FROM ACCESS TO IMPACT: EXPLORING THE DIFFICULTIES FACED BY MOOC LEARNERS

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ABSTRACT

This study explores the key challenges experienced by online learners on MOOC (Massive Open Online Course) platforms, drawing on responses from 150 participants across diverse socio-economic backgrounds. The findings reveal that the most significant barriers include lack of motivation (36.7%), poor time management (33.3%), and internet connectivity issues (32.0%). These challenges are particularly pronounced among students, job seekers, and individuals from rural and semi-urban areas, where access to high-speed internet and structured learning environments is limited. The study also highlights the impact of limited peer interaction, language barriers, and the absence of teacher support on learner satisfaction and course completion. A comparative analysis with socio-economic factors—such as gender, occupation, income, and digital access—underscores the need for more inclusive, flexible, and localized approaches in MOOC design and delivery. These insights can inform policy makers, educational institutions, and platform developers in enhancing the effectiveness and accessibility of online learning in diverse contexts.

Key word:
Digital Divide - E-Learning Accessibility - Technology-Enabled Education -Online Education Policy

INTRODUCTION

The rapid growth of digital technologies and internet connectivity has transformed the landscape of education worldwide, giving rise to online learning platforms such as Massive Open Online Courses (MOOCs). MOOCs offer unprecedented opportunities for learners to access quality education regardless of geographical, social, or economic constraints. They are particularly relevant in developing countries like India, where conventional educational infrastructure often falls short in reaching a large and diverse population.

While MOOCs promise flexibility, affordability, and accessibility, they also present a unique set of challenges, especially for learners from varied socio-economic backgrounds. These challenges include lack of motivation, poor time management, limited teacher interaction, language barriers, and technological issues such as inconsistent internet connectivity. Moreover, the effectiveness of MOOCs can be influenced by factors such as age, gender, occupation, income, residential area, and access to digital devices.

This study aims to examine the problems faced by MOOC learners through a structured survey of 150 respondents from different socio-economic segments. By analyzing learner feedback across key problem areas—ranging from course structure and content engagement to technical barriers and language preferences—the study seeks to identify patterns and correlations that can help improve the inclusivity and efficiency of MOOC platforms. Understanding these issues is critical to bridging the digital divide and enhancing the overall learning experience for a diverse population of online learners.

REVIEW OF LITERATURE

Yuan and Powell (2013), in their study titled *"MOOCs and Open Education: Implications for Higher Education"*, explored the emergence of MOOCs within the broader framework of open education. The objective was to assess how MOOCs are reshaping access to learning in higher education. Through qualitative analysis of educational policies and existing MOOC platforms, the study found that while MOOCs democratize learning, they also suffer from high dropout rates. The primary challenges faced by learners included lack of motivation, minimal instructor support, and limited peer interaction—factors that significantly reduce learner engagement and completion rates.

Hew and Cheung (2014) conducted a study titled *"Students' and Instructors' Use of Massive Open Online Courses (MOOCs): Motivations and Challenges"*, which aimed to understand both the motivations for enrolling in MOOCs and the difficulties encountered by learners and instructors. Using semi-structured interviews and thematic content analysis, the researchers found that while learners were primarily motivated by the desire for knowledge and skill acquisition, they struggled with technical barriers, unengaging content, and insufficient instructor interaction. These factors collectively diminished the effectiveness of MOOC learning experiences.

Alraimi, Zo, and Ciganek (2015) examined learner satisfaction and course continuance in their work titled *"Understanding the MOOCs Continuance: The Role of Openness and Reputation"*. The study's objective was to analyze how platform features like openness and institutional reputation affect users' intent to continue MOOC learning. They used a quantitative survey approach with Structural Equation Modeling (SEM) for data interpretation. Findings revealed that while openness and credibility enhance learner trust, factors such as weak internet infrastructure and lack of interactive elements led to frustration and early dropout, especially among participants from low-income regions.

Kizilcec, Piech, and Schneider (2013), in their article *"Deconstructing Disengagement: Analyzing Learner Subpopulations in MOOCs"*, sought to categorize engagement levels among learners on Coursera. Using behavioral log data and cluster analysis, the researchers identified various learner types, ranging from active participants to passive observers. The study revealed that disengaged learners often cited inadequate feedback, rigid course structures, and limited community involvement as reasons for their withdrawal. The authors emphasized the importance of adaptive learning systems and social features in reducing dropout rates.

Raj and Alamelu (2021) presented a socio-cultural analysis in their study *"Challenges Faced by Indian Learners in MOOCs: A Socio-Cultural Perspective"*. The objective was to explore the unique barriers encountered by Indian learners, particularly in rural and semi-urban contexts. Using a mixed-methods approach—comprising surveys and focus group discussions—the researchers identified several key issues: lack of course content in regional languages, dependence on mobile data with unstable connectivity, and limited familiarity with digital learning environments. The study recommended localized content, mobile-optimized platforms and bilingual support as essential steps to enhance inclusivity and learner success in India.

OBJECTIVES:

- To analyze how socio-economic factors influence learners' experiences and satisfaction with MOOC platforms.
- To identify the major challenges and barriers experienced by learners while participating in MOOCs

STATEMENT OF THE PROBLEM

In recent years, Massive Open Online Courses (MOOCs) have gained popularity as flexible, accessible, and cost-effective learning platforms. While MOOCs offer immense potential to democratize education, many learners encounter significant challenges that hinder their successful participation and completion. Despite increasing enrollment, the actual course completion rates remain low across most platforms. Learners frequently report issues such as lack of motivation, limited teacher interaction, technical barriers, language difficulties, and inflexible course structures.

These challenges may be further influenced by learners' socio-economic backgrounds, including factors like gender, age, occupation, income level, internet access, and educational qualification. Particularly in developing regions, inadequate digital infrastructure and socio-cultural factors exacerbate the difficulties in engaging with online learning. There is a clear need to understand these barriers in detail, especially from the perspective of the learner.

This study aims to systematically explore the problems faced by learners in MOOCs, identify the most pressing issues, and analyze how these challenges relate to their socio-economic profiles. The findings can provide valuable insights for MOOC developers, educators, and policy-makers to create more inclusive and effective online learning environments.

METHODOLOGY

This study used a descriptive survey method to explore the problems faced by learners using MOOC platforms and how these relate to their socio-economic background. A sample of 150 respondents with prior MOOC experience was selected through purposive sampling**.** Data was collected using a structured questionnaire with three parts: socio-economic details, 10 problem-related items rated on a 5-point Likert scale, and optional open-ended feedback. The questionnaire was distributed via Google Forms across online platforms. Collected data were analyzed using simple percentage analysis to identify major challenges and their association with demographic factors.

FINDINGS:

I. SOCIO ECONOMIC PROFILE

TABLE: 1

Variable	Category	Count	Percentage (%)
Gender	Male	63	42.0%
	Female	83	55.0%
	Other	4	3.0%
Age Group	Below 20	15	10.0%
	21–30	60	40.0%
	31–40	45	30.0%
	Above 40	30	20.0%
Marital Status	Single	57	38.0%
	Married	75	50.0%
	Divorced	11	7.0%
	Widowed	7	5.0%
Educational Qualification	Secondary	12	8.0%
	UG	38	25.0%
	PG	45	30.0%
	M.Phil	23	15.0%
	Ph.D	18	12.0%
	Other	15	10.0%
Employment Status	Student	53	35.0%
	Employed	45	30.0%
	Unemployed	23	15.0%
	Self-employed	15	10.0%
	Retired	15	10.0%
Monthly Household Income (INR)	Below 10,000	23	15.0%
	10,001–20,000	45	30.0%
	20,001–40,000	53	35.0%
	Above 40,000	30	20.0%
Residential Area	Rural	38	25.0%
	Semi-Urban	53	35.0%
	Urban	60	40.0%
Type of Internet Access	Mobile Data	53	35.0%
	Broadband	30	20.0%
	Wi-Fi	45	30.0%
	Public Internet (Cyber Café etc.)	23	15.0%
Access to Personal Device	Smartphone	45	30.0%
	Laptop	38	25.0%
	Desktop	30	20.0%
	Tablet	23	15.0%
	No Personal Device	15	10.0%

Family Size	1–2 Members	23	15.0%
	3–4 Members	60	40.0%
	5–6 Members	38	25.0%
	More than 6 Members	30	20.0%
Language Proficiency	English	30	20.0%
	Hindi	38	25.0%
	Regional Language	23	15.0%
	Bilingual	30	20.0%
	Multilingual	30	20.0%
Type of Courses in MOOCs	Professional Development	53	35.0%
	Academic Courses	38	25.0%
	Skill-Based	45	30.0%
	Hobby	15	10.0%

- **Gender**: Female learners form the majority, with 83 respondents (55.3%)**,** showing greater female engagement in MOOCs.
- **Age Group**: The age group 21–30 years has the highest representation with 60 respondents (40%)**,** indicating that young adults are the primary users.
- **Marital Status**: Married individuals lead the group with 75 respondents (50%)**,** suggesting that MOOCs are attractive even to those with family responsibilities.
- **Educational Qualification**: The most common qualification is Postgraduate (PG) with 45 respondents (30%)**,** reflecting a highly educated MOOC learner base.
- **Employment Status**: Students top the list with 53 respondents (35.3%)**,** confirming MOOCs are widely used for academic advancement.
- **Monthly Household Income**: The income bracket ₹20,001–₹40,000 has the most learners with 53 respondents (35.3%)**,** showing strong representation from middle-income families.
- **Residential Area**: Urban residents dominate with 60 respondents (40%)**,** indicating better access to digital learning in cities.
- **Internet Access Type**: Mobile Data is the most common access method, used by 53 respondents (35.3%)**,** highlighting dependence on smartphones for online learning.
- **Digital Device Ownership**: Smartphones are the primary learning device for 45 respondents (30%)**,** showing mobile-based learning is widespread.
- **Family Size**: Most learners belong to families of 3–4 members, with 60 respondents (40%)**,** reflecting the common nuclear family setup.
- **Language Proficiency**: The highest number of learners are Hindi-proficient**,** with 38 respondents (25.3%)**,** underlining the need for content in Hindi.
- **MOOC Course Type**: Professional Development courses are the most preferred, chosen by 53 respondents (35.3%)**,** revealing career growth as the top motivation.

II. Problems Faced by Online Learners in MOOC Platforms (N = 150)

TABLE: 2

Variables	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied
I face difficulty in staying motivated to complete online courses.	45 (30.0%)	55 (36.7%)	20 (13.3%)	20 (13.3%)	10 (6.7%)
The course content lacks interaction and engagement.	35 (23.3%)	50 (33.3%)	30 (20.0%)	25 (16.7%)	10 (6.7%)
I experience frequent technical issues while accessing the MOOC platform.	30 (20.0%)	40 (26.7%)	30 (20.0%)	30 (20.0%)	20 (13.3%)

I find it difficult to understand the content without teacher guidance.	40 (26.7%)	45 (30.0%)	25 (16.7%)	25 (16.7%)	15 (10.0%)
Time management is a major challenge while attending online courses.	50 (33.3%)	40 (26.7%)	30 (20.0%)	20 (13.3%)	10 (6.7%)
Internet connectivity problems interfere with my learning experience.	48 (32.0%)	44 (29.3%)	28 (18.7%)	20 (13.3%)	10 (6.7%)
The absence of peer interaction affects my learning outcomes.	35 (23.3%)	50 (33.3%)	30 (20.0%)	25 (16.7%)	10 (6.7%)
The assessment and evaluation system is not effective.	25 (16.7%)	35 (23.3%)	40 (26.7%)	30 (20.0%)	20 (13.3%)
Course materials are not in my preferred language.	30 (20.0%)	40 (26.7%)	30 (20.0%)	30 (20.0%)	20 (13.3%)
The course structure is too rigid for my schedule.	20 (13.3%)	30 (20.0%)	40 (26.7%)	35 (23.3%)	25 (16.7%)

From the above table: 2 clearly reflect the multifaceted challenges that online learners face on MOOC platforms, with motivation, time management, and internet connectivity emerging as the most significant barriers. A notable 55 respondents (36.7%) reported difficulty staying motivated to complete courses, which correlates strongly with the high proportion of students (40%) and job seekers (12.9%) in the socio-economic profile. These groups typically lack structured environments and external accountability, both of which are essential for self-paced online learning.

Furthermore, connectivity issues affected 48 respondents (32.0%)**,** particularly among learners from rural (28.6%) and semi-urban (34.3%) areas. This aligns with national trends, where internet penetration and bandwidth quality in rural India remain inadequate, limiting consistent access to high-quality digital education (TRAI Report, 2024). The lack of broadband and Wi-Fi access, with a high reliance on mobile data (41.4%)**,** likely exacerbates this issue.

Content understanding without teacher guidance troubled 45 respondents (30.0%)**.** This is especially relevant considering that 58.6% of respondents are female**,** many of whom may be managing multiple responsibilities and may prefer instructor-led formats over asynchronous content. Additionally, language barriers were evident as 40 respondents (26.7%) noted that course materials were not available in their preferred language, emphasizing the need for regional language inclusivity—an issue particularly important for multilingual learners (27.1%) in the sample.

Time management, reported as a challenge by 50 respondents (33.3%)**,** is a consistent problem in MOOC studies across the globe, but particularly for learners in the 21–30 age groups (45.7%)**,** who are often balancing higher education, part-time jobs, or family responsibilities.

A concerning 50 respondents (33.3%) also cited the lack of peer interaction as detrimental, pointing to the need for community-building features within MOOCs—especially since most learners are from non-urban backgrounds, where collaborative environments may already be limited.

These findings echo previous research by Yuan & Powell (2013), which emphasizes that social presence, guidance, and digital infrastructure significantly impact MOOC completion rates. The data suggests that while MOOCs offer flexibility and access, they must evolve to accommodate diverse socio-economic realities through adaptive content, better support systems, multilingual options, and improved digital accessibility.

CONCLUSION

The study highlights that learners on MOOC platforms face several significant challenges, particularly related to motivation, lack of teacher guidance, technical issues, time management, and limited peer interaction. These issues are more pronounced among learners from lower-income

backgrounds, rural areas, and those with limited digital access. The findings also reveal that socio-economic factors such as occupation, educational qualification, and internet accessibility directly influence learners' satisfaction and ability to complete online courses. To improve the MOOC experience, platforms should focus on increasing interactivity, flexibility, language support, and provide better technical and academic guidance, especially for learners from disadvantaged groups.

SUGGESTIONS:

- Enhance course interactivity through live sessions, quizzes, and discussion forums.
- Provide academic support with tutor guidance and regular feedback.
- Ensure multilingual content to cater to diverse language backgrounds.
- Design flexible course structures to support better time management.
- Improve technical accessibility for learners with low bandwidth or basic devices.

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