# CONSTRUCTION AND VALIDATION OF STUDY PRACTICES INVENTORY (SPI) FOR HIGHER SECONDARY STUDENTS

A. Balasundaram Research Scholar

Dr. I. Muthuchamy, Professor and Head, Department of Educational Technology, Bharathidasan University, Khajamalai Campus, Tiruchirappalli - 620 023, Tamilnadu, India, Email: angabala@gmail.com, Mobile No: +91 9994761184

#### Abstract

The study habit is essential for academic and professional success. The present research aimed to develop and validate a "Study Habits Inventory" for high school students. The researcher examined five areas of study habits: topic planning, reading and taking notes, learning environment, concentration habits, and test preparation. Based on these measurements, the investigator created 65 items. The investigator enlisted the help of five education and psychology professionals to check the inventory's content and face validity. Following the expert's review, 8 items were deleted, and several of the questions were changed in response to their key ideas, yielding 54 items for early testing of the scale. The preliminary try-out scale was attended by 50 students from Tiruchirappalli's upper secondary schools. The Correlation Coefficient was utilized to separate out the important components. The instrument contains both positive and negative feedback. The creation and validation of the study practices scale, as well as the final draft of the instrument, are all detailed.

Keywords: Study Practices, Study Practices Scale, Construction, Validation, Students.

## Introduction

Learners must be encouraged to adopt study habits in order to continue in the educational process in a regular and continuous manner. Teachers teach all students at the same time, yet not all students get the same grades (Sheik,2013). Study habits are regular ways for students to exercise and practice outside of class hours in order to master a subject or topic of syllabus (Ahmed, Alamgir and Kulsuma,2019). Having a personal timetable, attempting to study at the same times each day, setting specific goals for studying, studying course materials on a regular basis, reading class topics before the class for better

understanding teachers' lectures, working on study tasks i.e. assignment, homework, etc., completing assignment, homework on time, reviewing notes taken in classes, choosing a specific place that is free of noise, and other factors that are important. Developing study habits is essential not just for academic performance, but also for creative and critical thinking, as well as metacognition, which are all necessary for the development of Higher Order Thinking Skills (HOTS) (Sreelekha et al.,2015). It is often assumed that students who practice great study habits outperform those who practice poor study habits (Arora,2016). According to psychologists and educators, there is a relationship between study habits. Study habits serve as a pathway for learning. It may be seen as both a means to a goal and an end in itself (Neelam,2015). Thus, the relevance of study habit' as a habit is more general than specific. It has far-reaching consequences in people's lives, as well as cumulative and interacting societal implications (Ram,2017).

#### **Review of Related Literature**

The Bangla version of the Study Habits Questionnaire was a psychometrically sound measure fit for Bangladeshi university students, according to Ahmed, Alamgir, and Kulsuma (2019), who investigated the essential relationship between study habits and academic achievement.

Sreelekha et al. (2015) evaluated the study habits and academic performance of firstyear MBBS students. Students with strong study habits outscored those with bad study habits by a considerable margin on the part completion test.

Arora (2016) explored the relationship between adolescent academic achievement and study habits. Adolescent academic achievement and study habits were shown to have a strong positive correlation.

Neelam (2015) studied the study habits of children of working and nonworking mothers in connection to their home environment. There was a significant difference in study habits between male and female children. There was a significant variation in study habits between rural and urban youth.

Sheik (2013) conducted a study comparing the study habits, emotional intelligence, and academic achievement of working and nonworking mothers. Modern competitive education, according to the data, provides equal opportunities for both boys and females. This naturally increases desire and expectation, which fuels competitive spirit.

Ram (2017) looked into the study habits of senior secondary school students in Rajasthan's Alwar District. There is a significant difference between students' study habits in government and private senior secondary schools, male students' study habits in government and private senior secondary schools, and female students' study habits in government and private senior secondary schools, according to the findings.

Jafari, Aghaei, and Khatony (2019) examined the study habits of medical sciences students in Kermanshah, Iran, and the relationship between them and academic achievement. The researcher proposes that students' study habits be addressed and analyzed at the time of admission to university, and that students be given specific instruction to help them establish or alter study habits in order to enhance their academic achievements.

Pakseresht and Mehri (2015) studied the study habits of Rehabilitation Faculty Students at an Iranian University of Medical Sciences over the course of a semester. Taking notes and reading skills were strongly linked. Taking notes and time management were also strongly linked.

Sharma (2018) created and validated a study habits assessment for secondary school students. The study habits scale is important because understanding the current status of students' study habits is incredibly useful for teachers, school counselors, parents, and students.

The Teacher Trainee Study Habits Scale was created and validated by Kapadia and Joshi (2019). The construct validity of the developed tool's credibility was shown.

Rana and Deepika (2020) evaluated upper secondary school students' study habits depending on gender, school type, and academic stream. Significant gender differences in upper secondary school students' study habits have been found in favor of females.

Crede and Kuncel (2011) studied students' Study Habits, Skills, and Attitudes. The Third Supporting Collegiate Academic Performance Pillar In predicting academic accomplishment, habit and skill evaluations exceed every other non-cognitive individual difference variable tested so far and should be regarded the third pillar of academic success.

#### **Objectives of the study**

✤ To construct study practices inventory for Higher Secondary School Students

- ✤ To standardize study practices inventory for Higher Secondary School Students
- ✤ To establish norms for study practices inventory for Higher Secondary School Students.

#### **Research Design**

The researcher wanted to look at the study habits inventory for Higher Secondary School Students in Tirucirappalli District, Tamil Nadu. The population of the study comprises of all Tiruchirappalli Higher Secondary School pupils. The current study included purposeful sampling. The researcher then selects a sample at random. The instrument was given to 50 randomly chosen Higher Secondary School pupils. Permission and research ethics were obtained from Higher Secondary Students at each level of the tool administration. The B.V. Patel habit Inventory serves as the foundation for the study practices inventory (1976). The phrases were reworded and rearranged to match the sample in the present context.

#### **Inventory on Study Practices**

The investigator developed a study practices inventory, which was used to measure the level of study practices among upper secondary students. Initially, the inventory had 57 goods. It was made using the steps mentioned below.

#### **Preparation of Items**

Following a thorough assessment of the literature and discussions with faculty members from Education, Educational Technology, Senior, Experts, and instructors, the investigator developed 65 statements outlining various parts of study methods. After experts verified their relevance to the study's goals, the questions were reduced to 57. English language professionals checked the prepared statements for grammatical correctness and ambiguity.

#### **Standardization of Study Practices Inventory**

The dependability of the study practices inventory was established utilizing jury judgment, item analysis, and a test-retest technique after the rough copy of the inventory was prepared.

## **Content Validity**

The draft study scale was provided to a panel of teacher education professionals and postgraduate science instructors to assess the usefulness of the items in the study practices inventory for content validity. Some things were altered as a consequence of the suggestions and thoughts. As a result, expert judgment was employed to determine the content validity of the study practices inventory.

## Reliability

The draft research methods inventory was administered to 50 high school students, and their responses were collected. Use the test-retest procedure after a 15-day break to determine the dependability of the research method inventory. After that, the Pearson's product moment correlation coefficient was computed. The dependability co-efficient for the investigation was judged to be 0.81. As a consequence, the research practices inventory is considered reliable.

## **Description of Study Practices Inventory**

The final version of the research practices inventory has 54 assertions, 48 of which are good and 6 of which are negative. The dimensions of the item in the inventory of study practices are as follows.

- Planning of Subjects,
- Reading and note making,
- Learning Environment,
- Habit of Concentrations and
- Preparation for Examinations.

## Dimensions and Number of Items in each dimension in the Study Practices scale

S.No	Dimension	No.of Items
1.	Planning of Subjects	11
2.	Reading and note making	12
3.	Learning Environment	8
4.	Habit of Concentration	12
5.	Preparation for Examinations	11

## Polarity of the items in the Study Practices Inventory

S.No	Serial Number of Items in the Inventory	Polarity	Total
1	1,2,3,4,5,,7,,9,10,11,12,13,14,15,16,17,18,	Positive	48
	19,20,21,22,23,24,25,26,27,28,29,30,31,32,		
	33,34,35,36,38,39,40,41,42,43,44,45,46,47,		
	48,50,51,52,		

2	6,8,37,49,53,54	Negative	6
---	-----------------	----------	---

## Pilot Study and Administration of Study Practices Inventory

The investigator personally distributed the study inventory to the upper secondary students in their respective places after rigorous preparation. The instructions were carefully read aloud, and it was indicated that the statements should be answered to by inserting a check () mark in the appropriate boxes.

#### **Quantification of Study Practices Inventory**

The investigator's study habits inventory is of the likert kind, with five responses (five point scale) such as "often," "sometimes," "frequently," "rarely," and "never." This study practices inventory is intended to evaluate upper secondary students' study habits. There are 54 statements in this research practices inventory. The inventory of study habits has a maximum score of 270 and a minimum score of 54.

#### Scoring Procedure for items in the Study Practices Inventory

Response	Score for Positive Statement	Score for Negative Statement
Always	5	1
Often	4	2
Sometimes	3	3
Rarely	2	4
Never	1	5

## **Item Validity**

The investigator distributed the study practices inventory to 50 students. It had 57 things. The investigator ordered the High School students to fill out a questionnaire. The necessary instructions were given. To avoid ambiguity, the investigator gathered the students' viewpoints and reworded and reworded the items many times. Following the discovery of a link between the total and the individual item, the items in the research inventory were picked. After calculating the correlation, items having correlation values less than 0.4 were discarded. The inventory was reduced by three items, leaving the final tool with 54 items. As a result, the investigator developed the Study Practices Inventory (SPI), which initially

included 54 items divided into five categories: reading and note taking, topic planning, habit of concentration and test preparation, and learning environment.

Item	ʻr'		Item	ʻr'	
No.	value	Remark	No.	value	Remark
1	0.446	S	34	0.428	S
2	0.536	S	35	0.476	S
3	0.473	S	36	0.439	S
4	0.649	S	37	0.528	S
5	0.420	S	38	0.428	S
6	0.592	S	39	0.559	S
7	0.434	S	40	0.635	S
8	0.555	S	41	0.520	S
9	0.427	S	42	0.336	NS
10	0.585	S	43	0.435	S
11	0.135	NS	44	0.482	S
12	0.228	NS	45	0.554	S
13	0.549	S	46	0.607	S
14	0.565	S	47	0.535	S
15	0.570	S	48	0.404	S
16	0.564	S	49	0.430	S
17	0.455	S	50	0.501	S
18	0.555	S	51	0.471	S
19	0.456	S	52	0.698	S
20	0.427	S	53	0.676	S
21	0.579	S	54	0.668	S
26	0.439	S	55.	0.515	S
27	0.520	S	56	0.492	S
28	0.448	S	57	0.613	S
29	0.562	S			
30	0.450	S			

# **Correlation Value for the Items in the Study Practices Scale**

31	0.429	S
32	0.445	S
33	0.530	S

**NS**-Not Selected

# S-Selected,

## Conclusion

As part of this empirical research, the investigator developed and validated an instrument to measure upper secondary students' study habits. The application will assist students, teachers, administrators, academics, and other stakeholders in education in analyzing the degree of study habits and elements of Higher Secondary Students. Because of the developed's ease of administration, it may be administered to a larger sample and will help in the prediction of study habits on which teachers can base their style and way of teaching any subject.

## References

[1] Abid Hussain Ch. (2006) Effect of Guidance Services on Study Attitudes, Study Habits and Academic Achievement of Secondary School Students, In Bulletin of Education & Research, Vol. 28, No. 1, pp. 35-45.

[2] Adnan Kan and Ahmet Akbaş (2006) Affective Factors That Influence Chemistry Achievement (Attitude and Self Efficacy) and The Power Of These Factors To Predict Chemistry Achievement-I, Journal of Turkish Science Education, Vol. 3, No. 1, pp. 76-85.

[3] Aggarwal, J. C. (2007) Psychology of Learning and Development. Shipra Publications, Delhi.

[4] Aghadiuno (1995) A Causal Model of Secondary Students' Achievement in Chemistry, Research in Science & Technological Education, Vol. 13, No. 2, pp. 123-133.

[5] Ahman, J. Stanely (1965) Testing students Achievements and Aptitudes, New Delhi: Prentice Hall of India (p) Ltd.

[6] Al-Hakami, Ibrahim Al-Hassan Mahdi (1999) An empirical study of Saudi secondary school students' achievement motivation, attitude toward subjects, perception of classroom environment and teaching aids, in relationships to academic achievement in three school subjects, https://hydra.hull.ac.uk/catalog/hull:3864.

[7] Francis A. Adesoji and Segun M. Olatunbosun (2008) Student, Teacher And School Environment Factors As Determinants Of Achievement In Senior Secondary School Chemistry In Oyo State, Nigeria, The Journal Of International Social Research Vol. 1, No. 2, pp. 13-34.

[8] Ghosh S. (1989) A Critical Study of Scientific Attitude and Aptitude of the Students and Determination of some Determinates of Scientific Attitude. In M.B. Buch: Fourth Survey of Research in Education (1983-1988), NCERT, P. 730.

[9] Hilal Aklamis and Omer Ergin, (2008) The Effects of Scientific Process Skills in Education on Students" Scientific Creativity, Science Attitudes and Academic Achievement. In Asia Pacific Forum on Science Learning and Teaching. Vol. 9, No. 1, June 2008.

[10] James, A., & Maurice, P. V. (2004). Achievement in Science as related to Scientific Aptitude and Scientific Attitude among the XI Standard Students in Tamil Nadu. Ph.D Edu., In Indian Educational Abstract, Vol. 4, No. 2, New Delhi : NCERT, July 2004.