PERCEPTION TOWARDS SWAYAM - MOOC'S FOR LEARNING AMONG POST GRADUATE STUDENTS

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ABSTRACT:

Education is the foundation of a nation's progress, and with the advancement of digital technologies, online learning platforms have gained immense importance. In India, the need for affordable and accessible education led to the development of SWAYAM-MOOC's, a government-backed initiative providing free, high-quality online courses. The platform is designed to bridge the educational divide by offering learning opportunities to students, teachers, and professionals across the country. By integrating ICT in education, SWAYAM-MOOC's has not only enhanced accessibility but also revolutionized traditional learning methods.

Keywords: SWAYAM, MOOCs, online learning, Perception, Digital Education.

1. INTRODUCTION:

Information technology evolved in the 1970s. Its basic concept, however, can be traced to the World War II alliance of the military and industry in the development of electronics, computer, and information theory. After the 1940s, the military remained the major source of research and development funding for the expansion of automation to replace manpower with machine power. The term ICT is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single link system. There are large economic incentives to merge the telephone network with the computer network system using a single unified system of cabling, signal distribution, and management. communication device, encompassing radio, television, cell phones, computer and network hardware, satellite systems and so on, as well as the various services and appliance with them such as video conferencing and distance learning. Information and Communication Technology is a common term referring to the technologies used for collecting, storing, editing and communicating information ICT means the use of computer-based technology and the Internet to make information and communication services available in a wide range of users. ICT is a Hardware and Software that enable society to create, collect, consolidate and communicate information in a multimedia format and for various purposes.

2. STATEMENT OF THE PROBLEM:

Despite its benefits, many postgraduate students are unaware of SWAYAM-MOOC's or do not fully understand how it can support their education. A lack of awareness about its features, course quality, and certification value prevents students from exploring and using the platform. Without proper knowledge and motivation, postgraduate students may not take full advantage of SWAYAM-MOOC's, missing valuable learning experiences and career opportunities. Even though SWAYAM-MOOC's has the potential to transform higher education, there is limited research on how postgraduate students perceive and use this platform. The investigator reviewed different kinds of literature and observed that the

utilization of SWAYAM-MOOC's for learning among postgraduate student's remains limited, with only a few studies conducted at different periods. Therefore, for the present study, researcher has selected the problem entitled **"Perception towards SWAYAM-MOOC's for Learning among Post Graduate Students".**

3. OBJECTIVES OF THE STUDY:

The following are the framed objectives of the study

- To find out the level of perception towards SWAYAM-MOOC's for learning among post graduate students.

- To study the significant mean difference in perception towards SWAYAM-MOOC's for learning among post graduate students with respect to Gender.

- To study the significant mean difference in perception towards SWAYAM-MOOC's for learning among post graduate students with respect to Locality.

- To study the significant mean difference in perception towards SWAYAM-MOOC's for learning among post graduate students with respect to Number of courses completed.

- To study the significant mean difference in perception towards SWAYAM-MOOC's for learning among post graduate students with respect to Number of credits preferred.

4. Hypotheses of the Study:

The following are the framed hypotheses of the study

1. There is a high level of perception towards SWAYAM-MOOC's for learning among postgraduate students.

2. There is no significant mean difference between male and female students in perception towards SWAYAM-MOOC's for learning among postgraduate students.

3. There is no significant mean difference between rural and urban students in perception towards SWAYAM-MOOC's for learning among postgraduate students.

4. There is no significant mean difference in perception towards SWAYAM-MOOC's for learning among postgraduate students with respect to number of courses currently studying.

5. There is no significant mean difference in perception towards SWAYAM-MOOC's for learning among postgraduate students with respect to number of credits preferred.

5. Delimitations of the Study

The following are the Delimitations of the study

- The study is confined to second year Post Graduate students studying in Bharathiar University.

- The selection of sample done from various departments in Bharathiar University only.

- The student's response collected through questionnaire only.

- The study is delimited to 186 samples.

6. RESEARCH METHODOLOGY:

In research combining descriptive and normative methods, descriptive analysis provides factual data, while normative analysis compares it against predefined benchmarks to draw

meaningful conclusions and recommendations.

6.1 Area and Population of the study:

The researcher chose the area for this study as Bharathiar University Coimbatore, Tamil Nadu. The Population of the present study is 1551 Postgraduate students (Male-594, Female- 957) of different streams of Bharathiar University. The sample of the present study is 186 Postgraduate students (Male-65, female-121) from Arts, Science, and Social Science streams of Bharathiar University, Coimbatore. A simple random sample is a type of probability sampling method was adopted. The Perception on SWAYAM-MOOCs Scale used for data collection constructed and standardized by the investigator.

6.2 Data Collection Methods

For the Final Study, the investigator visited 12 departments in all streams like Arts, Science, and Social Science etc. to conduct the survey. The investigator briefed the concern department HoDs about the study objectives and got consent for conducting the study to their department students. A total of 186 post graduate students were taken in the final study. The following table shows the concern departments and number of students participated respectively.

6.3 Statistical Techniques

- Suitable descriptive and inferential techniques were used in the interpretation of the data to draw out meaningful pictures of results from the collected data. In the present study, the following statistical techniques were used:

- Mean and Standard Deviation were calculated for all the variables and then a t-test was calculated for the variables gender, locality.

- The one-way ANOVA procedure was employed to find out the significant difference with respect to the discipline, Number of courses studying, Number of courses completed in SWAYAM, Access of SWAYAM, and Time spent for SWAYAM and Number of credits preferred.

7. TESTING OF HYPOTHESES

Hypothesis: 1

There is a high level of level of perception towards SWAYAM-MOOC's for learning among Post Graduate students.

Table: 1

Analysis of level of perception towards SWAYAM-MOOC's for learning among Post Graduate students.

S.No.	Score Range	No. of students(N)	Percentage	Level of Perception
1.	27-90	32	17.20%	Low Perception
2.	91-114	122	65.59%	Moderate Perception
3.	115-135	32	17.20%	High Perception

The above table 4.1 shows that there is a moderate level of perception towards SWAYAM-MOOC's for learning among post graduate students. Hence the formulated hypothesis is rejected. Among the total samples, 65.59% of the post graduate students have moderate level of perception towards SWAYAM-MOOC's for learning.

TESTING NULL HYPOTHESIS

Hypothesis: 2

H01 - There is no significant mean difference between male and female students in perception towards SWAYAM-MOOC's among postgraduate students.

Table: 2

Analysis of significant mean difference between male and female post graduate students

Variable		N	Mean	SD	t-value	ρ	S /NS
Gender	Male	65	102.40	13.713	0.137	0.892	NS
	Female	121	102.65	11.050			

*(The table value at 5 % level of significance is 1.96)

From the above table, it is inferred that, the calculated "t" value (0.137) is lesser than the table value (1.96) at 0.05 level of significance. Hence, the formulated null hypothesis is accepted. Thus, there is no significant mean difference between male and female students in perception towards SWAYAM-MOOC's among postgraduate students.

From the observed mean score, Female students (102.65) are higher than the Male students (102.40) in perception towards SWAYAM-MOOC's for learning.

The above result is supported with study conducted by Diwakar Bordoloi and Haflongber (2024) it reveals that there is no significant difference between male and female students.

Testing Null Hypothesis Hypothesis: 3

H02 – There is no significant mean difference between rural and urban students in perception towards SWAYAM-MOOC's among postgraduate students.

Table: 3

Analysis of significant mean difference between rural and urban post graduate students

Variable		N	Mean	SD	t-value	ρ	S /NS
Locality	Rural	97	102.74	11.146	0.210	0.834	NS
	Urban	89	102.37	12.950			

*(The table value at 5 % level of significance is 1.96)

From the above table, it is found that, the calculated "t" value (0.210) is lesser than the table value (1.96) at 0.05 level of significance. Hence, the formulated null hypothesis is accepted. Thus, there is no significant mean difference between rural and urban students in perception towards SWAYAM-MOOC's among postgraduate students.

From the observed mean score, rural students (102.74) are higher than the urban students (102.37) in perception towards SWAYAM-MOOC's for learning.

The above result is supported with study conducted by Rajini Bala (2024) it reveals that there is no significant difference between rural and urban students.

TESTING NULL HYPOTHESIS

Hypothesis: 4

H03 – There is no significant mean difference in perception towards SWAYAM-MOOC'S among Postgraduate students with respect to No. of courses studying.

Table: 4

Analysis of significant mean difference of post graduate students with respect to number of courses studying

No. of courses studying	Mean	N	SD	No. of courses studying	Sum of squares	df	Mean square	F	ρ	S/NS
No course	103.60	87	11.633	Between Groups	634.365	3	211.455			
One course	100.22	59	13.519					1.477	0.222	NS
Two courses	103.11	36	9.905	Within Groups	26055.361	182	143.161			
Three courses	109.75	4	11.295							
Total	102.56	186	12.011	Total	26689.726	185				

*(The table value at 5 % level of significance is 3.07)

From the above table, it is found that, the calculated "f" value (1.477) is lesser than the table value (3.07) at 0.05 level of significance. Hence, the formulated null hypothesis is accepted. Thus, there is no significant mean difference in perception towards SWAYAM-MOOC'S among Postgraduate students with respect to Number of courses studying.

From the observed mean score, the students studying three courses (109.75) are higher than their counter parts such as students studying two courses (103.11), one course (100.22) and no course (103.60) in perception towards SWAYAM-MOOC's for learning.

TESTING NULL HYPOTHESIS

Hypothesis: 5

H04 – There is no significant mean difference in perception towards SWAYAM-MOOC'S among Postgraduate students with respect to No. of credits preferred.

Table: 5

Analysis of significant mean difference of post graduate students with respect to number of credits preferred

No. of credits preferred	Mean	N	SD	No. of credits preferred	Sum of squares	df	Mean square	F	ρ	S/NS
2 credits	102.40	65	12.562	Between Groups	62.778	2	31.389			
4 credits	102.33	100	12.071					0.216	0.806	NS
6-8 credits	104.19	21	10.255	Within Groups	26626.948	183	145.502			
Total	102.56	186	12.011	Total	26689.726	185				

*(The table value at 5 % level of significance is 3.07)

From the above table, it is found that, the calculated "f" value (0.216) is lesser than the table value (3.07) at 0.05 level of significance. Hence, the formulated null hypothesis is accepted. Thus, there is no significant mean difference in perception towards SWAYAM-MOOC'S among Postgraduate students with respect to Number of credits preferred.

From the observed mean score, the students who preferred 6-8 credits (104.19) are higher than those who prefer than 2 credits (102.40) and 4 credits (102.33) in perception towards SWAYAM-MOOC's for learning.

8. FINDINGS OF THE STUDY:

The following are the findings of the study

- It is found that there is a moderate level of perception towards SWAYAM-MOOC's for learning among postgraduate students.

- It is found that there is no significant mean difference is observed between male and female students in their perception towards SWAYAM-MOOC's for learning.

- It is found that there is no significant mean difference in perception between rural and urban postgraduate students, suggesting that geographic location does not influence their views on SWAYAM-MOOC's for learning.

- It is found that there is no significant mean difference in perception towards SWAYAM-MOOC's for learning based on the number of courses currently being pursued by postgraduate students.

- It is found that there is no significant mean difference in perception towards SWAYAM-MOOC's for learning based on postgraduate students preferred number of credits.

9. CONCLUSION:

One of the greatest strengths of SWAYAM-MOOC's is their ability to make education inclusive, reaching students in remote areas and providing them with the same learning resources as those in urban centers. The flexibility of self-paced learning ensures that students can balance their coursework with research, internships, or jobs, making education more adaptable to individual needs.

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