



## **Impact Of School Environment On Self - Regulation Among Primary School Children In Ernakulam District Kerala**

**Ameer Ali KE<sup>1\*</sup>, Riaz KM<sup>2</sup>,**

1. Ameer Ali K E, Assistant Professor, Government College of Nursing, Ernakulam, Kerala,

2. Riaz K M, Assistant Professor, Government College of Nursing, Thrissur, Kerala,

**\*Corresponding author**

Ameer Ali K E, Assistant Professor, Government College of Nursing, Ernakulam, Kerala, India

### **ABSTRACT**

**AIM :-**The ability to self-regulate has been viewed as a desirable quality throughout history because of its positive effects on behaviour and the accession of skills The present study aims to assess any positive impact of school environment on self - regulation among primary school children in Ernakulam district Kerala.”

**MATERIAL AND METHODOLOGY:-**Were the researcher used exploratory research approach for this study and research design was descriptive research design was used to assess self-regulation and school environment among school children. The study was carried out in selected Primary school of Ernakulam District, Kerala. were the study objective was To assess the self-regulation among primary school children, To assess the school environment among primary school children, To associate the self-regulation with the selected demographic variables. To associate the school environment with the selected demographic variables. The sample comprised of 400 primary school children. By using non probability purposive sampling technique. Considering objective and assumption of the study conceptual framework was prepared based upon king's goal attainment model is communication, **perception, interactions, transactions**. Formal written permission was obtained from the authorities to conduct the study and informed consent was obtained from the subjects prior to the data collection process. Data was collected by administering a self-regulation questionnaire.



**RESULT:-** Were study results was the level of school environment among the primary school children was that the majority of respondents 202(50.5%) had good school environment followed by 100(25%) had average school environment, 98(24.5%) had poor school environment and it seen in the Children's behaviour that the majority of respondents 179(44.75%) had adequate level of self-regulation followed by 118(29.5%) had moderate level of self regulation and 103(25.75%) had inadequate level of self-regulation as they have

**CONCLUSION:-**were the study was conclude that the children's who are having good school environment they have adequate level of self regulation.

**Key words:**self regulation, school environment, primary school children.

## **INTRODUCTION**

The Development of Self-Regulation across Early Childhood fundamental to an individual's functioning development of effective self-regulation is recognized as, with development during early childhood often considered an it is important for early marker life successes. *self*-regulation that likely require the integration of many skills such as executive functions and language skills Likewise, past research reveals that the major difference in the level of self-regulation skills children apparent during early childhood that consistently forecast a multitude of short- and long-term outcomes such as academic achievement throughout primary school, school readiness, adult educational attainment, a better ability to cope with stress, feelings of higher self-worth, as well as less substance use, and less law breaking, even among individuals at risk of maladjustment .<sup>1</sup>

Executive functions help an individual monitor, understand, and control their own reaction to environment, as well as problem solve regarding desired future behaviors. Put another way, the coordination of these skills often forms the basis of a child's ability to respond adaptively within the classroom. Notably a distinction has been made in recent years between executive functions at the service of abstract or decontextualized environments, and executive functions at the service of adapting to environments that require the regulation of affect and motivation (e.g., Hongwanishkul et al., 2005).



Sometimes referred to as ‘cool’ executive functions and ‘hot’ executive functions within cognitive traditions (e.g., these skills can be considered as necessary for behavioral and emotional aspects of self-regulation, respectively).<sup>2</sup>

Self-regulation is a skill that needs to be supported in children because it is key to their overall success and happiness. Children who can cope with stress, anger, disappointment, and frustration are more able to do well in school, with friends, and at home. For instance, across the lifespan, poorer SR has been associated with greater risk for substance abuse, sexual risk taking, physical illness, and psychopathology, violence, and criminality. SR also is associated with self-esteem and social and academic functioning. Difficulties with SR in childhood are even longitudinally related to lower adulthood income and educational attainment.<sup>3</sup>

Language is another child attribute that affects developing self-regulation, and may be an important factor for understanding potential self-regulation trajectory differences across children. Theoretically, language is thought to give children “mental tools” to help them organize and modify their thoughts and behaviors. During early childhood, expressive language in particular may be important as it enhances the ability of the child to both name their own current state and manipulate that state in relation to a specific context. It also seemingly enhances children’s ability to hold task requirements in mind (Karbach, Eber, & Kray, 2008). Research evaluating how expressive language helps toddlers to self-regulate suggests that trajectories of self-regulation vary between children based on the child’s observed expressive vocabulary skills. Likewise, early expressive language skills are also associated with higher levels of early self-regulation, with greater language gains across preschool and the transition to kindergarten associated with greater self-regulation gains. This suggests that children with higher levels of expressive language develop self-regulation faster compared to children with lower levels of language.<sup>4</sup>



Self-regulated learning (SRL) includes the cognitive, metacognitive, behavioral, motivational, and emotional/affective aspects of learning. It is, therefore, an extraordinary umbrella under which a considerable number of variables that influence learning (e.g., self-efficacy, volition, cognitive strategies) are studied within a comprehensive and holistic approach. For that reason, SRL has become one of the most important areas of research within educational psychology. In this paper, six models of SRL are analyzed and compared<sup>5</sup>

Poor self-regulation is a process deficit that impacts the person's everyday functioning and interpersonal relationships. Oftentimes problems of self-regulation are life-long and have roots in the person's early childhood development. As problems with self-regulation become entrenched, the person struggles with self-soothing and mood regulation. It impacts the capacity to modulate arousal for sustained attention, to be motivated for purposeful activities, to process and tolerate a range of sensory stimulation, and to tolerate change and handle everyday stress. Frequently the child struggles with coping skills, impulsivity, and self-control, especially as they grow older.<sup>29</sup>

School environmental factors are those aspects within the pupils' surrounding at school that influence the process of teaching and learning. The school environment is an important aspect of educational planning. The quality of education not only depends on the teacher as reflected on performance of their duties, but also in the effective coordination of the school environment.<sup>6</sup>

## **MATERIALS AND METHODS:**

**RESEARCH APPROACH:** A exploratory research approach was used to assess self regulation and school environment among primary school children at Ernakulam district of Kerala.

**RESEARCH DESIGN:-** Were the researcher adopt descriptive research design



**SETTING OF THE STUDY:** Settings are the more specific place where data collection occurs. The investigator conducted the study in Primary school at Ernakulam District, Kerala.

**TARGET POPULATION:-**It comprises of all the primary school children.

**ACCESSIBLE POPULATION:-**It includes children who are present at the time of study.

**SAMPLES:-** The students who are studying primary class.

**SAMPLING TECHNIQUE:-**Non probability purposive sampling technique has been adopted to select the sample.

**SAMPLE SIZE:-** Were the Sample size was 400 students who are studying in primary class.

**CRITERIA FOR SAMPLE SELECTION:**

**Inclusive criteria:**

- Children willing to participate in the study
- Children who studies in primary students
- Children from both gender

**Exclusive Criteria:**

- Children not willing to participate
- Children who are mentally or physically challenged

**VARIABLES:-**

**Dependent variable:**Childrenself care regulation.



**Attributed variables/ Extraneous:**Age, Gender, Education, occupation, Income, Mother and father Education and occupation.

## **METHODS OF DEVELOPING TOOL:**

### **DEVELOPMENT AND DISCRIPTION OF THE TOOL**

A self-regulation questionnaire was developed to assess the level of self-regulation among the children and the observation checklist was developed for assessing the school environment of primary school. The tool was based on the objectives of the study with the use of various resources, literatures and opinion from subject experts to ascertain the effectiveness and to bring out the correct items in the questionnaire. The self-regulation questionnaire contained 32 questions and the observational check list content 47 criteria list to check the school environment.

**The tool or the study instrument is divided into 3 parts.**

#### **Section A:Socio-demographic variables**

The elementary segment of the tool contains of 13 components for retrieving data about the selected general factors like age, gender, Geographic area of school, Type of school, Income of the family, Religion, Type of family, Mother's education, Father's education, Mother's Occupation, Father's Occupation, Number of Siblings, School achievements.

#### **Section B: Self regulation Questionnaire.**

The self-regulation questioner is develop to assess the self-regulation level of the children of primary schools. In this questioner the investigator divided it into the 4 component i.e.



- 1) Why do I do my Homework?
- 2) Why do I work on My classwork?
- 3) Why do I try to answer hard questions in class?
- 4) Why do I try to do well in school?

These 4 components consist of 32 questions to assess the self-regulation of children.

### **SCORE INTERPRETATION**

- Score interpretation for the self-regulation questioners Questionnaire
  - ADEQUATE                      97-128
  - MODERATE                      65-96
  - INADEQUATE                      0-64

### **Section C: Observational check list.**

It is developed to assess the school environment. The observational check list divided into the 10 main component i.e.

- 1) **Lighting**
- 2) **Temperature**
- 3) **Visual Distractions**
- 4) **Auditory Distraction**
- 5) **Physical surroundings**
- 6) **Materials**
- 7) **Space**
- 8) **Time**
- 9) **Learning environment**
- 10) **School facilities.**



**VALIDITY AND REALIABILITY OF THE TOOL:-** The content validity of the instrument was assessed by obtaining opinion from 28 experts in the field of nursing. The experts suggested simplification of language, reorganization and addition of certain items. Appropriate modifications were made accordingly and the tool was finalized.

The reliability is calculated by Karl's Pearson's correlation coefficient method and the reliability of study is 0.76 for the self-regulation questioner and for observational check list it is 0.96 and it is reliable & feasible to conduct main study.

### **ETHICAL CONSIDERATION:**

The research proposal was submitted to the institutional ethics committee of Govt. College of Nursing, Ernakulam and obtained permission. (IEC NO.B1/423/2019/CONEKM Dated 16.09.2019). Written informed consent from parents and children were obtained.

### **RESULTS AND DISCUSSION:**

The analysis of the study were organised in relation to the objective and assumption and hypothesis of the study.

Were the study assumptions and hypothesis was,

### **ASSUMPTIONS:-**

1. There is association between self-regulation with the demographic variables.
2. There is association between school environment with the demographic variables.
3. There is positive impact of school environment on self-regulation among primary school children.

### **HYPOTHESIS:-**

H<sub>0</sub>: There will be no significant association between self-regulation with the demographic variables.





H1: There will be significant association between school environment with the demographic variables.

Were the objective of the study was,

### **OBJECTIVES OF THE STUDY:-**

### **ORGANIZATION OF STUDY FINDINGS:**

The data obtained was organized in the master sheet for tabulation, statistically analysed and interpreted by using descriptive and inferential statistics. The findings were presented under the following headings.

#### **Section A: Distribution of respondents according to demographic variables.**

- The majority of the respondents 197(49.25%) were in the age group of 7-8 years followed by 125(31.25%) in the age group of 9-10 years, and 78(19.5%) in the age group of 5-6 years.
- In the category of sex majority of respondents 222(56%) were male and 178(44%) were female.
- In relation to Geographic area (school) majority of respondent school 159 (39.75%) belongs to urban geographical area followed by 151 (37.75%) belongs to rural geographic area and 90(22.5%) belong to urban-slum area.
- As regards to family income majority of respondent the majority of respondent 110(27.5%) having to family income between 10,001 to 15,000 Rs. Followed by 80(20%) had 20,001-25,000 Rs.,75(18.75%) had to Less than 10,000 Rs., 70(21.25%) had above 25,001 Rs And 65(16.25%) had 15,001-20,000 Rs.
- In relation to religion majority of 190(47.5%) belongs to Muslim religion followed by 150(37.5%) belongs to Hindu religion, and 60(15%) belongs to Christian religion.



- In relation to type of family the majority of respondent 202(51%) belongs to nuclear family followed by 189(47%) belongs to expanded family and 09(2%) belongs to joint family.
- In relation to mother's education the majority of respondent 128 (32%) mothers completed Under Graduate education followed by 110(27.25%) completed Senior Secondary education, 94(23.5%) completed post graduate education, 58(14.5%) completed secondary education and 10(2.5%) completed other education.
- In relation to father's education , the majority of respondent 188 (47%) fathers completed under graduate education followed by 90(22.5%) completed Post graduate education, 61(15.25%) completed Senior Secondary education, 43(10.75%) completed Secondary education and 18(4.5%) Completed Other education.
- In relation to mother's occupation , the majority of respondents 241(60.25%) mother's occupation were private job followed by 91(22.75%) occupation were government job, 35(8.75%) were self employed, 11(2.75%) were housewife, 9(2.25%) were farmer, 8(2%) were doing business and 5(1.25%) were doing other occupation.
- In relation to father's occupation the majority of respondent 119(29.75%) fathers occupation were doing private job followed by 91(22.75%) doing business, 70(17.5%) doing government job, 63(15.75%) doing self employed, 46(11.5%) were farmer and 11(2.75%) were doing other occupation.
- In relation to number of siblings the majority of respondent 143(35.75%) had one sibling followed by 131(32.75%) had two siblings, 88(22%) had three siblings, 20(5%) were single child and 18(4.5%) had four and above siblings.
- In relation to school achievement the majority of respondent 130(32.5%) having the grade A in school followed by 99(24.75%) had grade B+, 63(15.75%) had grade A+ and grade B respectively and 45(11.25%) had grade C in school achievement.

**Section B: Assessment of self-regulation among primary school children.**

This section deals with the analysis and interpretation of level of self-regulation among primary school children being summated using frequency and percentage.

**TABLE NO. 1: LEVEL OF SELF-REGULATION AMONG PRIMARY SCHOOL CHILDREN.**

**N=400.**

<b>LEVEL OF SELF-REGULATION</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
ADEQUATE (97-128)	179	44.75%
MODERATE (65-96)	118	29.5%
INADEQUATE (0-64)	103	25.75%

**SECTION C: ASSESSMENT OF SCHOOL ENVIRONMENT AMONG PRIMARY SCHOOL CHILDREN**

**TABLE NO. 2: Level of School Environment among Primary School Children.**

**N=400.**

<b>LEVEL OF SCHOOL ENVIRONMENT</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
GOOD (36-47)	100	25%
AVERAGE (24-35)	202	50.5%
POOR (0-23)	98	24.5%

**Section D: Association between self-regulation and the selected demographic variables among primary school children.**

**TABLE NO .3. Association between self-regulation and the selected demographic variables among primary school children.**

Socio-demographic variables	Total no. Of samples	Level of self-regulation			Df	P. Value	$\chi^2$ value	Result
		Adequate	Moderate	Inadequate				
		N	N	N				
<b>Age in years</b>					4	0.000	28.4	<b>S</b>
5-6 years	78	25	31	22				
7-8 years	197	113	38	46				
9-10 years	125	41	49	35				
<b>Gender</b>					2	0.035	6.69	<b>S</b>
Male	178	85	41	52				
Female	222	94	77	51				
<b>Geographic area</b>					4	0.000	52.3	<b>S</b>
Urban	159	78	69	12				
Semi-urban	90	38	18	34				
Rural	151	63	31	57				
<b>Income (Rs.)</b>						0.002	20.4	<b>S</b>
Less than 10,000	75	35	28	11				
Rs. 10,001-15,000	110	41	40	29				
Rs. 15,001-20,000	65	32	12	21				
Rs. 20,001-25,000	80	42	23	15				
Above 25000	70	25	26	19				
<b>Religion</b>					4	0.000	30.1	<b>S</b>
Hindu	150	32	18	10				
Christian	60	58	31	61				
Muslim	190	89	69	32				
<b>Type of family</b>					4	0.028	10.9	<b>S</b>
uclear	202	75	64	63				
Joint	09	04	03	02				
Expanded	189	100	51	38				
<b>Mother's Education</b>					6	0.017	15.4	<b>S</b>
Up to Secondary	58	29	12	17				
Senior Secondary	110	50	39	21				
Under-graduate	128	52	31	45				



Post-graduate	94	35	26	33				
others	10	3	5	2				
<b>Father's Education</b>					6	0.000	38.8	<b>S</b>
Up to Secondary	43	15	16	12				
Senior Secondary	61	32	10	19				
Under-graduate	188	67	86	35				
Post-graduate	90	28	41	21				
Others	18	8	7	3				
<b>Mother's Occupation</b>					12	0.281	14.3	NS
Government job	91	49	23	19				
Private job	241	91	77	73				
Self-employed	35	20	9	6				
Housewife	11	7	3	1				
Business	08	5	2	1				
Agriculture	09	4	3	2				
Other	05	3	1	1				
<b>Father's Occupation</b>					10	0.000	57.9	<b>S</b>
Government job	70	18	12	40				
Private job	119	58	35	26				
Self-employed	63	23	31	9				
Business	91	45	27	19				
Agriculture	46	28	10	8				
Other	11	7	3	1				
<b>Number of siblings</b>					8	0.002	24.2	<b>S</b>
One	143	47	42	54				
Two	131	67	35	29				
Three	88	48	27	13				
Four and above	18	10	5	3				
Single child	20	7	9	4				
<b>School achievement</b>					8	0.002	25.0	<b>S</b>
Grade A+	63	25	21	17				
Grade A	130	62	25	43				
Grade B+	99	48	38	13				
Grade B	63	19	23	21				
Grade C	45	25	11	9				

**SECTION E: ASSOCIATION BETWEEN SCHOOL ENVIRONMENT AND THE SELECTED DEMOGRAPHIC VARIABLES AMONG PRIMARY SCHOOL CHILDREN.**

**Table no.4:** Chi square value showing association of school environment with demographic variables

Socio-demographic variables	Total no. Of samples	Level of school environment			Df	P. Value	$\chi^2$ value	Result
		Good	Average	Poor				
		N	N	N				
<b>Age in years</b>					4	0.413	3.95	NS
5-6 years	78	20	37	21				
7-8 years	197	56	97	44				
9-10 years	125	24	68	33				
<b>Gender</b>					2	0.000	21.4	S
Male	178	62	87	29				
Female	222	38	115	69				
<b>Geographic area</b>					4	0.000	32.7	S
Urban	159	25	103	31				
Semi-urban	90	38	33	19				
Rural	151	37	66	48				
<b>Income (Rs.)</b>					8	0.152	12.0	NS
Less than 10,000	75	17	40	18				
Rs. 10,001-15,000	110	22	64	24				
Rs. 15,001-20,000	65	18	27	20				
Rs. 20,001-25,000	80	28	31	21				
Above 25000	70	22	30	18				
<b>Religion</b>					8	0.000	32.9	S
Hindu	150	21	22	17				
Christian	60	25	87	38				
Muslim	190	54	93	43				
<b>Type of family</b>					4	0.644	2.50	NS
Nuclear	202	49	98	55				
Joint	09	02	06	01				
Expanded	189	49	98	42				
<b>Mother's Education</b>					8	0.000	33.3	S
Up to Secondary	58	18	25	15				
Senior Secondary	110	36	53	21				



Under Graduate	128	13	67	48				
Post graduates	94	30	51	13				
Others	10	3	6	1				
<b>Father's Education</b>					8	0.011	19.7	S
Up to Secondary	43	13	19	11				
Senior Secondary	61	18	23	20				
Under Graduate	188	39	97	52				
Post graduates	90	21	56	13				
Others	18	9	7	2				
<b>Mother's Occupation</b>					12	0.005	28.2	S
Government job	91	28	45	18				
Private job	241	48	125	68				
Self-employed	35	10	17	8				
Housewife	11	9	1	1				
Business	08	2	5	1				
Agriculture	09	2	5	2				
Others	05	1	4	0				
<b>Father's Occupation</b>					10	0.000	46.1	S
Government job	70	19	38	13				
Private job	119	24	41	54				
Self-employed	63	12	39	12				
Business	91	31	50	10				
Agriculture	46	11	27	8				
Other	11	3	7	1				
<b>Number of siblings</b>					8	0.001	25.6	S
One	143	41	51	51				
Two	131	31	78	22				
Three	88	19	54	15				
Four and above	18	3	9	6				
Single child	20	6	10	4				
<b>School achievement</b>					8	0.000	37.4	S
Grade A+	63	16	30	17				
Grade A	130	28	58	44				
Grade B+	99	35	49	15				
Grade B	63	16	27	20				
Grade C	45	5	38	2				



## **DISCUSSION:-**

Majority of respondents 202(50.5%) had average school environment followed by 100 (25%) had poor school environment, 98(24.5%) had poor school environment.

The present study was supported by this study findings the total number of respondents (N=100), 62% of the teachers were professionally certified as general education teachers, and 38% teachers are special education teachers. The details of the responses of teachers are provided in table 1. Majority of the teachers (69%) strongly agree that they support the concept that children with learning disabilities profit from friendships with non-disabled students. Further support is noted in the frequency of response (54%) shown for the statement (No.9), „we actively encourages full participation of students with disabilities in the life of the school, including extracurricular activities“. Besides this, above average number of respondents (54%) supported the statement (No.15) „We actively encourages the parents to share in-depth knowledge with teachers about their children’s strengths and weaknesses and their specific needs“. The disagreement rates (disagree and strongly disagree of the statement No.14), „Teachers are well informed on how to apply different behaviour management techniques“ (45%) and (19%), shows that majority of the teachers are unaware of the behaviour management techniques in the Inclusive classroom.<sup>7</sup>

Majority of respondents 179(44.75%) had adequate level of self-regulation followed by 118(29.5%) had moderate level, 103(25.75%) had inadequate level of self-regulation.

The significant correlation between the action of exchanging information with classmates using external tools, and the action of using university LMS tools, indicates that the external tools did not compete with the LMS tools, but rather complemented them. Likewise, the revealing correlation between the use of PLE tools to send information to classmates and the use of tools external to the University for exchanging information with classmates, indicates that information exchange with persons not participating in the courses complemented information exchange with classmates. Students asked for help from their





teachers, valued their evaluations and suggestions, and showed critical thinking about their teaching strategies. The correlations between variables indicate that teacher suggestions and evaluations were related to actions by students regarding the use of digital tools and the recording of their reflections on their own learning. This indicates that the teachers probably encouraged these actions. The data indicates that a majority of students reflected on the role they have in their own learning, an important proportion used digital tools to organize their reflections about learning (67.88%), and approximately half of them recorded these thoughts. These three actions are strongly correlated ( $t > .38$ ), indicating the importance of PLE digital tools during the phase of reflection.<sup>8</sup>

Self-regulation through positive early experiences, experts suggest that self-regulation is a skill that needs guidance or to be taught. With these concepts in mind, what can you do as a parent or caregiver to support self-regulation? With a basic understanding of self-regulation, parents and caregivers can begin to look at their child's overall development to determine what may work. Infants and young children rely on predictable, nurturing care from adults in their lives. This relationship sets the foundation whereby children become aware that their needs are met; therefore, they can feel joy, comfort, and low levels of stress.<sup>9</sup>

## **CONCLUSION:**

The present study conclude that self regulation among the primary school children's the majority of respondents had adequate level of self-regulation and others had moderate level, in regard to the school environment among primary school children majority of respondents had average school environment followed by some students had poor school environment.



REFERENCES:

1. [McClelland, Acock, Piccinin, Rhea, & Stallings, 2013](#); The Development of Self-Regulation Across Early Childhood The development of effective self-regulation is recognized as fundamental to an individual's functioning:2015:25(3):2366-2368.
2. Zelazo PD, Carlson SM. Hot and cool executive function in childhood and adolescence: Development and plasticity. **Child Development Perspectives**. 2012;6:354–360.
3. Vygotsky LS. In: **Thought and language**. Kozulin A, translator. Cambridge, MA: The MIT Press; 1934/1986.
4. ErnetoPanadero.,A Review of Self-regulated Learning: Six Models and Four Directions for Research 28 April 2017 <https://doi.org/10.3389/fpsyg.2017.00422>
5. Thelen E (1989) Self-organization in developmental processes: Can systems approaches work? In: Gunnar (Edr.), Systems in development: The Minnesota Symposium in Child Psychology, pp. 77-117.
6. Ajayi, M. A. (2001) Effect of learning environment on students' academic achievement in Lagos State secondary schools. Unpublished MED thesis University of Nigeria.
7. Alur, M., & Timmons, V. (2009). Inclusive education across cultures crossing boundaries, sharing ideas. New Delhi: SAGE publications India Pvt Ltd.
8. Leech, N., Barrett, K., & Morgan, G. (2011). IBM SPSS for intermediate statistics, use and interpretation. New York: Taylor and Francis Group, LLC
9. The Connection Between Primary School Students' Self-Regulation in Learning and Perceived Teaching Quality:2013:Journal Of cognitive education and psychology:12(2):138-156.