

**Author: Ms. Sayali Shrikant Nene, Assistant Professor**

**Co-Author: Mrs. Nishmita Rana, Assistant Professor**

**College: B. K. Birla College of Arts, Science and Commerce, Kalyan**

**Department: Department of Management Studies**

**Mobile Number: 9867557359, 8080840140**

**E-mail ID: [saynene22@gmail.com](mailto:saynene22@gmail.com)**

# **Impact of SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) on learning and skill development among higher education students in Mumbai Metropolitan Region**

## **Abstract**

The importance of Open and Distance Learning in the educational system is constantly increasing. SWAYAM (Study Webs of Active Learning for Young Aspiring Minds) is one such platform where students can learn and develop various skills through online courses. So, this paper aims to study that whether in the age of social media, the young generation are also aware about such online learning platforms. This study further verifies if it creates any impact on their growth and skill development. The relation between exam enrolment and exam registration is also analysed using regression analysis. Thus, the overall satisfaction of students about SWAYAM and improvements if required is found out with the help of this study. It was concluded that the awareness level among students is less but there is a significant relation between skill development and use of courses on SWAYAM. It was also analysed that the ratio of students enrolling, registering for exam and completing the course is on a declining trend. So, the authorities are recommended to take necessary steps for making improvements.

**Key Words:** SWAYAM, Awareness, Skill Development

## **Introduction**

### **Open and Distance Learning:**

Open and Distance Learning (ODL) system is a system wherein teachers and learners need not necessarily be present either at same place or same time and is flexible in regard to modalities and timing of teaching and learning as also the admission criteria without compromising necessary quality considerations.

It is an educational provision to provide opportunities that can mitigate as well as remove barriers of access, finance, age, work, family commitments, disability or any other such barriers.

### **SWAYAM (Study Webs of Active Learning for Young Aspiring Minds):**

It is a Government of India initiated free open online learning platform providing a number of educational courses to university and college students. It was launched on 9<sup>th</sup> July 2017 by the then Ministry of Human Resource Development (MHRD) (now Ministry of Education), Government of India under Digital India Initiative to give a free entry to a range of web courses encompassing education, high school and other skills with the target population being Class 9 to post graduation students.

### **National Coordinators under SWAYAM:<sup>1</sup>**

To manage the content of SWAYAM courses, 9 national coordinators have been appointed and each coordinator has been given a specific area to maintain and monitor:

1. All India Council for Technical Education (AICTE) for self-paced and international courses.

---

<sup>1</sup> <https://en.wikipedia.org/wiki/SWAYAM>

2. National Programme on Technology Enhanced Learning (NPTEL) for engineering sector courses.
3. University Grants Commission (UGC) for non-technical post-graduate education.
4. Consortium for Educational Communication (CEC) for undergraduate education.
5. National Council of Educational Research and Training (NCERT) and National Institute of Open Schooling (NIOS) for school education.
6. Indira Gandhi National Open University (IGNOU) for out-of-school students.
7. Indian Institute of Management, Bangalore (IIMB) for management studies.
8. National Institute of Technical Teachers Training and Research (NITTTR) for Teacher training program.

### **Certification & Credit:**

As all the courses offered under SWAYAM are approved by the government of India, they are valid all over the country. After successful completion of the course taken on SWAYAM, certificates are provided which can be used for credit mobility of academic credits.

### **Statement of Problem:**

Today's educational system is evolving a lot towards online courses. Open and Distance Learning (ODL) is increasingly becoming the need of the hour. The requirement to be physically present at the same place and time is reduced and the timing of teaching and learning has become flexible. Also, the admission criterion for such learning has changed. Anyone, from anywhere can have access to these learning options.

SWAYAM is an Indian governmental portal for free and online courses for university and college learners. The main objective of this initiative is to make available the best teaching learning resources to all especially the disadvantaged.

The current generation is more inclined towards spending time on social media and watch that content as well as people on such media influences today's youth a lot. Hence, it becomes necessary to know that whether they are also aware about such online learning platforms and courses which are available for them. If yes, it needs to be seen what impact it creates on their growth and skill development.

Now-a-days, students also have a habit of giving up very easily. Their patience level is very less. So, through this study it can also be identified that whether after enrolling for online courses, are they completing it till the end or leaving it halfway. The enrolment and registration ratio of students can be analysed and proper recommendations can be given based on the same.

### **Review of Literature**

- Impact of learning through SWAYAM (Study Webs of Active – Learning for Young Aspiring Minds) in India:

This study focuses on examining the importance of SWAYAM (9 National Coordinators) AICTE, NPTEL, UGC, CEC, NCERT, NIOS, IGNOU, IIMB, NITTTR and the courses provided on its online portal. It also analyses the relation between Student Enrolment & Exam Registrations and Student Exam Registrations & Successful Certification through regression.

It proves that there is a significant association between them. It also suggests proper utilization of courses in future for all learners as it will play a prominent role.

*(By Dr. K. Karthikeyan & Dr. M. Dinesh Kumar published in The IASMS Journal of Business Spectrum, ISSN 0974-8016, June 2022, Vol XV, No.1, Pages 34-42)*

- Evaluation of Awareness & Impact of Swayam:  
 The main objective of the study is evaluating the history of development of MOOCs in India & development of Swayam courses. It also tries to assess awareness of students and young population about MOOC(SWAYAM) courses and its usefulness as perceived by the students. The population of the study included students of colleges in Bhopal and data is collected with the help of a questionnaire. It concluded that there is a high awareness level among the respondents and impact mostly in post graduate students, thus the state has been successful in effectively promoting SWAYAM courses.  
*(By Arjun Vinodkumar Lal, University of Hyderabad & ICAR – National Academy of Agricultural Research Management)*
- Impact of NPTEL on Faculty and Students in Non-technical Colleges:  
 Developing learner centred MOOCs is a popular tendency these days. In India, MHRD has initiated a program called SWAYAM. This paper examines the impact of NPTEL on faculty and students in non-technical colleges affiliated to Swami Ramanand Teerth Marathwada University, Nanded. in terms of learning outcomes, graduate attributes, FDP, etc.  
*(By Rohidas Nitonde published in IEEE Tenth International Conference on Technology for Education, December 2019)*
- Open educational practices of SWAYAM programme among research scholars:  
 This study aims at practicing the open educational resources of the state universities of Tamilnadu research scholars on their SWAYAM programme. It also determines the research scholars' level of open educational practices on their SWAYAM through appropriate methodological and statistical procedures. The data is collected through random sampling method. Their results stated that the learners open educational practices on the SWAYAM program are high in the various aspects but not up to the mark. Therefore, they recommend state and central governments to concentrate on research scholars for learning online courses on SWAYAM.  
*(By K. Sathish Kumar & M. Mahendraprabu published as a research article in Springer in March 2021, Volume 26, pages 4621-4645)*
- The Impact of SWAYAM/MOOCs Courses on Academic Libraries: Opportunities and Challenges:  
 The research paper explores the impact of SWAYAM and MOOCs on academic libraries and examines the opportunities and challenges presented by it. As online learning platforms continue to grow in popularity and importance in higher education, it is essential for academic libraries to adapt and evolve to effectively support and enhance these initiatives. Also, the challenges need to be addressed proactively to position themselves as vital partners in the delivery of quality education.  
*(By Dr. Sudhir P. Narkhede, Librarian, Savitri Jyotirao Social Work College, Yavatmal published in Journal of Emerging Technologies and Innovative Research, ISSN-2349-5162, Volume 11, Issue 4, April 2024)*

### **Gap Analysis:**

The research in this particular field is conducted in all over India especially in cities like Bhopal, Nanded, Yavatmal, etc. There are very less studies being done in the Mumbai Metropolitan Region (MMR). Thus, this study provides a lot of scope to understand the impact of SWAYAM in this area. Also, many studies are conducted on research scholars and the opportunities and challenges about SWAYAM, whereas this study focuses more on higher education students i.e. graduate and post graduate ones.

### **Objectives**

1. To know the awareness of the various SWAYAM Courses among graduate and post graduate students in the MMR region.
2. To understand the impact of those courses on learning and skill development of students.
3. To analyse the relation between Student Enrolment, Exam Registrations and Successful Certifications of students for SWAYAM courses.

### **Hypothesis**

1. The students are not significantly aware about various SWAYAM courses.
2. There is no significant relation between level of skill development and completion of SWAYAM courses.
3. There is no significant association between Student Enrolment and Exam Registrations.
4. There is no significant association between Exam Registrations and Successful Certifications.

### **Data Collection & Analysis Methods**

The study involved collection of data from graduate and post graduate students of colleges in Mumbai Metropolitan Region. It was collected on random sampling method with the help of a structured questionnaire prepared for the same. The questions were about the awareness level of SWAYAM courses, their impact on their learning levels and completion of exams after registration for those courses. After data collection, the hypotheses were tested using Z test of Mean, Chi Square Test and regression analysis for deciding rejection or acceptance of hypotheses.

### **Primary Data:**

The primary data is collected through google forms from students. The form contained various questions in parts, firstly the general questions based on their education level and discipline of study, etc. and then specific questions based on their awareness level; impact level on learning and skill development and exam enrolment, registration and certification, etc.

### **Secondary Data:**

In order to understand the SWAYAM initiative of the government and the various courses available on its platform, secondary data was referred on SWAYAM and other websites along with newspaper articles. Also, to review the studies and researches already conducted in this area, secondary sources were looked into.

### **Population And Sample:**

The population for the study consists of the graduate and post graduate students in the Mumbai Metropolitan Region. The data was collected through a questionnaire and google form was used to gather responses from different higher education colleges in Kalyan, Thane and Mumbai region. 58 responses were received and based on this sample data; further analysis was carried out.

### **Scope of the Study**

The responses are collected from the students of Mumbai Metropolitan Region and that is based on the specific questionnaire prepared to cover the objectives of awareness, impact, satisfaction, exam enrolment, registration and successful certifications.

### **Limitations of the Study**

The findings of this study may not be generalized as the studies conducted in different regions may find different conclusions for the topic. The study covers impact of SWAYAM only on higher education students; research scholars, academicians, faculties are not considered in the study.

### **Results and Discussion**

- **Awareness Level:**

HO = The students are not significantly aware about various SWAYAM courses.

H1 = The students are significantly aware about various SWAYAM courses.

<b>Descriptives</b>					
		<b>Awareness Level</b>		<b>ZAwarenessLevel</b>	
N		58		58	
Mean		3.14		<b>-1.02e-16</b>	
Standard deviation		0.847		1.18	

This hypothesis was tested using Z test of Mean (One Tail), in this test the z value of mean is compared with the table value of 1.645. If the z value is greater than the table value, the null hypothesis is rejected and if the z value is less than the table value, the null hypothesis is accepted. So here, the Z value of mean is -1.02e-16 converted to absolute number - 0.000000000000000102 which is **less than 1.645**, hence the null hypothesis is accepted that **the students are not significantly aware about various SWAYAM courses.**

- **Impact on Skill Development:**

HO = There is no significant relation between level of skill development and completion of SWAYAM courses.

H1 = There is a significant relation between level of skill development and completion of SWAYAM courses.

$\chi^2$ Tests							
		Value		df		p	
$\chi^2$		61		12		< .001	
N		58					

The Chi Square test is applied here, in this test the p value is compared with the significant value 0.05. If the p value is less than 0.05, the null hypothesis is rejected and if the p value is greater than 0.05, the null hypothesis is accepted. In the above table, **p value is less than 0.01** so the null hypothesis is rejected and it is accepted that, **there is a significant relation between level of skill development and completion of courses on SWAYAM portal.**

- **Association between Student Enrolment, Registration and Successful Certification:**

H0 = There is no significant association between Student Enrolment and Exam Registrations.

Model Fit Measures									
Model		R		R <sup>2</sup>		Adjusted R <sup>2</sup>			
1		0.771		0.595		0.588			
Model Coefficients - SWAYAM Enrolment									
Predictor		Estimate		SE		t		p	
Intercept		0.594		0.197		3.02		0.004	
SWAYAM Exam Registration		1.094		0.12		9.15		< .001	

R square value is 58% and p value is less than 0.01 is highly significant. So, the null hypothesis is rejected **showing a significant association between Student Enrolment and Exam Registrations.**

H0 = There is no significant association between Exam Registrations and Successful Certifications.

Model Fit Measures									
Model		R		R²		Adjusted R²			
1		0.903		0.816		<b>0.813</b>			
Model Coefficients - SWAYAM Exam Registration									
Predictor		Estimate		SE		t		p	
Intercept		0.131		0.0919		1.43		0.159	
SWAYAM Course Certification		0.926		0.0582		15.91		< .001	

R square value is 81% and p value is less than 0.01 is highly significant. So, the null hypothesis is rejected **showing a significant association between Exam Registrations and Successful Certifications.**

- 74.1% of the respondents learnt about SWAYAM from their college or universities.
- 77.6% of the respondents rarely use SWAYAM portal.
- The main purpose of opting for SWAYAM is skill development (53.4%) followed by receiving a certificate (25.9%).
- Almost half of the respondents are neutral about SWAYAM's impact on career goals (44.8%) as well as on academic performance (48.3%).
- 51.7% of the respondents have not enrolled on any course on SWAYAM.
- Only about 1/3<sup>rd</sup> respondent are satisfied (37.9%) and find the course content on SWAYAM effective (32.7%).

## Conclusion

- The students are not significantly aware about the SWAYAM and the courses available on it but those who are aware and use it, agree that there is a significant relation between skill development and completing courses on SWAYAM.
- There is a declining trend between Exam Enrolment, Exam Registration and Successful Certification indicating that students do enroll for course, but not all register for exam and complete the course certification.
- Majority of the students became aware about SWAYAM from their college or universities and the main purpose of using SWAYAM is skill development and receipt of a certificate.
- There is mostly a neutral opinion about impact of SWAYAM on career goal and academic performance which can also be seen in two third of the respondents being not satisfied and finding the course content ineffective.



## Suggestions

- The government needs to take more measures to increase awareness about SWAYAM and also take necessary steps to ensure that the students not only enroll but also register and complete the course.
- It is recommended that students can be motivated about certifications and credits which they will receive upon successful certification.
- Along with skill development, the government can introduce courses which can help in improving academic performance and shaping career of students.

For further research, comparative study of SWAYAM with other online learning platforms like Coursera, edX can be done. Also, research can be conducted to consider the impact of AI, Virtual Reality and other technologies on SWAYAM.

## Bibliography

- Karthikeyan, K., & Kumar, M. D. (2022). Impact of learning through SWAYAM (Study Webs of Active – Learning for Young Aspiring Minds) in India. *The IASMS Journal of Business Spectrum*, 15(1), 34-42. ISSN 0974-8016. <https://www.researchgate.net/publication>
- Lal, A. V. (n.d.). Evaluation of Awareness & Impact of Swayam. University of Hyderabad & ICAR – National Academy of Agricultural Research Management. <https://www.researchgate.net/publication>
- Nitonde, R. (2019). Impact of NPTEL on faculty and students in non-technical colleges. In *IEEE Tenth International Conference on Technology for Education* (pp. 1-5). <https://www.computer.org/csdl/proceedingsarticle>
- Kumar, K. S., & Mahendraprabu, M. (2021). Open educational practices of SWAYAM programme among research scholars. *Springer*, 26, 4621-4645. <https://www.researchgate.net/publication>
- Narkhede, S. P. (2024). The impact of SWAYAM/MOOCs courses on academic libraries: Opportunities and challenges. *Journal of Emerging Technologies and Innovative Research*, 11(4). ISSN-2349-5162. <https://www.jetir.org/papers>