



## ASSESSMENT OF SELF REGULATION AMONG PRIMARY SCHOOL CHILDREN IN ERNAKULAM DISTRICT, KERALA.

### Nursing

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### ABSTRACT

**BACKGROUND OF THE STUDY:** The development of self regulation across early childhood fundamental to an individual's functioning development of effective self regulation is recognized. The development of effective self-regulation can be recognized as fundamental to an individual's functioning, with development during early childhood often considered an early marker for later life successes. The present study aims to assess self-regulation and school environment among primary school children in Ernakulam District, Kerala.

**METHODS :-** 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. 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. Were study results was the level of self regulation among the primary school children was that in 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.

**CONCLUSION:-** Study was conclude that the majority of children had adequate level of self regulation.

### KEYWORDS

self regulation , school environment, primary school children.

### INTRODUCTION

Children are not born able to manage their behaviour in appropriate ways, thus to focus and persist despite of frustration, to remember and follow the directions, or to communicate effectively through conflict needs guidance, they can modify their way of thinking, expressing and acting. Science say's that the area of the brain are responsible for focusing, memorizing, and self-controlling which begins to mature during the preschool and early school years, and hence during school-age children undergo substantial growth in their abilities to manage their emotions, behaviour, and attention.<sup>1</sup>

The concept of self-regulation only not just apply to a child's emotional health; it also influences a child's cognitive ability. The ability of children to self-regulate their feelings and actions in preschool is related to their math and literacy abilities in kindergarten, which suggests curricula, intended to help children develop self-regulation skills and improve early academic abilities may be the most successful tool in helping children make significant progress in school. A lack of self-regulation can seriously hinder a child's learning capabilities and the overall classroom environment.<sup>2</sup>

The adults also experience frustrating situations, but they are unable to control their emotions or efficiently cope with their outcomes. Children have to learn and develop skills in controlling their emotions and actions, which is why self-regulation has emerged as a vital principle of early childhood development for preschoolers and kindergarteners.<sup>3</sup> Human beings, as social entities, are in constant interaction and communication with their environment. It is a social process that develops when individuals get to know themselves and their environment and determine their methods of interaction with their environment to attain their objectives. The concept of self-regulation is a basic that has gained in importance at every stage of persons life and expands and develops when individuals are born into their environment.<sup>4</sup>

Research indicates that between ages three and seven a qualitative shift in self-regulation may take place when children typically progress from reactive or co-regulated behavior to more advanced, cognitive behavioral forms of self-regulation that likely require the integration of many skills such as executive functions and language skills.<sup>5</sup>

A study was conducted to assess maternal representations of the child, which presumably underlie mothers parenting behaviours and to evaluate the moderating influence of preschoolers self-regulation on

relations between mothers representations and changes in children's negative and positive developmental adjustment outcomes from preschool to first grade. About 187 Participants were involved in which mothers and their preschoolers were assessed. Preschoolers with self-regulation difficulties whose mothers produced incoherent narratives showed increased externalizing behavior problems, decreased ego-resilience and lower peer acceptance across the transition to school the implications of these findings for understanding and supporting children's adjustment during the early school years are discussed.<sup>6</sup>

The nature of schooling demands constant use of children's executive functioning and self-regulatory abilities. For example, students must follow instructions, apply classroom rules, solve maths problems, comprehend texts, get along with peers and teachers, remember equipment, and transfer knowledge between situations. Without well-developed executive functioning and self-regulation skills, students can struggle with these basic school tasks. In these instances, teachers may view students as having problematic or disruptive behavior.<sup>7</sup>

This research aims to investigate the relationship between self-regulated learning awareness, learning behaviors, and learning performance in ubiquitous learning environments. In order to conduct this research, psychometric data about self-regulated learning and log data, such as slide pages that learners read, marker, and annotate, was collected.

### MATERIALS AND METHODS:

**RESEARCH APPROACH:** An 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.<sup>24</sup> The investigator conducted the study in Primary schools 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:** Children's self 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**

**Section B: Self-regulation questionnaire.**

**Section C: Observational checklist.**

##### 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 class work?
- 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

**Table No. 1: Score Interpretation For The Self-regulation Questionnaire**

| LEVEL OF SCORE | TOTAL SCORE | PERCENTAGE |
|----------------|-------------|------------|
| ADEQUATE       | 97-128      | 76-100%    |
| MODERATE       | 65-96       | 51-75%     |
| INADEQUATE     | 0-64        | 0-50%      |

##### 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 8 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.

#### 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:-

**H0:** 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:-

1. To assess the self-regulation among primary school children.
2. To assess the school environment among primary school children.
3. To associate the self-regulation with the selected demographic variables.
4. To associate the school environment with the selected demographic variables.

#### 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.**

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

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

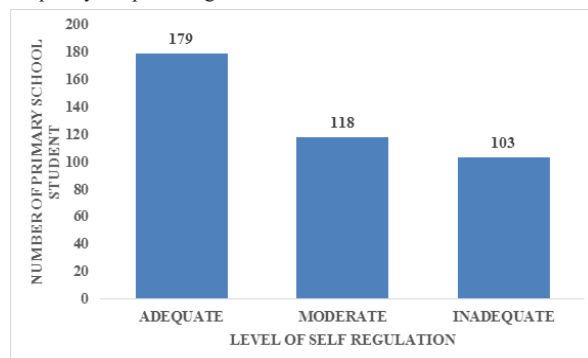
**Section A: Distribution of respondents according to demographic variables.**

- 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 geographical 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.



Graph No.01: Level Of Self Regulation.

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

In relation to association there was significant association between Age (28.4), Gender (6.69), Geographical area (52.3), Income (95.6), Religion (30.1), Type of family (10.9), Mother's education (15.4), fathers' education (38.8), Father's occupation (57.9), Number of siblings (24.2) and School achievement (25.0) with the level of self-regulation and was no significant association between Mother's occupation (14.3) with self-regulation.

Table No. 2 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 | X <sup>2</sup> value | Result |
|-----------------------------|----------------------|--------------------------|---------------|-----------------|----|----------|----------------------|--------|
|                             |                      | Adequate<br>N            | Moderate<br>N | Inadequate<br>N |    |          |                      |        |
| Age in years                |                      |                          |               |                 | 4  | 0.000    | 28.4                 | S      |
| 5-6 years                   | 78                   | 25                       | 31            | 22              |    |          |                      |        |
| 7-8 years                   | 197                  | 113                      | 38            | 46              |    |          |                      |        |
| 9-10 years                  | 125                  | 41                       | 49            | 35              |    |          |                      |        |
| Gender                      |                      |                          |               |                 | 2  | 0.035    | 6.69                 | S      |
| Male                        | 178                  | 85                       | 41            | 52              |    |          |                      |        |
| Female                      | 222                  | 94                       | 77            | 51              |    |          |                      |        |
| Geographic area             |                      |                          |               |                 | 4  | 0.000    | 52.3                 | S      |
| Urban                       | 159                  | 78                       | 69            | 12              |    |          |                      |        |
| Semi-urban                  | 90                   | 38                       | 18            | 34              |    |          |                      |        |
| Rural                       | 151                  | 63                       | 31            | 57              | 8  | 0.002    | 20.4                 | S      |
| Income (Rs.)                |                      |                          |               |                 |    |          |                      |        |
| 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              | 4  | 0.000    | 30.1                 | S      |
| Above 25000                 | 70                   | 25                       | 26            | 19              |    |          |                      |        |
| Religion                    |                      |                          |               |                 |    |          |                      |        |
| Hindu                       | 150                  | 32                       | 18            | 10              |    |          |                      |        |
| Christian                   | 60                   | 58                       | 31            | 61              | 4  | 0.028    | 10.9                 | S      |
| Muslim                      | 190                  | 89                       | 69            | 32              |    |          |                      |        |
| Type of family              |                      |                          |               |                 |    |          |                      |        |
| Nuclear                     | 202                  | 75                       | 64            | 63              | 6  | 0.017    | 15.4                 | S      |
| Joint                       | 09                   | 04                       | 03            | 02              |    |          |                      |        |
| Expanded                    | 189                  | 100                      | 51            | 38              |    |          |                      |        |
| Mother's Education          |                      |                          |               |                 | 6  | 0.000    | 38.8                 | S      |
| 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               | 12 | 0.281    | 14.3                 | S      |
| Father's Education          |                      |                          |               |                 |    |          |                      |        |
| 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              | 19 |          |                      |        |
| Others                      | 18                   | 8                        | 7             | 3               |    |          |                      |        |
| Mother's Occupation         |                      |                          |               |                 |    |          |                      |        |
| 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  |    |       |      |   |
| Father's Occupation |     |    |    |    |    |       |      |   |
| Government job      | 70  | 18 | 12 | 40 | 10 | 0.000 | 57.9 | S |
| 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  |    |       |      |   |
| Number of siblings  |     |    |    |    | 8  | 0.002 | 24.2 | S |
| 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  |    |       |      |   |
| School achievement  |     |    |    |    | 8  | 0.002 | 25.0 | S |
| 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  |    |       |      |   |

### DISCUSSION:-

In relation to the demographic variables the investigator was discuss that the finding of the study in relation to gender were majority of 222(56%) were female and 178(44%) were male.

Study was supported by Estefania Estevez, this study analyzed the role of different but interrelated variables in the family and school contexts in relation to problems of violent behaviour at school during adolescence. Participants were 1,068 students aged 11 to 16 (47% male) drawn from secondary schools in the Valencia Community (Spain). Statistical analyses were carried out using structural equation modeling. The model accounted for 32% of the variance in school violence. Results showed a direct association between quality of communication with father and teacher's expectations of the student with the adolescent's involvement in violent behaviour at school.<sup>8</sup>

- Distribution of the samples in relation to the socioeconomic status: Majority of respondent 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.

Were study findings was supported by the Jan Sebastian Novotny., adjustment problems and residential care environment Residential care environment represents a specific social space that is associated with a number of negative consequences, covering most aspects of children and youth functioning. The paper analyzes of the presence of adjustment problems among adolescents from institutional care environment and compares this results with a population of adolescents who grew up in a family. Methods: The sample consisted of two groups of adolescents. The first group included 285 adolescents currently growing up in an residential care environment, aged 13 to 21 (M = 16.23, SD = 1.643). The second group consisted of 214 adolescents growing up in a family, aged 15 to 20 (M = 17.07, SD = 1.070). We used a questionnaire Youth Self Report. Data were analyzed using descriptive statistics and ANOVA. Results: Results showed that adolescents in residential care exhibit higher average values in all adjustment problems. Also, in the context of diagnostic categories are the residential care adolescents more frequently in non-normal range (borderline and clinical), primarily in the border range. The greatest differences were reflected in the Thought problems and Rule-breaking behavior. MANOVA showed a significant multivariate effect between groups of adolescents, Hotelling's T = .803, F(8, 490) = 49.202, p < .001, d = .445 (large effect). Univariate analysis further showed a significant effect for Withdrawn/depressed (p = .044, d = .089, small effect), Somatic complaints (p = .002, d = .139, medium effect), Social problems (p = .004, d = .127, a small effect), Thought problems (p < .001, d = .633, strong effect), Attention problems (p < .001, d = .320, strong effect), Rule-breaking behavior (p < .001, d =

.383, strong effect), and Aggressive behavior (p = 0.15, d = .110, small effect). Results for the dimension of Anxious/depressed were not significant (p = .159).<sup>9</sup>

### SECTION B: ASSESSMENT OF SELF-REGULATION AMONG PRIMARY SCHOOL CHILDREN.

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>10</sup>

### CONCLUSION:

The findings of this study was conclude that there was adequate self regulation among the children who are studying primary schools at district Ernakulam of Kerala.

### CONFLICT OF INTEREST: Nil

### SOURCE OF FUNDING: Self

### 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.

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