



A descriptive study to assess the school readiness among lower primary school children at selected schools of Malappuram district with a view to develop self-instructional module on normal growth and developmental milestones.

Author: Ms. Abitha Priya. W.S, Lecturer, Department of Community Health Nursing, Al Shifa College of Nursing, Perinthalmanna, Kerala.

Co-authors: Mr. Jansan Mathew. K, Professor (Guide), Mr. Jiss George, Associate Professor, Mrs. Ancy. P. A, Assistant Professor, Department of Community Health Nursing, Al Shifa College of Nursing, Perinthalmanna, Kerala.

Abstract

Background of the study: The school readiness is the broad range of knowledge and skills that provide the right foundation for good future progress through school and life. In many ways being ready means children are equipped with what lies ahead and to learn from as well as contribute to what is happening. This combination of preparedness and openness to learning is ideal for development. **Statement of the problem:** A descriptive study to assess the school readiness among lower primary school children at selected schools of Malappuram district with a view to develop self-instructional module on normal growth and developmental milestones. **Objectives of the study:** Assess the school readiness among lower primary school children at selected schools; Find out the association between school readiness and selected demographic variables. **Methodology:** A quantitative research approach was used and the study design was descriptive design. Total 100 samples were selected for the study by using Quota sampling technique. Demographic Performa and Nursery Evaluation Scale Trivandrum (NEST) was used for the data collection. The data was collected from parents through phone calls and children by doing the assessment. The data collected were analyzed and tabulated by using descriptive and inferential statistics. **Results:** The analysis of school readiness assessment revealed that, 66 samples (66%) have normal school readiness and 34 samples (34%) have delayed school readiness. The mean and standard deviation score of overall school readiness is 59.06 and 8.88 respectively. There is an association found between school readiness with selected demographic variables such as education of father and occupation of father. The Fisher's Exact Test value of education of father, and occupation of father was 10.239, and 11.524 with a P value of 0.011, and 0.013 which is less than and equal to 0.05 level of significance. **Conclusion:** On the basis of findings the researcher concluded that 34% of the samples (n=34) have delayed school readiness.

Key words: School readiness, Lower primary school children, Self-instructional module, Growth and developmental milestones.

Introduction:

Schooling is the process of imparting knowledge and skills to individuals through curriculum and instruction, experimental learning, and work based learning. Schooling is a formal way of educating children in preschools, schools and higher education. School readiness refers to whether a child is ready to make an easy and successful transition into school. School readiness is the ability of a child to exhibit behaviors, skills, and knowledge which is necessary to get successful in elementary school. School readiness refers to whether a child is ready to make an easy and successful transition into school. School readiness is the ability of a child to exhibit behaviors, skills, and knowledge which is necessary to get successful in elementary school. School readiness can be regarded as a contributing factor to school performance (Abott-Shim, Lambert & Mc Carthy, 2003). If the school learner's school readiness is intact when they enter grade-1, their level of readiness may positively influence their school performance in the formal education situation.³

Need and significance

School readiness means that each child is ready to enter the school and get the benefit from early learning experiences that promotes the life of a child to success. The families, care takers, school staffs, and community workers need to work together in order to promote the growth and development of the child.⁷ In India, an estimated 26 millions of children are born every year. As per census 2011, the share of children (0-6 years) accounts 13% of the total population in the country.¹¹ Another study conducted on "Prevalence of developmental delay and factors affecting the developmental status among under five children in an urban slum". The results shows that: overall 12.2% of the children were found to be developmentally delayed. Prevalence of the developmental delay increased significantly from infancy (0-11 months) (95.7%) to 12 – 23 months of age, peaking at 12-23 months of age (20.3%), therefore showing a decreasing trend to 15.3% as the age of the child increased to more than 2 years.¹² Children are the citizens of the future world. Any delay in their developmental stage should be identified earlier and it should be corrected in proper time. This will help the children to achieve a better scholastic future. From the above reports and studies, it is confirmed that developmental delay can leads to poor academic performance. So, the investigator decided to conduct a study regarding assessment of school readiness among lower primary school children.

Statement of the problem

A descriptive study to assess the school readiness among lower primary school children at selected schools of Malappuram district with a view to develop self-instructional module on normal growth and developmental milestones.

Objectives of the study

- Assess the school readiness among lower primary school children at selected schools.
- Find out the association between school readiness and selected demographic variables.

Hypothesis

- **H1:** There is a significant association between school readiness and selected demographic variables.

Methodology

- Research approach: quantitative approach.
- Research design: The research design selected for the present study was descriptive research design.
- Variables: The research variable of the present study is school readiness.
- Tool: Part A: Demographic performa. Part B: Nursery Evaluation Scale Trivandrum (NEST).
- Settings: Selected Schools of Malappuram District.
- Population: Lower Primary School Children Studying At 1st Grade.
- Sampling: Quota Sampling Technique.
- Samples: Lower Primary School Children Studying In 1st Grade Class (Age group between 4 To 6 Years).

• Sample size: In this study the researcher have selected 100 sample.

Criteria for sample selection:

Inclusion criteria:

- Children studying in 1st grade class.
- Children between 4 to 6 years of age group.
- Children with parental consent.

Exclusion criteria:

- Children who participated in previous similar study.
- Children with diagnosed pre-existing diseases.

Data collection process

The data was collected by obtaining formal permission from the institutional head. Ethical clearance was obtained from the ethical committee of our institution. Informed consent was obtained from the parents of the subjects selected. Data collection was started by filling the demographic performa by asking questions to the parents through phone call and school readiness assessment is done by using the tool NEST. Data collection was started on 05/06/2023 and ends on 19/06/2023. The researcher selected 2 schools- Tharakan LP School, Angadipuram and A.M.L.P School, Thirurkad for the data collection.

Results

Section A: Distribution of demographic characteristics of lower Primary school children.

Table 1: Frequency and percentage distribution of samples based on age in completed months.

N=100

Demographic variables	Frequency	Percent
Age in completed months		
60 months	1	1%
61 months	0	0%
62 months	2	2%
63 months	6	6%
64 months	0	0%
65 months	2	2%
66 months	17	17%
67 months	1	1%
68 months	4	4%
69 months	3	3%
70 months	4	4%
71 months	7	7%
72 months	53	53%

The table 1 shows that among 100 members, 1 (1%) participant belongs to the age group of 60 and 67 months, and 53 (53%) participants belongs to 72 months of age group.

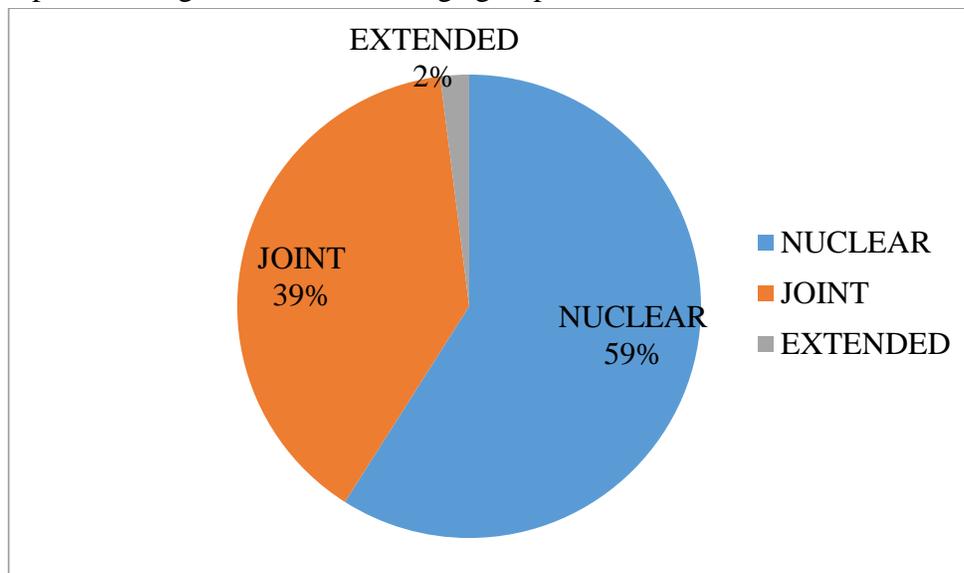


Figure 1: Percentage distribution of samples based on type of family.

The figure 1 shows that among 100 samples 59% of the participants belongs to nuclear family, 39% belongs to joint family and 2% belongs to extended family.

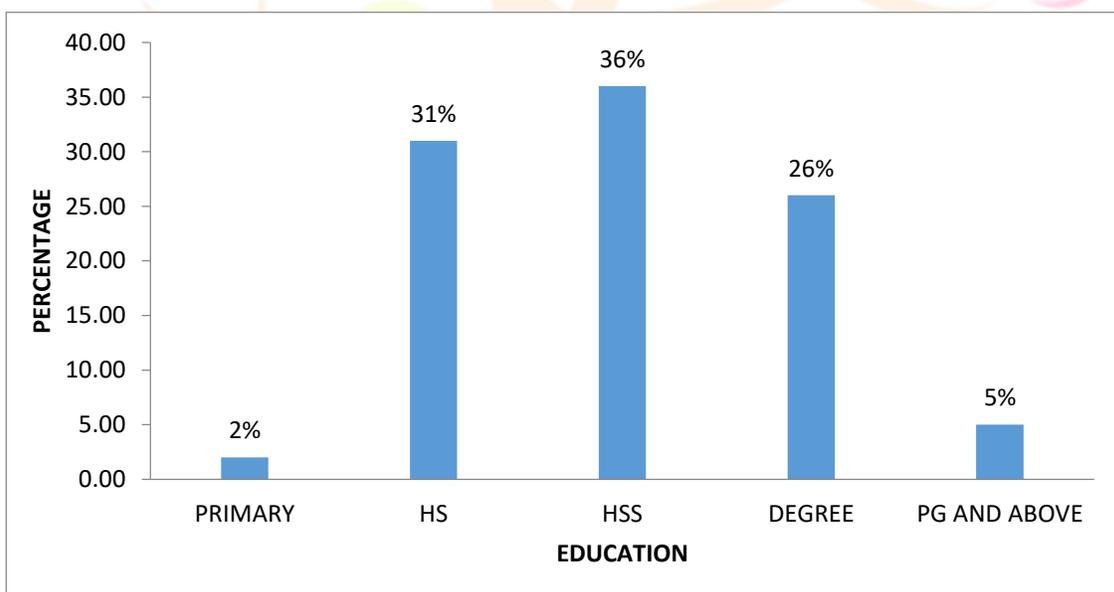


Figure 2: Percentage distribution of samples based on educational status of mother.

Figure 2 shows that majority 36 (36%) of the mothers have higher secondary school education, only 2 (2%) of mothers have primary level education.

Table 2: Frequency and percentage distribution of samples based on occupation of mother**N=100**

Demographic variables	Frequency	Percentage
Occupation of mother		
Government	11	11%
Private	14	14%
Daily wages	1	1 %
Self employed	15	15%
Home maker	59	59 %
Total	100	100 %

Table 2 depicts that majority of the participant's mothers 59 (59%) were home makers, and only 1 (1%) mother is working for daily wages.

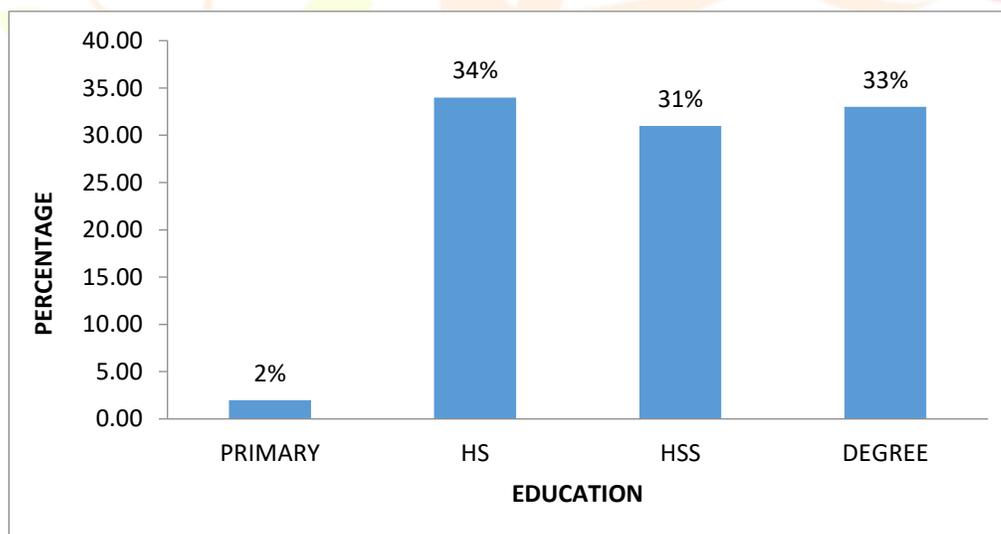
**Figure 3: Percentage distribution of samples based on educational status of father**

Figure 3 shows that, 34% (34) of the participant's fathers have high school education, and only 2% (2) of the participant's fathers have primary level of education.

Table 3: Frequency and percentage distribution of samples based on consanguinity of marriage**N=100**

Demographic variables	Frequency	Percentage
Consanguinity of marriage		
Non-consanguineous marriage	100	100 %
Consanguineous marriage	0	0%

Table 3 shows that 100% (100) of the participant's parents have undergone non-consanguineous type of marriage.

Table 4: Frequency and percentage distribution of samples based on birth order**N=100**

Demographic variables	Frequency	Percent
Birth order		
One	40	40.00 %
Two	34	34.00 %
Three and above	26	26.00 %
Total	100	100.00 %

Table 4 shows that 40% (40) of samples belongs to the birth order of one, and 26% (26) belongs to birth order of three and above.

Section B: Assessment of school readiness of lower primary school children on the basis of various domains.**Table 5: Frequency, Percentage, Mean, and Standard deviation of School Readiness of Lower Primary School Children.**

N=100

School Readiness	Frequency	Percentage	Means	S.D
Normal	66	66.00%	59.06	8.88
Delayed	34	34.00%		

The table 5 shows the frequency, percentage, mean and standard deviation of school readiness of lower primary school children. It shows that, 66 (66%) participants have normal development that is they have achieved the school readiness and 34 (34%) participants have delayed development that is these participants have not achieved their school readiness.

Table 6: Frequency, Percentage, Mean, and Standard deviation of School Readiness of Lower Primary School Children based on various domains.

Nest domains		Frequency	Percentage	Mean	S.D
Gross motor	Normal	69	69.00 %	9.19	2.34
	Delayed	31	31.00 %		
Fine motor	Normal	85	85.00 %	11.14	2.15
	Delayed	15	15.00 %		
Cognitive	Normal	73	73.00 %	10.29	2.80
	Delayed	27	27.00 %		
Personal social	Normal	93	93.00 %	10.64	0.50
	Delayed	7	7.00 %		
Receptive language	Normal	91	91.00 %	11.21	1.15
	Delayed	9	9.00 %		

Expressive language	Normal	88	88.00 %	6.67	0.78	N=100
	Delayed	12	12.00 %			

The table 6 shows that majority of the participants that is 69 (69%) have normal gross motor development, and remaining 31 (31%) participants have delayed gross motor development. In case of fine motor development, majority of the participants that is 85 (85%) have normal development and remaining 15 (15%) samples have delayed fine motor development. At the same time, 73 (73%) participants have normal cognitive development and remaining 27 (27%) participants have delayed cognitive development. In case of personal social development, majority of the participants that is 93 (93%) have normal development and only 7 (7%) participants have delayed personal social development. While assessing the receptive language development, majority of the participants that is 91 (91%) have normal development, and only 9 (9%) participants have delayed development. But in case of expressive language development, 88 (88%) participants have normal development and 12 (12%) participants have delayed development.

Section C: Association of school readiness and selected demographic variables of lower primary school children.

Table 7: Association of school readiness and selected demographic variables

N=100

Demographic variables	Chi square value	Fisher's exact test value	P value	Inference
Age in months	-	3.165	0.184	Not significant
Type of family	-	2.97	0.23	Not significant
Medium of instruction	2.465	-	0.14	Not significant
Education of mother	-	4.776	0.295	Not significant
Occupation of mother	-	5.183	0.242	Not significant
Education of father	-	10.239	0.011	*Significant
Occupation of father	-	11.524	0.013	*Significant
Term of birth	-	1.553	0.475	Not significant
Birth order	-	1.146	0.618	Not significant
Number of siblings	-	7.364	0.055	Not significant

(*significant at ≤ 0.05 level)

Table 7 shows the association of school readiness of lower primary school children with selected demographic variables. It shows that, association found between school readiness and demographic variables such as education of father (Fisher's exact test value: 10.239, P value: 0.011), and occupation of father (F: 11.524, P: 0.013) which is less than 0.05 level of significance.

Discussion

A study was conducted on "Early childhood education attendance and school readiness in low-and middle-income countries: The moderating role of family socioeconomic status". The study shows similar inequalities in relation to literacy-numeracy readiness, with higher scores for children whose parents have completed primary education ($b=0.144$, $P<0.001$), those from higher wealth households ($b=0.085$, $p<0.001$), and children residing in urban areas ($b=0.61$, $P<0.001$). The ICC indicated that 78%, 77%, 88%, and 93% of differences in the total, literacy-numeracy, learning, and socio-emotional school readiness were within countries. In case of socio-emotional readiness, rural children had higher socio-emotional scores than their urban peers ($b=-0.032$, $P<0.05$).

A study was conducted on "Factors related to school readiness in children: A cross sectional analytical study of elementary school children in Manado". In this study, out of 150 subjects, there were 109 children who were ready for school and 41 children who were not ready for school. Of the five factors studied, it was found that stunted affected school readiness (odds ratio (OR) 21.6; 95% confidence interval (CI): 6.68-70.32, $p<0.000$), maternal education status affected school readiness (OR 4.1; 95% CI: 1.75-9.63, $p<0.001$), socio-economic status affects school readiness (OR 5.1; 95% CI: 2.35-11.11, $P<0.000$), and preschool affects school readiness (OR 6.8; 95% CI: 3.1-14.9, $P<0.0001$). In multivariate analysis there were three factors that had an association with school readiness, namely height, preschool participation and socio-economic status (OR 34.4; 95% CI: 7.19-166.6, $P<0.001$, OR 6.5; 95% CI: 2.28-18.58, $P<0.0001$, OR 4.81; 95% CI: 1.59-14.92, respectively).

The study revealed that there was an association found between school readiness and all the six domains with some of the selected demographic variables. In the analysis of school readiness it shows that, the P values of education of father, occupation of father and number of siblings were 0.011, 0.013 and 0.055 which was less than 0.05 level of significance. In case of gross motor domain, the P value of age, education of father and occupation of father was 0.048, 0.007, and 0.008 which was less than 0.05 level of significance. Hence, there was an association found between gross motor domain with age, education and occupation of father. The P value of term of birth and occupation of mother was 0.031 and 0.044 which was less than 0.05 level of significance. Hence, there was an association found between fine motor domain with term of birth and occupation of mother. The P value of education of father and occupation of father was 0.004 and 0.012 which was less than 0.05 level of significance. Hence, there was an association found between cognitive domain with education and occupation of father. The P value of medium of instruction, education of father and number of siblings was 0.043, 0.002, and 0.011 which was less than 0.05 level of significance. Hence, there was an association found between personal social domain with medium of instruction, education of father and number of siblings. There was an association found between receptive language development with medium of instruction, education of father and number of siblings as the P values are 0.042, 0.003 and 0.019 which was less than 0.05 level of significance. In case of expressive language development, the P values of occupation of mother, term of birth, birth order and number of siblings are 0.05, 0.035, 0.028 and 0.011 which was less than 0.05 level of significance. Hence, there was an association found between expressive language development with occupation of mother, term of birth, birth order, and number of siblings. Hence, there was an association found between school readiness with education of father, occupation of father and number of siblings.

Conclusion

Assessment of school readiness among lower primary school children has provided the information regarding various developmental domains associated with school readiness. The school readiness was influenced by some of the demographic variables such as education of father, occupation of father, term of birth, birth order and number of siblings.

Recommendations

- A similar study can be replicated in a large sample to generalize the study findings.
- Interventional studies based on training on self-care, attention and concentration techniques emotional regulations, physical skills, language skills, and play and social skills can be conducted.
- The number of research study is very less regarding this topic hence more studies can be recommended.

Acknowledgement

Accomplishment of this study owes much to the encouragement, support and guidance of many. Sincere gratitude is hereby acknowledged. I attributes all honor and glory to God Almighty who has been providing all the strength required from the onset to the successful completion of this academic endeavor. I would like to convey my whole hearted gratitude to **Dr. Josephine Jacqueline Mary. N.I**, Principal, Al Shifa College of Nursing, Perinthalmanna, for her guidance, suggestions, constructive evaluation and encouragement throughout the research study to make this project a fruitful and successful learning experience. I express my hearty gratitude towards **Prof. Sini Neeruzhi**, Vice Principal, Al Shifa College of Nursing, Perinthalmanna, for her valuable advice and constant support for the successful completion of the study. I would like to convey my whole hearted gratitude to **Mr. Jansan Mathew. K**, Professor cum HOD of Community Health Nursing Department, Al Shifa College of Nursing, Perinthalmanna, under whose guidance this work has been carried out. I express my profound gratitude and exclusive thanks for his innovative and expert guidance, suggestions, encouragement and support, which helped to accomplish this task successfully. I express my heartfelt gratitude to **Mr. Jiss George**, Associate Professor, Department of Community Health Nursing, Al Shifa College of Nursing, Perinthalmanna, for his valuable guidance, suggestions and support. I express my sincere gratitude to **Mrs. Ancy. P.A**, Assistant Professor, Department of Community Health Nursing, Al Shifa College of Nursing, Perinthalmanna, for the enormous guidance and support rendered during the study. I express my gratitude towards **Mrs. Arya**, Bio Statistician, for the enormous guidance in the statistical analysis of the study. I express my hearty gratitude towards **Dr. M.K.C. Nair**, Former Vice Chancellor, KUHS, for his valuable advice and constant support for the successful completion of the study. I express my hearty gratitude towards **Mr. Ashokan**, Managing Director, NIMS SPECTRUM, Child Development Research Centre (CDRC), Trivandrum, for his valuable advice and constant support for the successful completion of the study. I express my hearty gratitude towards my co-guide, **Mrs. Swapna**, Developmental Therapist, NIMS SPECTRUM, Child Development Research Center, Trivandrum, for providing a training programme on Nursery Evaluation Scale Trivandrum (NEST), and her valuable guidance and support throughout the conduction of the study. I express my heartfelt gratitude towards **Mrs. Rajasree. I**, Principal, Tharakan L.P School, Angadipuram, for granting the permission to conduct the study. I express my sincere gratitude towards **Mr. Majeed**, Principal, AMLP School, Thirurkad, for granting the permission to conduct the study. I am extremely thankful to the members of the scientific review committee and institutional ethics committee for permitting me to conduct the study. I am thankful to all the teaching faculty of Al Shifa College of Nursing, Perinthalmanna, for their kind co-operation, valuable suggestions, and constant support for the successful completion of the dissertation. I express my sincere thanks to all the experts who willingly helped me through content validation as well as translation and re-translation of the tool. I also owe my sincere thanks to library staff, Al Shifa College of Nursing, Perinthalmanna, for the generous support and co-operation throughout the study. I express my sincere gratitude to my, classmates, friends, and juniors for their great support and encouragement throughout the study. I express my profound gratitude to all the participants who willingly participated and co-operated with this study. I express my sincere gratitude towards all the parents of the kids who have given consent for their kids to participate in this study. I express my sincere thanks to all the experts who willingly helped me through content validation as well as translation. Moreover, I obliged to my family members for their bondless love, moral support, and encouragement. I obliged to all who are involved in this study for their kind help and support in the successful completion of the study.

References

1. National Centre on Secondary Education and Transition (2004), Current challenges facing secondary education and transition services for youth with disabilities in the United States. January 2006 from University of Minnesota.
2. Vanderloo, L.M., Janus, M., Omand, J.A. et al. Children's screen use and school readiness at 4-6 years: prospective cohort study. *BMC Public Health* 22, 382 (2022).
3. Shrivastava, S., Patil, V., Shelke, M., Anvikar, M., Mathur, A., & Pathak, A. (2019). Assessment of school readiness of children and factors associated with risk of inadequate school readiness in Ujjain, India: an observational study. *BMJ paediatrics open*, 3(1), e000509.
4. Gregory, T. & Dal Grande, Eleonora & Brushe, et al, Associations between School Readiness and Student Wellbeing: A Six-Year Follow-up Study. *Child Indicators Research*. 14. 10.1007/s12187-020-09760-6 (2021).
5. Linda J.Graham, Naomi Sweller. (2011) The Inclusion Lottery: Who's in and who's out? Tracking inclusion and exclusion in New South Wales government schools. *International journal of Inclusive Education* 15:9, pages 941-953.
6. Nair MKC, Radhakrishnan R, Olusanya BO, Promoting school readiness in children with developmental disabilities in LMICs. *Front Public Health*. 2023 Feb 22; 11:993642.doi:10.3389/fpubh.2023.993642.PMID:36908404; PMICD: PMC9992638.
7. Global Research on Developmental Disabilities Collaborators. Developmental disabilities among children younger than 5 years in 195 countries and territories, 1990-2016: a systematic analysis for the global burden of disease study 2016.
8. United Nations Children's Fund (UNICEF). Seen, counted, included: Using data to shed light on the well-being of children with disabilities. New York: UNICEF (2021).
9. Jeon, H.-J., Peterson, C. A., Wall, S., Carta, J. J., Luze, G., Eshbaugh, E. M., & Swanson, M. (2011). Predicting School Readiness for Low-Income Children with Disability Risks Identified Early. *Exceptional Children*, 77(4), 435–452.
10. Patrianakos-Hoobler, Athena & Msall, Michael & Huo, etal. Predicting school readiness from neurodevelopmental assessments at age2 years after respiratory distress syndrome in infants born preterm. 2009, *developmental medicine and child neurology*. (52), 379-85, doi: 10. 1111/j.1469-8749.2009.03343.X.
11. Elena Commodari, Preschool attachment, school readiness and risk of learning difficulties, *Early childhood Research Quarterly*, (28), 2013, pages 123-133, ISSN 0885-2006
12. Rosemary Jolly, Christina Mariam Chacko, Knowledge regarding learning disability among primary school teachers, the international journal of indian psychology, ISSN: 2348-5396 (online), ISSN: 2349-3429, (9), 2021, DIP: 18.01.122.20210902, DOI: 10.25215/0902.122
13. Hughes, Claire & Foley, Sarah & White, etal. School Readiness in children with special educational needs and disabilities: Psychometric findings from a new screening tool, the Brief Early Skills, and Support Index. *British Journal of Educational Psychology*. 88. 10.1111/bjep.12206.
14. S.K.Sharma.Nursing research and statistics.Third edition.Elsevier publications.2018
15. Reid, L. D., & Strobino, D. M. (2019). A Population-Based Study of School Readiness Determinants in a Large Urban Public School District. *Maternal and child health journal*, 23(3), 325–334.
16. Aslan, M. & Çıkar, İ. (2019). The school readiness of 60-65 months old students: A case study. *International Journal of Contemporary Educational Research*, 6(1), 86-99.

17. Lydia Wangke* , Gregory Joey , Nurhayati Masloman , Hesti Lestari Factors Related to School Readiness in Children: ACross-Sectional Analytic Study of Elementary School Children in Manado, Scientific Foundation SPIROSKI, Skopje, Republic of Macedonia Open Access Macedonian Journal of Medical Sciences. 2021 Oct 23; 9(B):1387-1393. <https://doi.org/10.3889/oamjms.2021.7294> eISSN: 1857-9655
18. Disha Agarwal, Shailendra Singh Chaudhary, et al, Prevalence of Developmental Delay and Factors Affecting the Development Status among Under 5 Children in an Urban Slum of Agra City, National Journal of Community Medicine, Volume 9 (7), 2018.
19. Estami Shahrabaki Mahin, Ali Akbar Hagdoost, et al, Prevalence of learning disability in primary school students in Kerman city, European online journal of Nature and Social sciences, volume 3, (3) 2014.
20. Abdul Gafoor. K, prevalence of learning disabilities among school students in Kerala, INSIGHT Journal of applied research in education, volume 20 (1), 2015.

