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TIME MANAGEMENT BEHAVIOUR AMONG SECONDARY SCHOOL PUPILS IN MADURAI DISTRICT

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Abstract

Time Management plays a very important role not only in organizations but also in our personal lives. Teacher should give practice to the learners for efficient time management and conduct various activities for learner treating them as academic friends, the resultant of which will be the enhancement of the academic achievement. The study reveals that the female pupils are passing more in Time Management Behaviour than their counterparts. Hence, it is essential to make the males also have more time management behaviour, so that there will be compatibility in academic achievement. Appropriate teaching training programmes should be conducted for female pupils in secondary schools. It is worth mentioning that, the Government secondary schools pupils do well in their time management behaviour than aided secondary school pupils. The unaided secondary school pupils Time Management Behaviour is more than the aided secondary school pupils. It is inferred that, the aided secondary school pupils are in the last level in comparing to the government and unaided secondary school pupils in Time Management Behaviour. Naturally there is a need to improve the aided secondary school pupils Time Management Behaviour through proper training programmes. The English medium secondary school pupils do better than the Tamil medium secondary school pupils in Time Management Behaviour. Hence, the level of time management behaviour of Tamil medium secondary school pupils should be improved on a par with English Medium secondary school pupils through proper programmes.

Introduction

Time Management is about how we are utilizing our time in a systematic way. To adopt this practice, we should know how we are utilizing our time daily, It is essential to plan each and every activity based on our urgency, importance and necessity etc., If we follow time management behavior we can achieve a lot. Time Management is a process wherein one must keep the available time to manage their multiple task and also work accordingly. This keeps the person out of stress and tension. Time management is a must for future achievement. This is also useful for the learner studying in Secondary Schools to essential in their studies to suggest ways and means to adopt the aware of time management. Hence time management assumes significance for our daily life and thus the need for the current study.

Need for the Study

Time management behaviour is an important stress factor that influence the individual's academic achievement. The learners in Secondary School Pupils are not aware of the various practices to be adopted in time management process. There is no study carried out with the time management aspects of Secondary School Pupils daily activities. Hence the conduct of the present study which is entitled "Time Management Behaviour among Secondary School Pupils In Madurai District".

Objectives of the Study

The specific objectives of the study are listed below.

1. To measure the Time Management Behaviour among Secondary School Pupils.

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- To find out whether there is a significant difference in Time Management Behaviour of Secondary School Pupils in terms of select independent variables viz. Gender, Residence, Standard Studying, School Type and Medium of Study.

Terms and Definitions

Time Management Behaviour – refers to the harmonious process of ensuring the judicious allotment of time for the efficient execution of one’s daily activities.

Secondary School Pupils – refers to those who are studying Ninth and Tenth standard under Tamil Nadu State Board Syllabus in Madurai district.

Variables of the Study

Dependent Variables: Time Management Behaviour

Independent Variables

- Gender : Male / Female
- Residence : Day Scholar / Hosteller
- Standard Studying :9th/10th standard
- School Type : Govt. / Aided
- Medium of Study :English / Tamil

Hypotheses of the Study

The following hypotheses have been formulated for verification in this study.

- Time Management Behaviour** is satisfactory among Secondary School pupils.
- Gender** exerts a significant influence on time management behaviour among secondary school pupils.
- Residence** exerts a significant influence on time management behaviour among secondary school pupils
- Standard Studying** exerts a significant influence on time management behaviour among secondary school pupils
- School Type** exerts a significant influence on time management behaviour among secondary school pupils
- Medium of Study** exerts a significant influence on time management behaviour among secondary school pupils

Sample

A random sample of 400 Secondary School Pupils from Secondary Schools in Madurai district with due representation to the variables. Viz. Gender, Residence, Standard Studying, School Type and Medium of Study.

The tools used for data collection are as follows:

- General Information sheet structured by the Investigator.
- Time Management Behaviour Inventory constructed and standardized by the Investigator.

Statistical Treatments

- Significance of Pearson’s Product Moment Correlation.
- ‘t’- test for significance of difference between the means of large independent samples.

Related Studies

Kirk, James Patterson, Aimee Woody (2001), “A Time Management Skills Board Game”. In addition to a brief introduction to time management, this document contains a training manual for teaching time management skills to workers at all levels in an organization. The training is offered in the form of a board game that takes approximately 1-1/2 to 2 hours to play. Among the time management principles

learned in the game are prioritizing and goal setting skills. The game contains many real life time management dilemmas. Included in the manual are various ways the game can be customized to meet the needs of a particular audience. The manual also contains a list of Web sites where participants can go for additional information on time management.

Thibeault, Victoria, J.(1990), "Effective Time Management Strategies for School Counselors", this study summarizes the results of a literature review regarding effective time management strategies, with primary emphasis directed to the field of school counseling. This review addresses the following: the historical development of time management; goal setting and prioritization of tasks; delegation of responsibility; time saving tips; and supplementary suggestions. Recommendations and implications are offered for time management approaches for counselors who desire to enhance their effective use of time.

Burnstad, Helen, (1996), "In Search of the Precious Commodity Time: How To Use and Abuse It". Time management is critical for effective leadership and productivity among community college chairs and deans. An organization that is more time conscious tends to be more productive and less stressful. Similarly, an organization's time management culture can provide ideas for improving productivity and the work environment. One model of time management divides activities into four quadrants: important and urgent (e.g., deadlines and crises), important but not urgent (e.g., prevention activities and planning), urgent but not important (e.g., phone calls and meetings), and not important and not urgent (e.g., mail and busywork). In addition to applying this quadrant, deans and other administrators might wish to consider writing a personal mission statement and a personal master plan, determining the most valuable and productive use of time. Finally, strategies for maximizing available time include the following: (1) take control of how time is used; (2) improve commuting time; (3) plan for the possibility of waiting time; (4) make time for personal matters; (5) enlist the help of others in time management; (6) use a time management system such as a planner or computer program; (7) organize desks, offices, briefcases, and computer files; (8) reduce the amount of paper generated by sharing reading materials with colleagues; (9) try waking up an hour earlier each day; and (10) undertake energizing activities, such as vacations or sports, for personal renewal.

Wratcher, Marcia A, and Jones,Rosalind.(1988), "Facilitating a Time Management Workshop for Adult Learners".The Time Management Workshop for adult learners at the University of Pittsburgh (Pennsylvania) is described. It was developed when many adults, upon returning to school, expressed anxiety, questioned their skills and abilities, and reported study related problems associated with time management. Most of the self-instructional and workshop materials currently available on time management focus on providing basic tips for organizing and constructing study schedules. They are useful but do not cover many issues related to time management for adult learners (learning style, individual goals, time use and memory function, time use and misuse, and view of home, school, and career responsibilities). A theoretical background for the design of the Time Management Workshop is provided, looking at the androgogical model from Knowles and the time continuum model of motivation from Wlodkowski. The Time Management Workshop's overall goal is to assist participants in the exploration, definition, and decision-making processes regarding problems and issues of time management which are unique to their individual life situations. The workshop is highly interactive, with student interaction and discussion making up about 80% of the workshop. After attending the workshop, participants should be able to do such things as state their long- and short-term goals, trace their patterns of procrastination, and organize and prioritize assignments and commitments. This workshop has been an overwhelming success, with students reporting that they have a more realistic and less anxious conception of time management.

Campbell, Clifton P.(1988), Time Management: A Lesson Plan, Transparencies, Handouts and Media Evaluations on the Topic" Intended for use in a 3-hour instructional program at the graduate level, the packet contains an outline of the instructional content, 9 transparencies, 12 handouts, and 7 supplementary materials. The outline is organized in terms of content, instructor activity (such as showing a transparency), and student activity.

Instruction covers the following: time awareness; time wasters; getting the right things done; values; goals; setting priorities; planning; delegation; communication; decision making/problem solving; handling interruptions, distractions, meetings, paperwork, disorganization; dealing with procrastination; dealing with (or avoiding) crises; and controlling your life. Among transparencies and handouts are: "Circle of Time," "Things To Do Today," "80/20 Rule," "Causes of Delegation Problems," "Why Do We Procrastinate?" "Self-Assessment Questionnaire," "Determining Values and Goal Setting," "Planning Worksheet," "Tips on Decision Making," "Tips for Improving Delegation Skills," "Time Wasters--Cluttered Desk and Personal Disorganization," "Stress Alleviators," "Time Management Resources", "Philosophy of Time," and "Time Management Review". Also included are evaluations of two media productions concerned with time management.

Cranney, A.Garr; Kirby, Alan, F. (1980), "Time Management in College". Time management may be the most important study skill. The effects of a specific teaching technique designed to alter the time management skills of undergraduate students in a voluntary study skills course were assessed. Of the 95 subjects, 34 were enrolled in the course and were exposed to time management instruction, 31 were future course enrollees, and 30 were on the course waiting list. All subjects recorded daily activities for one week on a Time Use Inventory, and completed the Self-Survey Index and the Inventory of Study Habits and Attitudes. No significant differences were found between groups on total hours of study time, social, leisure, and miscellaneous activities after time management instruction, or on the organizational scale of the survey of Study Habits and Attitudes. Results suggested that time management instruction was ineffective because actual time use did not improve. Students, however, reported that they felt the instruction had made a difference in their use of time. Findings also showed that females managed their time better than males and that senior-level students studied more than other students.

Hypothesis Verification

Hypothesis 1

Time Management Behaviour is satisfactory among Secondary School pupils.

The average score of time management behaviour among secondary school pupils is found to be 53, while the theoretical average is 38 only. Hence the time management behaviour among secondary school pupils is found to be above the average level. It means that time management behaviour among secondary school pupils is found to be satisfactory. Hence the hypothesis is accepted.

Hypothesis 2

Gender exerts a significant influence on time management behaviour among secondary school pupils.

The statistical measures and the results of test of significance of difference between the mean scores of Time management behaviour among secondary school pupils in terms of Sex is presented in Table 1.

Variable	Sub Variables	N	Mean	Sd	't' Value	Significance at 0.05 Level
Sex	Male	173	52.16	9.32	-2.171	Significant
	Female	227	54.22	9.55		

The calculated 't' value (-2.171) is greater than the table value (1.96) at 0.05 level of significance. This shows that there is a significant difference between male and female pupils in the possession of time management behaviour. It can be inferred from the above finding that the female pupils possess more in time management behaviour than male pupils among secondary school pupils. Hence the hypothesis is accepted.

Hypothesis 3

Residence exerts a significant influence on time management behaviour among secondary school pupils.

The statistical measures and the results of test of significance of difference between the mean scores of Time management behaviour among secondary school pupils in terms of Residence is presented in Table 2.

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Residence	Dayscolar	323	53.63	9.40	1.250	Not Significant
	Hosteller	77	52.08	9.85		

The calculated 't' value (1.250) is lesser than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between dayscolar and hostel pupils in the possession of time management behaviour. From the above finding it can be inferred that, Residence does not play a vital role in the possession of time management behaviour among secondary school pupils. Hence the hypothesis is rejected.

Hypothesis 4

Standard Studying exerts a significant influence on time management behaviour among secondary school pupils

The statistical measures and the results of test of significance of difference between the mean scores of Time management behaviour among secondary school pupils in terms of Standard studying is presented in Table 3.

Variable	Sub Variables	N	Mean	Sd	't' value	Significance at 0.05 Level
Standard studying	9 th std.	210	53.63	9.52	0.677	Not Significant
	10 th std.	190	52.99	9.48		

The calculated 't' value (0.677) is lesser than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between 9th and 10th std. secondary school pupils in the possession of time management behaviour. From the above finding it can be inferred that, Standard studying size does not play a vital role in the possession of time management behaviour among secondary school pupils. Hence the hypothesis is rejected.

Hypothesis 5

School Type exerts a significant influence on time management behaviour among secondary school pupils.

The statistical measures and the results of test of significance of difference between the mean scores of Time management behaviour among secondary school pupils in terms of School type is presented in Table 4.

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
School type	Government	296	53.98	9.65	2.270	Significant
	Aided	104	51.38	9.49		

The calculated 't' value (2.270) is greater than the table value (1.96) at 0.05 level of significance. This shows that there is a significant difference between government and aided school pupils in the possession of time management behaviour. It can be inferred from the above finding that government school pupils possess more in time management behaviour than aided school pupils among secondary school pupils. Hence the hypothesis is accepted.

Hypothesis 6

Medium of study exerts a significant influence on time management behaviour among secondary school pupils

The statistical measures and the results of test of significance of difference between the mean scores of Time management behaviour among secondary school pupils in terms of Medium of study is presented in Table 5.

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Medium of study	English	167	54.58	9.23	2.261	Significant
	Tamil	233	54.43	9.60		

The calculated 't' value (2.261) is greater than the table value (1.96) at 0.05 level of significance. This shows that there is a significant difference between English and Tamil medium pupils in the possession of time management behaviour. It can be inferred from the above finding that English medium pupils possess more in time management behaviour than Tamil medium pupils among secondary school pupils. Hence the hypothesis is accepted.

Conclusion

The major conclusions emerged out of the present study are as follows:

1. Time Management Behaviour among Secondary School Pupils is found to be above the average level.
2. Time Management Behaviour among Secondary School Pupils is found independent upon their Residence, Standard studying.
3. The Time Management Behaviour among the secondary school pupils found dependent upon their Gender, School Type and Medium of Study.

References

1. Aggarwal, Y.P. (1986). Statistical Methods: Concepts, Application and Computation. New Delhi: Sterling Publishers Pvt. Ltd.
2. Arthur, T. Jersid (1957). The Psychology of Adolescence. New York: The Macmillan Co.
3. Best, John W. and Kahn, James V. (1989). Research in Education (6th ed.) New Delhi: Prentice Hall of India Pvt. Ltd.
4. Bhattacharya, S. (1972). Psychometrics and Behavioural Research. New Delhi: Sterling Publishers Pvt. Ltd.
5. Edwards, Allen L. (1971). Experimental Design in Psychological Research. New Delhi: Amerind Publishing Co. Pvt. Ltd.

A STUDY ON HEALTH AWARENESS AMONG SECONDARY SCHOOL STUDENTS IN CHENNAI DISTRICT

¹ Mr. K.U. Giridhar

Abstract

Health through education had been of great concern during ancient times and also in modern times in all the civilized nations of the world. Health is very important for human life. Wealth without health is of no use in our life; life is miserable and painful for an individual with ill-health. A sound mind is housed in a healthy body. Though modern man could enjoy all sorts of materialistic comforts in life, yet he falls often sick due to poor health awareness. Health promotion is not just about encouraging children and young people to eat well and to do exercise; it encompasses a much broader holistic approach. Health education aims to bring scientific knowledge to people so that they can use such knowledge for the betterment of their own health and health of the family and the community in which they live. Education is needed to replace ignorance by knowledge, remove prejudices and bring about changes in beliefs and attitudes in such a way that they will become positively tuned to health. At the heart of health and wellbeing is the capacity to form and sustain good personal, social and working relationships.

Introduction

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.

[WHO]

Good health enables people at all ages to do what they want to do, while poor health or a physical disability is an obstacle to the satisfaction of their wants and needs and, as such, affects their happiness unfavorably. Health through education has been of great concern during ancient times and also in modern times in all the civilized nations of the world. Health is very important for human life. Wealth without health is of no use in our life; life is miserable and painful for an individual with ill-health. A sound mind is housed in a healthy body. Though modern man could enjoy all sorts of materialistic comforts in life, thanks to the advancements of science and technology yet he falls often sick due to highly polluted environment in which he lives and works.

A study by **Nilsson *et al* (2011)** has revealed that Folate intake had a positive association with academic achievement in the 15-year-olds and provides new information on the need to keep watch foliate status in childhood and adolescence. Other related studies concluded that the probability of sickness significantly affected academic success.

Health needs and general content areas for health education, **Grout (2003)** pointed out that there are many health needs that are common to children at various age levels, although they may manifest themselves differently. She lists and discusses eleven basic health needs with which those interested in health education should be concerned. They are:

1. Food and eating, 2. Elimination of body waste, 3. Exercise and play, 4. Sleep and rest, 5. Eyes and ears, 6. Teeth, 7. Posture, 8. Illness and disease, 9. Accidents and injuries, 10. Emotional adjustments and Sex education.

The **National Social Welfare (NSW)** curriculum unit called ‘Health Studies’ defines health studies as: “that part of the curriculum which is concerned with the development of the total well-being of students and young people. It incorporates the curriculum areas of dance, health education, physical education, recreation and sport and refers to aesthetic, emotional, intellectual, physical and social development”. With in the area of health studies, health education as such is defined more specifically as follows: “*Health*

education provides learning experiences which influence understanding, attitudes and behaviour with regard to individual, home, school and community health".

Health awareness is dynamic in nature. Therefore, to be effective, it requires interaction between the individual, the home, the school and the community to increase the abilities of people to make informed decisions affecting their personal, family and community well-being and this is inflected in the above.

In some countries, the prevention of disease is the major concern and when that is the case, it is reflected in the curriculum, **K.C. Pang (2002)** of the University of Hong Kong writes: *"Health education is a method of conveying of the community the knowledge that necessary for the prevention of disease and the opportunity to lead a full normal life, physically, mentally and socially"*. Thus education should include:

- a) A basic knowledge of the normal functioning of the body
- b) An understanding of the more common ailments
- c) The effects that certain habits have on the system

Recognition of the need for health education in the schools has developed through the years, as educators and the lay public health have come to realize the importance of providing learning in maintaining good health and providing learning experiences which will result in healthful living or more people. Furthermore, they have come to see more clearly the relationship of knowledge, attitudes and practices with respect to health.

Gan, L. and Gong (2007) are of the view that health and education may interact in three not mutually exclusive ways which are listed below

- 1) Health may determine education.
- 2) One or more other factors may determine both health and education simultaneously; and
- 3) Education may determine health.

Determinants of Health

The predominant view appears to be that the effect of education on health is primarily driving the correlation in high-income countries. Similarly, a recent study by Lundborg (1903), using data on identical twins to estimate the health returns to education, concluded that higher educational levels positively affect self-reported health and reduce the number of chronic conditions.

Health May Determine Education

Health promotion is not just about encouraging children and young people to eat well and to do exercise; it encompasses a much broader holistic approach. The heart of health and wellbeing is the capacity to form and sustain good personal, social and working relationships. Such relationships undermine successful learning, as they are the key to motivation and excellence. When children and young people have good relationships, they are more likely to have self esteem and confidence with regard to their learning, to show resilience, when faced with personal challenges and to show respect for others. Health education aims to bring scientific knowledge to people so that they can use such knowledge for the betterment of their own health and health of the family and community in which they live.

Health and Wellbeing for Promoting Life Skill

Good health and well being is central to effective learning and preparation for successful independent living. Learning through health and wellbeing enables children and young people to; make informed decisions in order to improve their mental, emotional, social and physical well being. We humans are extraordinarily adaptable creatures. At the same time, we are creatures of habit, and our lives can easily become reutilized to the point, where the very idea of change becomes terrifying. This is the flip side of adaptability – we can fit ourselves into a niche so snugly that we never want to leave.

Education May Determine Health

Education is needed to replace ignorance by knowledge, remove prejudices and bring about changes in beliefs and attitudes, in such a way that they will become positively tuned to health. What we need

today for the progress of our country is enriched human resources made up of youths, not only well educated and skilled, but also well built and robust in health. The health of a family, community or a nation is ultimately determined by the health of individual members.

Puskar et al. (1999) collected data from the rural survey representing 624 community adolescents attending 4 rural Pennsylvania schools. The students were in the 9th, 10th and 11th grades. All the adolescent Health Inventory was used to report concerns related to general health psychological issues and risk behaviours. Overall, rural adolescents in the study reported an average of 6.5 (SD = 3.2) health concerns with frequencies of occurrence being always or often and reported an average involvement in 1 (SD = 3.2) risk behavior. Psychological issues were reported as 28% and 23% worried about their general health. Frequently report risk behavior included alcohol use and lack of exercise. There was minimal concern expressed regarding venereal disease or Aids, whereas 12% expressed concern about the possibility of pregnancy. These results suggested that the likelihood that adolescents perceive health from a holistic perspective and that health promotion should consider involving adolescents in planning both (a) to ensure congruence of the plan of care with adolescents concerns and (b) to clarify the interpretation and meaning of their concerns.

In examining the role of elementary school counselors in planned prevention activities at school, Botvin (1985) described a school-based health promotion programme. This programme was intended to be an effective response to the adolescent problems of cigarette smoking, use of marijuana and use of alcohol. It was used with junior high school students. The five components of the programme were as follows: (1) cognitive component, (2) decision-making, (3) techniques for coping with anxiety, (4) social skills training and (5) self-improvement. These various cognitive-behavioral techniques were taught using instructional methods of modeling, rehearsal feedback and reinforcement and extended practice through homework assignments. Many others have suggested training to prevent smoking in adolescence. Life skills counseling methods have been applied cross-culturally to help American Indian adolescents to avoid drug and alcohol use (**Bobo, 1985**).

Statement of the Problem

The present problem is titled as follows: A STUDY ON HEALTH AWARENESS AMONG SECONDARY SCHOOL STUDENTS IN CHENNAI DISTRICT

Operational Definition

Health

Health according to **WHO(2008)**, *“Good health status enables people at all ages to do what they want to do, while poor health or a physical disability is an obstacle to the satisfaction of their wants and needs as such affects their happiness unfavorably”*.

Need for the Study

Good health and well being is central to effective learning and preparation for successful independent living. Learning through health and wellbeing enables children and young people to; make informed decisions in order to improve their mental, emotional, social and physical well being. Like the cockroach, we humans are extraordinarily adaptable creatures. At the same time, we are creatures of habit, and our lives can easily become reutilized to the point where the very idea of change becomes terrifying. This is the flip side of adaptability – we can fit ourselves into a niche so snugly that we never want to leave. Education is needed to replace ignorance by knowledge, remove prejudices and bring about changes in beliefs and attitudes in such a way that they will become positively tuned to health. What we need today for the progress of our country is enriched human resources made up of youths not only well educated and skilled but also well built and robust in health. The health of a family, community or a nation is ultimately determined by the health of individual members. Therefore the investigator would like to see the health awareness among secondary school students.

Objectives of the Study

The following objectives have been set in the present study:

- To find out the significant difference between XI and XII standard students with respect to their health awareness.
- To find out the significant difference between male and female students with respect to their health awareness.
- To find out the significant difference between aided and government school with respect to their health awareness.
- To find out the significant difference between low income (Below 2 lakh) and high income (Above 2 lakh) parents students with respect to their health awareness.
- To find out the significant difference between students whose fathers have school education and college education with respect to their health awareness.
- To find out the significant difference between students whose mother have school education and college education with respect to their health awareness.
- To find out the significant difference between students from nuclear and joint family with respect to health awareness

Sample

A sample of 298 students studying in secondary classes is considered in the present study.

Table: 1 Showing the distribution of the sample drawn from different schools, Gender and standard

S. No	Name of the School	Types of School	Gender	XI	XII	Total
1.	<i>Pudur Government Boys Hr. Sec. School, Ashok Nagar</i>	Govt.	Boys	48	51	99
2.	<i>Government girls Hr. Sec. School, Aminjikarai</i>	Govt.	Girls	53	47	100
3.	<i>Thiru.Vi.Ka Boys Hr. Sec. School, Aminjikarai</i>	Aided	Boys	27	23	50
4.	<i>St. Ann's girls Hr.sec.school, Broadway</i>	Aided	Girls	22	27	49

Diagram - 1

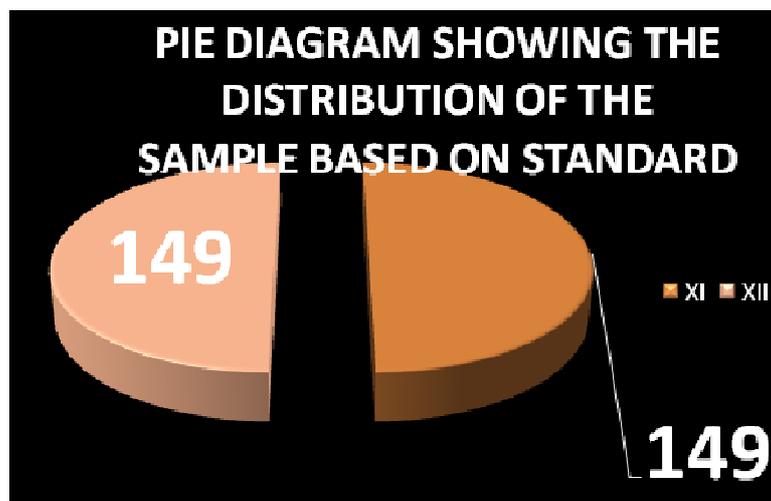


Diagram 2

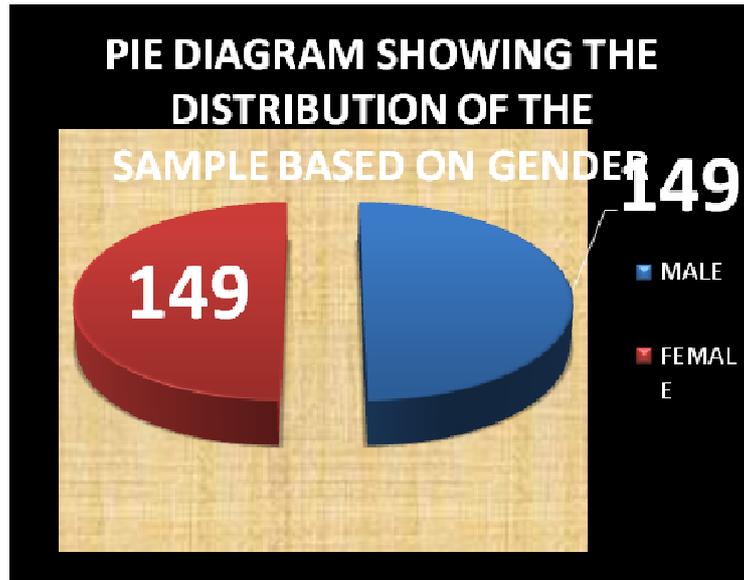
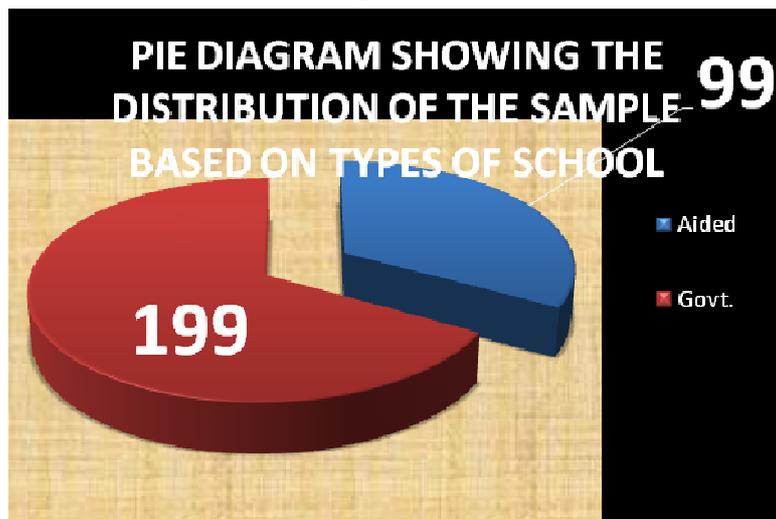


Diagram - 3



Method of Investigation

Survey method was undertaken in the present study. Care was taken in designing, formulating and applying appropriate research tools for the verification of the hypotheses.

Variables of the Study

The variables undertaken for the present study is:

Main Variable

Health Awareness of the student (Independent variable)

Background Variable

The following personal variables of the students were taken for this study with the following categories:

1. Class: (XI /XII)
2. Gender: (Male / Female)
3. Type of School: (Aided/Government)
4. Socio-Economic status (Below 2 lakh/ Above 2 lakh)

5. Fathers Educational qualification: (School/College Education)
6. Mothers Educational qualification: (School/College Education)
7. Type of Family: (Joint / Nuclear)

Tool Used

Health awareness standardized Inventory by Allen Pierre was administered.

Administration of the Tool

Health awareness standardized Inventory was administered to the selected sample of the 298 secondary school students. The students were required to select any one of the following five responses to indicate the extent to which they feel about their health awareness. The investigator requested the students to give their responses frankly and said that it would be confidential. The inventory consists of 100 items, each to be responded on the continuum of **A** – Not at all characteristic of me, **B** – Slightly characteristic of me, **C** – Somewhat characteristic of me, **D** – Moderately characteristic of me and **E** – Very characteristic of me.

Scoring

For the positive statements if the students answer the respond as **A,B,C,D,E** then the marks will be **5,4,3,2,1**. For the negative statement is reversed. The maximum possible score is **500** and minimum is **100**.

Pilot Study

Pilot study was conducted on higher secondary students. **50** samples were selected to test the feasibility of health awareness inventory. The pilot study helped to compute the reliability and validity of the test.

Reliability and Validity of the Tool

The reliability of health awareness inventory was established by Spearman Brown formula odd-even method. The reliability of co-efficient was computed and the value is **0.73**. The index of reliability is taken as measures of validity (Garret, 1981) and this works out in our study to square root of **0.73** equal to **0.85**, which is highly significant.

Analysis and Interpretation of Data

After the data have been collected, mean, standard deviation and correlation are used for the purpose of testing of null hypotheses, the results of which are given in the following tables.

Hypotheses-1: There is significant difference between XI and XII standard students with respect to their health awareness.

Table - 2: Showing significant difference of health awareness scores of XI and XII standard higher secondary students

Standard	N	MEAN	S.D	S.E.M	t-ratio	LS
XI	149	334.01	39.91	3.27	2.652	0.01
XII	149	321.15	43.71	3.58		

Inference: From the above table the obtained mean scores show that there is significant difference in the health awareness of the higher secondary school students studying in XI and XII standard. The XII standard students have higher health awareness than the XI standard students and it is statistically proved and thus the empirical hypothesis is accepted.

Hypotheses-2: There is no significant difference between male and female students with respect to health awareness.

Table – 3: Showing Mean, S.D., and CR for health awareness based on gender

Gender	N	Mean	S.D	S.E.M	t-ratio	LS
Male	149	329.74	45.90	3.81	0.861	NS
Female	149	325.52	38.56	3.12		

Inference: From the above table the obtained mean scores show that there is significant difference in the health awareness of the higher secondary school students. It is also observed from the mean health awareness scores show that male students have higher level of health awareness than the female counterparts and is statistically proved and hence the null hypothesis is rejected.

Hypotheses-3: There is no significant difference between aided and government school students with respect to health awareness.

Table – 4: Showing Mean, S.D., and CR for health awareness based on type of school management

Type of Management	N	MEAN	S.D	S.E.M	t-ratio	LS
Aided	99	342.67	48.58	4.88	4.484	0.01
Government	199	320.07	36.63	2.60		

Inference: From the above table the obtained mean scores show that there is significant difference in the health awareness of the higher secondary school students. It is also observed from the mean health awareness scores that aided school students have higher level of health awareness than the government school counterparts and is statistically proved and hence the null hypothesis is rejected.

Hypotheses-4: There is no significant difference between low income and high income parents students with respect to health awareness.

Table – 5: Showing Mean, S.D., and CR for health awareness based on economical status

Income	N	Mean	S.D	S.E.M	t-Ratio	LS
Low income below 2 lakh	246	331.85	41.30	2.63	3.880	0.01
High income above 2 lakh	52	307.38	41.36	5.74		

Inference: From the above table we find that the obtained mean scores show that there is a significant difference in the health awareness of the higher secondary school students. It is also observed from the mean health awareness scores students from low income group have higher level of health awareness than the high income counterparts and is statistically proved and hence the null hypothesis is rejected.

Hypotheses-5: There is no significant difference between students whose father have school education and college education with respect to health awareness

Table – 6: Showing Mean, S.D., and CR for health awareness based on fathers qualification

Father Qualification	N	Mean	S.D	S.E.M	t-ratio	Level of Significance
School education	153	322.69	37.98	3.07	2.043	0.05
College education	145	332.73	45.96	3.82		

Inference: From the above table we find that the obtained mean scores show that there is significant difference in the health awareness of the secondary school students' father qualification. It is also observed from the mean health awareness scores students whose father have college education have higher level of health awareness than the students whose father have school education and statistically proved and hence the null hypothesis is rejected.

Hypotheses-6: There is no significant difference between students whose Mother have school education and college education with respect to health awareness

Table – 7: Showing Mean, S.D., and CR for health awareness based on Mothers qualification

Mothers Qualification	N	Mean	S.D	S.E.M	t-ratio	Level of Significance
School education	184	331.05	47.29	3.49	1.216	NS
College education	114	325.42	32.49	3.04		

Inference: From the above table we find that the obtained mean scores show that there is significant difference in the level of health awareness of the secondary school students' mothers' qualification. It is also observed from the mean health awareness scores students whose mother have school education have higher level of health awareness than the students whose mother have college education and statistically proved and hence the null hypothesis is rejected.

Hypotheses-7: There is no significant difference between nuclear and joint family students with respect to health awareness

Table – 8: Showing Mean, S.D., and CR for health awareness based on type of family

Type of Family	N	Mean	S.D	S.E.M	t-ratio	LS
Nuclear	176	327.52	46.64	3.52	0.028	NS
Joint	122	327.66	35.22	3.19		

Inference: It is obtained from the above table that the obtained mean scores show that there is significant difference in the health awareness of the higher secondary school students coming from nuclear and joint family. It is also observed that the students coming from joint family have higher health awareness than the nuclear family students. It is statistically proved and hence the null hypothesis is rejected.

Major Findings

1. The XII standard students have higher health awareness than the XI standard students
2. It was found that male students have higher level of health awareness than the female students
3. It was found that Aided school students have higher level of health awareness than the Government school students.
4. It was found that students from low income group have higher level of health awareness than the higher income family
5. It was found that students whose father have college education have higher level of health awareness than the students whose father have school education
6. It was found that the students whose mother have school education have higher level of health awareness than the students whose mother have college education
7. It was found that the students coming from joint family have higher health awareness than the students coming from nuclear family.

Educational Implications

The findings of the study paved way to frame the following educational implications:

- All educational institutions can organise health awareness camps in order to improve physical well being of the students.
- Schools can also organise various counseling programmes for the parents to create awareness about the health status of their wards, particularly those studying at the secondary levels.
- At present life is full of stress and pressure for school children and adults. Pressure on school, busy parents, competitive sports and the demands of active participation are the contributing factors of stress. Teaching health maintenance skill to the children can help them learn to relax, teach self control and instill a sense of peace on their daily lives. Health must be acquired by people's own efforts and cannot be imposed upon them. Health assessment Performa helps the students to do SWOT analyses and counter the pressure of this fast-paced society and help them

to quiet their minds. It promotes self-discipline and develops inner strength. The regular participation in physical activity enhances the physical and psychological health of the body, social opportunities, relationships and quality of life. Learning through health and wellbeing promotes confidence, independent thinking and positive attitudes and dispositions.

- Being aware of health issues at the adolescent age is very essential. Both the teachers and the students must be aware of the physical changes in themselves. They must also have a complete knowledge of the various health hazards. Every school, regardless of size, should have someone on its staff assigned to coordinate the various aspects of the school health programme. In larger schools, this might be a full-time position, a person specially qualified to serve as a teacher, consultant, coordinator or supervisor of health education. A health coordinator can render valuable service in seeing that an all round health programme exists. Health instruction can be more carefully planned. In addition to the direct health teaching, there can also be provision for the correlation and integration of health instruction, along with the other subjects they learn at school. Resource materials can be provided for class teachers and other teachers involved in teaching about health issues. School and community relationships can be developed. The total school health programme can be guided to function as an integrated whole. The administration of the health education programme should also include a school health club or committee. The level of health awareness should be at the maximum for the secondary school students. In order to develop higher level of health awareness, the teachers should take much effort to develop the health awareness of the pupil so that it will improve the health development of students at this level. Medical professionals may help policy-makers by sharing their latest knowledge and experience. Special programme for awareness among adolescent groups may be organized at a large scale. The Educational institutions can give more importance for sports, thus diverting adolescent's attention in other healthy areas and keeping them constructively busy in mind and spirit. Health awareness plays a significant role, as health adjustment can be made more positive among the growing children. Once adolescents are made aware of the health problem, they can better adjust to the health conditions and further develop coping skills related to their problems.

Limitations of the Study

The present investigation has the following limitations:

1. The study was confined to the students of standard XI and XII only
2. XI standard students who have taken biological science as a subject have been considered.
3. The study is restricted to schools in Chennai district, Tamil Nadu.
4. The sample size is restricted to 298 students.

Suggestions for Further Study

The aim of education is not merely communicating knowledge to prepare for job, but awakening and developing positive attitude, interest and health awareness. This study confines itself to the secondary students.

- As this study covers Chennai district, Tamil Nadu only, similar study may also be extended to other areas.
- This study is confined to 298 school students only; further studies can be conducted on a large sample.
- The present study aims at studying Health awareness of XI and XII standard students only. Other psychological and physiological variables could also be included in the study.
- A similar study may be extended to Arts and Science College students at different levels.

Conclusion

This study gives an overall picture of the work, that consisting of the major findings, summary, suggestions for further research and educational implications of the study, which is the goal to be reached. The present study is sure to provide insights into the field of educational research and the findings of the study can serve as database for further research.

References

1. Bobo J.K (1985) "preventing drug abuse among American Indian adolescents. In:Gil Christ LP, Schinke, SP editors "preventing social and health problems through life skills training. University of washing school of social work, centre for social welfare research; Scattlepp: 43 - 54
2. Botvin (1985) Efficacy and effectiveness trials in the development of health promotion programmes. Preventive medicine (1985)
3. Gan and Gong (2007) - Sri Sarada Journal of frontiers of knowledge, September 2011 – volume I, Issue I – ISSN No 277-3398 (page no:14 & 15) (page no: 1 & 2)
4. Kahryn, R. Puskar, Kathleen Tusaie- Mumford, Susan Sereika and Jacqueline Lamb (1999) Health concerns and risk behaviours of rural adolescents Journal of community health nursing, vol 16, issue 2, 1999
5. Mushi, D.L., MPembeni, R.M and Jahn, A (2007) Knowledge about safe motherhood and HIV/AIDS among school pupils a rural area in Tanzana, Publishers BioMed central BMC pregnancy and childbirth, 7(1), 5.
6. Nilsson *et al* (2011) – Sri Sarada Journal of frontiers of knowledge, March 2013 – volume II, Issue I – ISSN No 277-3398 (page no:14 & 15)

IMPACT OF ICT IN SPECIAL EDUCATION

A.S.Kannan

Abstract

This article provides an overview of the role computer technology can play in promoting the education of children with special needs within the regular classroom. For example, use of computer technology for word processing, communication, research, and multimedia projects can help the three million students with specific learning and emotional disorders keep up with their nondisabled peers. Computer technology has also enhanced the development of sophisticated devices that can assist the two million students with more severe disabilities in overcoming a wide range of limitations that hinder classroom participation—from speech and hearing impairments to blindness and severe physical disabilities. However, many teachers are not adequately trained on how to use technology effectively in their classrooms, and the cost of the technology is a serious consideration for all schools. Thus, although computer technology has the potential to act as an equalizer by freeing many students from their disabilities, the barriers of inadequate training and cost must first be overcome before more widespread use can become a reality. In education was provided. Effective use of ICT for Education, along with ICT use in the teaching learning process; quality and accessibility of education; learning motivation. Learning environment. Besides, an overview of the ICT and scholastic performance.

Keywords: ICT, Tools, Impact on teachers, impairments,

Introduction

Technology can be the great equalizer in a classroom with diverse learners. Whereas teachers can find it difficult to differentiate instruction for 30+ students in one class, all with different needs and abilities, “assistive technology” (devices and software to assist students with disabilities) can often help teachers personalize lessons and skills enhancement to each child. Children with learning disabilities often have better technology skills than their teachers and are drawn to computers and other gadgets, so using them in the classroom makes perfect sense. For children with physical disabilities, technology can give access to learning opportunities previously closed to them. E-readers help students turn book pages without applying dexterity, and voice adaptive software can help students answer questions without needing to write. Computers are engaging and more advanced than the typical modified lesson allows. The widely-used teacher education textbook *Educating Exceptional Children* has a special section in each chapter focused on assistive technology explaining how it is used with exceptionalities ranging from giftedness to autism. Assistive technology is not always just for students with disabilities; it can be used to help any student with motivation, academic skills, and social development. Here are some helpful resources for teachers looking for assistive technology for their students:

Special Education

It provides students with identified disabilities specialized instruction designed to meet their unique learning needs, giving them the opportunity to develop to their fullest potential. In the United States, special education is delivered, free of charge, through the public education system, thanks to the Individuals with Disabilities Education Act (IDEA).

Between 2012 and 2016, the number of school-age students covered under IDEA has dramatically increased, rising from 5.67 million in 2011 to 5.83 million in 2014.

Recent statistics reveal the rapid growth in autism and similar disabilities account for much of the growth being seen in special education. For example, the number of 6- to 21-year-olds classified with autism increased a staggering 165 percent nationwide between the 2005-06 and 2014-15 school years.

Strategies for Disabilities

- **UNC's Center for Literacy and Disability Studies**

Uses technology in their mission to promote literacy and communication for individuals of all ages with disabilities. The Center has developed a three-part video on reading assessment and assistive technology that explains evidence-based practices of improving literacy through technology. Additionally, the Center has developed "alternative pencils" for students with disabilities who cannot hold a traditional pencil or see a page, including children with deaf-blindness. These technologies include alphabet eye gaze frames allowing children to "point" to letters with their eyes, onscreen keyboards that are controlled by switches, and electronic flipcharts.

- **Learn NC**

Offers an extensive set of resources to help teachers meet the needs of all learners, including "Reaching Every Learner: Differentiating Instruction in Theory and Practice," a series of articles and web conferences about differentiation. In addition, LEARN NC's technology integration page provides links to web resources, lesson plans, articles, and online courses designed to help educators incorporate technology into their teaching

- **Voice Thread**

It is a free software program that captures student voices and photos in order to collaborate on a topic. It is a technological substitute for written papers and allows students freedom to narrate their own projects.

- **Sounding Board**

It is an iPad that lets a student turn their device into a story board communicator. Students with writing disabilities and communication disorders can use the symbols to create their own messages in the same way that traditional symbol boards work, but easily and with a limitless supply of symbols.

- **Tech Matrix**

Offers consumer guides and links to software and assistive technology devices for students with disabilities. The site is sponsored by the National Center for Technology Innovation and the Center for Implementing Technology in Education. Tech Matrix gives information and links to resources for teaching science, math, reading, and writing using technology with special education students.

Benefits of Social Media in Special Education:

One area that special education teachers use social media for is students with autism. Some experts believe that social media is an effective method for improving the socialization skills of students from all ranges of the autism spectrum. Sites such as Habbo.com and Club Penguin provide heavily monitored and filtered social interaction, and depending on development and age level, these could be appropriate to utilize in special education classrooms.

For high school students, social media sites such as Edmodo are helpful in learning to use appropriate language and communication skills while online. Because many everyday activities take place online, it can be argued that this is an essential skill for special education students to have exposure to while in supervised and in school. Examples include the ability to job search and post portfolios or resumes, and building skills with computers. One of the main goals of every educator in special education is to provide students with the same tools they will need to be successful in life, and appropriately using social media is one of these skills.

Social media also fosters the ability to collaborate, and instant feedback on ideas, pictures, and projects that are posted via social media can help all students, including those with special needs or developmental disabilities, to gain more confidence.

Outside of the Classroom

Social media sites such as Twiducate, a social media site specifically designed for use in education, also allow educators to stay in touch with parents and students outside of school hours, providing better access for parents to track progress and stay in touch with what their children are doing in school.

One of the biggest challenges in any classroom is meeting the diverse needs of students, and this can be especially true in special education classes. Facebook and other educational social media sites have additional resources and applications can be added to supplement learning in school as well. Teachers can assess additional student needs and add the applications that will be most beneficial for each student to practice additional math, reading, or socialization skills.

Teaching Resources

Social media can also provide benefits in the field of special education through teacher resources. Networking and sharing ideas are beneficial for all teachers at all levels of education, and PCI Education and the We Are Teachers network developed a forum specifically for special education to interact and use forums and blogs to learn new ideas for special education classrooms. Webinars and other tools are also available to special education teachers through the site.

Additional information on using technology and social media in special education classrooms can be found at <http://www.emergingedtech.com/category/special-needs-students/>.

Need

IDEA covers children from the age of 3 through high school (or the age of 21, whichever comes first). Children younger than the age of 3 can receive services through IDEA's early intervention services.

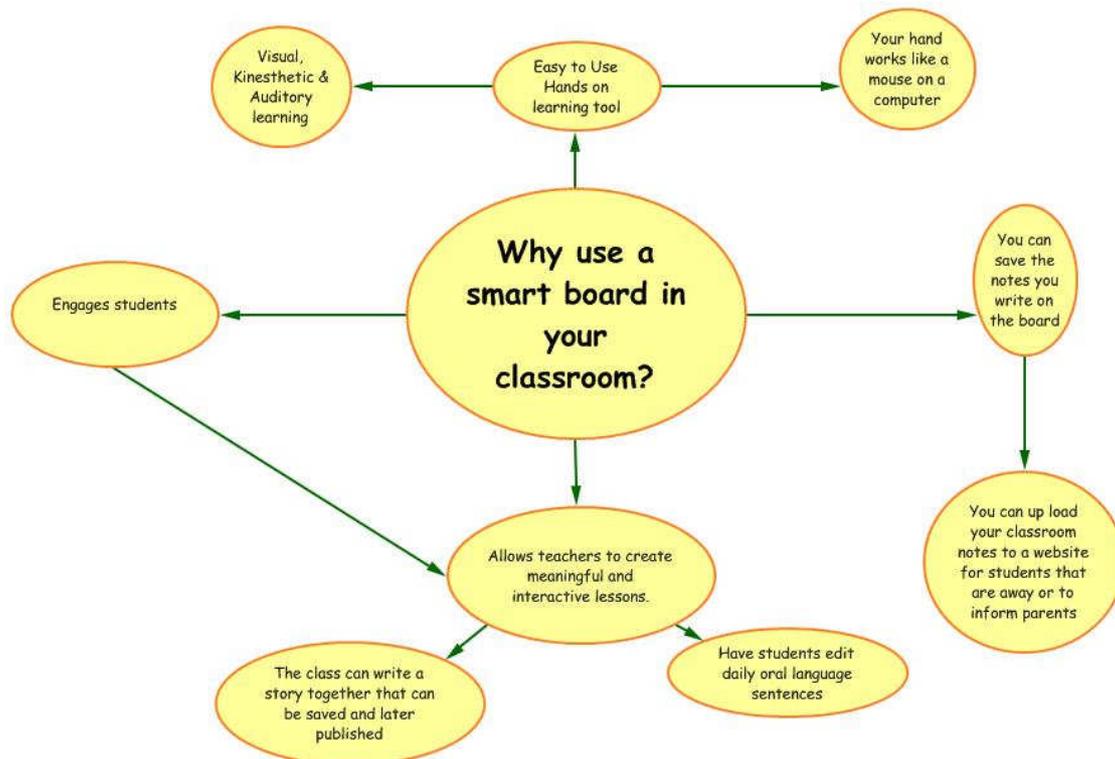
To qualify, children must fall under one of the 13 disabilities identified by IDEA:

- Autism
- Deafness
- Emotional disturbance
- Visual impairment, including blindness
- Speech or language impairment
- Orthopedic impairments
- Hearing impairment
- Intellectual disability
- Multiple disabilities
- Traumatic brain injury
- Other health impairment, including ADHD
- Specific learning disability, including (among others) dyslexia, dyscalculia, and dysgraphia

Children eligible for IDEA must have a diagnosis for one or more of the above named disabilities and, because of that disability, require special accommodations to make academic progress.

Benefits Special Education Classrooms

There are many different types of technology that are used in special education classrooms, from devices to address specific disabilities to standard devices that can be used in modified ways. Many of the following pieces of technology are also being used in mainstream classrooms with similar positive results for students of all kinds of abilities.



Smart board

Teachers can use these modernized versions of overhead projectors to help engage students while providing them visual tools that might help keep them on track during classroom discussions. Students with visual disabilities can also benefit from the enlarged classroom board.

Phonetic Ear

This device allows a teacher's voice to be heard more clearly by students. The teacher wears a microphone device around his or her neck (like a lanyard) and then the sound is transmitted to speakers in the room.

Clicker Response Systems

Students are given small handheld devices that they use to respond to questions posed by the teacher. The teacher can receive almost instant results to know whether or not the class is ready to move on to the next topic or if more clarification is needed. Think of it as a digital way

Conclusion

Today, a variety of information and communication technology (ICTs) can facilitate not only delivery of instruction, but also learning process itself. Moreover, ICT can promote international collaboration and networking in education and professional development. There is a range of ICT options – from multimedia delivery through videoconferencing to web sites – which can be used to meet the challenges teacher educators face today. In fact, there has been increasing evidence that ICT may be able to provide more flexible and effective ways for lifelong professional development for today's teacher educators. Researches have proved that ICT can change the way teacher educators teach and that it is especially useful in supporting more student-centred approaches to instruction and in developing the higher order skills and promoting collaborative activities.

References

1. Behum jahitha, a.(2011)ICT in teaching and learning. New Delhi; APH BUBLICATIONS
2. Mrs swathi desai (2010):Role of Information and Communication technologies education
3. Yelland,nn.(2003)"Young children Learning with logo; An analy7sis of strategies and interactions; Journal of educational computing research.
4. UNESCO, (2002). Information and Communication Technology.

STUDY HABITS OF COLLEGE STUDENTS DOING VARIOUS PROGRAMMES

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Abstract

The present study had been conducted on a sample of 218 students to find out the study habits of the students studying in various colleges of TamilNadu, India. Study habit inventory constructed by Dr. B.V. Patel (1975) was used to collect the relevant data. The data collected was analyzed and interpreted to draw inference using appropriate statistical methods like mean, standard deviation, and t-test. The results of this study reveal that there is a significant difference between the students from various programmes on six dimensions of study habits and total study habits and there is no significant difference between the students from various programmes in the fourth dimension, Concentration. Also there is no significant difference between the students who have scored below 900,901-999 and 1000 and above in their Hr. Sec. Exam on six dimensions of study habits and total study habits and there is a significant difference between the students from various programmes in the first dimension, Home Environment and Planning of work. It may be concluded that the good study habits lead to good academic record and bad study-habits lead to poor academic record as there is direct relationship between study habits and academic achievement. Being successful in school requires a high level of study skills. Students must acquire these skills, practice them and develop effective study habits in order to be successful in their various courses in their college.

Introduction

The present society is a competitive society, where the principle of struggle for existence and survival for fittest exists. Pen has become mightier than sword. Study-habit is a process from which an individual gets proper input to feed his hunger and to quench his thirst for knowledge. The study habits thus are of great assistance to actualize the potentialities of the individual. Many educators explore the fact that a number of students have not learnt well in high school and elementary grades. Because of this, students now seem to know less and apply knowledge, despite the availability of the study materials. Likewise, students do not know how to think and study properly and effectively. Only few teachers gave much attention to the improvement of these skills. To this effect, many students were able to proceed to the higher level of instruction without developing the habit of scheduling their study time. Thus, many talents and potentialities remain underdeveloped due to less attention given to their academic and personal growth. Good study habits include many different skills: time management, self-discipline, concentration, memorization organization and effort. Success of any student depends upon good study habits adopted by that student.

Effective Study Habits in College

There are four major reasons so as to why teachers should focus helping their students in developing effective study habits. The very first reason is that despite of availability of good study materials and the best instructors, instructors often find students have not learned well. The Second reason is that many students do not know how to think and study properly. Thus there is a great need to inculcate good study habits in students either by the instructor by motivating them or students themselves by self regulating them. The third one being that many talents remain underdeveloped due to less attention given to their academic and personal growth. The last one states that there has been marked decline in average weekly study time for college students.

Review of Related Literature

Good study habits lead to good academic record and bad study-habits lead to poor academic record as there is direct relationship between study habits and academic achievement. Study habits play an important role in human performance in academic field (Verma, 1996; Verma & Kumar, 1999; Satapathy & Singhal, 2000; Vyas, 2002). Ramamurti (1993) has rightly emphasized that despite possessing good intelligence and personality, the absence of good study habits hampers academic achievement. Hence, study habits of students' plays important role in learning and fundamental to school success.

The students studying in private schools have better study habits than the students studying in government schools (Naggappa & Venkataiah, 1995; Sanjeev, 2003). But Chaudhary & Lily (1191) pointed out that students belonging to government and private school were by and large similar with respect to their study habits.

Objectives of the study

1. To study the difference in the study habits of the students with respect to their higher secondary exam marks.
2. To study the difference in the study habits of the students belong to the Medical, Engineering and Arts and Science colleges.

Hypotheses

1. There is no significant difference in the study habits of the students with respect to their higher secondary exam marks.
2. There is no significant difference in the study habits of the students belong to the Medical, Engineering and Arts and Science colleges

Method

Survey method had been used for this study.

Sampling Technique and Sample Size

The study was conducted on a sample of 218 students drawn from various courses such as M.B.B.S, B.E, B.Sc, B.A, and B.com from different colleges in TamilNadu. Students from each college were selected randomly.

Tool

Study Habits Inventory (English Version) constructed by Dr.B.V.Patel (1975) was used to measure the study habits of students. The tool consists of 45 items distributed in seven areas namely home environment and planning of work, reading and note taking, planning of subjects, concentration, preparation of the exam, habits and Interest and College Environment.

Data Analysis

The collected data were scored as per manual and manual and analyzed by applying mean, S.D; t -test and F-test.

Table 1 F- test table showing the significant difference between the students from various programmes on seven dimensions of study habits and total study habits are given in Table-1

S. No	Study Habits Components	Sources of Variation	Sum of Squares	df	Mean Square	F	Sig
1	Home Environment and Planning of work	Between groups within groups Total	398.356 3241.864 3640.220	4 213 217	99.517 15.220	6.543	.000*
2	Reading and Note Taking	Between groups within groups Total	358.693 6347.821 6706.514	4 213 217	89.673 29.802	3.009	.019*
3	Planning of Subjects	Between groups within groups Total	343.787 3418.140 3761.927	4 213 217	85.947 16.148	5.356	.000*

4	Concentration	Between groups within groups Total	73.044 1946.974 2020.018	4 213 217	18.261 9.141	1.998	.096
5	Preparation for the Exam	Between groups within groups Total	424.164 3956.955 4391.119	4 213 217	108.541 18.577	5.843	.000*
6	Habit and interests	Between groups within groups Total	252.305 4734.562 4986.867	4 213 217	63.076 22.228	2.838	.025*
7	College Environment	Between groups within groups Total	236.926 4492.688 4729.615	4 213 217	59.232 21.092	2.808	.027*
8	Total study habits	Between groups within groups Total	3449.711 55306.569 58756.280	4 213 217	862.428 259.655	3.321	.012*

Table 2 The mean scores obtained by the students from various programmes on seven dimensions of study habits and total study habits along with the standard deviation and are given in table 2

S. No	Study Habits Components	Course	N	Mean	S.D
1	Home Environment and Planning of work	MBBS	50	21.70	3.71
		BE	57	21.19	4.25
		BSC	54	20.03	3.82
		BA	24	23.08	3.41
		BCOM	33	24.09	3.98
		Total	218	21.66	4.09
2	Reading and Note Taking	MBBS	50	26.00	4.70
		BE	57	29.42	4.94
		BSC	54	27.79	5.93
		BA	24	29.08	4.16
		BCOM	33	28.66	7.12
		Total	218	28.08	5.60
3	Planning of Subjects	MBBS	50	14.2	2.59
		BE	57	16.5	4.48
		BSC	54	17.22	4.23
		BA	24	14.41	3.32
		BCOM	33	16.90	4.89
		Total	218	15.98	4.16
4	Concentration	MBBS	50	12.38	2.41
		BE	57	11.96	2.90
		BSC	54	12.24	3.60
		BA	24	13.83	2.59
		BCOM	33	11.75	3.48
		Total	218	12.30	3.05
5	Preparation for the Exam	MBBS	50	17.48	4.66
		BE	57	18.86	4.83
		BSC	54	15.60	3.70
		BA	24	15.08	3.17
		BCOM	33	18.09	4.43
		Total	218	17.20	4.49
6	Habit and interests	MBBS	50	22.70	3.75
		BE	57	25.22	5.00
		BSC	54	23.69	5.07
		BA	24	24.25	3.16
		BCOM	33	25.60	5.71
		Total	218	24.21	4.80
7	College Environment	MBBS	50	17.40	3.68
		BE	57	20.10	4.67
		BSC	54	18.20	4.34

		BA	24	19.75	3.38
		BCOM	33	18.57	6.50
		Total	218	18.7431	4.67
8	Total study habits	MBBS	50	134.18	11.60
		BE	57	143.26	16.53
		BSC	54	134.77	18.95
		BA	24	168.41	9.07
		BCOM	33	142.30	19.73
		Total	218	138.39	16.45

Table-3 F- test table showing the significant difference between the students who have scored below 900,901-999 and 1000 and above in their Hr.Sec. Exam on seven dimensions of study habits and total study habits are given in table-3

S. No	Study Habits Components	Sources of variation	Sum of Squares	df	Mean Square	F	Sig
1	Home Environment and Planning of work	Between groups within groups Total	77.900 3562.320 3640.220	2 215 217	38.95 15.57	2.351	0.098*
2	Reading and Note Taking	Between groups within groups Total	29.331 6671.182 6706.514	2 215 217	14.67 31.06	0.472	0.624
3	Planning of Subjects	Between groups within groups Total	58.066 3703.861 3761.927	2 215 217	29.03 17.22	1.65	0.188
4	Concentration	Between groups within groups Total	1.565 2018.453 2020.018	2 215 217	0.783 9.388	0.083	0.920
5	Preparation for the Exam	Between groups within groups Total	67.453 4323.666 4391.119	2 215 217	33.72 20.11	1.677	0.189
6	Habit and interests	Between groups within groups Total	68.066 4712.659 4729.615	2 215 217	34.03 22.87	1.48	0.22
7	College Environment	Between groups within groups Total	16.956 4712.659 4729.615	2 215 217	8.478 21.92	0.387	0.680
8	Total study habits	Between groups within groups Total	628.111 58128.16 58756.28	2 215 217	314.055 270.364	1.162	0.315

Table 4 The mean scores obtained by the students who have scored below 900,901-999 and 1000 and above in their Hr. Sec. Exam on seven dimensions of study habits and total study habits along with the standard deviation are given in table-4

S.No	Study Habits Components	Marks scored in Hr.Sec Exam	N	Mean	S.D
1	Home Environment and Planning of work	Below 900	96	21.24	3.95
		900-999	42	22.86	4.90
		1000 and above	80	21.56	3.72
		Total	218	21.66	4.09
2	Reading and Note Taking	Below 900	96	26.15	5.49
		900-999	42	28.69	4.99
		1000 and above	80	27.67	5.44
		Total	218	28.08	5.60
3	Planning of Subjects	Below 900	96	16.47	4.55
		900-999	42	16.11	4.56
		1000 and above	80	15.32	3.34
		Total	218	15.98	4.16
4	Concentration	Below 900	96	12.26	3.25
		900-999	42	12.47	3.21
		1000 and above	80	12.26	2.73
		Total	218	12.30	3.05
5	Preparation for the Exam	Below 900	96	16.61	3.86
		900-999	42	18.02	4.58
		1000 and above	80	17.47	5.09
		Total	218	17.20	4.50
6	Habit and interests	Below 900	96	23.98	4.90
		900-999	42	23.36	4.86
		1000 and above	80	23.90	4.60
		Total	218	24.21	4.80
7	College Environment	Below 900	96	19.05	4.95
		900-999	42	18.40	4.23
		1000 and above	80	18.55	4.57
		Total	218	18.74	4.67
8	Total study habits	Below 900	96	137.12	17.26
		900-999	42	147.73	15.90
		1000 and above	80	138.17	15.69
		Total	218	138.19	16.45

Findings and Conclusion

The results of this study reveal that there is a significant difference between the students from various programmes on six dimensions of study habits and total study habits and there is no significant difference between the students from various programmes in the fourth dimension Concentration.

Also there is no significant difference between the students who have scored below 900,901-999 and 1000 and above in their Hr. Sec. Exam on six dimensions of study habits and total study habits and there is a significant difference between the students from various programmes in the first dimension Home Environment and Planning of work. The mean value of students who have scored Above 900 and 1000 marks are having conducive learning environment and Planning of work when compared to the students who have scored below 900 marks

It may be concluded that the good study habits lead to good academic record and bad study-habits lead to poor academic record as there is direct relationship between study habits and academic achievement. Being successful in school requires a high level of study skills. Students must acquire these skills, practice them and develop effective study habits in order to be successful in their various courses in their college.

A STUDY ON INTERPERSONAL INTELLIGENCE OF PROSPECTIVE TEACHERS

¹R. Sridevi

Abstract

The purpose of this descriptive study was to explore the level of Interpersonal Intelligence of Prospective Teachers and find out the differences, if any, in terms of some selected personal variables. 225 prospective teachers were selected randomly from different colleges located in Chennai District of TamilNadu state as the sample for the study. The t-tests and ANOVA were used for analyzing the data. The results revealed that- There is no significant difference in the Interpersonal Intelligence of Prospective teachers belonging to

- *Male and Female*
- *Single and Married*
- *Nuclear and Joint Families*
- *Rural and Urban*
- *Arts and Science*
- *English and Tamil*
- *Families with and without teacher members.*

There is a significant difference in the interpersonal intelligence of prospective teachers belonging to different college management type. Interpersonal intelligence among the Government, Government Aided and Private colleges is favourable to prospective teachers of private colleges.

Teacher education institutions must make an honest effort to produce teaching candidates of high quality. Teacher education institutions are the major force which can create great revolution in the field of education and the society as a whole.

Introduction

Social skill is any skill facilitating interaction and communication with others. Social rules and relations are created, communicated, and changed in verbal and nonverbal ways. The process of learning such skills is called socialization. Interpersonal skills are sometimes also referred to as people skills or communication skills. Interpersonal skills are the skills a person uses to communicate and interact with others. They include persuasion, active listening, delegation, and leadership. The term "interpersonal skills" is used often in business contexts to refer to the measure of a person's ability to operate within business organizations through social communication and interactions. Interpersonal skills are how people relate to one another.

It has been shown that people who actively use technology, have a harder time putting themselves into social situations and thriving. "Cell phones, computers, social networks, and even gaming consoles allow us to communicate without ever physically seeing the person we're communicating with."(Costley)

Interpersonal skills are the social skills people use to interact effectively with other people. A lack of good interpersonal skills may lead to unsuccessful personal relationships, as well as difficulty in the business world.

Examples of interpersonal skills are:

- The ability to express oneself clearly and confidently.
- Listening to others completely and with empathy.

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- Showing a willingness to collaborate.
- Understanding tacit rules of behavior.
- Being able to assert an opinion without diminishing another's opinion.
- Being responsible and timely.

Interpersonal intelligence is concerned with the capacity to understand the intentions, motivations and desires of other people. It allows people to work effectively with others. Educators, salespeople, religious and political leaders and counsellors all need a well-developed interpersonal intelligence.

Table 1 Table Showing Examples for Interpersonal intelligence

Intelligence	Examples	Discussion
Interpersonal	Sales people, teachers, clinicians, politicians, religious leaders	The ability to sense other's feelings and be in tune with others.

Table 2 Table Showing Summary of the Interpersonal intelligence

Intelligence Area	Strengths	Preferences	Learns best through	Needs
Interpersonal	Leading, organizing, understanding people, communicating, resolving conflicts, selling	Talk to people, have friends, join groups	Comparing, relating, sharing, interviewing, cooperating	Friends, group games, social gatherings, community events, clubs, mentors/ apprenticeships, etc.

Need and Significance of the Study

Interpersonal skills are rarely taught in a classroom environment. They are usually learned in daily life by seeing people use them with positive results. For example, people who have parents with good interpersonal skills may learn them at home, early in life. Others may learn them from friends at school. Still others may learn them in sports teams, church groups, scouting activities or other social settings.

A study of the level of Interpersonal Intelligence of Prospective Teachers may give an insight to prepare the future teachers according to the requirements in the present education system. It is important for a teacher to realize what is the ability of the students to interact and understand the people around us in our society. By knowing where students' strengths are, a teacher can reach and teach their students to a successful potential. The need for the study is strongly felt to use the Multiple Intelligence theory in the field of education. It helps teachers to identify their strong areas of Multiple Intelligence, help students to learn better. Teachers can enhance effectiveness of teaching their special subjects by optimizing their strong areas of Multiple Intelligence, be of assistance to educational managers to choose the right candidate according to his strong areas of Multiple Intelligence, prepare an effective teacher profile for teachers, and seek ways to develop relatively weaker areas of Multiple Intelligence. Prospective teachers are required to analyze their strengths, which will enable them to prevail over their weaknesses through proper planning. They should explore such opportunities of acquiring professional skills, which will in turn benefit them in using different teaching strategies to cater children of '*multiple intelligences*'.

Objectives of the Study

To study the level of Interpersonal Intelligence and find out the difference, if any, in Interpersonal Intelligence of the Prospective teachers.

Hypothesis

There exists no difference in Interpersonal Intelligence of Prospective Teachers owing to the differences in the selected personal variables such as Gender, Family Type, Region, Marital Status, Medium of Instruction, Teachers in the Family, Academic Stream and College management type.

De-Limitations of the Study

The present investigation has the following de-limitations

1. The study was restricted to a few educational institutions in Chennai District.
2. The sample size was restricted to 225 Prospective teachers and 225 In-Service teachers only.
3. Limitation of time for the teachers due to the tight schedule of the school was one of the difficulties faced by the investigator in the study.

Design of the Study

The present study has been designed as a descriptive study.

Tools Used

1. Multiple Intelligence Test by V. Chislett., M.Sc., and A. Chapman 2005 based on Howard Gardner's Multiple Intelligences Model.
2. Personal Data Sheet prepared by the investigators.

Selection of Sample

The sample constituted of 225 Teacher Trainees drawn from different Colleges of Education in Chennai City.

Statistical Treatment of Data

The following statistical techniques were used for analysis and interpretation of data.

1. Critical Ratio

The critical ratios were computed to test the difference in the Interpersonal Intelligence of Prospective Teachers with reference to Gender, Medium of Instruction, Marital Status, Family Type, Region, Academic Stream, Teachers in the Family.

2. One Way Analysis of Variance

One way analysis of variance was computed to explore the difference in the Interpersonal Intelligence of Prospective Teachers with reference to College Management Type.

Hypothesis - Wise Analysis

H.1 There exists no significant difference in INTERPERSONAL INTELLIGENCE of Prospective Teachers owing to the differences in the selected personal variables such as Gender, Marital Status, Family Type, Region, Academic Stream, Medium Of Instruction, Teachers in Family and College Management Type.

Table-3 Table showing the Critical Ratio for the differences in INTERPERSONAL INTELLIGENCE of Prospective Teachers belonging to different Gender, Marital Status, Family Type, Region, Academic Stream, Medium Of Instruction, Teachers in Family.

Variable	Category	N	Mean	S.D	df	Critical Ratio	Significance Level
Gender	Male	57	26.07	4.411	223	1.481	0.140 P>0.05 NS
	Female	168	27.32	5.834			
Marital Status	Single	191	26.79	5.149	223	1.016	0.311 P>0.05 NS
	Married	34	27.82	7.150			
Family Type	Nuclear	142	27.20	5.433	223	0.683	0.495 P>0.05 NS
	Joint	83	26.67	5.700			
Region	Rural	127	27.36	5.361	223	1.106	0.270 P>0.05 NS
	Urban	98	26.54	5.728			

Academic Stream	Arts	113	27.12	5.498	223	0.301	0.764 P>0.05 NS
	Science	112	26.89	5.577			
Medium Of Instruction	English	130	26.91	5.060	223	0.307	0.759 P>0.05 NS
	Tamil	95	27.14	6.133			
Teachers In The Family	Yes	78	26.91	6.086	223	0.108	0.914 P>0.05 NS
	No	147	26.99	5.157			

Gender

Since the calculated P value (0.140) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference between Male and Female Prospective teachers in their Interpersonal Intelligence.

Marital Status

Since the calculated P value (0.311) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference between Single and Married Prospective teachers in their Interpersonal Intelligence.

Family Type

Since the calculated P value (0.495) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference between in the Interpersonal Intelligence of Prospective Teachers belonging to Nuclear and Joint Families.

Region

Since the calculated P value (0.270) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference between Rural and Urban Prospective Teachers in their Interpersonal Intelligence.

Academic Stream

Since the calculated P value (0.764) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference between Arts and Science Prospective Teachers in their Interpersonal Intelligence.

Medium

Since the calculated P value (0.759) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference between English and Tamil Medium Prospective Teachers in their Interpersonal Intelligence.

Teachers in the Family

Since the calculated P value (0.914) is greater than 0.05, the null hypothesis is accepted at 0.05 level of significance. Thus there is no significant difference in the Interpersonal Intelligence of Prospective Teachers with and without teacher members in their family.

Major Findings of the Study

There is no significant difference in the Interpersonal Intelligence of Prospective teachers belonging to

- Male and Female
- Single and Married
- Nuclear and Joint Families
- Rural and Urban
- Arts and Science
- English and Tamil
- Families with and without teacher members.

There is a significant difference in the interpersonal intelligence of prospective teacher belonging to different college management type. Interpersonal intelligence among the Government, Government aided and Private colleges is favourable to Prospective teachers of Private colleges.

Educational Implications of the Present Study

Table-4 Interpersonal Intelligence Classroom Application

Intelligence	Teacher Centered	Student Centered
 <p>Interpersonal</p>	<ul style="list-style-type: none"> • Be aware of body language and facial expressions • Offer assistance whenever needed • Encourage classroom discussion 	<ul style="list-style-type: none"> • Encourage collaboration among peers • Group work strengthens interpersonal connections • Peer feedback and peer tutoring • Students present to the class • Encourage group editing

Conclusion

The purpose of the present investigation was to study the level of Interpersonal Intelligence with reference to some selected variables of Prospective Teachers and the study indicated significant relationship among the variables. The study may find some usefulness in the field of education and the finding of this study may serve as a basis for future research.

References

1. Best J.W. (1983) *Research in Education, Fourth Edition*. New Delhi. Prentice Hall of India. P.25.
2. Bingham F.S. (1962) *Psychology testing*. Holt, Rinehart, New York.
3. Bridget, Cornelius (2001). *Teacher Competence Associated with Intelligence, Attitude towards Teaching Profession and Academic Achievement of Teacher Trainees – Unpublished Dissertation of Master of Philosophy in Education, Department of Education, University of Kerala, Thiruvananthapuram, 2011.*
4. Dash B.N. (2005). *A New Approach to Teacher and Education in the Emerging Indian Society Chennai*. NeelKamal Publications.
5. James, M.Sawhery, Charles, W. Telford (1996), *Grow L.D., Alice Crow (1976), Cooley and Reed (1961)*. Cited from Aggarwal, J.C. (2000); *Essentials Psychology*, Vikas Publishing House Pvt Ltd., P.287, P289, P.331.
6. Quality Concerns in Teacher Education, NCTE document (1998) of calendar for Activities for B.Ed., New Delhi, NCTE, 2002, P.1
7. Saxena, N.R., et, al., (2009) *Teacher Education*, Meerut. R. Lall Book Depot

INTERNET ADDICTION AMONG HIGH SCHOOL STUDENTS IN MADURAI DISTRICT

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Abstract

The Internet is undeniably useful. Everyone, from students to professionals, uses it to gain information. It has also presented a whole new meaning to convenience. People can do numerous things with it without having to work hard to achieve the purpose. For instance, researching on a particular subject used to mean that a student had to go to the library and read a book or two. With the Internet, students only have to search for the topic using a keyword or key phrase and all the answers are right there. The present investigation was designed to measure the internet addiction among high school students in Madurai district. For this purpose a random sample of 340 high school students was constituted with due representation to the select population variables. A research tool-Internet addiction scale among high school students was prepared and standardized by the investigator.

This is highly useful for the policy makers, administrators and practitioners in the field of education. Gender plays a vital role in internet addiction among high school students. Male students have higher addiction on internet than female students. So that, the parents, teachers, friends and educational authorities should undertake appropriate programmes for decreasing the level of internet addiction behaviour among male high school students. It is very useful to enhance the level of academic achievement among male high school students to the maximum level to raise the quality of high school students' education in Madurai district. This may be true to other districts with certain reservations.

Introduction

Internet is an important communication and information sharing tool being used frequently in school, business and social life. Effect of internet on life has been examined in detail in recent years and it was reported that, despite providing convenience to maintain home, school and business lives, internet may cause negative consequences as well. Internet addiction can be described as combination of negative reflections consisting of excessive internet use causing loss of time perception or neglecting basic responsibilities, hostility, deprivation symptoms including tension, tolerance development and lying and social withdrawal. While time spent online can be hugely productive, compulsive Internet use can interfere with daily life, work, and relationships. When you feel more comfortable with your online friends than your real ones, or you can't stop yourself from playing games, gambling, or compulsively checking your smart phone, tablet, or other mobile device, even when it has negative consequences in students life, then you may be using the Internet too much. The Internet provides a constant, ever-changing source of information and entertainment, and can be accessed from most smart phones as well as tablets, laptops, and desktop computers. Email, blogs, social networks, instant messaging, and message boards allow for both public and anonymous communication about any topic. Each person's Internet use is different. You might need to use the Internet extensively for your work, for example, or you might rely heavily on social networking sites to keep in touch with faraway family and friends. Spending a lot of time online only becomes a problem when it absorbs too much of your time, causing you to neglect your relationships, your work, school, or other important things in your life. If you keep repeating compulsive Internet behavior despite the negative consequences in your offline life, then it's time to strike a new balance.

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Need of the Study

A contributing factor for Internet addiction is a lack of confidence in face-to-face interaction (Caplan, 2007). In addition, people may prefer cyber interaction because they experience a greater sense of control when they “deal with a machine” than “speak with a real person.” The studies of issues related to Internet addiction are particularly relevant in a college or university setting when:

- Students miss class because they cannot stay away from their electronic device
- Students cannot manage time
- Students withdraw from social events on campus
- Students suffer from sleep deprivation due to excess time spent using the Internet

The Internet has become a regular daily activity for many people. While most people are able to regulate and control the amount of time they spend online each day, others become preoccupied with the Internet and are unable to manage their use of it, which can lead to significant problems in their lives. Like other forms of compulsive behaviors, such as gambling, exercise, eating, shopping, or drug and alcohol use, Internet addiction can become a way to escape from difficult emotions and situations. The following information is provided to help you decide if you or a loved one may be struggling with Internet addiction.

Though the academic achievement of the high school students is affected by many personal, psychological and economic factors as well as internet addiction, so the researcher wanted to study how the internet addiction behaviour affects the academic achievement of the high school students. Hence a humble attempt is made to answer these research questions with due sincerity.

Operational Definitions of the Terms

Internet Addiction - refers to the obsessive playing of off-line computer games, such as Solitaire or Minesweeper, or obsessive computer programming Madurai district.

Variables of the Study

The study has been designed with the following variables:

Dependent Variables

(i). Internet Addiction

Independent Variables

- | | |
|-------------------------------|------------------------|
| i. Gender | : Male / Female |
| ii. School Locality | : Rural / Urban |
| iii. School type | : Unisex/ Co-education |
| iv. School management | : Government/Aided |
| v. Number of intimate friends | : Upto 3 / 4&above |

Objectives of the Study

The specific objectives of the present study are as follows:

1. To find out the internet addiction of the high school students with respect to the gender.
2. To find out the internet addiction of the high school students with respect to the school locality.
3. To find out the internet addiction of the high school students with respect to the school type.
4. To find out the internet addiction of the high school students with respect to the school management.
5. To find out the internet addiction of the high school students with respect to the number of intimate friends. .

Hypotheses of the Study

The study has been designed to verify the following hypotheses:

1. There is no significant difference in the internet addiction among high school students with respect to gender.
2. There is no significant difference in the internet addiction among high school students with respect to school locality.
3. There is no significant difference in the internet addiction among high school students with respect to school type.
4. There is no significant difference in the internet addiction among high school students with respect to school management . .
5. There is no significant difference in the internet addiction among high school students with respect to number of intimate friends.

Review of Related Literature

Archana Preet Anand (2004).Internet Addiction in Students: A Cause of Concern. The Internet was originally designed to facilitate communication and research activities. However, the dramatic increase in the use of the Internet in recent years has led to pathological use (Internet addiction). This study is a preliminary investigation of the extent of Internet addiction in school children 16-18 years old in India. The Davis Online Cognition Scale (DOCS) was used to assess pathological Internet use. On the basis of total scores obtained ($N = 100$) on the DOCS, two groups were identified—dependents (18) and non-dependents (21), using mean \pm ½ SD as the criterion for selection. The UCLA loneliness scale was also administered to the subjects. Significant behavioral and functional usage differences were revealed between the two groups. Dependents were found to delay other work to spend time online, lose sleep due to late-night logons, and feel life would be boring without the Internet. The hours spent on the Internet by dependents were greater than those of non-dependents. On the loneliness measure, significant differences were found between the two groups, with the dependents scoring higher than the non-dependents.

Arun Vijay Paul.R Chellavel Ganapthi.K Duraimurugan .M, Abirami. V, Elizabeth Reji (2010). Internet Addiction And Associated Factors: A Study Among College Students In South India. Introduction: The excessive and inappropriate use of Internet is a growing concern in the current tech-savy World.The youth are particularly vulnerable to this problem which may ruin their very critical academic career.The aim of this study is to determine the prevalence of Internet Addiction pattern and to analyse the associated factors among the college students from various education field. Methodology: This is a cross sectional study, in which 596 college students studying in Arts,Engineering and Medicine were assessed using a self-administered questionnaire. Information regarding demographic factors was collected and Internet Addiction pattern determined by Young's Internet Addiction test scale. Results: The findings show that out of 596 students, 246(41.3%) were mild addicts, 91(15.2%) were moderate addicts and 259(43.5%) were not addicted to internet use.There is no pattern of severe internet addiction among the study group.Males, students of Arts and Engineering stream, those staying at home, no extracurricular activity involvement, time spent on internet per day, mode of accessing internet are some of the factors significantly associated with internet addiction pattern. Conclusion: The prevalence of Internet Addiction is high, were in more than half of the study group show some form of Internet Addiction pattern.The internet addiction problem among students should gain attention and it is time to evolve an comprehensive intervention approach to promote a healthy and safe Internet use.

VidyaMavila Chathoth1, Bhagyalakshmi Kodavanji, Nayanatara Arunkumar, Sheila Ramesh Pai (2013). Internet Behaviour Pattern In Undergraduate Medical Students In Mangalore. Considering the explosive growth in internet use among medical students in India, this study aimed to determine the prevalence of internet addiction in undergraduate medical students. This cross-sectional study involved 90 subjects (18- 20 years of age) selected by random sampling from the first year undergraduate medical student population at Kasturba Medical College Mangalore. Young's Internet addiction test questionnaire was administered. Based on the scoring, subjects were classified into normal users (score <20), mild

(score 20-49), moderate (score 50-79) and severe (score >79) internet addiction groups. The prevalence of internet addiction (moderate and severe) was determined to be 18.88%. Majority (57.77%) conformed to mild addiction. The most common purpose for internet use was found to be social networking (97.8%), followed closely by e mailing (87.8%). The prevalence of moderate to severe internet addiction appeared to be low, a significant number of students conform to mild addiction.

Amit Malviya¹, Sanjay Dixit, Harish Shukl, Ankita Mishra, Abhineet Jain, Amrita Tripathi (2014). A Study To Evaluate Internet Addiction Disorder Among Students Of A Medical College And Associated Hospital Of Central India. Internet Addiction is an addiction like any other: it is defined as a compulsive loss of impulse control resulting in damage to the user and his or her relationships, schoolwork, or employment. Online gaming, compulsive use of social networking, and marathon Internet surfing sessions are all included in this powerful addition. Objective: To study Internet dependence among undergraduate students of MGM Medical College Indore and to determine prevalence of Internet addiction disorder among these students. Materials and Methods: A cross sectional study was carried out from Sept.2011 to January 2012 among 242 undergraduates of MGM Medical College of Indore city selected by simple random sampling. The data was collected by inter personal interviews using a standardized 'Internet Addiction Test' questionnaire developed by Dr. Kimberly S. Young in 1998. Results: Among 242 study subjects, 164 (67.8%) were males and 78 (32.2%) were females. Overall analysis to find out proportion of study subjects falling in the category of internet addicts on the basis of scoring system adapted for the study reveals that 23 (9.5%) subjects have been found to be internet addicts i.e. have scores 80-100. Among 23 (9.5%) internet addicts found in the study, 15 (6.1%) were males and 8 (3.3%) were females. (n=242). Conclusion: The data is indicative of Internet addiction to be an emerging problem of the modern era.

Vidyachathoth, Bhagyalakshmi Kodavanji, Nayanatara Arun Kumar* and Sheila Ramesh Pai(2014). Correlation between Affect and Internet Addiction in Undergraduate Medical Students in Mangalore. In the postmodern era, the online environment has become a significant arena for everyday living. Internet itself is a harmless tool but incorrect usage of net might consequently result in disruptions in mental health and social relationships. Objective: The present study aims to assess the correlation between affect and internet addiction in undergraduate medical students using the Young's Internet Addiction Test and affects scores, using the PANAS scale. Methods: This cross-sectional study involved 90 subjects (18-20 years of age) selected by random sampling from the first year undergraduate medical student population. Correlation between the internet addiction test scores and the positive/negative affect scores was calculated using the Pearson's correlation coefficient. Results: A significantly positive correlation was found between the internet addiction test scores and the negative affect scores. A positive correlation was also found between the daily duration of internet use and negative affect scores. Conclusion: Our study demonstrated a strong correlation between negative affect and internet addiction, highlighting the role of affect in behavioral addictions. This correlation can be made as a useful tool in screening adolescents for internet addiction.

Hypotheses Verification

Hypothesis 1

There is no significant difference in the internet addiction among high school students with respect to Gender.

Table 1: Showing Mean and Standard deviation of internet addiction among high school students with respect to Gender

Variable	Mean	S.D	N	d.f.	't' Cal. value	't' Tab. value	Level of Significance at (5 %)
Male	21.87	5.29	138	338	2.848	1.96	Significant
Female	20.81	5.08	202				

Hence the Null Hypothesis is Rejected

Inference

From the above table it is clear that obtained 't' value is 2.848, which is higher than the table value 1.96 at 0.05 level. Hence the null hypothesis is rejected. It is concluded that **"There is a significant difference in the internet addiction among high school students with respect to Gender"**. It is further noted that the internet addiction among Male high school students greater than Female students.

Hypothesis 2

There is no significant difference in the internet addiction among high school students with respect to School locality.

Table 2: Showing Mean and Standard deviation of internet addiction among High school students with respect to School locality

Variable	MEAN	S.D	N	d.f.	't' Cal. value	't' Tab. value	Level of Significance at (5 %)
Rural	21.43	4.77	245	338	0.997	1.96	Not Significant
Urban	20.74	6.11	95				

Hence the Null Hypothesis is Accepted

Inference

From the above table it is clear that obtained 't' value is 0.997, which is lower than the table value 1.96 at 0.05 level. Hence the null hypothesis is accepted. It is concluded that **"There is no significant difference in the internet addiction among high school students with respect to School locality"**. It is further noted that the internet addiction among Rural high school students have better than the Urban students.

Hypothesis 3

There is no significant difference in the internet addiction among high school students with respect to School type.

Table 3: Showing Mean and Standard deviation of internet addiction among high school students with respect to School type

Variable	Mean	S.D	N	d.f.	't' Cal. value	't' Tab. value	Level of Significance at (5 %)
Unisex	21.09	4.82	113	338	-0.389	1.96	Not Significant
Co- Education	21.31	5.36	227				

Hence the Null Hypothesis is Accepted

Inference

From the above table it is clear that obtained 't' value is -0.389, which is lower than the table value 1.96 at 0.05 level. Hence the null hypothesis is accepted. It is concluded that **"There is no significant difference in the internet addiction among high school students with respect to School type"**. It is further noted that the internet addiction among Co-education high school students have greater than the Unisex school students.

Hypothesis 4

There is no significant difference in the internet addiction among high school students with respect to School management.

Table 4: Showing Mean and Standard deviation of internet addiction among high school students with respect to School management

Variable	Mean	S.D	N	d.f.	't' Cal. value	't' Tab. value	Level of Significance at (5 %)
Government	21.44	5.01	252	338	1.150	1.96	Not Significant
Aided	20.66	5.65	88				

Hence the Null Hypothesis is Accepted

Inference

From the above table it is clear that obtained 't' value is 1.150, which is lower than the table value 1.96 at 0.05 level. Hence the null hypothesis is accepted. It is concluded that "There is no significant difference in the internet addiction among high school students with respect to School management". It is further noted that the internet addiction among Government high school students have better than the Aided high school students.

Hypothesis 5

There is no significant difference in the internet addiction among high school students with respect to Number of intimate friends.

Table 5: Showing Mean and Standard deviation of internet addiction among high school students with respect to Number of intimate friends

Variable	Mean	S.D	N	d.f.	't' Cal. value	't' Tab. value	Level of Significance at (5 %)
Up to 3	21.46	5.19	261	338	1.478	1.96	Not Significant
4 & Above	20.47	5.17	77				

Hence the Null Hypothesis is Accepted

Inference

From the above table it is clear that obtained 't' value is 1.478, which is lower than the table value 1.96 at 0.05 level. Hence the null hypothesis is accepted. It is concluded that "There is no significant difference in the internet addiction among high school students with respect to Number of intimate friends". It is further noted that the internet addiction among those who have upto 3 intimate friends high school students have better than the 4&above intimate friends of high school students.

Findings and Conclusion

- It was found that there is a significant difference in the internet addiction among high school students with respect to Gender.
- It was found that there is no significant difference in the internet addiction among high school students with respect to School locality.
- It was found that there is no significant difference in the internet addiction among high school students with respect to School type.
- It was found that there is no significant difference in the internet addiction among high school students with respect to School management.
- It was found that there is no significant difference in the internet addiction among high school students with respect to Number of intimate friends.

References

1. Dennis.p Curtin, Kim foley, Kunal Sen (1999). *Information Technology*. New Delhi, India: Tata McGraw_Hill publishing company limited.

2. DaniedMinoli (1999). *Internet and Interanet*. New Delhi, India: Tata McGraw-Hill publishing company private limited.
3. Douglas E Comer (2006). *Computer Networks and Internets*. New Delhi, India: Dorling Kindeersley India private Limited.
4. Guptha, C. B., & Vijay Guptha (2009). *An introduction to statistical method*. New Delhi, India: Vikas publishing house Pvt LTD.
5. Harley Hahn (1997). *The internet complete reference*. New Delhi, India: Tata McGraw-Hill Publishing Company limited.
6. Jackson S.L., (2006) *Research Methods and Statistics*. USA: Wordsworth Congage Learning.
7. John Freunds, E.(2004). *Mathematical Statics with Applications*. New Delhi, India: Prentice Hall India Private limited.

EFFECTIVENESS OF JIGSAW METHOD ON LEARNING CHEMISTRY AMONG XI STANDARD STUDENTS

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Abstract

Chemistry is a logical science. The students can study the chemistry concepts in any order, but it's probably best to start from the top and work their way down, since many concepts build on understanding units, conversion and how atoms and molecules interact. Chemistry can be a tough subject to learn, especially if they aren't going about studying this complicated science the right way. This research paper is based on the study conducted to find out the effectiveness of jigsaw method on the learning chemistry of eleventh standard students. The intention of this research was also to explore the linkage between teaching technique and student learning. In this study, the measuring instrument was used an achievement test in chemistry (post-test). One lesson (Chemical Bonding) was selected from 11th class Chemistry for this study. A sample of 50 students was randomly selected from Kanna Matriculation Higher Secondary School, Puliangudi. "Pre test and post test quasi experimental design" was selected for this research study. Experimental group was taught with the help of Jigsaw Method whereas the control group was taught the same lessons through traditional method of teaching for the period of six (6) weeks. t-test was used to analyze the data.

Introduction

Cooperative learning, as the name suggests, stands for a learning process or strategy in which the students get opportunities to learn by themselves in a group in a cooperative or non-cooperative environment by forming a number of teams, each consisting of a small number of students of different levels of ability for the understanding of a subject. They share all information among themselves and help each other for having the required knowledge, understanding and application of one or the other aspects of the content material, or course units included in their syllabus. It seems quite contrary to the practice of teaching-learning prevalent in our current educational system. The cooperative learning ideology rests in making the teaching-learning process as learner centered rather than being content or teacher centered.

Jigsaw Method

In education, jigsaw is a teaching technique invented by social psychologist Elliot Aronson in 1971. Students of an average sized class (26 to 33 students) are divided into competency groups of four to six students, each of which is given a list of subtopics to research. Individual members of each group then break off to work with the "experts" from other groups, researching a part of the material being studied, after which they return to their starting group in the role of instructor for their subcategory. The jigsaw strategy is a cooperative learning technique appropriate for students from 3rd to 12th grade. It is also used extensively in adult English Second Language (or ESL) classes. The strategy is an efficient teaching method that also encourages listening, engagement, and interaction, peer teaching and cooperative by giving each member of the group an essential part to play in the academic activity. Both individual and group accountability are built into the process. The Jigsaw method is a cooperative learning technique in which students work in small groups. Jigsaw can be used in a variety of ways for a variety of goals, but it is primarily used for the acquisition and presentation of new material, review, or informed debate. In this method, each group member is assigned to become an "expert" on some aspect of a unit of study. After reading about their area of expertise, the experts from different groups meet to discuss their topic, and then return to their groups and take turns teaching their topics to their group mates.

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Learning Chemistry

Learning is a relatively permanent change in behaviour potentiality that occurs as result of reinforced practice. Learning is a process and not a product. It involve all those experience and training of an individual (right from birth) which help him to produce changes in his behaviour. Learning leads to changes in behaviour but this does not necessarily mean that these changes always bring about improvement or positive development. One has an equal chance to drift to the negative side of human personality. Chemistry is a logical science. The students can study the chemistry concepts in any order, but it's probably best to start from the top and work their way down, since many concepts build on understanding units, conversion and how atoms and molecules interact. Chemistry can be a tough subject to learn, especially if they aren't going about studying this complicated science the right way. While there are no secret shortcuts to help them master Chemistry overnight, they can make it easier by studying the right way. And also, Learning chemistry involves practice. For making effective practice in learning chemistry, Jigsaw method of co-operative learning is used in this study.

Methodology

Research Design

The study adopted an untreated control group, pre test and post test quasi experimental design. *Sample:* Participants (N=50) were XI standard students studying in Kanna Matriculation School under state board syllabus for the year 2016-17.

Procedure

The present study follows the experimental methodology and participants were randomly assigned to experimental and control groups to identify effect of the independent variable (Jigsaw Method) on the dependent variable (Achievement in Chemistry).

Instrumentations

Chemistry Achievement Test: It refers to the topics cover lesson (Chemical Bonding) prescribed for XI standard Chemistry subject belong to State Board Syllabus resulted in developing 30-item chemistry achievement test measuring chemistry achievement level of XI standard students.

Significance of the Study

Jigsaw method strategies, properly structured, have proven to be efficient and effective in promoting mastery of knowledge and skills among students of all abilities and ages. Jigsaw method strategies can enhance creativity by harnessing the power of many kinds of human intelligence and providing task structures that facilitate shared work and responsibility. Jigsaw method is an instructional task design that engages students actively in achieving a lesson objective through their own efforts and the efforts of the members of their small learning team. In a good Jigsaw method lesson, it is difficult to complete the assignment successfully without productive collaboration and both easier and more engaging to complete it as a team. Four features have been regularly shown to be central to the success of any Jigsaw lesson. First and foremost is positive interdependence, a spirit of "all for one and one for all. The second key feature is accountability at the group and the individual level. That is, the group cannot succeed unless each member demonstrates success or significant progress. The third essential feature is what the Johnson's call "face-to-face primitive interaction" – the acts of helping each other learn. The fourth essential feature is the focus on interpersonal and small-group skills that students use in completing Jigsaw method lesson. Working successfully in a turn demands particular social skills, which are best learned and practiced in the context of real tasks. Included in this arena is the student's ability to review their own skills critically with a view to improving group effectiveness. When done properly, Jigsaw method not only stimulates cognition but also gives play to the multiple forms of intelligence that students bring to and shared task. In the context of their small learning team, students have a chance to identify and take advantage of each other's strengths and expand their own notions of how to approach a

challenge. Jigsaw Method uses both goal interdependence and resource interdependence to ensure interaction and communication among group members. Changing the role of the instructor from lecturing to facilitating the groups helps foster this social environment for students to learn through interaction. Using this kind of social environment, the eleventh standard students freely understand the chemistry concepts. With this back ground the present study entitled. *“The Effectiveness of Jigsaw method on learning Chemistry among XI standard students”* is attempted.

Objectives of the Study

1. To diagnose the problems of the learners in learning Chemistry through lecture method.
2. To find out whether there is any significant difference in the pre test scores between the control and experimental group.
3. To find out whether there is any significant difference in the post test scores between the control and experimental group.
4. To find out whether there is any significant difference in gain score between the control group and experimental group.
5. To find out the impact of jigsaw method in learning chemistry.

Hypotheses of the Study

1. There is no significant difference in the pre test scores between the control and experimental group.
2. There is no significant difference in the post test scores between the control and experimental group.
3. There is no significant difference in gain score between the control group and experimental group.
4. Jigsaw method of teaching is more effective than lecture method in learning chemistry.

Pre-test Analysis

Ho: 01 There is no significant difference in the pre test scores between the control and experimental group.

Table 1.01 t - test for the pre test scores between the control and experimental group

Group	N	Mean	SD	t - values		Remarks (5% level of significance)
				Calculated Value	Table Value	
Control	25	11.2000	2.72336	0.968	2.01	NS
Experimental	25	12.0800	3.63914			

NS - Not Significant

In the above table, the calculated 't' value (0.966) is less than the table value (2.01) for df at 0.05 level of significance. Hence the null hypothesis is accepted. It shows that there is no significant difference in the pre test scores between the control and experimental group.

Post-test Analysis

Ho: 02 There is no significant difference in the post test scores between the control and experimental group.

Table 1.02 T-test for the post test scores between the control and experimental group

Group	N	Mean	SD	T - values		Remarks (5% level of significance)
				Calculated Value	Table Value	
Control	25	26.6800	2.65707	2.602	2.01	S
Experimental	25	27.1200	2.50533			

S- Significant

In the above table, the calculated 't' value (2.602) is greater than the table value (2.01) at 0.05 level of significance. Hence the null hypothesis is rejected. It shows that there is significant difference in the post test scores between the control and experimental group.

Gain Score Analysis

Ho: 03 There is no significant difference in gain score between the control group and experimental group.

Table 1.03 t- Test for the gain scores of control group and experimental group.

Group	N	Mean	S.D.	t - values		Remarks (5% level of Significance)
				Calculated Value	Table Value	
Control	25	15.0000	4.18330	2.414	2.01	S
Experimental	25	15.4400	3.27974			

S- Significant

In the above table, the calculated 't' value (2.414) is greater than the table value (2.01) for df at 49 (50-1) at 0.05 level of significance. Hence the null hypothesis is rejected. It shows that there is significant difference in gain scores between the control group experimental group. The mean scores show that the experimental group scores higher than the control group in post test.

Discussion of Results

The major findings in the research work have shown that jigsaw method is an important method of teaching which affects students' achievement and interest in chemistry of XI standard students. In this study, to find out the XI standard students' performance in chemistry, an experiment was conducted on XI standard students of 2015-2016. In this study, Chemistry refers to the topics cover lesson (Chemical Bonding) prescribed for XI standard Chemistry subject belong to State Board Syllabus. The investigator had selected 50 students and divided in to two groups in from Sri Kanna Girls Higher Secondary School, Puliyangudi. These 50 students were equally and equivalently into two groups as experimental and control group. Hence each group consists of 25 students.

In the pre test, the control and experimental groups did not differ significantly in achievement test in Chemistry. In the post test, the students of Experimental group scored higher than the students of control group, experimental group scored more than the control group in post test. Regarding gain scores, the students of experimental group scored higher than the students of control group. The gain scores of experimental group was significantly higher than that of the control group.

The experimental group scored higher than the control group in the post test. This may be due to the fact that the Jigsaw method is more effective than the traditional method of teaching because the student discussed the connectional shared it with peers through this discussion. The student freely clarify their doubt with others, it reduces hesitation and it helps to reducing racial conflict and increasing positive educational out comes. It may also be due to the students learn cooperatively as group members share responsibility for each other's learning by using critical thinking and social skills, besides it helps to improve listening, communication and problem solving skills. And also the Jigsaw method is more effective in learning of Chemistry, because this method help to student's integrated knowledge and understanding from various sources and experts then also perceives the feelings and needs of others accurately and uses that information to approach them and it helps to elimination of misconception reduce students difficulties and realize meaning full learning.

Conclusion

The results of the study reveal that the concepts of chemistry have been imbibed by the students when they are learnt the concepts by jigsaw method of learning. The Jigsaw method of learning has a noticeable impact in the achievement in chemistry of XI standard students. The findings of the present study not only demonstrate that the students are satisfied with jigsaw method of learning but also

improved their scores in the achievement of chemistry. Hence the jigsaw method of learning is one of the effective teaching strategies incorporated to improve the XI standard students' level of knowledge in chemistry. In traditional method the students are only passive learners. But the jigsaw method of learning makes the students active and provides optimum opportunities to learn and retain various chemistry concepts at XI standard level. Based on the findings of the study, it clearly shows that Jigsaw method could be very appreciated by the XI standard students and stimulates an academic approach to them. No student can succeed completely unless everyone works well together as a team.

References

1. S.S.Chandra, *Modern Education*, Atlantic Publication, New Delhi (3rd Edition), 2008:3.
2. Ramesh Ghanta, *Modern Education*, Vikas Publication, New Delhi (3rd Edition), 2004:6,7.
3. S.K.Mangal, *Educational Psychology*, Prentice Hall India Publication, New Delhi (2nd Edition), 2007:2,171.
4. N.Dash, *Psychology Teaching Learning Process*, Cosmr Publication, New Delhi (2nd Edition), 2005, 1:5.
5. R.Sharma, *Educational Psychology*, Kanishka Publication, New Delhi (2nd Edition), 2007,11,12.
6. Gupta and Sharma, "Effectiveness of Cooperative Learning Approach Over Conventional Method in Mathematics at High School Level" Vol.2, No.1, Jan 2012.

MARITAL STATUS AND TYPE OF FAMILY WISE ANALYSIS OF METACOGNITION AMONG HIGH SCHOOL TEACHERS

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Abstract

The present study is entitled as "Marital Status and Type of Family wise analysis of Metacognition among High School Teachers". The teacher is a pivot of the educational system for the younger students. If the teachers are well educated and trained and if they are intellectually sound and take keen interest in their jobs, the success is ensured. Metacognition is one of the greatest concerns of teachers. Metacognitive activities help the teacher to determine how students can be taught to apply their cognitive resources through metacognitive control. The research was a survey type, which consists of purposive sampling of 800 high school teachers in Dindigul and Madurai districts. The investigator has constructed and validated the Metacognition scale. Personal data sheet was prepared by the investigator. The interpretation of data was done with statistical methods in percentage analysis, mean, standard deviation and 't'-test.

Introduction

The word 'Cognition' comes from the Latin term 'cognoscere' which means "to know." It covers the process of thought and involves various modes of knowing, such as perceiving, remembering, imaging, conceiving, and judging. Metacognition is defined as cognition about cognition and refers to cognitive processes that are involved in appraisal, monitoring or control of cognition (Flavell, 1979). Metacognition often referred to as "thinking about thinking," is defined as "one's knowledge concerning one's own cognitive processes and products or anything related to them". With respect to learning, this can be interpreted as an individual's awareness of what they have and have not learned. Metacognition is essential for teachers to in order to self-regulate and guide students. Metacognition refers, among other things, to the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective" (Flavell, 1976).

Significance of the Study

Teachers are considered as an important entity to facilitate students in the classroom. Through transacting curriculum in the school, it is the sole responsibility of the teacher to decide how and through what activity and kind of experience he/she wants to make students to think about themselves. Hence, it is expected that teacher resolve to be a person of rational thought, exhibiting democratic behavior, anxiety free and stable minded. It is generally agreed that the goodness of an educational programme to a large extent is dependent on the quality of teachers available to implement it. The quality of education depends upon the higher order thinking of teachers and students in other words their metacognition. Metacognition is thinking about one's own thinking. More technically, metacognition involves in the ability to evaluate one's own comprehension of subject matter and use that evaluation to predict how well one might perform a task. It refers to our understanding and control over our own thinking processes including awareness, control and regulation (Sternberg, 2009). It is extremely important that metacognitive skills are taught within the educational system, regarding their role in the development of students' scientific competence and raising the achievement level (Larkin, 2009).

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The study of metacognition has provided educational psychologists with insight about the cognitive processes involved in learning and what differentiates successful students from their less successful peers. It also holds several implications for instructional interventions, such as teaching students how to be more aware of their learning processes and products as well as how to regulate those processes for more effective learning. By this study the investigator wants to find out the marital status and type of family wise metacognition among high school teachers.

Objectives

1. To find out the level of metacognition among high school teachers with regard to marital status.
2. To find out the level of metacognition among high school teachers with regard to type of family.
3. To find out whether there is any significant difference in metacognition among high school teachers with regard to the marital status.
4. To find out whether there is any significant difference in metacognition among high school teachers with regard to the type of family.

Hypotheses

H₀1: There is no significant difference between married and unmarried high school teachers in their metacognition.

H₀2: There is no significant difference among joint and nuclear family school high school teachers in their metacognition.

Delimitations of the Study

1. The study is limited to high school teachers in Dindigul and Madurai districts only.
2. The investigator has proposed to choose only 800 teachers as sample for the study.

Method Used

The investigator has adopted survey method in this study to measure the “Marital status and Type of Family Wise Analysis of Metacognition among High School Teachers”.

Population and Sample

The population of the present study consists of teachers those who are working in high schools of Dindigul and Madurai districts, Tamilnadu. The investigator has used simple random sampling technique for selecting the sample from the population. The sample consists of 800 high school teachers. Among them 250 were male and 550 were female high school teachers.

Tool Used

To study the Marital status and Type of Family wise Analysis of Metacognition among High School Teachers. The investigator has constructed and validated the Metacognition Scale by his self.

Statistics Techniques Used

Percentage analysis Mean, SD and ‘t’ tests were used in this study.

Analysis of Data

Table 1 Level of Metacognition among High School Teachers With Regard to Marital Status

Dimensions	Marital Status	Low		Moderate		High	
		N	%	N	%	N	%
Knowledge of Cognition	Married	79	12.2	446	69.1	120	18.6
	Unmarried	22	14.2	114	73.5	19	12.3
Regulation of Cognition	Married	58	9.0	475	73.6	112	17.4

	Unmarried	31	20.0	102	65.8	22	14.2
Metacognition	Married	75	11.6	450	69.8	120	18.6
	Unmarried	27	17.4	105	67.7	23	14.8

Table 2 Level of Metacognition among High School Teachers With regard to Type of Family

Dimensions	Type of Family	Low		Moderate		High	
		N	%	N	%	N	%
Knowledge of Cognition	Nuclear	58	11.0	375	71.0	95	18.0
	Joint	43	15.8	185	68.0	44	16.2
Regulation of Cognition	Nuclear	54	10.2	381	72.2	93	17.6
	Joint	35	12.9	196	72.1	41	15.1
Metacognition	Nuclear	59	11.2	374	70.8	95	18.0
	Joint	43	15.8	181	66.5	48	17.6

Table 3 Difference between Married and Unmarried High School Teachers in their Metacognition

Dimensions	Marital Status	N	Mean	S.D	'P' value	Remarks
Knowledge of Cognition	Married	645	50.35	9.966	0.042	S
	Unmarried	155	48.51	10.036		
Regulation of Cognition	Married	645	50.51	9.787	0.005	S
	Unmarried	155	47.88	10.613		
Metacognition	Married	645	50.48	9.853	0.007	S
	Unmarried	155	47.99	10.383		

Table 4 Difference between Nuclear and Joint Family High School Teachers in their Metacognition

Dimensions	Type of Family	N	Mean	S.D	'P' value	Remarks
Knowledge of Cognition	Nuclear	528	50.25	9.712	0.328	NS
	Joint	272	49.50	10.538		
Regulation of Cognition	Nuclear	528	50.09	9.908	0.722	NS
	Joint	272	49.82	10.192		
Metacognition	Nuclear	528	50.19	9.793	0.466	NS
	Joint	272	49.63	10.398		

Results and Discussion

- The table 1 reveals that the level of metacognition and its dimensions of high school teachers with regard to marital status are moderate. Among the sample 18.6% of married and 12.3% of unmarried high school teachers have high knowledge of cognition, 17.4% of married and 14.2% of unmarried high school teachers have high regulation of cognition and 18.6% of married and 14.8% of unmarried high school teachers have high metacognition.
- The table 2 reveals that the level of metacognition and its dimensions of high school teachers with regard to type of family are moderate. Among the sample 18.00% of nuclear and 16.2% of joint family high school teachers have high knowledge of cognition, 17.6% of nuclear and 15.1%

of joint family high school teachers have high regulation of cognition and 18.00% of nuclear and 17.6% of joint family high school teachers have high metacognition.

- The table 3 reveals that there is significant difference between married and unmarried high school teachers in their knowledge of cognition, regulation cognition and metacognition. While comparing the mean scores of married (50.35, 50.51 & 50.48) and unmarried (48.51, 47.88 & 47.99). It is inferred that the married high school teachers are better than the unmarried high school teachers in their knowledge of cognition, regulation cognition and metacognition. This may due to the fact that married high school teachers have more experience to think, plan and involve themselves in all these activities with the help of their spouse. They can share and regulate their knowledge with their spouse and think metacognitively.
- The table 4 reveals that there is no significant difference between nuclear and joint family high school teachers in their knowledge of cognition, regulation cognition and metacognition.

Conclusion

The management and government should create metacognitive environment in schools. In creating a metacognitive environment, teachers should monitor and apply their knowledge deliberately, in modelling cognitive behaviours to assist students to become aware of their own thinking. Metacognitive teaching strategies must be included in the teacher education programme. Metacognitive skills are essential for the 21st century teachers. This would enable the teachers to cope up with the new situations and they will become good thinkers in near future.

References

1. Flavell, J. H. (1976). *Metacognitive aspects of problem solving*. Hillsdale: Lawrence Erlbaum.
2. Flavell, J. H. (1979). *Metacognition and metacognitive monitoring: A new area of cognitive-developmental inquiry*. Cambridge, MA: MIT Press.
3. Larkin, S. (2009). *Metacognition in young children*. New York: Routledge.
4. Mangal, S. K. (2007). *Statistics in Psychology and Education*. New Delhi: Prentice hall of India private Ltd.
5. Sternberg, R. J. (2009). *Cognitive psychology, 5th Edition*. Wadsworth Cengage Learning: Belmont, CA.
6. Scarlett, W. G. (2015). *The SAGE encyclopedia of classroom management*. New Delhi: Sage Publications.