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Status of Developmental Readiness of Rural and Urban School Children

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Abstract

This study aims to assess the status of developmental readiness of 200 students (100 boys and 100 girls) enrolled in Class I of private schools in rural and urban areas of Ludhiana district in Punjab. It also tries to find out locale difference in the developmental readiness of the students. The sample was selected through the random sampling method and the data were collected using self-structured developmental readiness checklist. Locale differences revealed that rural boys and girls showed significantly better socio-emotional skills and overall readiness than those living in urban areas.

Introduction

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), "Early childhood, defined as the period from birth to eight years old, is a time of remarkable growth with brain development at its peak. During this stage, children are highly influenced by the environment and the people that surround them."

Therefore, early childhood years lay the foundation of an individual's life. Early experiences, relationships and emotional support provided to a child influence the development of one's brain by creating and reinforcing neural connections that help in the development of motor and cognitive skills, and socio-emotional well-being. The transition from informal learning environment to formal school signifies a major step in early childhood years (Chan, 2012).

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Smooth transition and successful entry to formal school environment require the school readiness of children.

School Readiness

This indicates a learner's readiness to enter the formal education environment. It involves developmental readiness of the child, apart from academic readiness. Hence, it has a long-term effect on the child's academic performance and achievement. However, there is no single indicator to measure school readiness in young children.

Physical well-being, cognitive, motor and socio-emotional skills are essential domains for developmental readiness. They have a positive effect on the performance of young children in the formal school set-up. Also, quality early learning experiences are important to acquire the required level of developmental readiness in school (Zyl, 2011).

'Physical readiness' is an important parameter of the child's school readiness. It involves physical well-being and motor development. Motor skills cover two aspects — gross and fine motor skills. Gross motor skills refer to the involvement of larger body muscles (like torso, legs and arms) in performing physical activities like running, swimming, etc. Fine motor skills involve smaller muscle movements, for example, movement of the wrist. Sherry and Draper (2012) stated that lack of motor skills in children cause poor academic outcomes, apart from behavioural problems.

Another aspect is 'cognitive readiness'. Cognition is referred to as inner processing and products of the mind, and covers various mental activities, such as memory, problem solving, symbolisation, categorisation, reasoning, etc., (Singh and Singh, 2013). According to Bierman, et al., (2008), two aspects of cognitive readiness are important for formal schooling. One of these aspects covers the children's academic knowledge, while the other involves executive functions.

'Social readiness' is the child's ability to understand instructions and follow them, develop healthy relations and behavioural regulation, whereas, 'emotional readiness' is the individual's ability to deal with, regulate and express one's emotions, as well as, understanding others' feelings (Bai-barin, et al., 2008). Independence, responsibility and self-regulation are the key skills of socio-emotional readiness for formal schooling (McClelland and Morrison, 2003).

Hence, self-help readiness of young children refers to their ability to perform everyday tasks, such as eating, drinking, going to the toilet (toilet trained), dressing up, etc. This, thus, acts as a precursor to performing school related tasks required for easy settlement in a formal education set-up.

School children, equipped with foundational competencies and skills, tend to have better experience of school transition and have success in later academic achievement (Duncan, et al., 2007). Hence, early and strong learning foundation helps achieve both personal and academic success.

Assessing the developmental readiness of preschoolers as they enter Class I, i.e., formal schooling, is important, and a matter of concern for parents, preschool teachers, policy makers and other stakeholders.

Objectives of the Study

- To assess the developmental readiness of urban and rural private school children
- To find out locale differences in their developmental readiness

Sample

The study was conducted in eight private schools of Ludhiana (four rural and four urban) affiliated to the Punjab School Education Board (PSEB). Two hundred students of Class I — equally distributed across both the locales, i.e., rural (n_1= 100) and urban (n_2= 100) — were selected through random sampling. The sample consisted of equal number of boys and girls.

Tool

Self-structured developmental readiness checklists were used to conduct the study. It consisted of the following.

- Cognitive readiness checklist
- Physical readiness checklist
- Gross motor readiness checklist
- Fine motor readiness checklist
- Socio-emotional readiness checklist
- Self-help readiness checklist

Statistical Analysis

The collected data were classified and tabulated as per the objectives of the study in order to arrive at meaningful and logical inferences by frequency, percentage, arithmetic mean, Standard Deviation, Z–test and t–test methods.

Table 1 reveals that most rural and urban children had a high level of skills in all domains of developmental readiness. The data regarding the overall developmental readiness show that most children from both the locales entered formal schooling with a high level of readiness.

Kiernan, et al., (2008) identified that children's experiences, and home and neighbourhood conditions influenced their school readiness. This is in stark contrast with the findings of the present study.

Table 2 depicts that no significant locale difference exists between rural and urban girls in skills of various domains of developmental readiness, except socio-emotional skills. Rural girls had a greater level of socio-emotional readiness (skills) than urban girls.

Table 1: Percentage wise distribution of rural and urban school children across different domains and their levels of developmental readiness

Domains and levels of developmental readiness	Rural (n_1=100)		Urban (n_2=100)	
	Frequency	**Percentage**	**Frequency**	**Percentage**
	(f)	(%)	(f)	(%)
Cognitive skills				
High	74	74	71	71
Average	26	26	29	29
Low	0	0	0	0
Physical skills				
(a) Gross motor skills				
High	82	82	83	83
Average	18	18	17	17
Low	0	0	0	0
(b) Fine motor skills				
High	85	85	68	68
Average	15	15	18	18
Low	0	0	0	0
Socio-emotional skills				
High	86	86	68	68
Average	14	14	18	18
Low	0	0	0	0
Self-help skills				
High	76	76	66	66
Average	24	24	34	34
Low	0	0	0	0
Overall developmental readiness				
High	90	90	82	82
Average	10	10	18	18
Low	0	0	0	0

Table 2: Locale wise difference in developmental readiness among girls across different domains and levels

n= 100

Domains and levels of developmental readiness	Rural (n_1=50)		Urban (n_2 = 50)		Z-value
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Cognitive skills					
High	38	76	42	84	1
Average	12	24	8	16	1
Low	0	0	0	0	NA**
Physical skills					
(a) Gross motor skills					
High	40	80	38	76	0.48
Average	10	20	12	24	0.48
Low	0	0	0	0	NA**
(b) Fine motor skills					
High	43	86	40	80	0.8
Average	7	14	10	20	0.8
Low	0	0	0	0	NA**
Socio-emotional skills					
High	44	88	36	72	2*
Average	6	12	14	28	2*
Low	0	0	0	0	NA**
Self-help skills					
High	40	80	35	70	1.16
Average	10	20	15	30	1.16
Low	0	0	0	0	NA**
Overall developmental readiness					
High	44	88	43	86	0.3
Average	6	12	7	14	0.3
Low	0	0	0	0	NA**

*0.05 level of significance
**Not Applicable

An analysis of the overall developmental readiness of rural and urban girls again depicted no significant difference. In line with the finding, Gan, et al., (2016) reported non-significant difference in the overall developmental readiness of rural and urban children.

Table 3 shows non-significant difference in the mean scores among girls across all domains of developmental readiness, except in case of socio-emotional skills. A significant difference ($p<0.05$) was found in the mean scores of socio-emotional skills, wherein, rural girls scored higher mean value than urban girls. The non-significant difference in the overall developmental readiness concluded that the developmental readiness of girls from both the locales was equal.

Table 4 shows that non-significant difference was found in cognitive, gross motor, fine motor and self-help skills between rural and urban boys. A significant difference was found between rural and urban boys as regards to socio-emotional skills and overall readiness. Rural boys showed high levels of these skills as compared to urban boys. Punia and Sangwan (2011) also reported that a majority of children from both rural and urban areas had high levels of social adjustment. However, rural children were found to have slightly better socio-emotional skills as compared to urban children.

Table 5 elucidates non-significant mean difference in cognitive, fine motor and self-help skills of both rural and urban boys. A significant mean difference was found in gross motor and socio-emotional skills, and hence,

Table 3: Locale difference in the mean scores (±SD) of girls across different domains of developmental readiness

n= 100

Domains and levels of developmental readiness	Rural (n_1=50)	Urban (n_2 =50)	t–value
	Mean ±SD	Mean ±SD	
Cognitive skills	35.12 ± 4.71	34.96 ± 4.62	0.17
Physical skills			
(a) Gross motor skills	23.48 ± 3.29	22.72 ± 2.98	1.21
(b) Fine motor skills	22.72 ± 2.70	22.12 ± 3.10	1.03
Socio-emotional skills	21.14 ± 2.30	20.24 ± 2.77	1.97*
Self-help skills	20.01 ± 2.89	18.98 ± 2.35	1.95
Overall developmental readiness	122.54 ± 13.76	119.02 ± 11.93	1.37

*0.05 level of significance

Table 4: Locale difference in the developmental readiness of boys across different domains and levels

n= 100

Domains and levels of developmental readiness	Rural (n_1=50)		Urban (n_2 = 50)		Z-value
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)	
Cognitive skills					
High	36	72	29	58	1.49
Average	14	28	21	42	1.49
Low	0	0	0	0	NA**
Physical skills					
(a) Gross motor skills					
High	42	84	45	90	0.89
Average	8	16	5	10	0.89
Low	0	0	0	0	NA**
(b) Fine motor skills					
High	42	84	42	84	0
Average	8	16	8	16	0
Low	0	0	0	0	NA**
Socio-emotional skills					
High	42	84	32	64	2.28*
Average	8	16	18	36	2.28*
Low	0	0	0	0	NA**
Self-help skills					
High	36	72	31	62	1.06
Average	14	28	19	38	1.06
Low	0	0	0	0	NA**
Overall developmental readiness					
High	46	92	39	78	1.96*
Average	4	8	11	22	1.96*
Low	0	0	0	0	NA

*0.05 level of significance
**Not Applicable

Table 5: Locale difference in the mean scores (±SD) of boys across different domains of developmental readiness

n= 100

Domains and levels of developmental readiness	Rural (n_1=50)	Urban (n_2 =50)	t-value
	Mean ±SD	Mean ±SD	
Cognitive skills	33.95 ± 5.52	32.24 ± 5.51	1.55
Physical skills			
(a) Gross motor skills	24.08 ± 3.20	22.76 ± 2.40	2.33*
(b) Fine motor skills	22.60 ± 3.22	21.98 ± 3.09	0.98
Socio-emotional skills	21.44 ± 2.68	19.90 ± 2.59	2.92**
Self-help skills	19.28 ± 3.21	18.42 ± 2.65	1.46
Overall developmental readiness	121.65 ± 12.83	115.20 ± 12.65	2.53*

**0.01 level of significance
*0.05 level of significance

the overall developmental readiness, with rural boys scoring higher than urban boys, highlighting that the former were more developmentally ready than the latter. According to Shi, et al., (2008), a rural set-up provides an environment, where parents and children develop attachment, which leads to increased opportunities for physical activities, thereby, promoting the development of gross motor skills.

Conclusion and Recommendations

Thus, to conclude, it may be stated that developmental readiness is a multidimensional construct and has the potential to predict school readiness of young children. Some recommendations formulated to promote school readiness in young children are as follows.

- Parent and teacher training provides a better environment to promote school readiness among young children.
- Stimulating the parent–child relationship and the environment at home ensure smooth transition to formal schooling.
- Developmentally appropriate programmes need to be designed for preschoolers.
- The school curriculum should be responsive to meet the individual needs of young children, including Children with Special Needs.
- Primary school teachers must be equipped with basic knowledge regarding developmental readiness and should plan activities to promote the school readiness of children.

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