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Quasi-experimental study to assess the Effectivenss of planned teaching Programme on knowledge regarding breakfast skipping and its impact on academic achievement among school going children in selected schools of district Kangra Himachal Pradesh

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Abstract

Breakfast is widely acknowledged as the most essential meal of the day, particularly for children in their formative years. Skipping breakfast is a rising concern among school-going children, leading to poor concentration, reduced academic performance, and long-term health implications. Despite known benefits, breakfast consumption remains inconsistent, especially in rural areas due to limited awareness and socio-economic constraints.

Methodology: A quantitative research approach with a quasi-experimental one-group pre-test post-test design was adopted. The study was conducted among 60 school-going children aged 8- 15 years in a selected school in District Kangra, Himachal Pradesh. Participants were selected using purposive sampling technique. A self -structured knowledge questionnaire was used to assess knowledge before and after the implementation of a 30- 45-minute structured Teaching Programme (STP) on breakfast skipping and its impact on academic performance. Descriptive and inferential statistics were used to analyze the data.

Results: The pre-test revealed that 40% of children had poor knowledge, 60% had moderate knowledge, and only 0% had adequate knowledge. Following the intervention, post-test scores showed significant improvement: 76.7%achieved good knowledge, 23.3% had moderate knowledge, and 0% remained in the poor category. The mean knowledge score increased from 11.67±2.995 in the pre-test to 23.3±3.013 in the post-test, with a mean difference of 11.530. The paired t-test yielded a t-value of 2.00 and a p-value of 0.001, indicating statistically significant improvement. The level of significance is 0.005. No significant association was found between post-test knowledge scores and demographic variables.

Conclusion: The Planned Teaching Programme was effective in enhancing the knowledge of school-going children regarding breakfast skipping and its impact on academic performance.

Keywords: Breakfast skipping, academic achievement, school going children, planned teaching Programme

Introduction

Breakfast, often referred to as the "most important meal of the day," has been a subject of interest in nutritional science, education, and public health for decades. It serves as the first source of energy after an overnight fast, replenishing glucose levels and providing essential nutrients to kick start metabolic processes among school-going children, breakfast consumption is particularly critical due to its association with physical health, cognitive functioning, and academic performance. In India, where diverse dietary habits and socioeconomic conditions influence meal patterns, understanding the role of breakfast in the context of education is vital.

According to World Health Organization (WHO), school-age children are generally defined as those between 5 and 19 years old. These age group encompasses 1 a wide range of developmental stages, from early childhood through adolescence, and is recognized as a crucial period for both health and education.

The concept of a planned teaching program is rooted in health education principles, aiming to impart knowledge, change attitudes, and encourage healthy behaviors. In this study, the intervention is designed to educate children about the nutritional benefits of breakfast and its direct correlation with their academic outcomes. Academic performance, a measurable outcome in educational settings, is influenced by multiple factors, including nutrition, sleep, and socioeconomic status. Among these, breakfast stands out as a modifiable factor. Studies worldwide, including those from the United States, United Kingdom, and India, have linked breakfast consumption with improved mathematics scores, reading comprehension, and overall grade point averages. In the Indian context, the Mid-Day Meal Scheme has highlighted the importance of nutrition in education, but breakfast remains underexplored as a standalone factor. This study seeks to bridge this gap by focusing on knowledge

enhancement as a precursor to behavioral change.

In India, particularly in rural and semi-urban settings, dietary habits are influenced by various factors, including cultural practices, economic constraints, and access to nutritional information. Understanding the specific knowledge gaps and misconceptions regarding breakfast among school-going children in this region is crucial for developing targeted educational interventions. This study aims to address this need by assessing the effectiveness of a planned teaching Programme designed to enhance knowledge about the importance of breakfast and its impact on academic performance.

Though direct data is limited, breakfast eaters might score 10-12% higher in school, similar to Indian findings, while the ASER (Annual status of education report) 2022 shows undernourished kids lag 10-15% in reading and math skills. With 25.5% of kids under 5 stunted, breakfast in rural areas like Kangra contributes 10-20% of daily energy, often limited to tea and bread, despite the state's high literacy rate of 86%.

In recent years, there has been an increasing trend of breakfast skipping among school children. This unhealthy behavior is often associated with reduced school performance, higher absenteeism, and decreased participation in classroom activities. Studies have shown that children who eat breakfast regularly tend to perform better academically than those who skip it. However, the awareness and knowledge levels about the consequences of breakfast skipping remain limited in many school-age populations. Therefore, there is a strong need to assess the current knowledge of children and provide structured teaching Programmes to encourage daily breakfast consumption and highlight its benefits on learning and academic success.

The importance of addressing nutritional deficiencies and promoting healthy dietary habits among school-going children cannot be overstated. Breakfast consumption is a critical factor in ensuring optimal physical and cognitive development. In India, where a significant portion of the population faces nutritional challenges, the need for targeted interventions is particularly acute. Poor dietary habits during childhood and adolescence can have long-lasting consequences, impacting health, education, and overall well-being.

Aim of the Study

To improve the knowledge regarding breakfast skipping and its impact on academic achievements among school-going children.

Objectives

- To assess the pre-test knowledge score regarding breakfast skipping and its impact on academic achievements among school-going children.
- To assess the post-test knowledge score after the implementation of the planned teaching Programme among school going children.
- To compare the pre- and post-test knowledge scores regarding breakfast skipping and its impact on academic achievements among school going children.
- To find the association of post-test knowledge scores regarding breakfast skipping and its impact on academic achievement among school going children with their selected socio demographic variables.

Operational Definitions: Operational definition of important terms used by the researcher to carry out his research work is stated below:

1. Assess: In the present study, it refers to gathering or collecting information regarding the importance of breakfast associated with academic performance among the school going children.

2. Effectiveness: In the present study, it refers to the extent to which structured teaching programme will achieve the desired effect of improving knowledge regarding breakfast among children.

3. School Going Children: In the present study, it refers to the children that range between 8-15 years of age.

4. Breakfast Skipping: In present study, in present study, it refers to missing first meal of the day usually eaten in the, morning

5. Planned Teaching Programme: It refers to a structured set of information for 15-20 minutes by using charts and flash card to create awareness and spread knowledge to children regarding breakfast skipping.

6. Knowledge: In the present study, it refers to the level of understanding of the children have regarding the nutritional importance of breakfast and its impact on their health and academic performance.

7. Academic Achievement: in the present study, it refers to the level of knowledge, skills and competencies acquired by students in various subject or courses typically measured through grades.

Materials and Methods

Research Approach: A quantitative research approach to be appropriate for the present study used to assess the effectiveness of planned teaching Programme on knowledge of school going children.

Research Design: Quasi experimental "one group pre - test and post - test design "is used because it involves:

Research Variables: Variables are qualities, properties or characteristics of person, things or situations that change or vary.

Independent Variable: In the present study the independent variable is structured teaching Programme.

Dependent Variable: In this study, dependent variables are knowledge of school going children regarding breakfast skipping and its impact on academic achievement.

Socio Demographic Variables: It is characteristics, attributes of the study object.

Research Setting: The present study was conducted at selected schools of District Kangra, Himachal Pradesh.

Population: The population of the present study was school going children of district Kangra, Himachal Pradesh.

Target Population: In the present study, the target population was school going children of age group 8-15 years.

Accessible Population: In the present study accessible population is school going children who are interested in my study and full fill the inclusion criteria in selected schools of District Kangra, Himachal Pradesh

Sample and Sampling Technique
Sample: In this study the sample was all adolescents
Sample Size: Sample size refers to the number of participants or observation includes in the study. • In this study the sample size was 60 school going children.
Sampling Technique: Non probability purposive sampling technique was used to select 60 school going children in selected area of district Kangra, Himachal Pradesh.

Criteria for Sample Collection
A. Inclusion Criteria: The study includes school going children who were: • in the age group of 8-15 years of selected schools of District Kangra • willing to participate in the study • Available at the time of data collection • Able to understand Hindi and English
B. Exclusion Criteria: This study excludes children who were: • Not willing to participate in the study. • Not available at the time of data collection • Child less than 8 years or more than 15 years.

Selection and Development of the Tool: The tool was selected and developed according to the objectives of the study, previous review of literature like, books, journals, unpublished research studies, mass media and by discuss with guide and co guide. The developed tool was refined and validated by subject experts and the guides. So, a self-structured knowledge questionnaire was used to assess the knowledge score among school going children.

Description of Tool
Part 1: Selected Socio - Demographic Variables: In this study, selected socio- demographic variables was: Age (in years), Gender, type of school, academic achievement, Type of family, Area of residency, Monthly income (In Rupees), Occupation, Number of siblings, dietary status, time spend on eating breakfast, days per week you skip breakfast, food you prefer to eat, feeling when you skip breakfast, any previous knowledge about topic.

Part-2: Consist of section A and B
- **Section-A:** (Self-structured knowledge questionnaire) It consists of self- structured knowledge questionnaire which seeks facts and information regarding artificial intelligence. It consists of 30 items of multiple-choice questions where total score is 30.
- **Section- B:** (Planned teaching programme) the researcher provided a planned teaching programme to the students regarding artificial intelligence. In which all aspects such as introduction of artificial intelligence, its importance, advantages and disadvantages was covered by researcher in his teaching programme**.**

Scoring Key
The self-structured questionnaire consisted of 30 questions. In which the right answer was documented as correct one mark and wrong were documented as zero mark. The complete range was 0-30.

Table 1: Classification of Knowledge Scores

Knowledge score	Range	Percentage
Inadequate	0-10	≤ 33%
Moderate	11-20	34-66%
Adequate	21	≥ 70%

Content Validity
The prepared data collection tool, along with the problem statement, objectives and operational definition, was submitted for consent validation to a panel of 10 experts comprises of 1 doctor and 9 nursing professionals. Their suggestion was carefully reviewed and incorporated into the tool after discussion with the research guide and co- guide.

Language Validity
The English version of the tool was validated by a subject expert in English language to ensure clarity and grammatically accuracy. The Hindi translated version of the tool was validated by a Hindi language expert to ensure linguistic accuracy and contextual relevance.

Ethical Consideration
A written permission was obtained from principal, Netaji Subhash College of Nursing, Palampur. • Ethical clearance was taken from ethical clearance committee of Netaji Subhash College of Nursing. • Ethical clearance was taken from each study sample anonymity and confidentiality of each sample will be assured and maintained throughout the study.

Pilot Study: After obtaining the administrative approval, pre testing of structured questionnaire was done by administering it to 6 adolescents at D.P.S Public Scholl Dhaliara, Kangra on month of April. The subject chosen were similar in the characteristics to those of the population under study to check the items for clarity, relevance of items and nature of response. It was found that participants took 30 minutes to complete the structure questionnaire. The items of structured questionnaire were clear and unambiguous.

Reliability of Tool: Reliability is the degree of consistency and accuracy with which an instrument measures the attribute for which it is designed to measure. Reliability is the extent to which instruments consistently measure a concept, three types of reliability, internal consistency and equivalence. Reliability of tool was computed by applying Karl Pearsons Correlation coefficient formula. The reliability of self- structured knowledge questionnaires was 0.89 so the tool was reliable. The tool was found to be reliable and feasible for conducting the study as range of reliability is from 0.6 to 1.0 according to Suresh K Sharma.

Procedure of Data Collection
After obtaining formal administrative approval from the principal and schools of selected areas i.e. Kangra. The aim of the study was to evaluate the effectiveness of planned teaching programme on knowledge regarding breakfast skipping and its impact on academic achievement among school going children in selected schools of District Kangra, Himachal Pradesh. After obtaining permission from concerned authorities, the investigators develop rapport and take consent from adolescents. Total 60 sample were selected by non- probability purposive sampling technique. After getting consent from the sample who met the inclusion criteria 1. Pre-test: On 1st day pre-test was administered to the school going children in the form of self- structured knowledge questionnaires. Provide planned teaching programme to the study sample 2. Posttest: Post- test was conducted on the 7th day of pre-test with same set of self-structured knowledge questionnaire. The data were

compiled and analysis was done by using descriptive and inferential statistics.

Data Analysis: The analysis was made based on the objectives and hypothesis. Both descriptive and inferential statistics were used for the data analysis such as:

- **Descriptive statistics:** The statistical analysis include frequency, percentage, mean, median and standard deviation.
- **Inferential statistics: a)** Paired t- test will be used to find out the significant difference between pre-test and post-test. **b)** Chi square test will be used to find out the association of post-test knowledge scores of adolescents with their selected socio demographic variables.

Analysis and Interpretation of Data: Data was entered in master sheet, for tabulation and statistical processing in order to analyze and interpret using descriptive and inferential statistics methods. The result of analysis of data have been organized and presented under following sections:

Section-I:

Description of selected socio - demographic variables of adolescent students

This table shows the finding related to Frequency and percentage distribution of adolescent students regarding use and importance of E-Learning.

Table 2: Distribution of Selected Socio-Demographic Variables of Participants (n=60)

Sr. No.	Selected Socio-Demographic Vraiables	Options	(f)	(%)
1.	Age (in years)	10- 12 years	18	30.0%
		13- 14 years	14	23.3%
		15- 16 years	19	31.7%
		17-18 years	9	15.0%
2.	Gender	Male	30	50.0%
		Female	30	50.0%
3.	Class	5- 6	12	20.0%
		7- 8	12	20.0%
		9- 10	18	30.0%
		11- 12	18	30.0%
4.	Type of school	Government School	20	33.3%
		Private School	40	66.7%
5.	Area of Residence	Urban area	10	16.7%
		Rural area	50	83.3%
6.	Family members	Single Parent family	0	0.0%
		Nuclear family	36	60.0%
		Extended family	7	11.7%
		Joint family	17	28.3%
7.	Monthly family income (in rupees)	Less than 20,000	4	6.7%
		20,001-30,000	3	5.0%
		30,001-40,000	18	30.0%
		40,001-50,000	35	58.3%
8.	Education of Father	No formal education	0	0.0%
		Primary education	4	11.7%
		Secondary education	11	18.3%
		Higher education	45	75.0%
9.	Education of Mother	No formal education	0	0.0%
		Primary education	7	11.7%
		Secondary education	20	33.3%
		Higher education	33	55.0%
10.	Occupation of Father	Farmer	4	6.7%
		Government service	12	20.0%
		Private job	36	60.0%
		Business	8	13.3%
11.	Occupation of Mother	Farmer	1	1.7%
		Government service	1	1.7%
		Private job	12	20.0%
		Homemaker	46	76.7%
12.	Frequency of E-learning usage	Daily	13	21.7%
		Once a week	5	8.3%
		Several times a week	6	10.0%
		Rarely or never	36	60.0%
13.	Access to E-learning devices	No	36	60.0%
		Yes	24	40.0%
13.(a)	If yes, then specify the device used: Smartphone	No	36	60.0%
		Yes	24	40.0%
	Laptop	No	60	100.0%
		Yes	0	0.0%
	Computer	No	60	100.0%
		Yes	0	0.0%
	Tablet	No	60	100.0%
		Yes	0	0.0%

14.	Internet connection used for e-learning	No	36	60.0%
		Yes	24	40.0%
14.(a)	If yes, then specify the type used: Wi-Fi	No	54	90.0%
		Yes	6	10.0%
	Mobile data	No	42	70.0%
		Yes	18	30.0%
	Broadband	No	60	100.0%
		Yes	0	0.0%
	Hotspot	No	60	100.0%
		Yes	0	0.0%
15.	Parental involvement in E-Learning activities	Regular monitoring and support	8	13.3%
		Occasional monitoring and support	7	11.7%
		Minimal Involvement	7	11.7%
		No involvement	38	63.3%
16.	Do you have prior knowledge of E-Learning	No	36	60.0%
		Yes	24	40.0%
16.(a)	If yes, then specify source: School	No	48	80.0%
		Yes	12	20.0%
	Internet	No	58	96.7%
		Yes	2	3.3%
	Social media	No	50	83.3%
		Yes	10	16.7%
	Friends or family members	No	60	100.0%
		Yes	0	0.0%
17.	Do you have prior experience with E- learning	No	36	60.0%
		Yes	24	40.0%
17.(a)	If yes, then specify source: Online classes	No	57	95.0%
		Yes	3	5.0%
	Mobile learning apps	No	43	71.7%
		Yes	17	28.3%
	Social media	No	56	93.3%
		Yes	4	6.7%
	Family guidance or support	No	60	100.0%
		Yes	0	0.0%

Section-II:

- **Assess the pre-test knowledge score of adolescent students regarding use and importance of E-Learning.**

This section shows the findings related to frequency and percentage distribution of pre-test knowledge scores regarding use and importance of E-Learning among adolescent students. The majority of adolescent students i.e., 51.7% have inadequate knowledge, 48.3% of adolescent students have moderate knowledge and 0% of adolescent students have adequate knowledge during their pre-test.

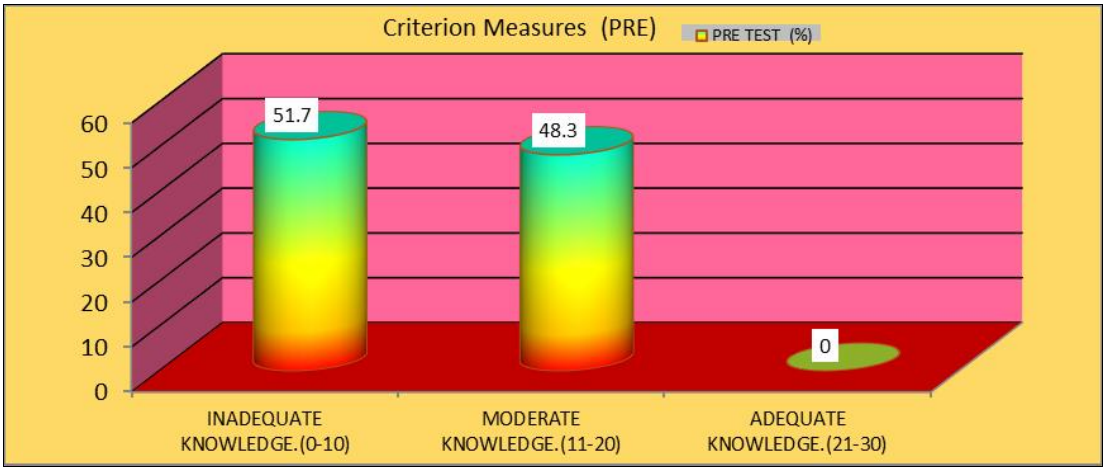

Fig 1: Criterion Measures (PRE)

Section - III:

- **Assess the post-test knowledge score of adolescent students regarding use and importance of E-Learning.**

This section shows the findings related to frequency and percentage distribution of post-test knowledge scores regarding use and importance of E-Learning among adolescent students. The majority of adolescent students i.e., 56.7% have moderate knowledge, 43.3% of adolescent students have adequate knowledge through self-structured knowledge questionnaire regarding use and importance of E-Learning among adolescent students.

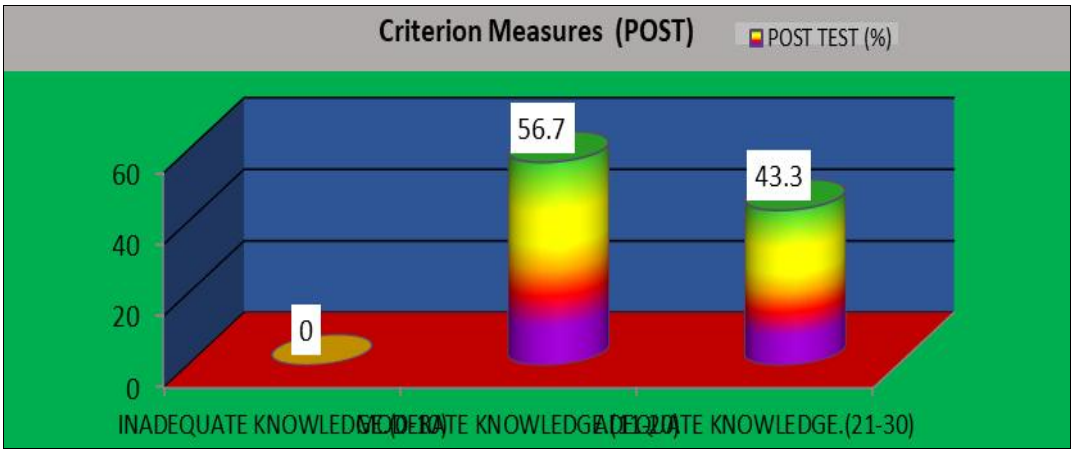

Fig 2: Criterion Measures (Post)

Section-IV

- **Comparison between pre-test and post-test knowledge score of adolescent students regarding use and importance of E-Learning.**

This section shows the findings related to comparison between frequency and percentage of pre-test and post-test knowledge scores regarding use and importance of E-Learning among adolescent students. This data depicts that in pre-test, adolescent students with inadequate knowledge have frequency score 31 and percentage of 51.7%,whereas,in post-test the frequency was 0 and percentage was also 0%.Among moderate knowledge adolescent students,the frequency was 29 and percentage was 48.3% in pre-test, where as in post-test frequency was 34 and percentage was 56.7%.Among adeqaute knowledge adolescent students, the frequency was 0 and percentage was also 0% in pre - test,where as in post-test frequency was 26 and percentage was 43.3%.

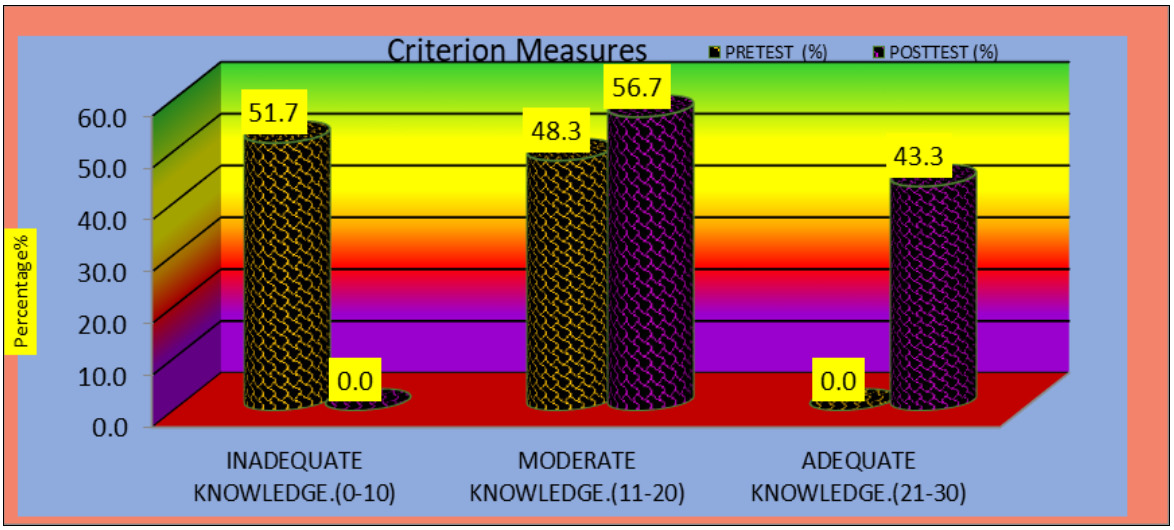

Fig 3: Criterion Measures

Section - V:

- **Association between post - test knowledge scores with their selected demographic variables regarding use and importance of E-Learning among adolescent students.**

Selected Socio-Demographic Variables	Adequate	Moderate	Inadequate	df	χ^2	P value
Age (in years)						
10-12	0	18	0	3	28.096*	0.000
13-14	5	9	0			
15- 16	12	7	0			
17-18	9	0	0			
Gender						
Male	13	17	0	1	0.000N.S.	1.000
Female	13	17	0			
Class						
5-6	0	12	0	3	34.321*	0.000
7-8	1	11	0			
9-10	8	10	0			
11-12	17	1	0			
Type of school						
Government School	9	11	0	1	0.034N.S.	0.854
Private School	17	23	0			
Area of Residence						
Urban	6	4	0	1	1.357N.S.	0.244
Rural	20	30	0			
Family Members						
Single Parent family	0	0	0	2	1.031N.S.	0.522
Nuclear family	15	21	0			
Extended family	2	5	0			
Joint family	9	8	0			
Monthly family income (in rupees)						
Less than 20,000	1	3	0	3	0.760N.S.	0.859
20,001-30,000	1	2	0			
30,001-40,000	8	10	0			
40,001-50,000	16	18	19			
Education of father						
No formal education	0	0	0	2	0.969N.S.	0.616
Primary education	1	3	0			
Secondary education	4	7	0			
Higher education	21	24	0			
Education of mother						
No formal education	0	0	0	3	3.759N.S.	0.153
Primary education	1	3	0			
Secondary education	4	7	0			
Higher education	21	24	0			
Occupation of father						
Farmer	1	3	0	3	2.251N.S.	0.522
Government service	4	8	0			
Private job	16	20	0			
Business	5	3	0			
Occupation of Mother						
Farmer	0	1	0	3	2.706N.S.	0.439
Government service	0	1	0			
Private job7	7	5	0			
Homemaker	19	27	0			
Frequency of E-Learning usage						
Daily	13	0	0	3	45.543*	0.000
Once a week	4	1	0			
Several times a week	6	0	0			
Rarely or never	3	33	0			
Access to E-Learning devices						
No	3	33	0	1	44.898*	0.000
Yes	23	1	0			
If yes, then specify type of device used Smartphone						
No	3	33	0	1	44.898*	0.000

Yes	23	1	0			
Laptop						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			
Computer						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			
Tablet						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			
Internet connection used for e-learning						
No	3	33	0	1	44.898*	0.000
Yes	23	1	0			
If yes, then specify the type used Wi-Fi						
No	20	34	0	1	8.718*	0.000
Yes	6	0	0			
Mobile Data						
No	9	33	0	1	27.356*	0.000
Yes	17	1	0			
Broadband						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			
Hotspot						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			
Parental involvement in E-Learning activities						
Regular monitoring and support	8	0	0			
Occasional monitoring and support	7	0	0			
Minimal involvement	6	1	0			
No involvement	5	33	0	3	38.827*	0.000
Do you have prior knowledge of E-Learning						
No	3	33	0	1	44.898*	0.000
Yes	23	1	0			
If yes, then specify source School						
No	15	33	0	1	14.270*	0.000
Yes	11	1	0			
Internet						
No	24	34	0	1	2.706N.S.	0.100
Yes	2	0	0			
Social Media						
No	16	34	0	1	15.692*	0.000
Yes	10	0	0			
Friends or family members						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			
Do you have experience with E-Learning						
No	3	33	0	1	44.898*	0.000
Yes	23	1	0			
If yes, then specify source Online Classes						
No	24	33	0	1	0.700N.S.	0.403
Yes	2	1	0			
Mobile Learning apps						
No	9	34	0	1	31.020*	0.000
Yes	17	0	0			
Social Media						
No	22	34	0	1	5.604*	0.018
Yes	4	0	0			
Family guidance or support						
No	26	34	0		N.A.	N.A.
Yes	0	0	0			

***= Significant NS= Not significant**

Data given in table shows the computed Chi-square of selected socio-demographic variables and the level of knowledge of adolescent students.The data revealed that there was no significant association of level of knowledge with selected socio -demographic variables i.e.gender,type of school,area of residence,family members,monthly family income (in rupees)education of father,education of mother,occupation of father,occupation of mother,access to E-Learning devices if yes then type of device used like laptop,computer and tablet,type of internet connection used at for E-Learning,if yes then type of internet connection used such as broadband,hotspot,do you have prior knowledge with E-Learning, if yes then source such as internet,friends or family,do you have prior experience with E-Learning,if yes then source such as online classes,family guidance or support. There was significant association of level of knowledge with selected demographic variables age, class, frequency of E-Learning usage, access to E-Learning devices,if yes then source through smartphone, internet connection used for E-Learning,if yes then type of connection used such as Wi-Fi,mobile data,parental involvement in E-Learning activities,do you have prior knowledge of E-Learning,if yes then source through school and social media and do you have prior experience with E-Learning,if yes then source through mobie learning apps and social media.

Conclusion

The result from this study reveals that implication of planned teaching programme on knowledge regarding breakfast skipping and its impact on academic achievement among school going children of selected schools was adequate. As school going children of selected schools were easily attracted and shows interest towards planned teaching programme. Chi- square value had significance association between knowledge score regarding breakfast skipping among school going children with their selected socio-demographic variables so it has concluded that selected socio- demographic variables has effect on knowledge on school going children. Planned teaching programme was effective in improving the knowledge, more effective in learning of school going children and it is easy to deliver also grab viewer attention and increase learner engagement. We hypothesized that providing educational programme with the use of planned teaching programme may improve the knowledge regarding breakfast skipping and its impact on academic achievement among school going children. This hypothesis was supported by findings of the current study as score of knowledge improving significantly after planned teaching programme. Hence it was concluded that the use of planned teaching programme is an effective strategy for improving the knowledge regarding breakfast skipping and its impact on academic achievement among school going children.

Limitation: All information collected from the students was based on the self-reported responses only.

- The study was confined to 60 students only.
- The study was limited to assessment of knowledge regarding breakfast skipping and its impact on academic achievement.
- The study was limited to students aged between 8-15 years only.

Recommendations: Keeping in view of the present research study findings, the following recommendations have been made

- The study can be replicated on a larger sample, thereby allowing for generalization to a broader population.
- A well-structured module should be developed to enhance the knowledge of students regarding breakfasts skipping.
- Regular educational programs can be conducted for students the importance of understanding study areas, such as the importance of breakfast, effects of breakfast skipping advantages and disadvantages of breakfast skipping, thereby ensuring an in-depth understanding of breakfast skipping.
- A comparative study can be done between effectiveness of self-instructional module verses planned teaching programme.
- The study can be done in the colleges and various educational institutes.
- A similar study can be conducted to compare the knowledge levels of students, between urban and rural populations.

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