

# REVIEW OF RESEARCH



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# A STUDY ON COMPUTER SELF EFFICACY AND HOME ENVIRONMENT AMONG HIGHER SECONDARY STUDENTS

# R. Selvaraj<sup>1</sup> and Dr. D. Hemalatha Kalaimathi<sup>2</sup>

<sup>1</sup>Ph.D. Research Scholar, Department of Education, Dravidian University, Kuppam, Andhra Pradesh.

2Assistant Professor of Biological Science Education, Lady Willingdon Institute of Advanced Study in Education, Triplicane, Chennai, Tamil Nadu.

#### **ABSTRACT:**

Increasingly, computer technology has been and is becoming more powerful tool in all over the world for changing the strategies of teaching and learning in classrooms since its introduction in education in the 1960s and 70s. This has been necessitated by the conceptions of techno-reformers (Papert, 1980) that computer technology can revolutionalise the educational landscape. Nowadays, computer technology (e.g., the Internet, iPad, MOOCS, 3Ds, blackboard, MOODLE, etc.) has become a common tool in many schools and institutions in both developing and developed countries; and are being used to teach all subject areas (Khorrami-Arani, 2001) in different modes including distance teaching and regular teaching. The intention is that computer technology can enhance classroom teaching for development of 21st century competencies. Home is the first and the most significant place for the child's inclusive growth and development. It provides not only the hereditary transmission of basic potentials for the development of the child, but also the favorable environment in terms of interpersonal relationship and cultural pattern. The present study was explored to find out the computer self efficacy and home environment among higher secondary students. Survey method was conducted on a random sample of 1000 higher secondary school students. Data was analyzed using F-ratio. Results found that there is significant difference in computer self efficacy and home environment of higher secondary students based on type of management.

**KEYWORDS**: Computer Self Efficacy, Home Environment, Higher Secondary Students.

#### INTRODUCTION

Today's cyber era is full of competition; everyone is in a race to compete with others to achieve various life goals. Amongst the various areas of competition, academic achievement is the most relevant and important aspect as per the culture of education in our society, where more than the children, parents compete among each other. The future of any country depends upon how equipped its youth is in their level of motivation, their character and their aspirations. This is achieved when we have school machinery which takes all efforts to create such an academic environment where excellence is nourished and developed. The role of education is to prepare productive citizens and equip them to contribute positively to the development of the general economy of any nation.

Children grow up in several environments - home, school and community are the setting for social and intellectual experiences from which they acquire and develop the skills, attitudes and attachments which characterize them as individuals and shape their choice and performance as adults. During childhood and adolescence most of the social influence upon individual can be categorized as being associated either with home or with school environments. In the early years the family is the most potent source of influence, but once children have entered school, new opportunities are created for adults, and for peers and older pupils to influence individual development.

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#### **NEED FOR THE STUDY**

The ultimate aim of education is to train the youth to make proper adjustments to the different types of environment in which they have to live. Psychologists and psychiatrists have brought to light on the basis of their researches that making proper adjustments to the changing nature of the environment is the most important prerequisite condition for a happy and successful life. An individual is not born adjusted or maladjusted. It is as his physical, mental and emotional potentialities are influenced and directed by the factors of the environment in which he finds himself adjusted or maladjusted. The social standing of an individual is strongly characterized by the predominant features of his or her family background. Knowledge of computers is a very important aspect of today's education. Computers are common tools in most schools, and are being used increasingly in all subject areas. Although some students are enthusiastic about using computers, others may be more apprehensive.

# **OBJECTIVES OF THE STUDY**

- To find out the significant difference in computer self efficacy of higher secondary students based on type of management.
- To find out the significant difference in home environment of higher secondary students based on type of management.

#### **HYPOTHESES**

- 1. There is no significant difference in computer self efficacy of higher secondary students based on type of management.
- **2.** There is no significant difference in home environment of higher secondary students based on type of management.

#### **METHOD & SAMPLE**

Survey method was used for this study. As many as 1000 higher secondary school students were chosen using random sambling technique.

#### **TOOLS**

- 1. Computer Self-Efficacy Inventory (CSEI) constructed and validated by the investigator under the guidance of the supervisor (2015).
- 2. Home Environment Inventory (HEI) standardized by Prof. Karuna Shankar Mishra, adapted and revalidated by keeping some of the items and rejecting some items as per the requirement and need of the present study by the investigator and the research supervisor (2015).

# **DATA ANALYSIS**

Table 1: Computer Self Efficacy of Higher Secondary Students with respect to Type of Management

| Factors of                           | Type of Mana    | gement             |                 | F      | Level of<br>Significance | Group Differ<br>Significantly |
|--------------------------------------|-----------------|--------------------|-----------------|--------|--------------------------|-------------------------------|
| Computer Self<br>Efficacy            | Government (1)  | Govt. Aided<br>(2) | Private (3)     |        |                          |                               |
| Beginning Level<br>Computer Skills   | 4.81<br>(2.07)  | 5.35<br>(1.71)     | 5.90<br>(1.68)  | 29.463 | P<0.01                   | 1,2 1,3                       |
| Advanced Level<br>Computer Skills    | 5.84<br>(2.19)  | 6.76<br>(2.00)     | 7.04<br>(1.85)  | 31.915 | P<0.01                   | 2,3                           |
| Internet Handling<br>Skills          | 5.72<br>(2.08)  | 6.37<br>(1.78)     | 6.81<br>(1.80)  | 28.413 | P<0.01                   | 1,2 1,3 2,3                   |
| Overall<br>Computer<br>Self Efficacy | 27.83<br>(7.68) | 29.10<br>(5.05)    | 29.95<br>(6.11) | 34.979 | P<0.01                   | 1,2 1,3 2,3                   |

to and for all California.

Table-1 shows that the overall computer self efficacy score is high for the students studying in private schools (29.95) and the same was low for the students studying in the government schools (27.83). The P-value is less than 0.01 with regard to overall computer self efficacy and for all the three factors namely students having beginning level computer skills, advanced level computer skills and internet handling skills. Using Tukey HSD, it is revealed that higher secondary students belonging to different types of school management, i.e. government, government aided and private schools significantly differed in their computer self efficacy and all its factors namely students having beginning level computer skills, advanced level computer skills and internet handling skills at 0.01 level.

Table 2: Home Environment of Higher Secondary Students with respect to Type of Management

| Factors of Home<br>Environment | Type of Management |                   |                       |         |                          |                               |
|--------------------------------|--------------------|-------------------|-----------------------|---------|--------------------------|-------------------------------|
|                                | Government (1)     | Private (2)       | Govt.<br>Aided<br>(3) | F       | Level of<br>Significance | Group Differ<br>Significantly |
| Control                        | 18.23<br>(4.99)    | 22.58<br>(4.14)   | 21.30<br>(4.38)       | 81.721  | P<0.01                   | 1,2 1,3 2,3                   |
| Protectiveness                 | 18.05<br>(5.56)    | 22.71<br>(4.76)   | 21.33<br>(5.28)       | 70.386  | P<0.01                   | 1,3 2,3                       |
| Punishment                     | 15.95<br>(5.22)    | 21.09<br>(4.79)   | 20.35<br>(6.07)       | 88.790  | P<0.01                   | 1,2 1,3 2,3                   |
| Conformity                     | 17.12<br>(5.23)    | 21.80<br>(4.29)   | 20.23<br>(6.09)       | 68.364  | P<0.01                   | 2,3                           |
| Social Isolation               | 15.75<br>(5.61)    | 18.47<br>(3.76)   | 17.99<br>(3.99)       | 34.237  | P<0.01                   | 1,3 2,3                       |
| Overall<br>Home<br>Environment | 85.10<br>(21.79)   | 106.65<br>(16.20) | 101.20<br>(16.82)     | 123.091 | P<0.01                   | 1,2 1,3 2,3                   |

Table-2 depicts that overall home environment score was high for the students studying in private schools (106.65) and the same was low for the students studying in the government schools (85.10). The P-value is less than 0.01, with regard to overall home environment for all the five factors namely control, protectiveness, punishment, conformity and social isolation. Using Tukey HSD, it is revealed that higher secondary students belonging to different types of school management, i.e. government, government aided and private schools significantly differed in their home environment and all its five factors namely control, protectiveness, punishment, conformity and social isolation at 0.01level.

### **FINDINGS**

1) There is significant difference in computer self efficacy and its dimension based on type of management among higher secondary students.

Type of management has a significant difference on the overall computer self efficacy of groups 1&2, 1&3 and 2&3. the mean scores for overall computer self efficacy is found to be highest for the students studying in private schools (5.90) followed by the students studying in government aided schools (5.35) and is lowest for the students studying in government schools (4.81).

For the dimension, beginning level computer skills, groups 1&2 and 1&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

For the dimension advanced level computer skills, groups 2&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

For the dimension, Internet Handling skills, groups 1&2, 1&3 and 2&3 differ significantly at 0.01 level. The mean score is found to be highest for the students studying in Private Schools followed by the students studying in Government Aided Schools and is lowest for the students studying in Government Schools.

2) There is significant difference in home environment and its dimension based on type of management among higher secondary students.

Type of management has a significant difference on the overall home environment of groups 1&2, 1&3 and 2&3. the mean score for overall home environment is found to be highest for the students studying in government aided schools (101.20) followed by the students studying in private schools (106.65) and is lowest for the students studying in government schools (85.10).

For the dimension control, groups 1&2, 1&3 and 2&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

For the dimension protectiveness, groups 1&3 and 2&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

For the dimension punishment, groups 1&2, 1&3 and 2&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

For the dimension conformity, group 2&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

For the dimension social isolation, groups 1&3 and 2&3 differ significantly at 0.01 level. the mean score is found to be highest for the students studying in private schools followed by the students studying in government aided schools and is lowest for the students studying in government schools.

# CONCLUSION

The findings are in agreement with the studies Dornbusch et al. (1992) examined the impact of authoritative parenting, parental involvement in schooling, and parental encouragement to succeed on adolescent school achievement in an ethnically and socio- economically heterogeneous sample of approximately 6,400 American 14-18-year-olds. Adolescents reported in 1987 on their parents' general child-rearing practices and on their parents' achievement specific socialization behaviors. In 1987, and again in 1988, data were collected on several aspects of the adolescents' school performance and school engagement. Authoritative parenting (high acceptance, supervision, and psychological autonomy granting) led to better adolescent school performance and stronger school engagement. The positive impact of authoritative parenting on adolescent achievement, however, was mediated by the positive effect of authoritativeness on parental involvement in schooling. In addition, non-authoritativeness attenuated the beneficial impact of parental involvement in schooling on adolescent achievement. Parental involvement was much more likely to promote adolescent school success when it occurs in the context of an authoritative home environment.

Computer knowledge is of prime most importance in the current technological advancement happening globally. So promoting technologically knowledge is very crucial but it has some problems as well. We have been hearing of many socially disturbing news because of the wrong use of technology therefore a huge responsibility lies on the shoulders of both parents and school. Parents and well as teachers should be affectionate enough. They should listen and understand all the queries, problems and needs of their children and should try to answer and solve them.

#### REFERENCES

- 1. Abott, R. (2001). An Assessment of the Computer Science Major Field Achievement Test. Los Angeles: U.S. Online Journal, Department of Computer Science.
- 2. Bansal, S., Thind, S. K., & Jaswal, S. (2006). Relationship between quality of home environment, locus of control and achievement motivation among high achiever urban female adolescents. Journal of Human Ecology 19(4), 253-257.
- 3. Daulta, M. S. (2008). Impact of home environment on the scholastic achievement of children. Journal of Human Ecology, 23(1), 75-77.
- 4. Feuerstein, A. (2000). School Characteristics and Parent Involvement: Influences on Participation in Children's Schools. The Journal of Educational Research, 94(1), 29-40.