

# INTERNET USAGE AMONG SENIOR SECONDARY STUDENTS IN RELATION TO SELF REGULATED LEARNING, SOCIAL SUPPORT AND ALIENATION

**Dr.Subodha Chandra Mishra**

Assistant Professor and Head of the Department

PG Department of Education

Bhadrak Autonomous College, Bhadrak

## ABSTRACT

Home Computer, electronic games and the Internet have become in these years an integral part of the lives of youth. The Gallup survey conducted in 2002 (cited in Whitlock, Powers and Eckenrode, 2006) states that youth prefer Internet to other modes of communication such as TV, telephone and radio. The survey also reported that parents buy home computer and subscribe to Internet access in order to provide modern and better educational facilities and opportunities to their children. Even though these parents are concerned more and more about the under influence of Internet on their children because these children use Internet also for playing game, downloading popular songs and pictures of their favourite stars, they consider that time wasted thus on Internet is better than time wasted on TV, and that without computer and Internet their children would suffer and be at a disadvantage in their learning process (Kraut et al.1998). Thus Internet is useful and can also be harmful to young students. On one hand, it provides benefits in the areas of social, cognitive and physical development and on the other hand, creates risks such as cyber buffering, addiction and sexual solicitations. But it's very true that even though Internet can also create negative consequences, we can't do without it in our daily life. In India, alienation is regularly increasing among young school students. Stress, Strain and setbacks because of psychological and physical changes affect adversely the adolescent's social mixing and tuning, interests and perceptions about themselves. In this unfavourable situation, perceived social support in adolescence acts as a buffer and protective power to face problems. face

## Chapter Overview:

The study has been presented in detail in the Dissertation. The present chapter deals with the description of the study in nutshell under main headings which include Introduction to variables under study, significance of the study, statement of problem, operational definitions, objectives, hypotheses, design of the research, sample, tools, procedure of data collection and statistical techniques used for analyzing data. Further, findings of the study, educational implications and suggestions for further research are also elaborated in this chapter.

## RATIONALE OF THE STUDY

The advent of computer in the seventies and its subsequent improvements coupled with the use of Internet has generated a revolution especially in the life of adolescent and in the field of education (cited in Badura, 1977). Now-a-days, online Internet communication and social networking is becoming progressively popular among youth and adolescents.

Home Computer, electronic games and the Internet have become in these years an integral part of the lives of youth. The Gallup survey conducted in 2002 (cited in Whitlock, Powers and Eckenrode, 2006) states that youth prefer Internet to other modes of communication such as TV, telephone and radio. The survey also

reported that parents buy home computer and subscribe to Internet access in order to provide modern and better educational facilities and opportunities to their children. Even though these parents are concerned more and more about the under influence of Internet on their children because these children use Internet also for playing game, downloading popular songs and pictures of their favourite stars, they consider that time wasted thus on Internet is better than time wasted on TV, and that without computer and Internet their children would suffer and be at a disadvantage in their learning process (Kraut et al.1998). Thus Internet is useful and can also be harmful to young students. On one hand, it provides benefits in the areas of social, cognitive and physical development and on the other hand, creates risks such as cyber buffering, addiction and sexual solicitations. But it's very true that even though Internet can also create negative consequences, we can't do without it in our daily life.

Senior Secondary students have been chosen for the current study because they use Internet more actively than other segments of population. These students are in their adolescent period, and comprise a large part of Internet users using games. These years of adolescence are formative and influencing because it's during these years that most of physical, behavioural and psychological transformations occur. The development during this period can be accurately termed as full of storm and stress. A healthy and better development of adolescents is subjected to various interactive, social and intricate factors. Students have different requirements and abilities regarding their academic life. Internet provides an ideal solution to meet these requirements according to the respective abilities of young learners. The average amount of time spent on Internet is increasing and the starting age of these users is rapidly decreasing (cited in Erdogan, 2008), thus, it becomes mandatory that teachers, parents, psychologists, technology creators and legislative members become conscious of positive effects as well as drawbacks of the use of Internet.

In modern times, young learners are becoming increasingly responsible for their learning. They are no longer passive students filled with knowledge and information, rather they are active members in their own learning process, reconstructing and reorganizing their previous horizon of knowledge with a new one. Thus it is necessary for both learners and educators to better understand and use the concept of self regulation in the development of these learning and achievement abilities. In India, alienation is regularly increasing among young school students. Stress, Strain and setbacks because of psychological and physical changes affect adversely the adolescent's social mixing and tuning, interests and perceptions about themselves. In this unfavourable situation, perceived social support in adolescence acts as a buffer and protective power to face problems. But in Indian context, a very scanty research work has been carried out to study the use of Internet among Senior Secondary students. Thus the present study is dedicated to this aspect. It is comparatively a novel idea and would be very helpful for teachers and parents, as well as for students themselves. They will be thence aware of positive and negative effects of the use of Internet. Thus teachers and parents would be able to give necessary guidance and assistance to students in their holistic development, and students would also be able to learn better through self regulation. It's for the reason that the investigator has decided to study extensively this topic and to conduct a research in this area. With these perspectives, the current study intends to investigate the use of Internet among senior secondary students with regard to self regulated learning, social support and alienation.

### **STATEMENT OF THE PROBLEM**

***Internet Usage Among Senior Secondary Students in Relation to Self Regulated Learning, Social Support And Alienation***

### **OPERATIONAL DEFINITION OF KEY TERMS USED**

#### **Internet Usage:**

Use of an international network of well over ten thousand networks linked using the TCP/ IP protocols.

#### **Senior Secondary Students:**

The students studying in 11th and 12<sup>th</sup> grades

#### **Self Regulated Learning:**

Self-regulated learning is a self-initiated action that involves goal setting and regulating one's efforts to reach the goal, self-monitoring (meta-cognition), time management, and physical and social environment regulation

**Social Support:**

The perceived availability of people whom the individual trusts and who make one feel cared for and valued as a person.

**Alienation:**

A mental state of freely separated or estranged from an individual group or society, commonly evidenced in the behaviour of adolescents during secondary school and college years as they adjust to the approaching adult status.

**OBJECTIVES OF THE STUDY**

- i. To construct and standardize a scale to assess perceived social support among senior secondary students.
- ii. To compare the Internet usage among senior secondary students having high and low levels of self regulated learning and its different dimensions i.e. meta- cognitive self regulation, management of time and study environment, effort regulation, peer learning and help seeking.
- iii. To compare the Internet usage between the two groups of
  - Male senior secondary students (Arts, Commerce, Science and total) having high and low level of self regulated learning.
  - Female senior secondary students (Arts, Commerce, Science and total) having high and low level of self regulated learning.
  - Male and female senior secondary students (Arts, Commerce, Science and total) having high level of self regulated learning.
  - Male and female senior secondary students (Arts, Commerce, Science and total) having low level of self regulated learning.
  - Senior secondary students of Arts, Commerce and Science having high and low levels of self regulated learning.
- iv. To compare the Internet usage among senior secondary students having high and low levels of social support and its different dimensions i.e. family support, teachers support, friends support and online social support.
- v. To compare the Internet usage between two groups of
  - Male senior secondary students (Arts, Commerce, Science and total) having high and low level of social support.
  - Female senior secondary students (Arts, Commerce, Science and total) having high and low level of social support.
  - Male and female senior secondary students (Arts, Commerce, Science and total) having high level of social support.
  - Male and female senior secondary students (Arts, Commerce, Science and total) having low level of social support.
  - Senior secondary students of Arts, Commerce and Science having high and low level of social support.
- vi. To compare the Internet usage among senior secondary students having high and low levels of alienation.
- vii. To compare the Internet usage between two groups of
  - Male senior secondary students (Arts, Commerce, Science and total) having high and low level of alienation.
  - Female senior secondary students (Arts, Commerce, Science and total) having high and low level of alienation.
  - Male and female senior secondary students (Arts, Commerce, Science and total) having high level of alienation.
  - Male and female senior secondary students (Arts, Commerce, Science and total) having low level of alienation.

- level of alienation.
  - Senior secondary students of Arts, Commerce and Science having high and low levels of alienation.
- viii. To compare the Internet usage among male and female senior secondary students (Arts, Commerce, Science and Total).
- ix. To find out the relationship of Internet usage with self regulated learning (meta-cognitive self regulation, management of time and study environment, effort regulation, peer learning and help seeking) of students.
- x. To find out the relationship of Internet usage with social support (family support, teachers support, friends/peer support and online social support) of students.
- xi. To find out the relationship of Internet usage with alienation of students.
- xii. To compare senior secondary school students' opinions in terms of self regulated learning, social support and alienation regarding-Internet related activities: giving password to unknown, pretending to be a different person, sending false mail, IMS or prank mail to unknown person, blocking IMS from unwanted person and accepting friend request from unknown person on their social networking sites. being careful while surfing the Internet, Internet v/s conventional documents, expressing Internet as , time saving, more informative, more expensive, more useful and more preferred
- influence of Internet usage on the academic efficiency
  - replacement of library service by the Internet
  - Internet as a way of escaping from problems and relieving stress
  - effect of Internet usage on physical and psychological health
  - importance of the Internet in their life

### ***HYPOTHESES OF THE STUDY***

On the basis of above mentioned objectives, following null hypotheses have been framed for verification:

Ho-1 No significant difference exists on the Internet usage among senior secondary students having high and low levels of self regulated learning and its different dimensions i.e. meta-cognitive self regulation, management of time and study environment, effort regulation, peer learning and help seeking.

Ho-2 No significant difference exists on the Internet usage between the two groups of

- a) Male senior secondary students (Arts, Commerce, Science and total) having high and low level of self regulated learning.
- b) Female senior secondary students (Arts, Commerce, Science and total) having high and low level of self regulated learning.
- c) Male and female senior secondary students (Arts, Commerce, Science and total) having high level of self regulated learning.
- d) Male and female senior secondary students (Arts, Commerce, Science and total) having low level of self regulated learning.
- e) Senior secondary students of Arts, Commerce and Science having high and low levels of self regulated learning.

Ho-3 No significant difference exists on the Internet usage among senior secondary students having high and low levels of social support and its different dimensions i.e. family support, teachers support, friends support and online social support.

Ho-4 No significant difference exists on the Internet between two groups of

- a) Male senior secondary students (Arts, Commerce, Science and total) having high and low level of social support.

- b) Female senior secondary students (Arts, Commerce, Science and total) having high and low level of social support.
- c) Male and female senior secondary students (Arts, Commerce, Science and total) having high level of social support.
- d) Male and female senior secondary students (Arts, Commerce, Science and total) having low level of social support.
- e) Senior secondary students of Arts, Commerce and Science having high and low level of social support.

Ho-5 No significant difference exists on the Internet usage among secondary students having high and low levels of alienation.

Ho-6 No significant difference exists on the Internet usage between two groups of

- a) Male senior secondary students (Arts, Commerce, Science and total) having high and low level of alienation.
- b) Female senior secondary students (Arts, Commerce, Science and total) having high and low level of alienation.
- c) Male and female senior secondary students (Arts, Commerce, Science and total) having high level of alienation.
- d) Male and female senior secondary students (Arts, Commerce, Science and total) having low level of alienation.
- e) Senior secondary students of Arts, Commerce and Science having high and low levels of alienation.

Ho-7 No significant difference exists on the Internet usage among male and female senior secondary students (Arts, Commerce, Science and Total).

Ho-8 No significant relationship exists between Internet usage and self regulated learning (meta-cognitive self regulation, management of time and study environment, effort regulation, peer learning and help seeking) of senior secondary school students.

Ho-9 No significant relationship exists between Internet usage and social support (family support, teachers support, friends/peer support and online social support) of students.

Ho-10 No significant relationship exists between Internet usage and alienation of students.

Ho-11 No significant difference exists among senior secondary school students' opinions in terms of self regulated learning, social support and alienation regarding-

Internet related activities, giving password to unknown, pretending to be a different person, sending false mail, IMS or prank mail to unknown person, blocking IMS from unwanted person and accepting friend request from unknown person on their social networking sites, being careful while surfing the Internet, Internet v/s conventional documents, expressing Internet as time saving, more informative, more expensive more, useful and more preferred

- a. influence of Internet usage on the academic efficiency
- b. replacement of library service by the Internet
- c. Internet as a way of escaping from problems and relieving stress
- d. effect of Internet usage on physical and psychological health
- e. importance of the Internet in their life

## **METHODOLOGY OF THE STUDY** *Design of the*

### **Study**

In the present study, quantitative research methods were utilized to test the hypotheses proposed. Descriptive method of research was employed for the present study as this method is concerned with surveying, describing and investigating the existing phenomenon or issues, conditions and relationships that exist.

## Population and sample

In this study population include the students studying in 11<sup>th</sup> and 12<sup>th</sup> of senior secondary schools of Odisha. For the present study the sample consisted of 400 senior secondary school students of Odisha. The sample included both Male and Female students of Arts, Science and Commerce Academic Stream. A multi-stage random sampling technique was used to collect the data. Odisha was divided in four zones on the basis of commissionerates headquarters i.e. Baripada, Balasore, Bhadrak and Jajpur. In order to draw a representative sample, twelve senior secondary schools from these districts of Odisha State were selected. The selection of the schools was done randomly by the investigator and the subjects within the schools were also selected on the basis of randomization technique of sampling.

## Tools Used

The following data gathering instruments have been used in the present study to collect data:

1. Internet Usage Questionnaire
2. Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich, Smith, Garcia, and McKeachie, (1991) adapted in Indian conditions by the investigators
3. Perceived Social Support Scale developed by the investigator(s)
4. Alienation Scale by Dr. R.V. Patil

Tool '**Perceived Social Support Scale**' was constructed and standardized by the investigators to access the level of social support among the students. To identify and select items relating to social support an exhaustive review of literature on social support was made. All these items were given to five judges to judge the relevancy of these items for social support scale. The judges were senior professors of Education, Sociology and Psychology from Utkal University, Bhubaneswar. The first draft of the social support scale consisted of 60 items represented four subscales - Family, Teachers, Friends/Peer and online support. The preliminary form of the scale was administered on a sample of 20 students to find out the efficacy of language of items. After this preliminary administration, editing of the items was done as suggested by first try out. In order to determine the item analysis and homogeneity of the items, the prepared scale was individually administered to a randomly selected sample of 100 adolescents (male and female) of Bhadrak. Response sheets of 100 students were scored and were placed in an ascending order to employ item analysis for identifying item potentiality and then item discrimination. The top 27% and bottom 27% (Kelly, 1939) were selected for item analysis. The t- test was applied to find out the item discriminating value. The items having significant t-values were selected whereas others were rejected. So, the final draft of the scale consisted of 40 items. The reliability of the scale was found to be 0.861 and 0.751 by applying Spearman Brown formula (odd-even method) and test retest method respectively.

## DATA COLLECTION PROCEDURE

Data was collected through direct administration of scales and questionnaire to respondents. Respondents in the study included those who participated directly through filling the scales and questionnaire. The scales and questionnaire were administered to a group of randomly selected respondents. At the outset, rapport was established with the students. Detailed information and essential guidelines were provided to all respondents and aim of the survey was also fully explained to all respondents. Data was collected by using scales and questionnaire filled out in the classroom settings. The students were asked to tick mark and write the most appropriate response in their opinion. The investigator assured the respondents that the information so collected will be used only for research purpose. On completion, the researcher collected scales and questionnaire from the respondents.

## STATISTICAL TECHNIQUES USED

The following statistical techniques were used for analyzing the data:

1. Percentage

2. Mean, Standard Deviation and t-test.
3. Pearson's Product Moment Coefficient of Correlation
4. Chi-square

### ***DELIMITATIONS OF THE STUDY***

Keeping into consideration objectives and suitability of the research present study has been delimited to following:

5. Sample of the study was confined to the senior secondary schools of four districts of Odisha.
6. The study was restricted to only these variables i.e. Internet usage, Self Regulated Learning, Social Support and Alienation.
7. Only 400 students of XI and XII grades were considered for the study.
8. The study was delimited to the following tools:
  - a) Internet Usage Questionnaire
  - b) Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich, Smith, Garcia, and McKeachie, (1991) adaptation in Indian conditions by the investigator
  - c) Perceived Social Support Scale (PSSS) developed by the investigator
  - d) Alienation Scale by Dr. R.V. Patil

In terms of validity, social desirability is considered a significant bias and a significant threat to the construct validity of all self reporting tools/instruments.
6. The data collection for the study was done some time back in 2014 and things are bound to have changed to some extent. Hence the result generated may be taken as indicative of Internet usage of students.

### ***FINDINGS OF THE STUDY***

***PHASE: I*** A brief description of sample characteristics was provided in this phase.

### ***PHASE: II FINDINGS RELATED TO COMPARISON OF INTERNET USAGE AMONG SENIOR SECONDARY STUDENTS IN RELATION TO SELF REGULATED LEARNING, SOCIAL SUPPORT, ALIENATION AND GENDER Findings related to Internet usage and self regulated learning***

1. Significant difference was found between the groups of senior secondary students having high and low level of self regulated learning on their Internet usage. Low regulated students spend more time in surfing the Internet as compared to high regulated students.
2. Significant difference was found between both the groups' i.e. senior secondary students having high and low levels of meta-cognitive self regulation on their Internet usage. Low regulated students on meta-cognitive self regulated learning spend more time in surfing the Internet as compared to high regulated students.
3. Significant difference was found between both the groups' i.e. senior secondary students having high and low levels of management of time and study environment as a dimension of self regulated learning on their Internet usage. Low self regulated students on management of time and study
  - a. environment spend more time in surfing the Internet as compared to high self regulated students.
4. Significant difference was found between both the groups' i.e. senior secondary students having high and low levels of effort regulation on their Internet usage. Low regulated students on effort regulation spend more time in surfing the Internet as compared to high regulated students.
5. No significant difference was found between both the groups' i.e. senior secondary students having high and low levels of peer learning on their Internet usage.
6. No significant difference was found between both the groups' i.e. senior secondary students having high and low levels of help seeking on their Internet usage.

7. Significant difference was found between the two groups of male senior secondary students having high and low levels of self regulated learning on their Internet usage. Male students with low level of self regulated learning are more inclined to Internet usage than those high regulated students.
8. Significant difference was found between the two groups of female senior secondary students having high and low level of self regulated learning on their Internet usage. Female senior secondary students having low level of self regulated learning spend more time in browsing Internet than students with high level of self regulated learning.
9. Significant difference was found between the two groups of male and female senior secondary students having high level of self regulated learning on their Internet usage. Male students having high level of self regulated learning spend more time on Internet than their counterparts.
10. No significant difference was found between the two groups of male and female senior secondary students having low self regulated learning on their Internet usage.
11. No significant difference was found between the two groups of male senior secondary students of Arts having high and low self regulated learning on their Internet usage.
12. No significant difference was found between the two groups of female senior secondary students of Arts having high and low self regulated learning on their Internet usage.
13. No significant difference was found between the two groups of male and female senior secondary students of Arts having high level of self regulated learning on their Internet usage.
14. Significant difference was found between the two groups of male and female senior secondary students of Arts having low level of self regulated learning on their Internet usage.
15. No significant difference was found between the two groups of senior secondary students of Arts having high and low levels of self regulated learning on their Internet usage.
16. Significant difference was found between the two groups of male senior secondary students of Commerce having high and low level of self regulated learning on their Internet usage. Male senior secondary students of Commerce having low level of self regulated learning spend more time in browsing Internet than students with high level of self regulated learning.
17. Significant difference was found between the two groups of female senior secondary students of Commerce having high and low levels of self regulated learning on their Internet usage. Low regulated female students of Commerce spend more time in surfing the Internet as compared to high regulated female students of Commerce.
18. No significant difference was found between the two groups of male and female senior secondary students of Commerce having high level of self regulated learning on their Internet usage
19. No significant difference was found between the two groups of male and female senior secondary students of Commerce having low level of self regulated learning on their Internet usage
20. Significant difference was found between the two groups of senior secondary students of commerce having high and low level of self regulated learning on their Internet usage. Senior secondary students of Commerce having low level of self regulated learning spend more time in browsing Internet than those students with high level of self regulated learning.
21. No significant difference was found between the two groups of male senior secondary students of Science having high and low levels of self regulated learning on their Internet usage.
22. No significant difference was found between the two groups of female senior secondary students of Science having high and low levels of self regulated learning on their Internet usage.
23. No significant difference was found between the two groups of male and female senior secondary students of Science having high level of self regulated learning on their Internet usage.
24. No significant difference was found between the two groups of male and female senior secondary students of Science having low level of self regulated learning on their Internet usage.
25. No significant difference was found between the two groups of senior secondary students of



Science having high and low level of self regulated learning on their Internet usage.

### ***Findings related to Internet usage and Social Support***

- 1) Significant difference was found between both the groups' i.e. senior secondary students having high and low levels of social support on their Internet usage. Students having high social support spend more time in surfing the Internet as compared to those having low level of social support.
- 2) No significant difference was found between both the groups' i.e. senior secondary students having high and low levels of family support on their Internet usage.
- 3) No significant difference was found between both the groups' i.e. senior secondary students having high and low levels of teachers' support on their Internet usage.
- 4) No significant difference was found between both the groups' i.e. senior secondary students having high and low levels of friends'/peer support on their Internet usage.
- 5) Significant difference was found between both the groups' i.e. senior secondary students having high and low levels of online support. Students having high online support spend more time in surfing the Internet as compared to those having low level of online support.
- 6) No significant difference was found among male senior secondary students having high and low levels of social support on their Internet usage.
- 7) Significant difference was found among female senior secondary students having high and low level of social support on their Internet usage. Female senior secondary students of having high level of social support spend more time in browsing Internet than students with low level of social support.
- 8) No significant difference was found between the two groups of male and female students having high level of social support on their Internet usage.
- 9) Significant difference was found between the two groups of male and female students having low level of social support on their Internet usage. Male senior secondary students having low level of social support spend more time in browsing Internet than female students with low level of social support.
- 10) No significant difference was found between the two groups of male senior secondary students of Arts having high and low level of social support on their Internet usage.
- 11) Significant difference was found between the two groups of female senior secondary school students of Arts having high and low level of social support on their Internet usage. Female senior secondary students having high level of social support spend more time in browsing Internet than female students with low level of social support.
- 12) No significant difference was found between the two groups of male and female students of Arts having high level of social support on their Internet usage.
- 13) Significant difference was found between the two groups of male and female senior secondary students of Arts having low level of social support on their Internet usage. Male senior secondary students having low level of social support spend more time in browsing Internet than female students with low level of social support.
- 14) No significant difference was found among senior secondary students of Arts having high and low levels of social support on their Internet usage.
- 15) No significant difference was found between the two groups of male senior secondary students of Commerce having high and low level of social support on their Internet usage.
- 16) No significant difference was found between the two groups of female senior secondary students of Commerce having high and low levels of social support on their Internet usage.
- 17) No significant difference was found between the two groups of male and female senior secondary students of Commerce having high level of social support on their Internet usage.
- 18) No significant difference was found between the two groups of male and female senior secondary students of Commerce having low level of social support on their Internet usage.
- 19) No significant difference was found between the two groups of senior secondary students of

Commerce having high and low levels of social support on their Internet usage.

- 20) No significant difference was found between the two groups of male senior secondary students of Science having high and low levels of social support on their Internet usage.
- 21) No significant difference was found between the two groups of female senior secondary students of Science having high and low levels of social support on their Internet usage.
- 22) No significant difference was found between the two groups of male and female senior secondary students of Science having high level of social support on their Internet usage.
- 23) No significant difference was found between the two groups of male and female senior secondary students of Science having low level of social support on their Internet usage.
- 24) No significant difference was found between the two groups of senior secondary students of Science having high and low level of social support on their Internet usage.

#### ***Findings related to Internet usage and Alienation***

- 1) No significant difference was found between the two groups of senior secondary students having high and low levels of alienation on their Internet usage.
- 2) No significant difference was found between the two groups of male senior secondary students having high and low levels of alienation on their Internet usage.
- 3) No significant difference was found between the two groups of female senior secondary students having high and low levels of alienation on their Internet usage.
- 4) Significant difference was found between the two groups of male and female senior secondary students having high level of alienation on their Internet usage. Male students having high level of alienation spend more time on Internet.
- 5) Significant difference was found between the two groups of male and female senior secondary students having low level of alienation on their Internet usage. Male students having low level of alienation spend more time on Internet.
- 6) No significant difference was found between the two groups of male senior secondary students of Arts having high and low levels of alienation on their Internet usage.
- 7) No significant difference was found between the two groups of female senior secondary students of Arts having high and low levels of alienation on their Internet usage.
- 8) No significant difference was found between the two groups of male and female senior secondary students of Arts having high level of alienation on their Internet usage.
- 9) No significant difference was found between the two groups of male and female senior secondary students of Arts having low level of alienation on their Internet usage.
- 10) No significant difference was found between the two groups of senior secondary students of Arts having high and low levels of alienation on their Internet usage.
- 11) No significant difference was found between the two groups of male senior secondary students of Commerce having high and low levels of alienation on their Internet usage.
- 12) No significant difference was found between the two groups of female senior secondary students of Commerce having high and low levels of alienation on their Internet usage.
- 13) No significant difference was found between the two groups of male and female senior secondary students of Commerce having high level of alienation on their Internet usage.
- 14) No significant difference was found between the two groups of male and female senior secondary students of Commerce having low level of alienation on their Internet usage.
- 15) No significant difference was found between the two groups of senior secondary students of Commerce having high and low levels of alienation on their Internet usage.
- 16) No significant difference was found between the two groups of male senior secondary students of Science having high and low levels of alienation on their Internet usage.
- 17) No significant difference was found between the two groups of female senior secondary students of Science having high and low levels of alienation on their Internet usage.
- 18) No significant difference was found between the two groups of male and female senior secondary students of Science having high level of alienation on their Internet usage.

- 19) No significant difference was found between the two groups of male and female senior secondary students of Science having low level of alienation on their Internet usage.
- 20) No significant difference was found between the two groups of senior secondary students of Science having high and low levels of alienation on their Internet usage.

#### ***Findings related to Internet usage and Gender***

- 1) Significant difference was found between the two groups of male and female senior secondary students on their Internet usage. Male senior secondary students spend more time in surfing the Internet as compared to female students
- 2) No significant difference was found between the two groups of male and female senior secondary students of Arts on their Internet usage.
- 3) No significant difference was found between the two groups of male and female senior secondary students of Commerce on their Internet usage.
- 4) No significant difference was found between the two groups of male and female senior secondary students of Science on their Internet usage.

#### **PHASE-III FINDINGS RELATED TO RELATIONSHIP OF INTERNET**

##### ***USAGE WITH SELF REGULATED LEARNING, SOCIAL SUPPORT, ALIENATION OF SENIOR SECONDARY STUDENTS***

- 1) Significant negative relationship was found between Internet usage and self regulated learning of senior secondary students. Hence, it may be inferred that if level of self regulated learning increases, Internet usage decreases.
- 2) Significant negative relationship was found between Internet usage and meta- cognitive self regulated learning of senior secondary students. Hence, it may be inferred that if level of meta-cognitive self regulated learning increases usage of Internet decreases.
- 3) Significant negative relationship was found between Internet usage and management of time and study environment i.e. Dimension of self regulated learning of students indicating that if level of management of time and study as a dimension of self regulated learning increases, usage of Internet decreases.
- 4) Significant negative relationship was found between Internet usage and effort regulation as a dimension of self regulated leaning indicating that if level of effort regulation increases, Internet usage decreases.
- 5) Negative relationship was found between Internet usage and peer learning as a dimension of self regulated leaning but this relationship was not found to be significant.
- 6) Positive relationship was found between Internet usage and self regulated leaning on help seeking but this relationship was not found to be significant. So, no significant relationship was found between Internet usage and help seeking as a dimension of self regulated learning.
- 7) Significant positive relationship was found between Internet usage and social support of senior secondary students indicating that if level of social support increases Internet usage also increases.
- 8) Positive relationship was found between Internet usage and family support as a dimension of social support but this relationship was not found to be significant.
- 9) Negative relationship was found between Internet usage and teachers support as a dimension of social support but this relationship was not found to be significant.
- 10) Significant positive relationship was found between Internet usage and friends/peer support as a dimension of social support. Further, it can be inferred that if level of friends/peer support as a dimension of social support increases the Internet usage also increases.
- 11) Significant positive relationship was found between Internet usage and online social support as a dimension of social support indicating that if level of online social support increases; the usage of the Internet also increases.
- 12) Negative relationship, though not significant, was found between Internet usage and alienation.

Therefore, no significant relationship was found between Internet usage and alienation of students.

#### ***PHASE: IV FINDINGS RELATED TO COMPARISON OF STUDENTS'***

##### ***VIEWS RELATED TO INTERNET IN TERMS OF SELF REGULATED LEARNING, SOCIAL SUPPORT AND ALIENATION Concerns related to Internet Usage and Self Regulated Learning***

No significant difference was found between the two groups of students having high and low levels of self regulated learning on the Internet related activities in terms of giving password to unknown, blocking IMS from unwanted person.

And significant difference was found between the two groups of students having high and low levels of self regulated learning on the Internet related activities in terms of pretending to be a different person, sending false mail, IMS or prank mail to unknown person, and accepting friend request from unknown person on the social networking sites.

Students with low regulated learning presented themselves with fake identity, sent false e-mails, IMS or prank e-mail to another persons and accepted friend requests of unknown person on their social networking sites as compared to those students having high level of self regulated learning.

It was found that students having high and low levels of self regulated learning do not differ significantly on their opinion regarding need to be careful while accessing the Internet whereas they significantly differ in their opinion on the need of parents' permission to use Internet. From the analysis, it was found that students with high self regulated learning showed their consent for the need of parents' permission for Internet access as compared to those students with low self regulated learning.

It was found that students having high and low levels of self regulated learning do not differ significantly on the comparison of the Internet with conventional documents in terms of students consideration of Internet as more informative ,more expensive and o more useful

And significant difference was found between the two groups in terms of students' opinion regarding Internet as o time saving and preference of Internet to conventional documents.

From the analysis it was found that a majority of students having high regulated learning consider Internet time saving as compared to those with low self regulated learning, whereas Internet is more preferred by students with low regulated learning as compared to students having high self regulated learning.

- a) It was found that students having high and low levels of self regulated learning do not differ significantly on their opinions regarding influence of Internet usage on their academic efficiency.
- b) No significant difference was found between the two groups of high self regulated learners and low self regulated learners on their opinion about replacement of library services by the Internet.
- c) It was found that students having high and low self regulated learning do not differ significantly on their perception of Internet as a way of escaping from problems and relieving stress.
- d) Significant difference was found between the two groups of students having high and low level of self regulated learning on their expressed opinion regarding the effect of Internet on physical and psychological health indicating that a majority of students with high self regulated learning agreed that Internet affects their physical and psychological health as compared to those students with low self regulated learning. But from further analysis it was found that students having high and low levels of self regulated learning do not differ significantly on their perception of Internet's positive or negative effects on physical or psychological health.
- e) It was found that students having high and low levels of self regulated learning do not differ significantly on the importance of Internet in their life.

### ***Concerns related to Internet Usage and Social Support***

It was found that students having high and low social support do not differ significantly in terms of giving password to unknown, pretending to be a different person, sending false mail, IMS or prank mail to unknown person, and accepting friend request from unknown person on the social networking sites. And significant difference was found between the two groups in terms of - blocking IMS from unwanted person.

From the further analysis it was indicated that students with high social support are more aware about blocking the IMS than students with low social support.

- a. It was found that students having high and low social support do not differ significantly on their opinions regarding being careful while surfing the Internet.
- b. It was found that students having high and low social support do not differ significantly on the comparison of the Internet with conventional documents expressing the Internet as-
- c. time saving, more informative, more expensive, more useful and more preferred.
- d. No significant difference was found between the two groups of students having high and low level of social support on their opinion about influence of Internet usage on their academic efficiency.
- e. It was found that students having high and low social support do not differ significantly on their opinion about replacement of library services by the Internet.
- f. It was found that students having high and low social support do not differ significantly in their perception of Internet as a way of escaping from problems and relieving stress.
- g. Significant difference was found between the two groups of students having high and low level of social support on their expressed opinion regarding the effect of Internet on physical and psychological health indicating that a majority of students with high social support agreed that Internet affects their physical and psychological health as compared to those students with low social support. But from further analysis it was found that students having high and low levels of social support do not differ significantly on their perception of Internet's positive or negative effects on physical or psychological health.
- h. It was found that students having high and low social support do not differ significantly on the importance of Internet in their life.

### ***Concerns Related to Internet Usage and Alienation***

It was found that students having high and low alienation do not differ significantly in terms of giving password to unknown, pretending to be a different person, sending false mail, IMS or prank mail to unknown person, and accepting friend request from unknown person on the social networking sites. And significant difference was found between the two groups in terms of blocking IMS from unwanted person.

From the further analysis it was found that a majority of students with high alienation are engaged in blocking the IMS than students with low alienation.

- 1) It was found that students having high and low levels of alienation do not differ significantly on their opinions regarding being careful while surfing the Internet.
- 2) It was found that students having high and low levels of alienation do not differ significantly on the comparison of the Internet with conventional documents expressing the Internet as- time saving, more informative, more expensive, more useful and, more preferred.
- 3) No significant difference was found between the two groups of students having high and low level of alienation on their opinion about influence of Internet usage on their academic efficiency.
- 4) No significant difference was found between the two groups of students having high and low levels of alienation on their opinion about replacement of library services by the Internet.

- 5) It was found that students having high and low levels of alienation do not differ significantly on their perception of Internet as a way of escaping from problems and relieving stress.
- 6) No significant difference was found between the two groups of students having high and low level of social support on their expressed opinion regarding the effect of Internet on physical and psychological health.
- 7) Significant difference was found between the two groups of low alienated and high alienated students on the importance of Internet in their life indicating that students with low alienation consider Internet important in their life as compared to those students with high alienation.

### ***SUGGESTIONS FOR FURTHER RESEARCH***

The solution of one problem tends to indicate many unresolved problems which need scientific probing. No single research can find solutions for all these problems. There is wide scope for further research in this field. It is very difficult for a researcher to cover all aspects of a research problem in hand, so a few suggestions are needed for further research in the direction. Here are a few suggestions for further research work based on the experience of investigator in the field of study.

- 1) The study was conducted on senior secondary students; similar studies may be conducted by drawing samples from different grade levels like college students, university students, and students of professional courses and from different educational set-ups (government, semi-govt., private and deemed) to have in depth knowledge.
- 2) The present study was confined to a sample of 400 students of senior secondary schools from four districts of Odisha; the similar studies may be repeated with a larger sample and in different regions to generalize results.
- 3) Similar studies can be conducted to find out the effect of other independent variables on the Internet usage.
- 4) Some studies covering pattern of Internet usage, Internet addiction and influence on the behaviour pattern among the Internet user could be undertaken.
- 5) The present study was to investigate Internet usage among students in relation to self regulated learning, social support and alienation. But it will also be advisable to conduct studies to investigate influence of perceived Internet usage on self regulated learning, social support and alienation.
- 6) Some comparative, follow-up, longitudinal and/or experimental studies could be undertaken to evaluate the perceived influence of Internet use on different age groups at different levels e.g. school level, college level and university level.
- 7) The present study was carried out utilizing quantitative survey methodology to investigate existing differences, relationships between Internet usage and variables under study. But to get an entire picture of reality multi-method approach incorporating both quantitative and qualitative methods can be employed to study the phenomenon.
- 8) The triangulation approach can be adopted by applying more than one investigator, more than one method, large sample with more than one method for a single problem.
- 9) In terms of validity, social desirability is considered a significant bias and a significant threat to the construct validity of all self reporting tools/instruments. So similar studies can be conducted with another measures/ tools of the variables under study.
- 10) In depth study on self regulated learning, social support and alienation can be carried out.

### ***CONCLUSION***

The most outstanding characteristic of any research is that it contributes something to the development of the area concerned. Keeping in view objectives of the study, the investigator has suggested the implications of present study to the field of education. This study has following implications for parents, teachers, educational administrators and all those involved in the lives of senior secondary students:

- 1) Use of Internet and its tools are developing favourably in academic and learning sectors. It has revolutionized the academic and educational system. But it also poses risks for youths as there are various concerns about privacy, security, pornography and Internet crime. Therefore, there is a strong requirement to bring awareness and motivate students to use Internet with safeguards and appropriately for information, education and communication point of view.
- 2) Attitude of the teachers and parents towards the new technology 'INTERNET' should be changed. It is not only a waste of time. Students should be encouraged to use the Internet resources to prepare their educational assignments and presentations.
- 3) Healthy online and offline relationships should be maintained. Of course there are risk factors of teen Internet usage but ban on the Internet is not a solution. Instead of putting ban on the Internet, parents should set the rules for Internet usage like an Internet time log, no Internet surfing until students complete their homework etc.
- 4) Computer should be kept in a common area from where parents can put an eye on their children's activities on the Internet.
- 5) It is not enough to consider only the time spent online by adolescents; rather parents should have a watch on the Internet related activities by asking questions about their online activities. They should try to know real life identities for their children's online friends. Students should be encouraged to engage in constructive online activities and interaction.
- 6) If students exhibit negative effects on their school performance, health and offline relationships with family and friends due to their over involvement in other activities on the Internet, parents should talk with them in a friendly manner and they should be encouraged to take up other hobbies and activities such as reading books and team sports. There should be a regular co-operation and interaction among parents, students and teachers to ensure a better use of Internet by adolescents.
- 7) Extensive training programmes should be organized at school levels for students, teachers and parents as well so that all categories of users can improve their proficiency in the use of the Internet. Internet literacy does not imply skill sets alone. It also implies knowledge about safeguards, guidelines which we need to enlighten with our younger generation.
- 8) Students of Arts and Science, as compared to students of commerce do not receive exposure to ICT since their courses are largely modeled on conventional pedagogy. The Internet and allied technologies should be included in the curriculum so that students would be benefitted to use Internet effectively for their Educational purpose.
- 9) Media literacy programmes should be incorporated in the curricula through the integration of the teacher-librarian cooperation so that students can be instructing and educated how to use Internet and how to evaluate the information sources on the web from the curricular point of view assisting students to differentiate between useful and deceiving information on the Internet, blocking of IMS from unwanted person whom they don't want to talk to etc.
- 10) If teachers and parents goal is to create successful life-long learners, self regulated learning strategies must be inculcated among students through direct instruction and modeling. Choices and freedom should be given to the students so that they can regulate their own learning.
- 11) Peers play an important role in creating a positive and favourable learning environment. So constructive, cooperative and collaborative learning should be encouraged.
- 12) Fundamental changes are required to be made in the basic functioning of school level for teachers so that they would be able to allocate the time and resources necessary for preparing students to be self regulated learners. Most importantly, classroom curriculum, activities, task and assessment systems must be organized in a way that help in developing independent, self directed inquiry and tactical problems- solving abilities among students.
- 13) Students, Teachers and Parents must be aware of time spent on Internet by the learners and its effects on the real life relationships and interactions. One must use Internet and not be addicted

to it, as Internet is a socially connecting as well as socially isolating device at the same time.

- 14) It is important to mention the implication of the present study for the educational administration. Educational policy-makers must restructure the school curriculum in keeping the necessity of connecting to virtual world in the classroom to motivate the adolescents for excellence in learning which makes them rise to meet competition and higher expectations of the society especially in case of rural/remote area's adolescents.
- 15) The school counsellor should provide counselling services with the focus on pattern of Internet usage and its influence on Social, psychological aspects of an individual. Adolescents should be encouraged to avail these services frequently as per their needs, so that they can have a positive attitude and better adjustment which is essential to live a happy and healthy life.

## REFERENCES

- 1) Abdullah, M.N.L.Y. and Bakar, K.A.(2006). Motivational beliefs and self-regulated learning: a study on Malaysian students. Retrieved September 18, 2012 from [http://eprints.usm.my/4891/1/motivational\\_belief\\_and\\_self-regulated\\_learning,\\_a\\_study\\_on\\_Malaysian\\_students.pdf](http://eprints.usm.my/4891/1/motivational_belief_and_self-regulated_learning,_a_study_on_Malaysian_students.pdf)
  - 2) Acikalin, M. (2009). Pre-service Elementary Teachers' Beliefs about Use of the Internet in the Social Studies Classroom. *European Journal of Teacher Education*, 32, 305-320.
  - 3) Ackermann, E. (1996). *Learning to use the Internet: An introduction with examples and exercises*. New Delhi: BPB Publications.
  - 4) Adegoke, L. (2009). *Introduction to Public Relations: Principles, Media and Methods*. Amsterdam: Homelab Multiventures
  - 5) Babbie, E. (1989). *The practice of social research* (5th ed.). Belmont, California: Wadsworth Publishing Company
  - 6) Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215
  - 7) Best, J.W. and Khan, J.V. (1993). *Research in Education*. Boston: Library of Congress Cataloguing
  - 8) Cady, Glee Harrah, & Me Gregor, Pal (1996). *Mastering the Internet*. New Delhi: BPB Publications.
  - 9) Campbell, A.J., Cumming, S. R. & Hughes, I. (2006). Internet use by the socially fearful: addiction or therapy? *CyberPsychology and Behavior*, 9 (1), 69-75
  - 10) Caplan, G. (1974). *Support systems and community mental health: Lectures on concept development*. New York: Behavioral Publications.
  - 11) Cutrona, C.E., and Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B.R. Sarason, I. G Sarason, & R - Pierce (Eds ), *Social Support: An Interactional view* (pp 319-366). New York: Wiley
  - 12) d'Apollonia, S., Galley, D., & Simpson, M. (2001). Formal reasoning and conceptual development. Retrieved July 17, 2012 from <http://www.place.dawsoncollege.qc.ca/~sdapoll/PAREA96.htm>
  - 13) Dabbagh, N., & Kitsantas, A. (2005). Using Web-based pedagogical tools as scaffolds for self-regulated learning. *Instructional Science*, 33, 513-540.
  - 14) Esen, B.K. & Gündogdu, M. (2010). The relationship between internet addiction, peer pressure and perceived social support among adolescents, *The International Journal of Educational Researchers*, 2(1), 29-36.
  - 15) Finn, J. (1995). Computer based self help groups: a new resource to supplement support groups. *Social Work with Groups*, 18, 109-117.
  - 16) Gay, L.R. and Airasian, P.W. (2000) *Educational Research: Competencies for Analysis and Application*. : Merrill ISBN:0130961035
  - 17) Halder, D. and Jaishankar, K. (2013) Use and misuse of internet by semi-urban and rural youth in India: A baseline survey report, *Centre for Cyber Victim Counselling* retrieved on Nov. 17, 2014 from <http://www.cybervictims.org>
  - 18) Hupcey, J.E. (1998). Clarifying the social support theory- research linkage. *Journal of Advanced Nursing*, 27, 1231-1241.
- Internet Growth Statistics* (2010). Today's road to e-commerce and global trade Internet technology reports. Retrieved from <http://www.internet world stats.com/emarketing.html>
- Internet Society Bulletin* (2003). News from the Internet society. Bulletin No. 4. Retrieved from



<http://www.isoc.org/news/>

- 19) *Internet Usage Statistics* (2010). World Internet users and population stats. Retrieved from <http://www.internetworldstats.com/stats.html>.  
*Internet Wikipedia* (2010). Retrieved from <http://en.wikipedia.org/wiki/Internet>  
*Internet World Statistics* (2010). Retrieved on 2.10.2014 from <http://www.internetworldstats.com/stats.htm>
- 20) Kuo, Y.C. (2010). Interaction, Internet Self-Efficacy, and Self-Regulated Learning as Predictors of Student Satisfaction in Distance Education Courses Retrieved on Dec. 17, 2012 from <http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1737&context=etd>
- 21) Labuhn, A.S., Zimmerman, B.J., & Hasselhorn, M. (2010). Enhancing students' self - regulation and mathematics performance: The influence of feedback and selfevaluative standards Meta-cognition and Learning, 5 (2), 173-194
- 22) Mythily, S., Qiu, S., & Winslow, M. (2008). Prevalence and correlates of excessive Internet use among youth in Singapore. *The Annals, Academy of Medicine, Singapore*, 37, 9-14.
- 23) Nalwa, K., and Anand, A.P. (2003) Internet addiction in students: a cause of concern. *Cyber Psychology Behaviour*, 6 (6),
- 24) Norbeck, J.S., Lindsey, A.M. and Carrier, V.I. (1981). The development of an instrument to measure social support. *Nursing Research*. 30, 264-269.
- 25) Oostrom, M.A.Van, Tijhuis, M.A.R., Haes, J.C., Tempelaar, R. and Kromhout D., (1995). A measurement of social support in epidemiological research: the social experiences checklist tested in a general population in The Netherlands. *Journal of Epidemiology and Community Health*, 49, 518-524.
- 26) Puzziferro, M. (2008). Online technologies self-efficacy and self-regulated learning as predictors of final grade and satisfaction in college-level online courses. *American Journal of Distance Education*, 22(2), 72-89.
- 27) Rainie, L., & Horrigan, J. (2005). A decade of adoption: How the Internet has woven itself into American life. Washington DC: Pew Internet and Family Life.
- 28) Suzuki, L. K., & Calzo, J. P. (2004). The search for peer advice in cyberspace: An examination of online teen bulletin boards about health and sexuality. *Applied Developmental Psychology*, 25, 685-698.
- 29) Tadasad, G., Maheswarappa, B. and Alur, S. (2003). Use of internet by undergraduate students of PDA College of Engineering, Gulbarga, *Annala of Library and Information studies*, 50(1), 31-42.