

# Demographic Characteristics and Motivational Factors among SWAYAM Participants: An Exploratory Analysis

**Dr. Pooja Verma**

*Assistant Professor, KR Mangalam University, Gurugram, Haryana*

**Prof. Ahrar Husain**

*IASE, Faculty of Education, JMI, New Delhi-110025, India.*

**Abstract:** *This paper reports a part of a large survey study on the role of SWAYAM MOOCs in Democratization of Higher Education. Questionnaire was used to collect data. This paper provides the initial details about the demographics (gender, age group, nationality, location, educational discipline, education level, employment status, income group etc.) of the participants and source of their motivation to take up this course. Findings show that men enrolment is more than women, students are more active than working, urban residents are more participative, and foreign participation is visible but Indian participation is way stronger. Engineering and technology outdone other disciplines when it comes to participation. Most of them came to know about this platform through the internet and knowledge extension and professional development are the main motivations behind. The findings are compared with the existing research and suggestions are provided.*

**Keywords:** *Demography, MOOCs, Motivation, SWAYAM*

## Introduction

Massive open online courses (MOOCs) are trending in education these days especially in distance and online education. Research is flourishing in this area and lead some researchers to claim that innovation like MOOC will soon cause the disappearance of university system [1]. Others support MOOCs as they may act as a bridge for underprivileged social groups and hence may lead to educational inclusiveness which will ultimately head towards the societal change [2]. The application of MOOCs proved to be beneficial in developing countries like India especially in Teachers' Continuous Professional Development [3] but it is believed that it may provide positive results in every possible educational field. Research shows that MOOCs attract students from diverse countries [4]. Thus, identifying characteristics of learners taking up MOOCs, and their motivations for taking the course can add to the literature on open and distance education. Likewise, one may get insight into how to enhance the learning experiences and meet the learning needs.

SWAYAM (i.e. Study Webs of Active learning for Young Aspiring Minds) is an open-source Indian MOOC platform. SWAYAM follows certain approaches, popularly known as the Four Quadrant Approach means e-learning that has - e-Tutorial, e-Content, Discussion forum and Assessment. A study on SWAYAM indicated that certain Instructional, technical and communication challenges are faced by its participants [5]. But to take care of these challenges, it is important to find out about the demographic characteristics of participants.

This paper provides the initial details about the demographics of the SWAYAM participants and source of their motivation to take up this course.

## Objective of the study

The main objectives of this research are-

- To identify the characteristics of students participating in a SWAYAM MOOC (gender, age group, nationality, location, educational discipline, education level, employment status, income group etc.)
- To analyze the motivation of SWAYAM MOOC participants to take these courses.

## Literature review

Literature review is done under two headings:

(a) Demographics of MOOC participants and (b) Motivation to take up MOOCs.

### *MOOC learners' demographics*

MOOC learners are mostly college degree holders and employed [6]. And they are mainly males and employed [7]. Indeed, a study revealed that 83% of MOOC students have completed postsecondary degree, 79.4% of students were undergraduates and level of education of 44.2% was beyond bachelor's degree. The same study reported that 56.9% of participants were males; and 62.4% were employed full-time or self-employed, while 13% were retired or unemployed [7]. A study indicated the similar results 56% of participants were males and 44% were females [8]. Additionally, research reported that those who claimed that they could not afford higher studies were mostly undergraduates [6]. So, we may say that the educational background of MOOC learners is not diverse. When it comes to gender disparity, it is sustained that difference in gender participation in any MOOC is directly related to the course taught [9].

### Motivation for enrolling

Learners frequently join these courses to learn new things, for educational purposes or professional proficiency [10]. In a survey, it has been found that major motivators for MOOC participants were teacher's suggestions, professional skills development, and exploration of interest areas [11]. A survey of MOOC students that was a pre- and post-course survey indicated that love for lifelong learning, online learning fun, better understanding the subject matter without any time limit or achievement expectation, intellectual stimulation, convenience and social experience were the main motivators for MOOC learners for enrollment [12].

### Methodology

This paper is the result of a self-made questionnaire survey conducted by researcher. The survey was carried out through Google form which was forwarded to 6987 SWAYAM MOOC participants' email IDs and got replies from 885 participants.

### Results

#### Participant's Gender and Age

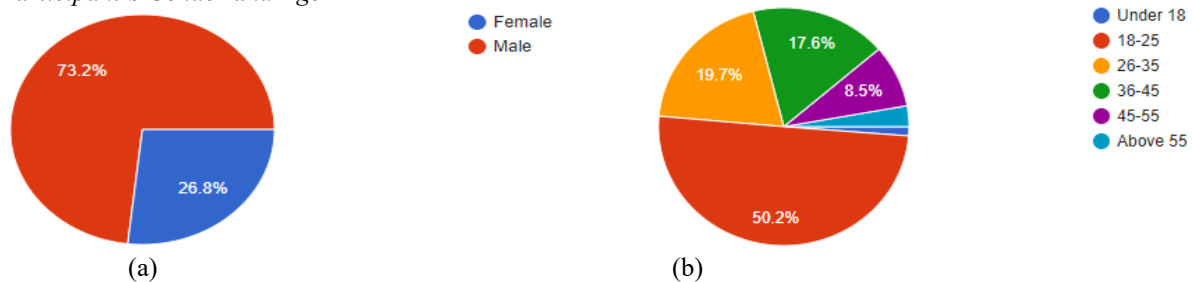


Figure 1. (a) Gender (b) Age

The study required voluntary participation; this means males are more active on SWAYAM platform as they made 73.20% of the total participants. And 50.20% of total participants belonged to the 18-25 years age group. This means people of this age group are most active on SWAYAM platform.

#### Participant's Nationality and Place of Residence

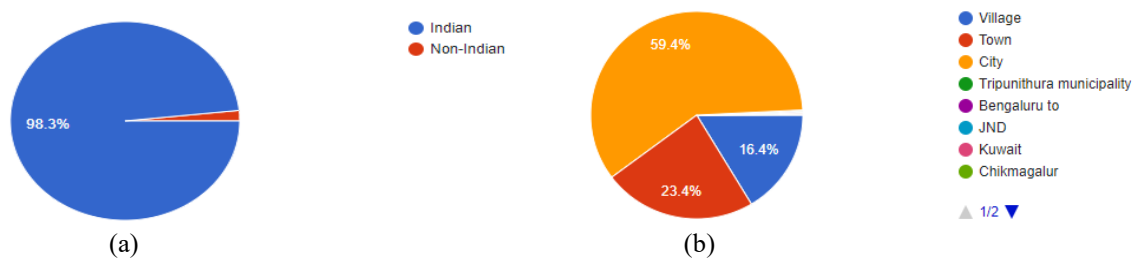


Figure 2. (a) Nationality (b) Place of Residence

Most of the participants were from India, indicates the lack of proper advertising of the platform outside India and low participation from semi-urban and rural area indicate the lack of infrastructure. Though participation in this study was observed from almost all the states and union territories out of 29 states and 7 union territories of India.

#### Participant's Education level and Educational discipline

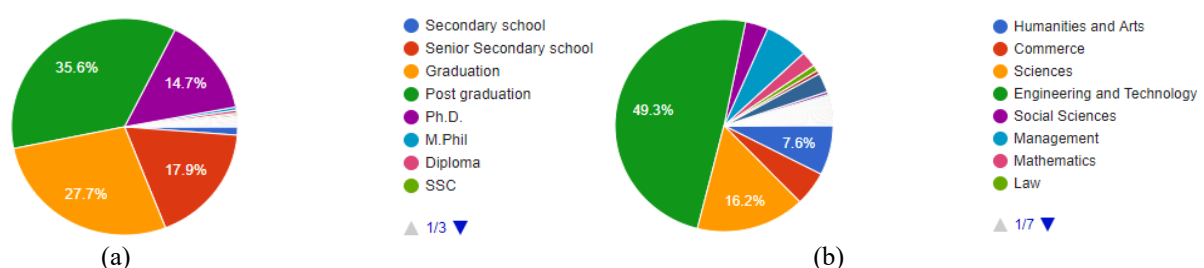
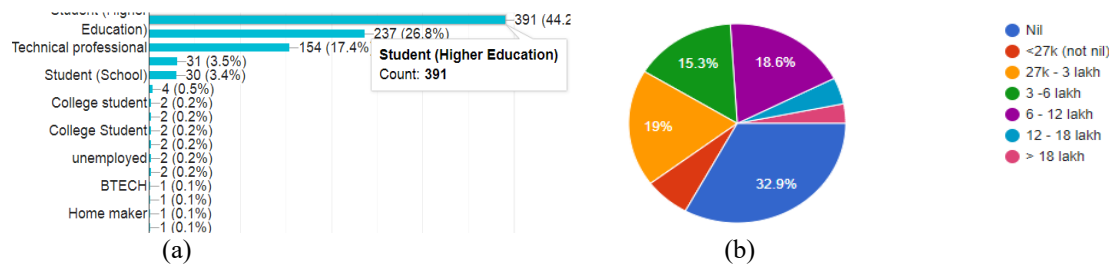


Figure 3. (a) Education level (b) Educational discipline

Highest level of Education of most of the participants was post-graduation (i.e. 35.60%) but undergraduate participants were quite comparable. And it reflects that gradually SWAYAM is gaining popularity at senior secondary school level. Figure 3. (b) clearly indicates that students of Engineering and Technology are most active on this platform.

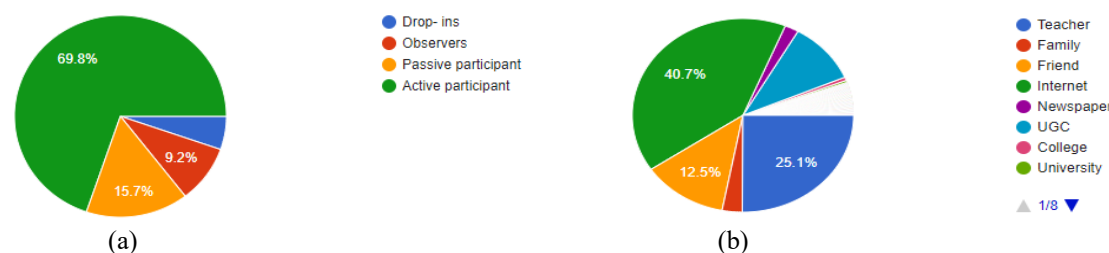
#### Participant's Current occupation and Average Annual Income



**Figure.4. (a) Current occupation (b) Average Annual Income**

According to Figure 4. (a), 44.20% of the participants were college/university students but teachers and other technical professionals also participated in considerable number. This shows that students are more active on this platform. According to Fig.4. (b), most of the participants did not earn 32.90%. They must be students or who were willing to enhance their knowledge but not employed.

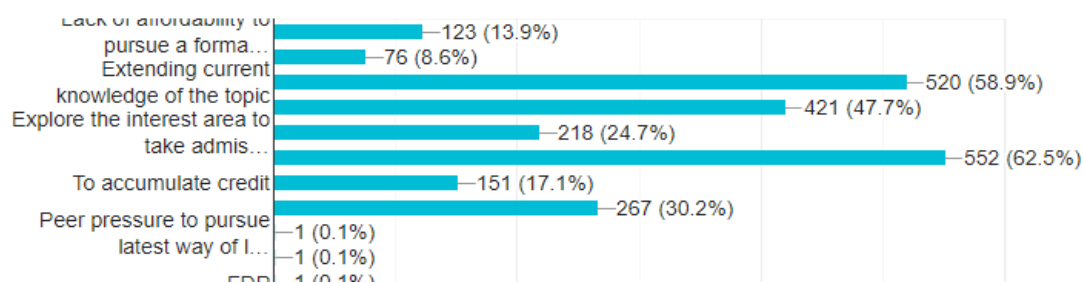
#### Participant's User category and Source of knowledge



**Figure.5. (a) User category (b) Source of knowledge**

Most of the participants (i.e. 69.80%) claimed that they belonged to the Active participant category. According to Figure 5(b), SWAYAM participants came to know about SWAYAM MOOCs mainly through the Internet, their teachers, UGC notices and their friends.

#### Participant's Motivation for taking the course



**Figure.6. Motivation for taking the course**

The main motivations of participants behind taking up SWAYAM MOOC were professional development, extension of knowledge and general interest in the topic and learning through digital mode.

#### Conclusion

Findings show a similar trend in terms of gender differences in MOOC enrollments as findings of this research indicate that men in this study surpassed women in number. Here, most of the participants were Indian and were residents of urban areas. Participation was observed above secondary school level. In contrast, to the previous studies, there appeared difference in employability status as most of the SWAYAM users were students with post-graduate degrees but were unemployed. Almost half of the participants belonged to the Engineering and technology discipline. Most of the participants identified themselves as active participants but it can be possible that only active participants paid attention to my mail and contributed in this research by filling in the questionnaire. Previous studies revealed that friends were the initial source of knowledge about these courses

but here the internet, teachers and UGC notices emerged as main sources of knowledge. Like the previous studies, motivations behind taking up the course were knowledge expansion and professional development but in this study learning through digital mode was also one of the main motivators.

### Recommendations

Measures should be taken to get comparable enrolment of participants belonging to different social categories. Proper advertising should be done to attract participants from different countries, geographical areas, educational levels, disciplines and employment status. Funds should be distributed well to arrange the prerequisite infrastructure to let the maximum participants enjoy this digital mode of learning. Like NPTEL (one of the National Coordinator of SWAYAM), other National Coordinators (i.e. AICTE, CEC, IGNOU, IIMB, NCERT, NIOS, NITTTR, UUGC) should also take up the provision of Local Chapter and should train SPOC (Single Point of Contact) to readily solve the queries of the students.

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