support under PM-Poshan to children with special needs. PIB Delhi. https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2025044#:~:text=The%20National%20Education%20Policy%202020,the%20objectives%20of%20NEP%202020.

Ministry of Social Justice and Empowerment. (2018). Notification, Gazette of India (Extra-Ordinary) Department of Empowerment of Persons with Disabilities (Divyangjan). Jan 4. [Last accessed on 2018 Mar 26]. Available from: https://groups.google.com/d/topic/wethepwd/XuRiT0VdWsg

Misciagna, A. (Ed.). (2019). The Prevalence and Gender Differences in Specific Learning Disorder. In *Learning Disabilities - Neurological Bases, Clinical Features and Strategies of Intervention*. https://www.intechopen.com/chapters/70206.

Mishra, P., & Pahwa, P. (2018). Review on learning disability in India and abroad. *Paripex Indian Journal of Research, 7*(4), 54. https://www.researchgate.net/publication/342152491_Review_on_Learning_Disability_in_India_and_Abroad

Mitchell, D. (2020). "The Role of Assistive Technology in Inclusive Education." *Journal of Special Education Technology*. https://doi.org/10.4324/9780429401923

Mohan, K. (2023). Employment Conditions of Private School Teachers in Tamil Nadu – Legal Regime and Judiciary's Approach. *International Journal for Multidisciplinary Research (IJFMR), 5(*3), 1-7. https://doi.org/10.36948/ijfmr.2023.v05i03.3383

Moharana, D. (2019). Effectiveness of guidelines on knowledge and attitude of trainee school teachers towards identification and management of children with specific learning disabilities. *Indian Journal of Psychiatric Nursing,* 16(2), 77-83. https://journals.lww.com/iopn/fulltext/2019/16020/effectiveness_of_guideline_on_knowledge_and.6.aspx

Mooij, J. (2008). Primary education, teachers' professionalism and social class: About motivation and demotivation of government school teachers in India. *International Journal of Educational Development, 28*(5), 508-523. https://doi.org/10.1016/j.ijedudev.2007.10.006

Mugesh, T., Arthi, J., & Dutt, S. (2023). Specific Learning Disabilities: Revisiting the theories, research and rehabilitation in the current perspective. *International Journal of Creative Research Thoughts (IJCRT), 11*(2), e476. https://ijcrt.org/papers/IJCRT2302556.pdf

Mukherjee, S., & Das, S. (2020). Promoting Inclusive Education in Rural India: Strategies and Outcomes. *Open Journal Netaji Subhas Open University*.

Mukhopadhyay, R., & Sriprakash, A. (2010). Global frameworks, local contingencies: Policy translations and education development in India. *Compare: A Journal of Comparative and International Education*, 41(3), 311–326. https://doi.org/10.1080/03057925.2010.534668.

Muktamath, V. U., Hegde, R. P., & Chand, S. (2021). Types of specific learning disability. In M. Tzouriadou & S. Tzivinikou (Eds.), *Learning Disabilities: From Assessment to Intervention* (pp. 2). Intech Open. https://doi.org/10.5772/intechopen.100809

Murray, C., Lombardi, A., & Wren, C. T. (2011). The effects of disability-focused training on the attitudes and perceptions of university staff. *Remedial and Special Education, 32*(4), 290-300. https://www.researchgate.net/publication/240731429_The_Effects_of_Disability-Focused_Training_on_the_Attitudes_and_Perceptions_of_University_Staff

Murray, C., Lombardi, A., Seely, J. R., & Gerdes, H. (2014). Effects of an intensive disability-focused training experience on university faculty self-efficacy. *Journal of Postsecondary Education and Disability, 27*(2), 179-193. https://eric.ed.gov/?id=EJ1040537

Muthusamy, K., & Sahu, J. K. (2020). Specific learning disability in India: Challenges and opportunities. *Indian Journal of Pediatrics, 87*, 91–92. doi: 10.1007/s12098-019-03159-0.

Muzamhindo, S., Kong, Y., & Famba, T. (2017). Principal Component Analysis as a Ranking Tool: A Case of World Universities. *International Journal of Advanced Research (IJAR), 5*(6), 2114-2135. https://doi.org/10.21474/IJAR01/4650

Nag, S., & Snowling, M. J. (2012). Reading in an Alphasyllabary: Implications for a language universal theory of learning to read. *Scientific Studies of Reading, 16*, 404-423. https://doi.org/10.1080/10888438.2011.576352

Nag, S., & Snowling, M. J. (2012). School underachievement and specific learning difficulties. In J. M. Rey (Ed.), *IACAPAP Textbook of Child and Adolescent Mental Health* (Ch. 3, pp. 21). International Association for Child and Adolescent Psychiatry and Allied Professions. https://iacapap.org/_Resources/Persistent/3150c10bf4abd85e73ad73b8333eeab1f47d2e24/C.3-LEARNING-DISABILITIES-072012.pdf

Narayan, J. (1997). *Grade level assessment device for children with learning problems in schools*. Secunderabad.

National Association of Special Education Teachers. *Characteristics of Children with Learning Disabilities*. Retrieved from: https://www.naset.org/fileadmin/user_upload/LD_Report/Issue__3_LD_Report_Characteristic_of_LD.pdf

National Institute of Open Schooling (NIOS). https://nios.ac.in/media/documents/PWD/provisionforlwd.pdf

National Joint Committee on Learning Disabilities (NJCLD). (2005). Responsiveness to intervention and learning disabilities: A report prepared by the National Joint Committee on Learning Disabilities. *Learning Disability Quarterly*, 28(4), 249–260.

Neha & Roopa. (2020). Attitude of Primary School Teachers towards Learning Disabilities in Children - An Intervention Study. *International Journal of Science and Research (IJSR)*, *9*(9), 1084-1088. https://www.ijsr.net/getabstract.php?paperid=SR20917131838

Neha, & Roopa. (2018). Attitude of Primary School Teachers Towards Learning Disabilities in Children: An Intervention Study. *International Journal of Science and Research (IJSR)*, 9(9), 1084-1088. https://doi.org/10.21275/SR20917131838

Nicolson, R., & Fawcett, A. (1990). Automaticity: A new framework for dyslexia research? *Cognition, 35*(2), 159-182. https://doi.org/10.1016/0010-0277(90)90013-A

Niti, & Singh, P. R. (2021). Inclusive Education in India – Concept, Need and Challenges. *International Journal of Social Science & Management Studies*, *7*(7), 97–103. https://www.journalijar.com/uploads/6512a10c1eb87_IJAR-44542.pdf

Norman, G., & Streiner, D. (2008). *Biostatistics: The Bare Essentials* (3rd ed.). Hamilton, ON, Canada: B.C. Decker Inc.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Olusanya, B. O., Kancherla, V., Shaheen, A., Ogbo, F. A., & Davis, A. C. (2022). Global and regional prevalence of disabilities among children and adolescents: Analysis of findings from global health databases. *Frontiers in Public Health*, 10, 977453. https://doi.org/10.3389/fpubh.2022.977453.

Ostertagova, E., Ostertag, O., & Kovac, J. (2014). Methodology and application of the Kruskal-Wallis Test. *Applied Mechanics and Materials, 611*, 115-120. https://www.researchgate.net/publication/289442433

Panicker, A., Bhattacharya, S., Hirisave, U., et al. (2015). Reliability and validity of the NIMHANS index of specific learning disabilities. *Indian Journal of Mental Health*, 2, 175. https://indianmentalhealth.com/pdf/2015/vol2-issue2/Reliability-and-Validity-of-the-NIMHANS-index-of-specific-learning-disabilities.pdf.

Pastor, P. N., & Reuben, C. A. (2008). Diagnosed attention deficit hyperactivity disorder and learning disability: United States, 2004-2006. *Vital Health Stat 10*, 2008 Jul;(237):1-14.

Pawar, S. H., & Mohite, V. R. (2014). Effectiveness of Self-Instructional Module on Knowledge of Primary School Teachers Regarding Learning Disorders Among Children in Selected Schools at Karad City. *International Journal of Science and Research (IJSR), 3*(7), 2382-2386. Retrieved from: https://www.ijsr.net/archive/v3i7/MDIwMTQxMDMw.pdf

Podolsky, A., Kini, T., & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of US research. *Journal of Professional Capital and Community, 4*(4), 286-308. https://doi.org/10.1108/JPCC-12-2018-0032

Polit, D.F., & Beck, C.T. (2017*). Nursing Research: Generating and Assessing Evidence for Nursing Practice* (10th ed.). Wolters Kluwer Health, Philadelphia, 784 p. https://doi.org/10.1016/j.iccn.2015.01.005

Prasadh, R. S., & Burle, S. M. (2022). A study on learning disability among the secondary school pupils in north coastal districts of Andhra Pradesh. *Journal of Positive Psychology, 6*(8), 844-854. https://journalppw.com/index.php/jpsp/article/view/9819/6411

Raberger, T., & Wimmer, H. (2003). On the automaticity/cerebellar deficit hypothesis of dyslexia: Balancing and continuous rapid naming in dyslexic and ADHD children. *Neuropsychologia, 41*(11), 1493-1497. https://doi.org/10.1016/s0028-3932(03)00078-2

Rajabzadeh, M., Hajian-Tilaki, K., & Ghasempour, M. (2023). Assessment of knowledge, attitude, and practice of medical and dental students about maintaining and disinfecting toothbrushes. *International Journal of Dental Hygiene, 21*(2), 350-356. https://doi.org/10.1111/idh.12667

Ramaa, S., & Gowramma, I. P. (2002). A systematic procedure for identifying and classifying children with dyscalculia among primary school children in India. *Dyslexia, 8*(3), 67-85. https://doi.org/10.1002/dys.214

Rani, N. S., & Reddy, R. G. (2021). A Study on Awareness Levels of Primary School Teachers on Learning Disabilities in Government Schools of Telangana. **harma Innovation,* *10*(3), 170. https://www.thepharmajournal.com/archives/?year=2021&vol=10&issue=3&ArticleId=5760

Rao, C. T. A., S., Midha, R., et al. (2021). Development and standardization of the DALI-DAB (Dyslexia Assessment for Languages of India – Dyslexia Assessment Battery). *Annals of Dyslexia** 71, 439–457. https://doi.org/10.1007/s11881-021-00227-z.

Redpath, J., Kearney, P., Nicholl, P., Mulvenna, M., Wallace, J., & Martin, S. (2013). A qualitative study of the lived experiences of disabled post-transition students in higher education institutions in Northern Ireland. *Studies in Higher Education, 38*(9), 1334-1350. https://eric.ed.gov/?id=EJ1023233

Reigeluth, C.M. (Ed.). (1983). *Instructional Design Theories and Models: An Overview of Their Current Status* (1st ed.). Routledge. https://doi.org/10.4324/9780203824283

Richey, R. (1988). *The Theoretical and Conceptual Bases of Instructional Design*.

Rights of Persons with Disabilities (RPWD) Act, 2016. National Centre for Promotion of Employment for Disabled People. [Internet]. Ncpedp.org. (2018). [Last accessed on 2018 Apr 09]. Available from: http://www.ncpedp.org/RPWDact2016

Rogoff, R.L. (1987). *The Training Wheel – A Single Model for Instructional Design*. New York: John Wiley, p. 146.

Ross-Hill, R. (2009). Teacher attitude towards inclusion practices and special needs students. *Journal of Research in Special Educational Needs, 9,* 188–198. https://awspntest.apa.org/doi/10.1111/j.1471-3802.2009.01135.x

Rugmini, & Thomas. (2012). [Details not provided].

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness.* The Guilford Press. https://doi.org/10.1521/978.14625/28806

Sahu, A., Bhargava, R., Sagar, R., & Mehta, M. (2018). Perception of families of children with specific learning disorder: An exploratory study. *Indian Journal of Psychological Medicine*, 40(5), 406-413. DOI: 10.4103/IJPSYM.IJPSYM_148_18

Samagra Shiksha, Ministry of Education, Department of School Education and Literacy, Government of India (2020). https://samagra.education.gov.in/inclusive.html

Santor, D. A., Haggerty, J. L., Lévesque, F., Burge, F., Beaulieu, D., Gass, D., & Pineault, R. (2011). An Overview of Confirmatory Factor Analysis and Item Response Analysis Applied to Instruments to Evaluate Primary Healthcare. *Healthcare Policy, 7*(Special Issue), 79-92. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3399444/

Saravanabhavan, S., & Saravanabhavan, R. (2010). Knowledge of learning disability among pre-and in-service teachers in India. *International Journal of Special Education, 25*(3), 133-134. https://files.eric.ed.gov/fulltext/EJ909291.pdf

Scaria, L. M., Bhaskaran, D., & George, B. (2022). Prevalence of specific learning disorders (SLD) among children in India: A systematic review and meta-analysis. *Indian Journal of Psychological Medicine*. https://doi.org/10.1177/02537176221100128.

Scaria, L. M., Bhaskaran, D., & George, B. (2023). Prevalence of Specific Learning Disorders (SLD) Among Children in India: A Systematic Review and Meta-Analysis. *Indian Journal of Psychological Medicine, 45*(3), 213-219. https://doi.org/10.1177/02537176221100128

Schelly, C. L., Davies, P. L., & Spooner, C. L. (2011). Student perceptions of faculty implementation of universal design for learning. *Journal of Postsecondary Education and Disability, 24*(1), 17-28. https://files.eric.ed.gov/fulltext/EJ941729.pdf

Scolt, C. A. (2020). The need for disability sensitization in schools and communities of India. *International Journal of Emerging Technologies and Innovative Research, 7*(10), 3533-3541. http://www.jetir.org/papers/JETIR2010460.pdf

Sebal, T. J., & Pianta, R. C. (2012). Recent trends in research on teacher-child relationships. *Attachment & Human Development, 14*(3), 213-231. https://doi.org/10.1080/14616734.2012.672262

Shah, & Kumar. (2012). Sensitizing the teachers towards school mental health issues: An Indian experience. *Community Mental Health Journal, 48*(4), 522-526. https://doi.org/10.1007/s10597-011-9437-2

Shah, C. G., & Buch, P. M. (2019). Prevalence of specific learning disabilities among Gujarati medium primary school children. *Indian Journal of Child Health, 6*, 283-286.

Shah, H., & Kumar, D. (2012). Sensitizing the Teachers Towards School Mental Health Issues: An Indian Experience. *Community Mental Health Journal, 48*(4), 522-526. https://doi.org/10.1007/s10597-011-9437-2

Shah, N., & Bajaj, S. (1994). Study of students having uneven performance in different subjects in school. *Archives of Indian Psychiatry*, 1(1), 22-24.

Shah, N., & Bhatt, T. (2008). Clinical practice guidelines for specific learning disorders. *Indian Journal of Psychiatry*, 51, 68-95. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_564_18

Shah, S. R., & Udgaonkar, U. S. (2018). Influence of gender and age of teachers on teaching: Students' perspective. *International Journal of Current Microbiology and Applied Sciences, 7*(1), 2436-2440. https://doi.org/10.20546/ijcmas.2018.701.293

Shah, S. R., & Udgaonkar, U. S. (2018). Influence of Gender and Age of Teachers on Teaching: Students' Perspective. *International Journal of Current Microbiology and Applied Sciences, 7*(1), 2436-2440. https://doi.org/10.20546/ijcmas.2018.701.293

Shari, M., & Vranda, M. N. (2015). Knowledge of primary school teachers in identifying children with learning disability. *Disability CBR & Inclusive Development, 26*(3), 68-76. https://doi.org/10.5463/DCID.v26i3.443

Shari, M., & Vranda, M. N. (2016). Attitude of Primary School Teachers towards Children with Learning Disabilities. *Journal of Indian Association for Child and Adolescent Mental Health*. https://doi.org/10.1177/0973134220160404

Shari, M., & Vranda, M. N. (2016). Attitude of primary school teachers towards children with learning disabilities. *Journal of Indian Association for Child and Adolescent Mental Health*. https://doi.org/10.1177/0973134220160404

Shaywitz, S. (2003). *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level*. Alfred A. Knopf. https://psycnet.apa.org/record/2003-88281-000

Shettleworth, S. J. (2010). *Cognition, Evolution, and Behavior* (2nd ed.). Oxford University Press.

Shofia von Humboldt, Rolo, J., & Isabel Leal. (2021). *Psychological Assessment*. https://doi.org/10.1007/978-3-319-69892-2_84-1

Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics, 9*(1), 4-11. https://doi.org/10.12691/ajams-9-1-2

Shukla, P., & Agarwal, G. (2015). Awareness of learning disabilities among teachers of primary schools. *Online Journal of Multidisciplinary Research (OJMR), 1*(1), 33-38. https://citeseerx.ist.psu.edu/document?repid=rep1%20&type=pdf&doi=870b0b15c93a584c5298d09d8e30bcb2bb97dba6

Singh, S., et al. (2017). Specific learning disability: A 5-year study from India. *International Journal of Contemporary Pediatrics, 4*(3), 863-868. https://doi.org/10.18203/2349-3291.ijcp20171687

Sood, V. (2013). Construction and standardization of verbal learning disabilities checklist for school children. *i-manager's Journal on Educational Psychology*, *7*(2), 30-41. https://doi.org/10.26634/jpsy.7.2.2470.

Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher–student relationships. *Educational Psychology Review, 23*(4), 457-477. https://doi.org/10.1007/s10648-011-9170-y

Stefanics, G., Fosker, T. M., Huss, M., Mead, N., Szucs, D., & Goswami, U. (2011). Auditory sensory deficits in developmental dyslexia: A longitudinal ERP study. *NeuroImage, 57*(3), 723-732. https://doi.org/10.1016/j.neuroimage.2011.04.005

Stein, J. (2019). The current status of the magnocellular theory of developmental dyslexia. *Neuropsychologia, 130*, 66. https://doi.org/10.1016/j.neuropsychologia.2018.03.022

Subi, S., & Archana, K. R. (2019). Knowledge and attitude of primary school teachers on learning disabilities in children: A descriptive study. GJRA - *Global Journal For Research Analysis*, 8(4), 71-73. https://www.worldwidejournals.com/global-journal-for-research-analysis-GJRA/recent_issues_pdf/2019/April/April_2019_1555652835_2335544.pdf.

Subi, S., & Archana, K. R. (2019). Knowledge and attitude of primary school teachers on learning disabilities in children: A descriptive study. *GJRA - Global Journal for Research Analysis*, *8*(4), 71-73. https://www.worldwidejournals.com/global-journal-for-research-analysis-GJRA/recent_issues_pdf/2019/April/April_2019_1555652835_2335544.pdf

Subramanian, & Manickaraj. (2017). Relationship Between Knowledge, Attitudes, Concerns and Competency Skills of Regular Teachers About Inclusive Education. *International Journal of Indian Psychology, 4*(3). https://doi.org/10.25215/0403.032

Sundjaja, J.H., Shrestha, R., & Krishan, K. (2023). McNemar and Mann-Whitney U Tests. In: *StatPearls* [Internet]. Treasure Island (FL): StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK560699/

Suresh, S. S., & Palanichamy, T. (2021). Comparability with Indian Approaches on Inclusive Education for Specific Learning Difficulties (SLD). *International Journal of Humanities and Social Science Invention (IJHSSI), 10*(2), pp 47-56. https://www.ijhssi.org/papers/vol10(2)/Ser-2/F1002024756.pdf

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (5th ed.). New York: Allyn and Bacon.

Takase, M., Niitani, M., Imai, T., & Okada, M. (2019). Students' perceptions of teaching factors that demotivate their learning in lectures and laboratory-based skills practice. *International Journal of Nursing Sciences, 6,* 414–420. DOI: 10.1016/j.ijnss.2019.08.001

Tamil Nadu state government source. https://schools.org.in/coimbatore

Tang, Y., & Hu, J. (2022). The impact of teacher attitude and teaching approaches on student demotivation: Disappointment as a mediator. *Frontiers in Psychology*, *13*, 985859. https://doi.org/10.3389/fpsyg.2022.985859

Tavakol, M., & Wetzel, A. (2020). Factor Analysis: A Means for Theory and Instrument Development in Support of Construct Validity. *International Journal of Medical Education, 11*, 245-247. https://doi.org/10.5116/ijme.5f96.0f4a

Tewari, J. N. (1981). National Sample Survey of the Disabled in India. *Indian Journal of Public Administration*. https://doi.org/10.1177/0019556119810329.

Thomas Kishore, M., Maru, R., Seshadri, S. P., Kumar, D., Vijay Sagar, J. K., Jacob, P., & Poornima Murugappan, N. (2021). Specific learning disability in the context of current diagnostic systems and policies in India: Implications for assessment and

certification. *Asian Journal of Psychiatry*, 55, 102506. doi: 10.1016/j.ajp.2020.102506.

Thomas, & Uthaman. (2019). Knowledge and attitude of primary school teachers towards inclusive education of children with specific learning disabilities. *Journal of Social Work Education and Practice, 4*(2), 23-32. https://www.researchgate.net/publication/344167041_Knowledge_and_Attitude_of_Primary_School_Teachers_Towards_Inclusive_Education_of_Children_with_Specific_Learning_Disabilities

Thurstone, L.L., & Chave, E.J. (1929). *The measurement of attitude*. Chicago: University of Chicago Press.

Tzouriadou, M., & Tzivinikou, S. (Eds.). (2022). *Learning Disabilities: From Assessment to Intervention*. Cambridge Scholars Publishing, Lady Stephenson Library, Newcastle upon Tyne, UK.

U.S. Department of Education, National Center for Education Statistics. (2015). *Digest of Education Statistics, 2013* (NCES 2015-011).

ul Haq, N., Hassali, M. A., Shafie, A. A., Saleem, F., Farooqui, M., & Aljadhey, H. (2012). A Cross Sectional Assessment of Knowledge, Attitude and Practice Towards Hepatitis B Among Healthy Population of Quetta, Pakistan. *BMC Public Health, 12*, 692. https://doi.org/10.1186/1471-2458-12-692

United States Department of Education, Office of Special Education and Rehabilitative Services. (2018). Individuals with Disabilities Education Act (IDEA). Retrieved from https://sites.ed.gov/idea/

Ursin, H. (2014). Brain sensitization to external and internal stimuli. *Psychoneuroendocrinology, 42*, 134-145. https://doi.org/10.1016/j.psyneuen.2014.01.008

Vijaykrishna, A., Chand, S., Nandakumar, U.P., Prabhu, S., Dikkatwar, M.S., & Vinay, B.C. (2022). Assessment of Knowledge, Attitude, and Practice among Subjects Visiting the Tobacco Cessation Clinic. *Global Journal of Medical, Pharmaceutical and Biomedical Update, 17*(19), 1-10. https://gjmpbu.org/content/119/2022/17/1/pdf/GJMPBU-17-19.pdf

Vogt, W. P. (2005). *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences**(3rd ed.). Newbury Park, Calif.: Sage Publications.

Wang, K. A. (1932). Suggested criteria for writing attitude statements. *Journal of Social Psychology, 3*, 367-373.

Wang, X. (2023). Exploring positive teacher-student relationships: The synergy of teacher mindfulness and emotional intelligence. *Frontiers in Psychology, 14*, 1301786. https://doi.org/10.3389/fpsyg.2023.1301786

Webster's Dictionary. https://www.merriam-webster.com/dictionary/knowledge

Wentzel, K. R. (2015). Teacher-Student Relationships, Motivation, and Competence at School. In C. M. Rubie-Davies (Ed.), *The Routledge International Handbook of Social Psychology of the Classroom* (pp. 167-176). Routledge. https://www.researchgate.net/publication/285086211_Teacher-Student_Relationships_and_Adolescent_Competence_at_School

Willcutt, E. G., & Pennington, B. F. (2000). Comorbidity of Reading Disability and Attention-Deficit/Hyperactivity Disorder: Differences by Gender and Subtype. *Journal of Learning Disabilities, 33*(2), 179–191. https://doi.org/10.1177/002221940003300206

Williams, D. (2013). Competency of school teachers regarding learning disabilities. *IOSR Journal of Nursing and Health Science, 2*(2), 20-23. https://doi.org/10.9790/1959-0222023

World Health Organization. (1992). *International Statistical Classification of Diseases and Related Health Problems* (10th ed.). WHO.

Yadav, D., & Agarwal, V. (2008). A baseline study of learning disabilities: Its prevalence, teacher awareness, and classroom practices. In Thapa, K., Aalsvoort, G.M., & Pandey, J. (Eds.), *Perspectives on Learning Disabilities in India* (pp. 221-238). New Delhi: Sage Publications. http://www.pbs.org/wgbh/misunderstoodminds/mathstrats.html

Yao, B., & Wu, H. R. (2003). Risk factors of learning disabilities in Chinese children in Wuhan. *Biomed Environ Sci*, 2003 Dec;16(4):392-7. https://pubmed.ncbi.nlm.nih.gov/15011970/

Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, R. (2015). Design and Implementation Content Validity Study: Development of an Instrument for Measuring Patient-Centered Communication. *Journal of Caring Sciences, 4*(2), 165-178. https://doi.org/10.15171/jcs.2015.017

Appendix - I

Ethical Clearance Certificate

INSTITUTIONAL HUMAN ETHICS COMMITTEE

Avinashilingam

Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956) Re-accredited with 'A+' Grade by NAAC.
Recognised by UGC Under Section 12 B
Coimbatore-641 043, Tamil Nadu, India

20th January 2020

To
Ms.S.Rajkumari
Department of Human Development
Avinashilingam Institute for Home Science and
Higher Education for Women
Coimbatore – 641 043

Dear S.Rajkumari,

Ref: Your proposal No. IHEC/19-20/HD/48 entitled "Development of Assessment Scale for Primary School Teachers to Identify Children with Learning Disability" submitted for approval to the IHEC on 30.10.2019.

The Institutional Human Ethics Committee of our University hereby grants approval to your research proposal No.IHEC/19-20/HD/48 entitled "Development of Assessment Scale for Primary School Teachers to Identify Children with Learning Disability" submitted by you. The Approval number for the same is AUW/ IHEC/HD-19-20/XPD/48.

We wish you all the best in your research endeavours.

Regards,

S. Uma Mageshwari

Dr.S.Uma Mageshwari
Member Secretary

Institutional Human Ethics Committee

Appendix - II

Permission Letter - 1

கோயம்புத்தூர் மாவட்ட முதன்மைக் கல்வி அலுவலரது செயல்முறைகள்

ஒ.மு.எண். 17778 /ஈ5/2019, நாள். .12.2019

மார்கழி – திருவள்ளுவராண்டு–2050

...

பொருள்–பள்ளிக்கல்வித்துறை– கோயம்புத்தூர் மாவட்டம் – அவினாசிலிங்கம் கல்வி நிறுவனத்தில் உதவி பேராசிரியராக பணியாற்றும் திருமதி.எஸ்.ராஜ்குமாரி என்பார் தனது ஆராய்ச்சிப் பணிக்காக துவக்கப் பள்ளி ஆசிரியர்களிடமிருந்து விவரங்கள் பெற அனுமதி வழங்குதல்– சார்பு.

பார்வை– Ms.S.Rajkumari. Asst.Profeser and Ph.D Research Scholar Avinashilingam Institute for Home Science, Coimbatore letter dated. 05.12.2019

கோயம்புத்தூர் மாவட்டம் அவினாசிலிங்கம் கல்வி நிறுவனத்தில் உதவி பேராசிரியராக பணியாற்றும் திருமதி.எஸ்.ராஜ்குமாரி என்பார் தனது ஆராய்ச்சிப் பணிக்காக மாவட்டத்திலுள்ள துவக்கப் பள்ளி ஆசிரியர்களிடமிருந்து விவரங்கள் பெற அப்பள்ளி ஆசிரியர்களுக்கு "Development of Assesement Scale for primary School teacher to identify children with Learning Disability" என்ற தலைப்பில் மாணவர்களிடம் ஏற்படும் பிரச்சனைகள் சார்பாக பயிற்சி அளிக்க கீழ்க்கண்ட நிபந்தனைகளின் அடிப்படையில் அனுமதி அளிக்கப்படுகிறது.

நிபந்தனைகள்

1. பள்ளிக்கு செல்லும் முன் சம்பந்தப்பட்ட பள்ளித் தலைமை ஆசிரியரிடம் முன் அனுமதி பெற்று செல்லவேண்டும்.
2. ஆராய்ச்சி பயிற்சி தொடர்பாக ஆசிரியர்களிடம் தொகை ஏதும் வசூலிக்கக்கூடாது.
3. எவ்வித புகாருக்கும் இடமின்றி உரிய தலைப்பில் மட்டும் பயிற்சி அளிக்கப்பட வேண்டும்.
4. ஆசிரியர்களை இது தொடர்பாக கட்டாயப்படுத்தக்கூடாது.
5. வாரத்திற்கு ஒரு நாள் மற்றும் இரண்டு மணி நேரம் மட்டுமே பயிற்சி அளிக்க அனுமதி வழங்கப்படுகிறது.

இது தொடர்பாக மேற்காண் பேராசிரியர் தனது அடையாள அட்டையுடன் தங்களை அணுகும் போது மேற்காண் நிபந்தனைகளின் அடிப்படையில் ஒத்துழைப்பு நல்குமாறு பள்ளித் தலைமையாசிரியர்கள் கேட்டுக் கொள்ளப்படுகிறார்கள். மேலும் சம்மந்தப்பட்ட பேராசிரியர் அளிக்கும் பயிற்சியின் தன்மையை உரிய முறையில் ஆராய்ந்து விதிகளுக்கு உட்பட்டு அனுமதி வழங்குமாறும் தலைமையாசிரியர்கள் கேட்டுக் கொள்ளப்படுகிறார்கள்.

20/12/19

முதன்மைக் கல்வி அலுவலர்,
கோயம்புத்தூர்.

பெறுநர்–சம்மந்தப்பட்ட பள்ளித் தலைமையாசிரியர்கள்,
கோயம்புத்தூர் மாவட்டம்.

நகல் : Ms.S.Rajkumari. Asst.Profeser and Ph.D Research Scholar Avinashilingam Institute for Home Science, Coimbatore.

Permission Letter - 2

Avinashilingam
Institute for Home Science and Higher Education for Women
Deemed to be University Under category 'A' By MHRD u/s 3 of U.G.C. Act 1956
Re-Accredited with 'A' Grade By NAAC Recognised by U.G.C. Under Section 12 B
Coimbatore - 641043, Tamil Nadu, India

Dr.K.Arockia Maraichelvi
M.Sc., M.Phil., Ph.D.
Associate Professor and Head
Department of Human Development
e-mail – selvibru97@rediffmail.com
Mob. No: 9843114463

To

BRISK NURSERY & PRIMARY SCHOOL
33, K.K. Pudur Road
Velandipalayam
Coimbatore - 641 025

Subject: Requesting permission for data collection of research –Reg

This is to bring to your kind notice that **S.Rajkumari** conducting a research study on **"Development of Assessment Scale for primary School teacher to identify children with Learning Disability"** under the guidance of **Dr.Ramya Bhaskar** Assistance professor ~~and Head~~ in the Department of Human Development, Avinashilingam Institute for Home science and Higher Education for Women, Coimbatore. In this regard, I request you to kindly permit her to conduct the survey in your esteemed institute. I would also like to mention that the data collection will be done without causing any inconvenience for our college work and the collected data will be kept confidential and used for research propose only.

Thanking you

Sincerely

For BRISK NURSERY & PRIMARY SCHOOL
(S.ANBARASU M.Sc.,M.Ed.,)
PRINCIPAL

Permission Letter - 3

Avinashilingam
Institute for Home Science and Higher Education for Women
Deemed to be University Under category 'A' By MHRD (Under Sec 3 of UGC Act 1956)
Re-Accredited with 'A' Grade By NAAC, Recognised by UGC Under Section 12 B
Coimbatore - 641043, Tamil Nadu, India

Dr.K.Arockia Maraichelvi
M.Sc., M.Phil., Ph.D.
Associate Professor and Head
Department of Human Development
e-mail – selvibru97@rediffmail.com
Mob. No: 9843114463

To

The Principal
St. Paul's Nursery and Primary School
195A, Alagannan Street
Saibaba colony, K.K. Pudur
CBE - 38

Subject: Requesting permission for data collection of research –Reg

This is to bring to your kind notice that **S.Rajkumari** conducting a research study on **"Development of Assessment Scale for primary School teacher to identify children with Learning Disability"** under the guidance of **Dr.Ramya Bhaskar** Assistance professor, ~~and Head~~ in the Department of Human Development, Avinashilingam Institute for Home science and Higher Education for Women, Coimbatore. In this regard, I request you to kindly permit her to conduct the survey in your esteemed institute. I would also like to mention that the data collection will be done without causing any inconvenience for our college work and the collected data will be kept confidential and used for research propose only.

Thanking you

Sincerely

G. EDLINE DELSIA, M.A.,B.Sc.,B.Fd.,D.S.A.,M.Phil.,
PRINCIPAL & CORRESPONDENT
ST. PAUL'S NURSERY & PRIMARY SCHOOL
195-A, ALAGANNAN STREET,
SAIBABA COLONY, K.K. PUDUR,
COIMBATORE - 641 038.

Dr. K. AROCKIA MARAICHELVI
Associate Professor and Head
Department of Human Development
Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore 641 043

Appendix - III a

Teacher's Knowledge Questionnaire

The present scale comprises of 57 statements which will reflect on the knowledge on learning disability. Read each statement carefully and mark (✓) on the answer which are appropriate to you. Please answer all the statement. Your responses will be kept confidential.

S.No	Item	Yes	No	Don't know
1	Learning Disabled children have average or above average intelligence			
2	Learning Disabled children will not have any sensory problems (like blindness or hearing impairment)			
3	Learning Disability is a Neurological disorder			
4	Learning Disability is a Behavioural disorder			
5	Learning Disabled children find it difficult to keep up with children of the same age in learning			
6	Learning Disabled children find it difficult to keep up with children of the same age in dayto day functioning			
7	Learning disability affect all of the ability like listening, speaking, reading, writing and mathematics			
8	Dyscalculia refers to difficulties with comprehension of language / words			
9	Learning Disability is caused due to physical disability			
10	Children with learning disability show lot of difference in his/her achievement and intelligence			
11	Learning Disability is a hidden disability			
12	Learning disability is rare among children			
13	There are 4 or 5 children with Learning disability on average in a regular classroom			
14	Prevalence of learning disability is more among boys than girls			
15	If a child has Learning disability, his/her sibling will also have Learning disability			
16	If parents has Learning disability the child will also have Learning disability			
17	Learning Disability is caused only because of heredity factors			
18	Learning disability will disappear as the child grows older			
19	Learning Disability occurs because of minimal brain dysfunction			
20	Genetic is not the only cause for learning disability			
21	Learning disabled and slow learners are the same			
22	Learning disability occurs due to lack of abilities of the students.			
23	Learning disability occurs due to lack of interest of the students.			
24	Learning disability occurs due to lack of efforts of the students			
25	Learning disability is caused by indiscipline behaviour in the classroom			
26	Learning disability is caused by the educational level of the parents			
27	Aphasia is oral language disability			
28	Dyslexia is learning disorder associated with language			
29	Medium of instruction is the reason for learning disability			
30	Poor basic knowledge in subjects will lead to learning disability			
31	Children with dyslexia are more creative than other children			
32	Dysgraphia is a writing disorder			
33	Intervention can be started at any time for the success of Learning			

	disabled children			
34	Children with dyslexia put more efforts to succeed in reading.			
35	Children with dyslexia are usually good in extracurricular activities			
36	Children with dyslexia always have writing problems.			
37	Learning disabled children have poor motor abilities			
38	Difficulties with written language are common among Learning disabled children			
39	Learning disabled lack in social skills			
40	Difficulty in oral language are common among Learning disabled children			
41	Learning disabled children are quite impulsive			
42	Learning disabled children are usually hyperactive			
43	Not all learning disabled childrenhave poor coordination in their physical activity			
44	Not all learning disabled children have poor coordination in their organizational skills			
45	Learning disability leads to academic difficulties			
46	Dyslexia occurs with English language alone			
47	Learning disabled children does not show consistent performance in different areas			
48	Learning disabled children have lower attention span			
49	Learning disabled show reversal in writing and reading			
50	Learning disabled children omit, add, reverse letters in words			
51	Learning disabled children get confuse with arithmetic signs >,<,-,+			
52	Learning disabled children have a problem in handling scissors			
53	Learning disabled children should be sent to remedial classes			
54	Only customised syllabus is applicable for Learning disabled children			
55	Special educators can only teach Learning disabled children			
56	Early identification of learning disability is needed for early intervention			
57	Intervention is better when children are older			

Appendix - III b

Attitude of primary school teachers on learning disability

The present scale comprises of 35 statements which will reflect on the attitude towards learning disability. Read each statement carefully and mark (✓) on the answer which are appropriate to you. Please answer all the statement. Your responses will be kept confidential.

S.No.	Item	Agree	Neutral	Disagree
1.	I don't like children whose performance is low in class			
2.	If children does not perform consistently well, it is because of their laziness			
3.	If a child is good in one aspect, the child should be good in all aspects			
4.	I get irritated when I see children having problems with learning in class			
5.	I feel that learning disabled children have to be put in special school			
6.	All learning disabled children have Attention Deficit hyperactive Disorder (ADHD)			
7.	I feel that learning disabled children cause disturbance to the class			
8.	I don't want to have any learning disabled children in my class			
9.	I feel learning disabled children affect other children's attention in class			
10.	I get annoyed / irritated when learning disabled children expect me to explain the same concept again			
11.	I feel irritated to give special attention to one child			
12.	I feel special educator should take care of children with learning disability			
13.	I feel that the child has to adapt to my teaching methods			
14.	I feel learning disability cannot be managed in normal class room			
15.	I feel learning disabled children have less IQ			
16.	I feel children with learning disability perform well in academics			
17.	Children with learning disability are good in many skills			
18.	I feel learning disabled children cannot get along with other children			
19.	Teaching learning disabled children delays my work			
20.	I feel that learning disabled children will not be able to cope up with normal school syllabus			
21.	I feel modern technology can be used for teaching learning disabled children			
22.	I focus on the strength of the child rather than weakness to teach him/her			
23.	When I discover a child is little different, I ignore that child			
24.	I feel that punishment will help the child to perform better in class			
25.	I feel that making the child write many times will help the child to remember things better			
26.	I feel that advising in front of other children to help them to over come their problem			

27.	I feel showing pity will help these children to over come their problem			
28.	I feel that labelling children as learning disabled children will offend them			
29.	I feel that learning disabled children should be segregated to a different class according to their needs			
30.	I don't mind if some children doesn't understand the topic I teach			
31.	I get disturbed when learning disabled children are in my class			
32.	I feel disappointed when learning disabled children say that they cannot understand my teaching			
33.	I feel these children should get extra coaching in other study centres			
34.	I feel use of multi sensory teaching should be encouraged for these children			
35.	I am experienced to handle children hence I will not change my teaching style			

Appendix - III c

Teaching practices of primary school teachers

The present scale comprises of 24 statements which will reflect onteaching practices. Read each statement carefully and mark (✓) on the answer which are appropriate to you. Please answer all the statement. Your responses will be kept confidential.

S. No.	Item	Yes	No
1	I feel relaxed once I complete the lesson plan		
2	I give extra information to children other than book		
3	I change my teaching style to make the class interesting for learning disabled children		
4	I see to that I reach out every child in the class		
5	I ignore the disability when I interact with the child with learning disability		
6	When I see a child with learning disability in the class I don't do anything different		
7	I punish the child toperform better in class		
8	Imake the learning disabled child write many times which will help them remember things better		
9	I adviselearning disabled child in front of other children,to make themover comethis problem		
10	I give less work to learning disabled children because I pity them		
11	I don't like to teach or repeat the concept for learning disabled children again and again		
12	I give extra time for the children who write very slow		
13	Due to time constraint I prefer to write on board and finish my work		
14	My aim in teaching is to finish the portions early and I do that way		
15	After the class hours I give extra coaching for learning disabled children		
16	I don't use multi sensory teaching		
17	I give extra attention and extra coaching for learning disabled children		
18	I use only chalk and board to teach children		
19	I give project work for children which can be done by themselves		
20	If I have a child with learning disability I will try give extra coaching to make them learn at their own pace		
21	If there is a child with learning disability in my class I will ignore him/her and take class for other children		
22	I treat learning disabled child as one among the others		
23	I will ask /inform the child who is slow in writing to copy from their friends notes		
24	I teach children to their level of understanding		

Appendix - III d

GENERAL BACKGROUND INFORMATION

Please fill in the following entries: Put ✓ mark where ever necessary

Email Address:

Name of the Teacher:

Age: **Date of birth:** **Gender:** Male / Female

Marital Status: Single / Married / Divorced / Widowed

No. of Children:

Religion:

Educational Qualification (Tick in the appropriate option, you can tick more than one) :

UG with B.Ed. / UG without B.Ed. / UG with M.Ed. / PG with B.Ed. / PG without B.Ed. / PG with M.Ed. / Diploma / teacher training.

Give you complete Education Qualification: _____

Year of experience: less than 5years / 6-10 years / 11-15 years / more than 15 years

Type of School: Government / Private

Nature of school: Boys / Girls / Co education

Board of education of school that you are working now: State / CBSE /ICSE

Class being taught: Lower primary (I, II, III std) / Upper primary (VI, V std)

Working with counsellors: Yes / No

Child psychology in curriculum: Yes / No

Attended in service education (if any training or course completed related to teaching or child development /psychology, if any mention): Yes / No

If yes, mention below / other ----------

Family type: Nuclear / Joint

Area of living: Urban / rural / Semi -urban

Avinashilingam Institute for HomeScience and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Appendix L2

(Item No 5 of Check List)

Details of Research Publications

S.No	Article	Journal	Other Details Vol / No / Page No / Year	Published in UGC-CARE / Scopus Indexed / Web of Science
1	The relationship between teachers' knowledge, attitude and practices towards learning disabilities of the students	The Journal of Research ANGRAU,	Vol. 51(3), pg 113- 120	UGC CARE
2	Rural Community Teachers' Awareness and Attitude on Learning Challenges.	Journal of Extension Education	Vol. 34(4), pg 6920–6931	UGC CARE

*Proof of list of Journals from Internet to be attached along with copies of reprints.

Scholar : S. Rajkumari 21/2/24

Supervisor : 21/2/24

Checked By: 22/2/24

✓ 23.2.2024

HoD/Dean of Respective School

The scholar Mrs. S. Rajkumari (18PHHDP002) has published her article in the following journals:

1. The Journal of Research ANGRAU - is indexed and active in UGC Care Group I from 2019 to present.
2. Journal of Extension Education - is indexed and active in UGC Care Group I from 2019 to present.

These two articles may be considered.

21.02.2024

RESEARCH ARTICLE

Journal of Extension Education
Vol. 34 No.4, 2022
DOI: https://doi.org/10.26725/JEE.2022.4.34.6920-6931

Rural Community Teachers' Awareness and Attitude on Learning Challenges

S. Rajkumari and Ramya Bhaskar

ABSTRACT

In rural landscapes, teachers are unsung education heroes, facing challenges like limited professional growth, inadequate infrastructure, and the need to innovate teaching methods for diverse student needs. They shape their communities' education through adaptability and evolution. A September 2022 study conducted in Coimbatore district of Tamil Nadu surveyed 149 rural primary school teachers, using self-developed questionnaires on background information, awareness of learning challenges, and attitudes toward them. Reliability, measured with Cronbach's Alpha, showed scores of 0.829 for awareness and 0.854 for attitudes. Results revealed that most teachers had moderate awareness, with some displaying low awareness and many holding neutral attitudes, which could turn unfavorable over time. Linear regression highlighted associations with age, experience, and class type. Experience emerged as the main predictor for both awareness and attitude, implying that more experience leads to improved awareness and attitude. These findings can guide stakeholders in supporting rural educators, benefitting students across geographical boundaries.

Keywords*: Teacher; Rural community; Awareness; Attitude; Learning challenges ; Tamil Nadu*

INTRODUCTION

In rural areas, access to quality education is often hampered by various challenges, including geographical remoteness, limited resources, and socioeconomic disparities. As the frontline agents of change in these settings, rural community teachers hold the key to unlocking the potential of their students and driving progress within their communities. Rural community teachers are the linchpins of educational advancement in rural areas. Rural teachers usually have a more distinctive and significant influence on students' lives. (Irvin et al. 2016). In comparison to urban environments, rural schools encounter specific difficulties such as limited resources concerning facilities and non-teaching personnel, substandard school infrastructure, and a scarcity of teachers, especially those with adequate training, as these schools are not considered particularly appealing places to work (Bawane, 2019). Due to inadequate training, demanding administrative responsibilities, and a lack of non-teaching staff, many rural schools now have multi-grade classrooms, a high student-teacher ratio, and unsatisfactory levels of educational quality and curriculum outcomes (Annual Status of Education Report (Rural) [ASER], 2018).

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Rural community teachers act as agents of change, inspiring their students to dream big and overcome the barriers of their circumstances. They play a pivotal role in nurturing young minds and talents that can contribute to the overall development of the rural community.

Effective resolution of learning challenges within rural communities hinges upon the profound influence of teachers' knowledge and attitude. Their awareness of the unique obstacles faced by students is the cornerstone of this endeavour. Armed with this awareness, teachers possess the ability to adapt their teaching approaches to cater to specific needs, thereby enhancing student motivation and academic outcomes. Furthermore, their knowledge or awareness equips them with insights that extend beyond traditional curriculum boundaries, allowing them to foster critical thinking and problem-solving skills in their students.

However, it is not just awareness but the positive attitudes of these educators that shape a transformative learning environment. Their constructive outlook fosters resilience and determination in students, inspiring them to overcome adversity. In addition to imparting subject matter knowledge, teachers become mentors who instil values of perseverance and self-belief. These attitudes also create an inclusive classroom atmosphere where every student feels valued and capable. A study by Zuniga et al. (2017) found that teacher knowledge was positively correlated with attitudes towards students with disabilities and substantial variances in knowledge and attitudes were observed due to the factors such as educational attainment, length of teaching tenure, and the nature of certification. They also found that teachers in rural areas faced challenges such as a lack of resources, training, and support for inclusive education. The study suggested that improving teacher knowledge and attitude could enhance the quality of education for students with disabilities in rural settings.

The existing body of literature on rural teachers addresses various challenges in teaching, including poor working conditions, overloaded teaching and administrative duties, and lack of resources. While studies have explored these aspects individually, there is a noticeable gap in research on teachers specifically examining the awareness and attitude towards learning challenges of children. Despite studies on difficulties faced by rural schools, the focus has been limited in understanding how teachers perceive and respond to learning challenges. The identification of research gap emphasises the need for addressing teachers' levels of awareness and attitude towards children's learning challenges highlights the crucial role of rural community teachers in dealing with diverse learning challenges and promoting inclusive education. This research provides valuable insights for educators and policymakers, fostering collaboration to create an enabling environment for equitable educational opportunities in rural communities, and empowering students to reach their full potential. With this backdrop, the objectives of this study are:

- To determine the level of awareness and attitude of rural community teachers on learning challenges.
- To assess the relationship between awareness and attitude of rural community teachers regarding learning challenges.
- To examine the influence of socio-demographic variables on awareness and attitude of rural community teachers.

METHODOLOGY

The research received ethical clearance from the Institutional Human Ethical Committee and adopted a cross-sectional research design. The investigation was carried out in September 2022, in Coimbatore district, Tamil Nadu state. Coimbatore was chosen for the study due to its status as a prominent educational hub in South India and its proximity to surrounding rural areas. Primary school teachers both male and female who instruct children from first standard to fifth standard were selected purposefully through convenient sampling. Five zones within Coimbatore guided the selection of three schools per zone based on the consent given by the school authority to ensure a comprehensive representation. Totally 514 teachers consented and participated in the study. Further, 149 primary school teachers from rural areas, working in rural schools was scooped out for the present analysis. To collect data on socio-demographic information, a self-developed questionnaire was designed, encompassing aspects such as age, family type, area of living, type of residence, educational qualification, and years of experience. Regarding the research instruments, an awareness scale was constructed with 57 statements. Respondents were asked to indicate their level of agreement on a Likert scale with five response options, ranging from "strongly disagree" to "strongly agree." The questionnaire included both positive and negative statements to capture a comprehensive understanding of the participants. Additionally, to assess the attitude of teachers toward learning challenges, a 35-statement attitude scale was developed using a 3-point Likert Scale with options for "agree," "neutral," and "disagree." This scale was carefully crafted to encompass both positive and negative statements, ensuring a comprehensive and accurate understanding of the teachers' perspectives. The reliability of the research tools was evaluated using Cronbach's Alpha test, which yielded favorable results, with the awareness scale achieving a reliability score of 0.829 and the attitude scale achieving a reliability score of 0.854. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS), with regression analysis employed to investigate the influence of socio-demographic variables on the awareness and attitude of rural community teachers towards learning challenges.

FINDINGS AND DISCUSSION

Rural Teachers' Socio Demographic Characteristics

The Social and demographic characteristics of the respondents, categorizing them based on age, class handling, educational qualification, years of experience, and family type. Regarding age, the respondents were grouped into four categories. The highest number of respondents (35.6%) fell within the age range of 31-40 years, with 53 participants. Regarding educational qualification, the majority of respondents (61.1%) possessed a "Degree with B.Ed," with 91 participants. In contrast, 22.1 per cent of the sample (33 respondents) had a "Degree without B.Ed.".

Considering years of experience, respondents were divided into four categories. The highest proportion of participants (32.2%) had less than 5 years of experience, with 48 individuals. Further, the family type of the respondents was categorized as joint and nuclear. The majority (63.8%) belonged to joint families, with 95 participants, while 36.2 per cent (54 individuals) were from nuclear families. These personal factors provide important demographic insights into the study's sample population, enabling a comprehensive understanding of the data collected.

From various studies it was evident that examining the influence of socio-demographic characteristics on teachers' awareness and

attitude concerning learning challenges holds crucial significance. Age, for instance, emerges as a pivotal factor, with older teachers often showcasing heightened empathy derived from extensive teaching experience, while younger teachers bring fresh perspectives and enthusiasm. At the same time, higher qualifications may empower teachers to create inclusive environments, and continuous professional development enhances their teaching practices, extended teaching periods contribute to encountering diverse student needs, fostering better awareness, and improved teaching skills. Therefore, these personal factors can inform targeted interventions and professional development, thereby improving rural teachers' abilities to address the diverse needs of students.

Rural Community Teachers' Level of Awareness and Attitude on Learning Challenges

The level of awareness and attitude toward learning challenges among rural community teachers is depicted in Table 1.

Table 1. Level of Awareness and Attitude of Rural Community Teachers on Learning Challenges

Sl. No	Variables	Categories	Number	Percentage
1	Awareness	High	18	12.1
		Moderate	112	75.2
		Low	19	12.8
2	Attitude	Favourable	62	41.6
		Neutral	84	56.4
		Unfavourable	3	2
Total			149	100

Table 1 presents data on 149 rural community teachers, and their awareness and attitude concerning learning challenges. Regarding awareness, the majority, 75.2 per cent, showed a moderate level, 12.8 per cent had a low level and 12.1 per cent demonstrated a high level of awareness. Turning to attitude, 56.4 per cent held a neutral attitude, 41.6 per cent of the respondents displayed a favorable attitude towards learning challenges, and only two per cent expressed an unfavorable attitude. These findings provide valuable insights into the perceptions and inclinations of rural community teachers concerning learning challenges, which are crucial for understanding and addressing educational needs in such communities.

The alignment of this research findings with the prior studies conducted by Basim et al. (2019) in Kerala, Daniel et al. (2019) in Pune, Charan and Kaur (2017) in Punjab, and Ghimire (2017) in Dharan, Nepal, is indicative of a broader, recurring issue within the educational landscape. However, a study conducted by Shari and Vranda (2015) with 200 primary school teachers from 16 schools of Bangalore South revealed that most of the teachers had favourable attitude towards specific learning disabilities which is found to be dissimilar from the results of the present study, and this contradiction in attitudes may stem from differences in urban and rural teachers' access to resources and training, as well as potential cultural variations shaping their perceptions of specific learning challenges.

Predictive Capacities of Socio-demographic Factors on Awareness and Attitude of Rural Teachers on Learning Challenges

A multiple linear regression analysis was carried out to investigate the relationship between respondents' social and demographic characteristics and awareness as well as attitudes towards learning challenges. The sample size of 149 was considered sufficient for the five independent variables used in the study, as the assumption of linear regression was met, which indicated that the sample was adequate. The assumption of singularity was met, and in the correlation analysis, none of the independent variables had coefficient loadings exceeding 0.9, indicating no severe multi-collinearity. Collinearity was also satisfied, with tolerance values less than 1 and VIF less than 10, ensuring no substantial multi-collinearity among the independent variables. Extreme univariate outliers were not found, and Cook's distance was within an acceptable range, implying no single data point excessively influenced the model. These results suggest that all assumptions for conducting the multiple linear regression analysis were adequately met, establishing the reliability of the findings.

Table 2a. Correlation between Social - Demographic Characteristics and Awareness

Variables	Awareness	Age	Family Type	Educational Qualification	Years of Experience	Class Taught
Awareness	1.000					
Age	.211**	1.000				
Family Type	.085	.026	1.000			
Educational Qualification	.018	-.133*	-.075	1.000		
Years of Experience	.318**	.656**	-.016	-.014	1.000	
Class Taught	.136*	.211**	.031	-.280**	.266**	1.000

Table 2a displays the correlation matrix depicting the relationships between Social and demographic characteristics and awareness among the participants. The correlation between awareness and age demonstrated a positive relationship with awareness ($r = .211$, $p < .001$), indicating that as participants' age increased, their awareness of learning challenges also showed an increase. The positive correlation was attained based on the scoring pattern which implied higher scores as higher awareness levels and quantified age that implied higher code numbers for higher age groups. Age-related cumulative experiences and continuous exposure to a variety of educational contexts may explain the positive link between age and awareness of learning challenges that have been reported. Older participants may have experienced a wider variety of pupils and teaching environments throughout their careers, which would have increased their understanding of different learning challenges. Furthermore, as people get older, they might participate in ongoing professional development and learn about efficient teaching techniques, which would increase their knowledge of learning challenges

even more. Years of experience also displayed a positive relationship with awareness (r = .318, p < .01). This reveals that as the number of years of experience of the participants increased, their awareness of learning challenges also increased. In class taught, a positive relationship with awareness (r = .136, p < .05) was noted, indicating that certain classes taught by the participants were associated with higher levels of awareness regarding learning challenges. However, the variables family type (r = .085, p > .05) and educational qualification (r = .018, p > .05) did not show statistically significant correlations with awareness among the participants. The relationship observed between variations in family type and educational qualifications and the level of awareness regarding learning challenges among the study participants suggests that these factors may not have an significant effect on awareness in this context.

Table 2b. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.337[a]	.114	.083	8.107	.114	3.671	5	143	.004
a. Predictors: (Constant), Class taught, Family type, Age, Educational Qualification, Years of experience									
b. Dependent Variable: Awareness									

Table 2c. ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1206.550	5	241.310	3.671	.004[a]
	Residual	9398.913	143	65.727		
	Total	10605.463	148			
a. Predictors: (Constant), Class taught, Family type, Age, Educational Qualification, Years of experience						
b. Dependent Variable: Awareness						

Table 2b displays the model summary, revealing an R-value of .337, indicating a positive relationship between the independent and dependent variables. The R-squared (R^2) value is .114, indicating an 11.4 per cent variance in the dependent variable explained by the independent variable. On the other hand, Table 2c represents the ANOVA results, which show significant relationship between social and demographic characteristics and awareness (F=3.671, P=.004).

Table 2d.Coefficients[a]

Model B		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Std. Error	Beta			
1	(Constant)	20.256	3.733		5.426	.000
	Age	.048	.959	.005	.050	.960
	Family Type	1.609	1.387	.092	1.160	.248
	Educational Qualification	.536	.922	.049	.582	.562
	Years of Experience	2.125	.763	.299	2.785	**.006**
	Class Taught	1.120	1.439	.066	.778	.438
a. Dependent Variable: Awareness						

Additionally, the multiple linear regression analysis revealed that only years of experience (□=.299, t=2.785, P=.006) significantly influence the awareness among rural community teachers regarding learning challenges. This means that a one-unit change in years of experience is associated with an increased score of 2.125 the awareness of rural teachers on learning challenges. Nonetheless, the study found that age, family type, educational qualification, and class taught did not significantly influence the awareness of learning challenges among rural teachers.

A study conducted by Malliga (2020) found that primary teachers working in Erode district had a low level of awareness regarding learning disabilities. In this context, background variables such as marital status, additional qualifications, and the location of the school did not appear to exert any influence on the awareness of learning disabilities among primary school teachers. Importantly, the research deduced that there exists a significant disparity in the awareness scores related to learning disabilities among primary school teachers based on the types of schools they teach in and their monthly income levels.

Table 3. Influence of Social and Demographic Characteristics of Rural Teachers on Attitude

Variables	Attitude	Age	Family Type	Educational Qualification	Years of Experience	Class Taught
Attitude	1.000					
Age	.137*	1.000				
Family Type	.036	.026	1.000			
Educational Qualification	-.044	-.133*	-.075	1.000		
Years of Experience	.268**	.656**	-.016	-.014	1.000	
Class Taught	.013	.211**	.031	-.280**	.266**	1.000

*** -Significant at 1% level* * *-Significant at 5% level*

Table 3 presents the correlation matrix, examining the relationships between social and demographic characteristics with attitudes toward learning challenges among the participants. The correlation analysis revealed significant results for certain variables. Firstly, the correlation between attitude and age was positive and statistically significant ($r = .137^{*}$, $p < .05$), also years of experience also displayed a positive relationship with attitude ($r = .268^{**}$, $p < .01$), indicating that as participants' age increased, their attitude toward learning challenges showed a favourable level and a similar trend was observed in years of experience as well. The positive correlation was established by examining the scoring pattern, where elevated scores indicated a higher attitude level. Additionally, age codes as well as codes for years of experience were quantified, with higher code numbers corresponding to more advanced age group and experience. As teachers' age increases, they may develop a heightened sense of empathy and patience, essential qualities in dealing with learning challenges. This emotional intelligence, cultivated through years of interaction with students, might manifest as a positive attitude toward understanding and addressing diverse learning needs. On the other hand, family type ($r = .036$, $p > .05$), educational qualification ($r = -.044$, $p > .05$) and class taught ($r = -.013$, $p > .05$) did not show statistically significant correlations with attitude among the participants. This implies that variations in family type, class taught and educational qualifications did not have a statistically significant impact on the level of attitude regarding learning challenges among the participants in this study. These findings suggest that, within the scope of this study, demographic aspects such as family type, the class taught, and educational qualifications may not be the primary determinants shaping teachers' attitudes toward learning challenges. It opens avenues for exploring other potential influential factors, such as, professional development opportunities, or specific training related to addressing diverse learning needs. Moreover, these results underscore the diverse and complex nature of attitudes among teachers, highlighting the need for a nuanced understanding of the factors that contribute to their perspectives on learning challenges.

Table 3b. Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.291[a]	.084	.052	11.246	.084	2.639	5	143	.026

a. Predictors: (Constant), Class taught, Family type, Age, Educational Qualification, Years of experience

b. Dependent Variable: Attitude

Table 3c. ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1668.634	5	333.727	2.639	.026[a]
	Residual	18084.037	143	126.462		
	Total	19752.671	148			
a. Predictors: (Constant), Class taught, Family type, Age, Educational Qualification, Years of experience						
b. Dependent Variable: Attitude						

The model summary and ANOVA are shown in Tables 3b and 3c, respectively. According to the table, the R-value was .291, indicating a positive relationship between the independent and dependent variables, accounting for 8.4% of the variance and an $R^2$of .084. According to the ANOVA, there was a significant correlation between sociodemographic factors and attitude among teachers in rural communities, with F=2.639, p=.026.

Table 3d. Coefficients[a]						
Model B		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		Std. Error	Beta			
1	(Constant)	72.389	5.178		13.979	.000
	Age	-1.007	1.330	-.081	-.757	.450
	Family type	.975	1.924	.041	.507	.613
	Educational Qualification	-1.059	1.278	-.070	-.828	.409
	Years of experience	3.333	1.058	.343	3.150	**.002**
	Class taught	-1.884	1.996	-.082	-.944	.347
a. Dependent Variable: Attitude						

Additionally, Table 3d's multi-linear regression analysis showed that the years of experience (β =.343, t= 3.150, P=.002) was found to be the predictive factor of the attitudes of rural community teachers in the study area towards learning challenges. For one unit increase in years of experience, there will be a .343 score increase in teachers' attitude towards learning challenges. This indicated that factors like age, family type, educational qualification, and the class taught did not influence rural teachers' attitudes toward learning challenges.

A study by Wu et al. (2022) examined the factors influencing rural teachers' innovative behaviour in Integrating Technology into Teaching (ITT) in China. They found that organizational environment, peer support, and information

literacy contributed to rural teachers' innovative behaviour in Integrating Technology into Teaching (ITT), while technostress hindered its behaviour in Integrating Technology into Teaching (ITT). They did not find any significant effects of demographic variables such as age, gender, education level, and teaching experience on rural teachers' innovative behaviour in Integrating Technology into Teaching (ITT). Another study by Bailey (2021) discussed the challenges and strategies for addressing the needs of rural students in the United States. He suggested that teachers can work with rural students' families to improve outcomes for rural students by engaging them in the learning process, communicating regularly and transparently, and providing relevant and authentic learning experiences. He did not mention any specific factors that affect rural teachers' attitudes toward learning challenges.A study by Plessis and Mestry (2019) explored the challenges and opportunities for teacher education in rural schools in South Africa. The research outcomes highlighted that the only two factors that significantly affected the inclusion of students with learning disabilities - teachers' training and age. In contrast, factors such as teachers' gender, experience, qualifications, and marital status did not exert a notable influence on the inclusion of students with learning disabilities.

Rural teachers, as defined in this study, are educators who are both working and living in rural areas. These teachers play a pivotal role in shaping the educational landscape of remote and less developed regions. Often facing unique challenges related to limited resources and geographical isolation. Rural teachers are tasked with the crucial responsibility of imparting knowledge and skills to students who come from similar limited resources as of these teachers. Socio-demographic variables, encompassing characteristics such as age, education, family type, and years of teaching experience, form the basis for understanding the diverse composition of these rural educators. In the specific context of this study, the term "rural teachers" takes into account the intricate interplay of personal and professional factors that contribute to the socio-demographic profile of these individuals. The influence of socio-demographic variables on rural teachers is a nuanced aspect of the study. Notably, the age and number of years a teacher has spent in the profession emerged as a significant factor shaping their awareness levels and attitudes towards learning challenges. In contrast, other socio-demographic variables, including family type, educational qualification, and the class taught, did not demonstrate statistical significance in influencing these teachers' awareness and attitudes on educational obstacles. This study sheds light on the unique dynamics of rural education, emphasizing the importance of considering both the professional and personal aspects of teachers in these settings. Recognizing the specific characteristics that define rural teachers allows for a more targeted approach to address their needs and challenges, ultimately contributing to the improvement of education for the children to overcome educations obstacles in underserved areas.

CONCLUSION

The study revealed that a substantial majority of the teachers exhibited a moderate level of awareness concerning learning challenges, with a smaller proportion displaying high awareness levels and a slightly larger fraction. with low awareness. In the context of attitudes toward learning challenges, more than half of the teachers adopted a neutral stance. This indicates that a considerable number of teachers neither strongly favoured nor opposed addressing learning challenges. Meanwhile, a noteworthy percentage demonstrated a favourable attitude, showcasing receptivity and support

for addressing learning challenges. In contrast, a minimal (2%) expressed an unfavourable attitude, indicating a small fraction of teachers with a less optimistic perspective on handling learning challenges. It is essential to underscore the significance of the substantial 56.4% of teachers who maintained a neutral attitude. This neutrality suggests a middle-ground perspective that may be influenced by a variety of factors such as their thoughts, beliefs, exposure to inclusive practices, and lack of specific training towards educational policies. Importantly, the mention of a potential shift to an unfavourable stance over time implies that these teachers might be open to evolving perspectives. This shift could be influenced by gaining more experience in dealing with diverse learning challenges or encountering challenges in implementing inclusive practices, potentially leading some teachers to develop a less favourable outlook over time. These insights are pivotal in effectively informing strategies tailored to address the evolving educational needs of rural areas.

The study revealed that years of experience emerged as a significant influence for both awareness and attitude among rural community teachers. Teachers with greater experience tended to display heightened awareness and more positive attitudes towards addressing learning challenges. Conversely, social and demographic factors such as age, family structure, educational background, and the class they taught did not exert a significant influence on either awareness or attitude. These findings hold crucial implications for educational stakeholders and policymakers. It is clear that experienced teachers play a crucial role in fostering awareness and cultivating positive attitudes towards addressing learning challenges in rural areas. To leverage this, tailored support and professional development programs should be crafted, with a particular focus on empowering experienced teachers. By doing so, we can enhance the overall quality of education in rural settings and ensure that students receive the support they need to succeed academically. Furthermore, involving rural community teachers in policymaking processes and crafting policies aligned with their insights can lead to contextually relevant and effective strategies for rural education. This collaborative approach can create an enabling environment that promotes equitable educational opportunities, empowering students in rural communities to achieve their full potential.

Practical applications of these findings might involve integrating awareness and attitude enhancement modules into teacher training programs or utilizing the insights to inform policy initiatives aimed at improving the quality of education in rural communities. Effective improvement of education in rural areas involves a multifaceted approach. Identifying specific educational challenges. Targeted interventions, and subsequent teacher training programmes should address the enhancement of awareness with regard to learning challenges and a favourable attitude to address these challenges.

REFERENCES

Annual Status of Education Report (Rural) [ASER]. (2018). ASER Centre, Inkprint. in, New Delhi, 8-9. http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202017/aser2017

Bailey, J., (2021). Addressing the needs of rural students. *Phi Delta Kappan*, *102*(5), 40-44.

Basim Ali, C.T., Fysal, N., AkhilaThasneem, A., & Aswathy, P.S.,(2019). Assessment of knowledge level on learning disability among primary school teachers. *International Journal of Contemporary Paediatrics*, 6(2),431-435. https://doi.org/10.18203/2349-3291.ijcp20190545

Bawane, J., (2019). Paradoxes in teacher education: Voices from the Indian context. *Teaching and teacher education.* 49–70. https://doi.org/10.1007/978-3-030-26879-4_3

Charan, G. S., & Kaur. H.,(2017). A Cross-Sectional Survey to Assess the Knowledge and Attitude Regarding Dyslexia among Teachers at Selected Schools, Punjab. *International Journal of Science and Healthcare Research. 2*(3), 9- 14. https://ijshr.com/IJSHR_Vol.2_Issue.3_July2017/IJSHR003.pdf

Daniel, D., Ruth, R., Gaikwad, M., Adhale, V., Bhalerao, S., & Jagtap, S. (2019). A study on awareness levels of primary school teachers on learning Disabilities in government schools of Telangana, *The Pharma Innovation Journal*, *8*(5), 423-426. http://www.thepharmajournal.com/

Ghimire, S. (2017). Knowledge of Primary School Teacher Regarding Learning Disabilities in School Children. *Journal of Nobel Medical College. 6*(10), 29-35.

Irvin, M. J., Byun, S. Y., Meece, J. L., Reed, K. S., & Farmer, T. W. (2016). School Characteristics and Experiences of African American, Hispanic/Latino, and Native American Youth in Rural Communities: Relation to Educational Aspirations. Peabody Journal of Education, *91*(2), 176-202. https://doi.org/10.1080/0161956X.2016.1151739

Malliga, T. (2020). Awareness of Learning Disability among primary school teachers", *TNTEU International Journal of Educational Research*, *1*(1), 34- 41.

Plessis, P., & Raj MestryII, R. (2019). Teacher education for rural schools – a challenges for South Africa. *South African Journal of Higher Education*, *39*(1), S2-S9. http://dx.doi.org/10.15700/saje.v39ns1a1774

Shari, M. & Vranda, M. N. (2015). Knowledge of primary school teachers in identifying children with learning disability. *Disability CBR & Inclusive Development. 26*(3), 68-76. http://dx.doi.org/10.5463/DCID.v26i3.443

Wu, J., Li, Y., Zhang, H., & Wang, L. (2022). Factors influencing rural teachers' innovative behavior of integrating technology into teaching: A structural equation modeling analysis. *Computers & Education*, 174, 104212.

Zuniga, R., Olson-Buchanan, J. B., & Schmidtke, J. M. (2017*). The relationship between teacher knowledge and attitude towards students with disabilities in rural South Texas* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10275632)

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THE RELATIONSHIP BETWEEN TEACHERS' KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS LEARNING DISABILITIES OF THE STUDENTS

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ABSTRACT

The research was conducted with the aim of understanding the relationship between teachers' knowledge, attitude, and practice towards learning disabilities of the students. For this study, 133 primary school teachers were chosen at random in 2022. The information on primary school teachers' Knowledge, Attitude, and Practices (KAP) was collected by a KAP scale developed by the researcher. The scale was validated and verified for reliability using Cronbach's Alpha. The reliability score of the constructed KAP scale was 0.829, 0.854, and 0.700 correspondingly suggesting good reliability. Results showed that more than half of teachers (69.2%) had a moderate degree of knowledge and 54.9% were found to have a neutral attitude towards learning disability of the students. In terms of practices, a good level of practices among nealry three-fourth(72.9%) of the teachers was noted. A significant association was recorded between the knowledge and attitude of primary school teachers towards learning disabilitiesof the students. However, the results did not record practices being significantly interrelated to the knowledge and attitude towards learning disabilities of the students among primary school teachers, implying that knowledge or attitude might not influence practices as the practices remains self-regulated.

Keywords: KAP, learning disability, Primary School Teachers, Relationship, Students

INTRODUCTION

Learning Disability (LD) is an unnoticed barrier. It interferes with every aspect of life, academic performance, social relationships, mobility, and employment. It is one of the concerns that require special consideration. In India, no special efforts are made to determine the prevalence of LD, but it is estimated that 13-14 percent of our school children have learning disabilities (Deshmukh *et al*., 2021).

The child's teachers are the first to notice when they believe they are not learning as they should. Arifa and Siraj (2019) stated in their study that, present a significant problem for educators and members of the households. The way the teachers respond to these kids' needs will determine how successful they are and they become.

For the teachers to respond to the needs of the children, should be aware of the challenges children face. Hence, their knowledge of learning disability is most important for identifying them. Several scholars have highlighted the fact that primary school teachers exhibited lower levels of

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knowledge with regard to specific learning abilities (Shari and Vranda, 2016; Ghimire, 2017). According to Moothedath and Vranda (2015), Among teachers, only 5% are solely seemed to be having sufficient knowledge regarding learning disability which is a very low number to take into account. A professional degrees needed to work as a teacher in a school in India is a teacher training degree. Dhindsa *et al.* (2021) in their study reported that many teachers lack the training, expertise, and experience/knowledge required to identify at-risk young children. Often teachers lack the necessary knowledge to recognize students with learning disabilities; or struggle to recognize students who are at risk, which could lead to an increase in the prevalence of LD. According to Singh *et al*. (2017), recent investigations on learning disabilities found that there is a 5% -15% prevalence in India, which is a highly frightening number. As teachers being the ones to recognize obstacles among children, their ability to support children is significantly impacted by the lack of knowledge and comprehension of particular learning difficulties. According to WHO (2012), certainly being more knowledgeable will lead an alteration in behavior (Sitrakool, 2017). From this statement, it could be understood that knowledge may influence a behaviour of a person.

A study by Madhamani and Joseph (2021) stated that teachers in schools have some knowledge regarding learning difficulties, but lack the necessary practice to effectively manage school children. Though they lack knowledge, teachers are more aware of learning difficulties and have a favourable attitude. The study by Soni (2020) reported that instructors' knowledge and attitudes were positively correlated. Because knowledge is a significant truth that affects or influences an individual's own attitude and practice, rather than being a single component or detached fact.

Few studies sustained the results of the investigations that teachers had insufficient knowledge on learning disabilities. The study by Asok *et al.* (2021) stated that teachers belonging to government schools had insufficient knowledge of learning disability while the vast majority had positive attitudes. Soni (2020) reported that most teachers had insufficient knowledge and highly favourable attitude toward learning disability. The K-A-P Model, which is based on the social psychology theory of cognitive-affective-behaviour, suggested that knowledge influences attitude, and, in turn, practices (Luo *et al.,* 2022). With these perspectives, the study was proposed to record the the relationship between teachers' knowledge attitude and practices (KAP) towards learning disabilities of students.

After parents, teachers are the greatest influence on a child's life. To cater the needs of various learner types, teachers can adapt their teaching methods. A teacher must be knowledgeable about the different types of learning disorders to recognise one in a student who is not making sufficient progress in class. Teachers' knowledge, attitudes, and practices affect students' learning in many ways. Learning disability seriously impede educational actions that require reading, math, or writing abilities. Ten to fourteen percent of children in India suffer from a specific learning disability. In comparison to teachers with general pedagogy backgrounds, those with enough knowledge of learning difficulties and the necessary skills or competencies can serve better. If teachers' fall short in awareness and knowledge affects these children as these children go unattended in a group. Since teachers are the learned people with whom the children spend the vast majority of their active time, it is extremely crucial for teachers, notably primary school teachers, to be aware of this unseen disability that enables early detection and

intervention. Also, teachers' attitudes toward these students are essential in facilitating them in coping with this disability.

MATERIALS AND METHODS

Human Ethical Committee clearance from the institute was sought to conduct the study. The study used a cross-sectional research design and a descriptive research approach. A total of 133 primary school teachers from 13selected schools in Coimbatore City, Tamil Nadu were considered for the study using a convenient sampling technique. Data was collected between the months of October and November, 2022 using a self-structured interview schedule. Data collection involved two sections. Section I - Socio-demographic variables that were taken into consideration for the study; Section II-A rating scale for knowledge and attitude, along with a checklist for practices. The description of the study tools is as follows:

The teacher's knowledge of the learning disability of the students scale was constructed with 57 statements. Basic information about the qualities, conditions, and misconceptions are the scale's primary statements. A Likert scale with five possible responses namely strongly disagree, disagree, uncertain, agree, and agree strongly was used in the interview schedule consisting both positive and negative statements.

The teacher's attitude on the learning disability of the students scale was developed with 35 statements. Myths and general inferences about learning disabilities of the students were presented as statements. Agree, Neutral, and Disagree are the responses on a three-point Likert scale with both positive and negative statements.

Teacher's classroom teaching practices A checklist with 24 statements in total, with both positive and negative statements was developed. Information about common classroom practices and teaching pedagogy of teachers were included in the statement. Through content validity, the self-developed tool was validated. The tool's content was reviewed by experts. In the first step, a committee of two senior academia and two primary school teachers were included in the discussion for checking the scale content statements. The scale was refined according to the suggestions given by them. Nine experts were chosen from various disciplines based on the subject which included two developmental pediatricians, one neurologist, one professor from the Department of Special Education, two professors from the department of Human Development, one clinical psychologist, and one special educator. Review and face validity was obtained and the scale was refined further. Cronbach's Alpha test was used for the estimation of the reliability. A range from above 0.700 in the Cronbach's alpha test is considered to be reliable, therefore, the scales were reliable with scores of 0.829 for the knowledge scale, 0.854 for the attitude scale, and the practices scale had 0.700 score. The gathered data was scored and compiled. Frequency and percentages were calculated and the results were interpreted using ANOVA test to check the relationship between KAP.

RESULTS AND DISCUSSION

As per Table 1, those between the ages of 31 and 40 made up nearly half of the teachers (39.8%), followed by those between the ages of 41 and 50 (26.3%), 21 to 30 (24.1%), and those between the ages of 51 and 60 were up to 9.8%. A total of 96.2% of the teachers were women. Majority of teachers (69.9%) belonged to a nuclear family, while 30.1% lived in a joint family. More than half of the respondents (54.9%) came from urban areas. More than half (65.4%) of the teachers had a B.Ed degree. Only 39% had less than five years of teaching experience, others had more than five years of teaching experience (61%).

Socio-demographic features play a significant part in the development of KAP. Several

research studies have hypothesized the influence of the socio-demographic conditions of teachers on their KAP. However, this study was limited only to seeing the relationship between KAP, nevertheless accepting the fact that certain socio-demographic aspects impact the KAP owing to the available literature. The study by Shari and Vranda (2015) identified variations in overall knowledge levels on LD under age, education, classes taught, type of school, and number of teaching years of experience of teachers. Dada and Sulyman (2021) brought out the significant influence of gender, school type, and specialization of teachers on their knowledge of LD in the Ilorin South local government area, Kwara State. The study conducted in Saudi Arabia by Nsreen and Mogeda (2019) reflected on a significant relationship between levels of knowledge and socio-demographic variables. Ranjeetha and Shobha (2019) also recorded the association between socio-demographic variables and classroom practices of teachers related to LD.

Table 2 indicated that nearly three-fourth teachers (69.2%) had a moderate knowledge level and 27.1% exhibited a high knowledge level. A higher number (54.9%) of the respondents had a neutral attitude, and 40.6% had a favourable attitude regarding learning disabilities of the students. Majority (72.9%) had satisfactory classroom practices, whereas, the remaining teachers (27.1%) had average classroom teaching practices.

The KAP level demonstrated that the great majority of teachers had a moderate knowledge level (69%), a neutral attitude towards LD(55%), and good teaching practices (73%). However, the cause for concern here is the moderate levels of knowledge and neutral attitudes which should be enhanced to higher and favorable levels, as the

Table 1. Primary school teachers' socio demographic information (n=133)

S.No.	Variables	Category	Number	Percentage(%)
1.	Age (in years)	21- 30	32	24.1
		31 – 40	53	39.8
		41 – 50	35	26.3
		51 – 60	13	9.8
2.	Gender	Female	128	96
		Male	5	4
3.	Family Type	Joint	40	30.1
		Nuclear	93	69.9
4.	Area of Living	Urban	73	54.9
		Semi Urban	60	45.1
5.	Educational Qualification	Degree with B.Ed	87	65.4
		Degree without B.Ed	46	34.6
6.	Years of Experience	< 5 years	52	39.1
		6-10 years	35	26.4
		11-15 years	18	13.5
		>15 years	28	21.1
	Total	**133**	**100**	

Table 2. Level of teachers' KAP towards learning disabilities of the students

S.No	Variables	Categories	Number	Percentage
1.	Knowledge	High	36	27.1
		Moderate	92	69.2
		Low	5	3.8
2.	Attitude	Favourable	54	40.6
		Neutral	73	54.9
		Unfavourable	6	4.5
3.	Practices	Good / Satisfactory	97	72.9
		Average	36	27.1
		Poor / Unsatisfactory	0	0
	Total	**133**	**100**	

possibility of the moderate levels going down to low and neutral attitudes becoming unfavorable cannot be ruled out. Hence, constant monitoring of the knowledge and attitudes of the teachers might help in facilitating the enhancement and avoiding deviation or debilitating the acquired knowledge and attitudes.

The study carried out by Shari and Vranda (2015) with teachers belonging to primary schools at Bangalore South revealed that most of the teachers responded to having a favourable attitude towards specific learning disabilities of the students which is found to be contradictory from the results of this study.

The findings of this study highlighted that knowledge interacted with attitude in a statsitically significant way. This suggested that a teacher's attitude is influenced by their level of knowledge. Additionally, the findings showed that a teacher's teaching practices is unaffected by their knowledge level. Practices and attitude also did not show a significant relationship or did not influence one another. Regardless of the type of attitude, the teaching practices were found to be good and satisfactory. Elizabeth and Seema (2019) compared knowledge and attitude depending on the teaching division and educational sub-districts. They reported that there is a strong connection between teachers' inclusive education knowledge and attitudes. The study by Neha and Roopa (2018) on 60 teachers on Knowledge, Attitude, and Practices in dealing with Learning Disability among children found that the majority of the teachers showed a moderate knowledge level, unfavourable attitude and a moderate level of practices in dealing with learning disabilities among children which is in line with this study for knowledge level.Subi and Archana (2019) with 225 teachers on their attitudes and knowledge of learning disabilities of children in Trivandrum concluded that a good number of primary school teachers had positive attitudes and good knowledge of learning disabilities of students.

Table 3 depicts the relationship between knowledge, attitude, and practices. The results of the ANOVA test indicated that the three knowledge levels (High, Moderate, and Low) corresponded to the mean attitude scores of the teachers with 87.42, 81.76, and 84.20, respectively. The majority of the teachers with a moderate knowledge level exhibited a neutral attitude towards learning disabilities of the students. Additionally, a statistically significant relationship was observed between the teachers' knowledge and attitudes toward learning disability at 5% levels with F (2) =

Table 3. Relationship between teachers' Knowledge, Attitude and Practices (KAP) towards learning disabilities of the students

S.No.	KAP	Classification	N	Mean±SD	F(df)	Significance
Relationship of Knowledge with Attitude and Practices						
1.	Attitude	High	36	87.42±8.817	3.305(2)	0.040*
		Moderate	92	81.76±12.111		
		Low	5	84.20±8.319		
2.	Practices	High	36	20.83±3.682	2.824(2)	0.063^{NS}
		Moderate	92	19.77±3.530		
		Low	5	17.00±3.937		
Relationship of Attitude with Knowledge and Practices						
1.	Knowledge	Favourable	54	54.74±12.225	2.540(2)	0.083^{NS}
		Neutral	73	50.52±10.354		
		Unfavourable	6	49.00±4.858		
2.	Practices	Favourable	54	20.06±3.873	2.151(2)	0.121^{NS}
		Neutral	73	19.64±3.541		
		Unfavourable	6	22.83±2.639		
Relationship of Practices with Knowledge and Attitude						
1.	Knowledge	Good	97	53.18±10.585	2.991(1)	0.086^{NS}
		Average	36	49.44±12.248		
		Poor	0	-		
2.	Attitude	Good	97	83.40±12.081	0.001(1)	0.976^{NS}
		Average	36	83.33±9.508		
		Poor	**0**	**-**		

NS – Not Significant ; * Significant at 5% level

3.305, P=0.040 suggesting that knowledge influences attitudes among teachers. Another noteworthy finding was the relationship between knowledge and practices; it was observed that the teachers with low knowledge levels exhibited a mean score of 17.00 which denoted average classroom practices; however, it was not found to be statistically significant.

Pertaining to the relationship of attitude with knowledge and practice, it can be noted that the greater part of teachers had neutral attitudes followed by favourable and unfavourable attitudes respectively. However, regardless of the attitude type, the mean scores of knowledge levels remained in the high range. Subsequently, no significant relationship was found statistically between attitude and knowledge. The same trend can be observed with regard to the relationship of attitude with practice, regardless of attitude type, the teachers' practice scores were found to be in the range of good teaching practices and no statistically significant relationship between attitude and practice was noted.

Focusing on the relationship of practice with knowledge and attitude, Table 3 makes it evident that the majority of the primary school teachers' practices were at good levels followed by average levels. The knowledge levels mean scores who practiced good and average levels of teaching were 53.18 and 49.44, respectively indicating a high knowledge level on learning disabilities. Similarly, the attitude scores were found to be favourable with a mean of 83.40 and 83.33 among the teachers who practiced good and average teaching methods respectively. However, no significant relationship was found in practice involving knowledge and attitude. The results indicated that knowledge influenced the attitude of a teacher (Table 3). However, the teaching practices may not be influenced by knowledge. Similarly, attitude has no influence on either knowledge or practice and also practice is not found to be influencing the knowledge and attitude of teachers. However, literature as suggested that teachers' knowledge attitude and practice depend upon many factors which cannot be overlooked when deliberating the KAP of teachers such as issues related to socio-demographic aspects which need to be explored to uphold other significant factors that impact the KAP of teachers.

CONCLUSIONS

Knowledge interacted with attitude of primary school teachers toward learning disabilities of the students but not on practices. Similarly, attitude did not interact with knowledge or practices, neither practices interacted with knowledge and attitude which was directed at practice being self-regulated among the teachers. It is seen that there was a dearth of knowledge and favourable attitude among teachers towards learning disabilities. KAP of teachers was insufficient and the reason may be the teachers might not have received the required training. The researcher felt the need for sensitization or intervention training and workshops on LD are much essential for teachers to deal with children at the primary school level.

REFERENCES

Arifa, S and Siraj, S.S. 2019. A descriptive study to assess the knowledge and attitude of primary school teachers regarding learning disabilities among children in selected schools of district Pulwama Kashmir. Journal of Paediatrics and Nursing Science. 2(10):19-32.

Asok, A.S., Akoijam, P., Gupta, A and Akoijam, B.S. 2021. A knowledge and attitude of school teachers towards learning disabilities in Bishnupur district, Manipur: A cross sectional study. International Journal of Community Medicine and Public Health. 8(2):823- 826.

Dada, O.C and Sulyman, H.T. 2021. Teachers knowledge of pupil with learning disability in Ilorin south local government area, Kwara state. African Journals Online. 29(2):79-88.

Deshmukh, P.S and Gautam, A. 2021. A study to assess the attitude and effectiveness of structured teaching programme on knowledge of primary school teachers regarding learning disabilities in children among selected schools at Sangli, Miraj, Kupwad Corporation Area. World Journal of Pharmaceutical Research. 10(7):850-863.

Dhindsa, H., Borana, H., Yadav, J., Jangid, J., Gharu, K., Khawa, S.P and Kumar, A. 2022. Knowledge regarding learning disabilities in children among primary school teachers. International Journal of Community Medicine and Public Health. 9(1):235-239.

Elizabeth, K.T and Seema, P. 2019. Knowledge and attitude of primary school teachers towards inclusive education of children with specific learning disabilities. Journal of

Social Work Education and Practice. 4(2):23-32.

Ghimire, 2017. Knowledge of primary school teacher regarding learning disabilities in school children. Journal of Nobel Medical College. 6(1):29-35.

Luo, Y., Chen, L.C., Yang, S.C and Hong, S. 2022. Knowledge, attitude and practice (KAP) towards COVID-19 pandemic among the public in Taiwan: a cross-sectional study. International Journal of Environmental Research and Public Health. 19(5):1-13.

Madhamani, A and Joseph. 2021. Assessment of knowledge and awareness on public school teachers towards learning disabilities in children –An institutional based cross-sectional study in Dharmapuri district, Tamil Nadu. Journal of Family Medicine and Primary Care. 10(7):2524-2528.

Moothedath, S and Vranda. 2016. Attitude of primary school teachers towards children with learning disabilities. Journal of Indian Association for Child and Adolescent Mental Health. 12(4):323-33.

Neha and Roopa, K.S. 2018. Knowledge, attitude and practices of primary school teachers in dealing with learning disabilities among children, Research Review International Journal of Multidisciplinary. 03(11):634-638.

Nsreen, A. A and Mogeda, E.S. 2019. Assessing primary school teacher's knowledge of specific learning disabilities in the Kingdom of Saudi Arabia. Journal of Educational and Developmental Psychology. 9(2):9-22.

Ranjeetha, G.V and Shobha, G. 2019. Classroom practices of teachers on learning disabilities in children. International Journal of Educational Management. 34(3):562-575.

Shari, M and Vranda, M. N. 2015. Knowledge of primary school teachers in identifying children with learning disability. Disability CBR & Inclusive Development. 26(3):68-76.

Singh, S., Sawani, V., Deokate, M., Panchal, S., Subramanyam, A.A., Shah, H.R and Kamath, R.M. 2017. Specific learning disability: A 5 year study from India. International Journal of Contemporary Pediatrics. 4(3):863-868.

Sitrakool, B. 2017. Assessment of community pharmacists' knowledge, attitude and practice regarding non-prescription antimicrobial use and resistance in Thailand. M.Sc. Thesis submited to University of Hertfordshire, United Kingdom.

Soni, S.S. 2020. A study to assess the knowledge and attitude of school teachers regarding learning disability among children in selected schools at Churu. GFNPSS International Journal of Multidisciplinary Research. 1(2):81- 88.

Subi, S and Archana, K.R. 2019.Knowledge and attitude of primary school teachers on learning disabilities in children: A descriptive study. GJRA - Global Journal For Research Analysis 8(4):71-73.

World Health Organisation (WHO). 2012. Health education: theoretical concepts, effective strategies and core competencies: A foundation document to guide capacity development of health educators, Printed by WHO Regional Office for the Eastern Mediterranean, Cairo. pp.7-8.

Rajkumari, S and Ramya Bhaskar. 2023. The relationship between teachers' knowledge, attitude and practices towards learning disabilities of the students. The Journal of Research ANGRAU. 51(3): 113-120.
DoI: https://doi.org/10.58537/jorangrau.2023.51.3.13