# Investigating the Nexus of Intrinsic Motivation, Learner Engagement, and Satisfaction in the Completion of MOOC Courses

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# ABSTRACT

This study looks at how learner engagement, intrinsic motivation, and satisfaction interact dynamically within the context of Massive Open Online Courses (MOOCs). It looks at how learner engagement and intrinsic motivation interact and how that affects MOOC completion and satisfaction rates. The review highlights the critical role that intrinsic motivation plays in sparking learners' interest and maintaining their engagement throughout MOOC participation through a thorough study of the body of available research. It explores a number of motivating elements, including personal interests, self-efficacy beliefs, and perceived relevance, clarifying how each influences learners' desire to actively engage in MOOC activities. Furthermore, the review delves into the multifaceted aspects of learner engagement, which include behavioral, cognitive, emotional, and social dimensions. It also highlights the noteworthy impact of these characteristics on the prediction of MOOC completion rates and satisfaction levels. This study provides insightful information about the intricate relationships between intrinsic motivation, learner engagement, and MOOC outcomes by combining empirical data and theoretical frameworks. To guide the creation of more efficient and interesting MOOC experiences for a varied student base, the implications of these discoveries for instructional design, learner support tactics, and future research prospects are explored.

Keywords: Intrinsic Motivation, Learners Engagement, Satisfaction, MOOC, Online Courses

# 1. INTRODUCTION

In the world of MOOCs and online courses, the confluence of intrinsic motivation, student engagement, and satisfaction constitutes a dynamic and varied environment in modern education. It is becoming more and more important to comprehend the complex interactions between these elements as the digital revolution continues to transform conventional learning paradigms. Within learning environments, intrinsic motivation, stems from people's innate impulses, goals, and interests acts as a stimulant to increase engagement and enjoyment. A wide range of actions, thought processes, feelings, and social interactions that indicate active involvement and commitment in the learning process are collectively referred to as learner engagement (Moore et al., 2022) [1]. Contrarily, satisfaction represents students' subjective assessments of their educational experiences and includes elements like perceived value, expectations met, and general contentment. These constructs interact dynamically in the setting of MOOCs and online courses, influencing the experiences, results, and perceptions of learners. This study aims to clarify the combined effects of intrinsic motivation, learner engagement, and satisfaction on MOOC completion rates, learning outcomes, and the general effectiveness of online learning environments by exploring the complex dynamics of these factors. This study intends to provide insights that inform instructional practices, course design strategies, and policy decisions aimed at optimizing the efficacy, accessibility, and inclusivity of MOOCs and online courses in modern educational landscapes through a thorough examination of the body of literature, theoretical frameworks, and empirical research.

# 2. LITERATURE REVIEW

# 2.1. Online Learning and MOOC Courses

MOOCs, the pinnacle of online learning, have transformed education by offering scalable and easily accessible learning opportunities. By removing traditional obstacles of time, money, and location, MOOCs provide learners with access to high-quality educational information that has never been possible before. Even with their promise, questions continue about MOOC efficacy and learner outcomes, with dropout rates continuing to be a major problem. In an effort to better comprehend and resolve these problems, researchers are investigating cutting-edge strategies including individualized learning paths and adaptive learning technology to increase engagement and retention. Moreover, the incorporation of social learning functionalities is intended to promote cooperative learning settings on MOOC platforms (Persada et al.,2022) [2]. The persistence of credentialing and accreditation challenges has sparked conversations about alternate validation models, like micro-credentialing. In spite of these obstacles, MOOCs are still developing, with constant attempts being made to enhance pedagogy, student support systems, and course design. The fact that MOOCs can reach a varied range of learners, including those from underprivileged places, highlights their potential to democratize education. In terms of the future, MOOCs' success will depend on its capacity to adjust to the shifting demands of education and strike a balance between scale and tailored learning experiences. By managing these intricacies, educators and legislators have a crucial influence on how MOOCs and online learning develop in terms of accessibility, efficacy, and inclusion.

#### 2.2. Self Determination Theory (SDT)

The SDT offers a strong foundation for comprehending student engagement, intrinsic motivation, and satisfaction in the context of online and MOOCs. According to Deci and Ryan's (1985) [3] theory, there are three fundamental psychological demands that humans have: relatedness, competence, and autonomy. When these demands are met, people become more intrinsically motivated, which increases their interest in and satisfaction with learning activities. Applying SDT principles to MOOCs and online courses entails creating learning environments that promote learners' autonomy by giving them options for evaluation procedures, pacing, and content selection. Giving students the chance to practice self-directed learning, goal-setting, and reflection gives them the confidence to take charge of their education and develops intrinsic drive. Furthermore, adding learning activities that are suitably difficult and encouraging social interactions amongst students might improve their sense of relatedness and competence, respectively. Teachers and course designers can create more meaningful and engaging learning experiences that meet the needs and preferences of various learners by aligning instructional approaches with the concepts of SDT (Deci & Ryan 2000) [4]. In online learning outcomes. Using SDT principles into MOOCs and online courses is a great way to improve the efficacy and caliber of online learning as these formats develop.

#### 2.3. Intrinsic Motivation and Learners' Engagement

When it comes to motivating students and encouraging their active participation in class activities, intrinsic motivation is essential. Intrinsic motivation, which is based on people's innate wants, passions, and curiosities, is a strong force that encourages students to pursue their learning objectives independently and diligently. Learners who possess intrinsic motivation demonstrate authentic interest and delight in the learning process, which results in increased levels of engagement, focus, and effort expenditure. This innate motivation propels students to actively pursue subject-matter mastery, take on new challenges, and investigate novel concepts (Csikszentmihalyi, 2014) [5]. Additionally, when students successfully complete learning tasks, they feel more accomplished and satisfied, which raises their sense of competence and self-efficacy. Because learners view the learning objectives and activities as personally relevant and in line with their beliefs and interests, intrinsic motivation also promotes a strong sense of personal relevance and significance. Because of this, learners who are intrinsically driven are more likely to display traits of deep learning, like critical thinking, problem-solving, and knowledge application (Krause

et al., 2006) [6]. Moreover, intrinsic motivation fosters a good emotional state that is marked by zeal, interest, and enjoyment, all of which help students become more engaged and persistent in their studies. In general, encouraging meaningful and sustained engagement among students is crucial for improving learning outcomes and academic performance. This is because intrinsic motivation needs to be fostered.

#### 2.4. Learners Intrinsic Motivation and Learners satisfaction online Courses

A key component of online learning is intrinsic motivation, which encourages students to participate in educational activities because they find the process of learning to be intrinsically enjoyable and satisfying. Intrinsic motivation, which stems from people's innate wants and passions, is essential for maintaining students' interest and perseverance in online learning. SDT, which emphasizes the value of autonomy, competence, and relatedness in promoting motivation and engagement, offers a theoretical framework for comprehending intrinsic motivation (Teguh et al., 2022) [7]. With characteristics like flexible pacing, a selection of learning resources, and chances for self-directed exploration, online learning environments have special potential to promote students' intrinsic motivation. Studies have indicated a favorable correlation between students' intrinsic motivation and their performance in online courses, as well as their level of pleasure and overall success. A few elements that affect intrinsic motivation in online learning are the perceived applicability of the material, the level of support provided by the teacher, and the availability of chances for collaborative learning. In online environments, obstacles including disengaged learners, technological problems, and a lack of social connection might impede the growth of intrinsic motivation (Ngiwara et al., 2018) [8]. Creating interesting and interactive course materials, encouraging a feeling of community among students, and offering chances for independence and selfexpression are some tactics to support intrinsic motivation in online learning. In order to foster learners' intrinsic motivation and improve their overall learning experiences, educators and instructional designers are essential in developing online learning environments. Teachers may design online learning experiences that are more relevant, effective, and engaging for a varied student body by grasping and utilizing the concepts of intrinsic motivation.

## 2.5. Mediation Effects of Learners Engagement and Learner Satisfaction

In online learning contexts, the relationship between intrinsic motivation and academic outcomes is significantly influenced by the mediation effects of learner engagement and satisfaction. Intrinsic motivation affects learners' academic performance and satisfaction levels through a mechanism known as learner engagement, which includes behavioral, cognitive, emotional, and social components. Intrinsically driven students are more likely to participate actively in class, which raises their satisfaction levels and produces better learning results (Dixson, 2015) [9]. According to research, there is a mediating role for learner engagement in the relationship between intrinsic motivation and other measures of academic success, including retention rates, grades, and course completion rates. Similar to this, learner satisfaction, which represents students' subjective assessments of their educational experiences, serves as a mediator between academic outcomes and intrinsic motivation and optimize the learning environment to promote favorable academic outcomes by understanding the mediating function of learner engagement and satisfaction (Fredericks et al., 2004) [10]. The promotion of students' academic success and general well-being in online learning environments ultimately depends on creating a safe, stimulating, and encouraging learning environment that fosters intrinsic motivation and satisfaction.

#### 2.6. Learner Satisfaction towards Online Learning

Evaluating the efficacy and caliber of educational experiences in virtual environments necessitates taking into account the degree of happiness that learners have with online learning. It includes the subjective

assessments made by students of the different facets of their online education, such as the course material, the way in which it is delivered, the interactions they have with classmates and teachers, and the general atmosphere of the learning environment. According to research, elements including technology dependability, teacher support, course design, and the perceived value of the learning resources all have an impact on student happiness. In online courses, high learner satisfaction is linked to higher motivation, engagement, and academic success (Joo et al.,2013) [11]. Additionally, contented students are more likely to finish their courses, stick with their studies, and have positive opinions about studying online. In order to improve the entire learning experience, instructional techniques, course design strategies, and support mechanisms can be informed by an understanding of learners' satisfaction with online learning. Creating a feeling of community, giving prompt feedback, allowing chances for cooperation, and making sure there are clear lines of communication are a few tactics that can be used to increase learner satisfaction (Deng, 2019) [12]. Prioritizing learner satisfaction allows instructors and course designers to build more effective, encouraging, and engaging online learning environments that cater to students' varied requirements and preferences. Based on the above research gap we propose a conceptual model.



Figure 1: Conceptual Model

## 3. CONCLUSIONS

This study's result emphasizes how important intrinsic motivation, student engagement, and satisfaction are when it comes to MOOCs and online courses. The study demonstrate how intrinsic motivation has a major influence on learners' levels of engagement and general happiness with MOOC experiences. Moreover, it is clear that learner engagement plays a crucial mediating role in the relationship between intrinsic motivation and satisfaction, highlighting its significance in influencing students' opinions about how effective a course is. The complexity of encouraging active participation in online learning settings is highlighted by the multimodal character of learner engagement, which encompasses behavioral, cognitive, emotional, and social components. Improving learners' intrinsic motivation, engagement, and pleasure in MOOCs requires creating a welcoming and stimulating learning environment. Prioritizing strategies that aim to increase engagement and promote intrinsic motivation can help to enhance online course completion rates as well as the overall learning experience. Subsequent investigations ought to delve into supplementary elements that impact these concepts and their consequences for virtual

learning. Teachers and course designers can construct more successful and captivating online learning environments for a varied student body by comprehending and utilizing the relationship among intrinsic motivation, learner engagement, and satisfaction. In the end, there is potential for improving the accessibility, efficacy, and inclusivity of online education by leveraging the intersection of intrinsic motivation, learner engagement, and satisfaction.

## 4. LIMITATION AND FUTURE RESEARCH

This study, which is based on an extensive evaluation of the literature, finds a gap that opens the door to more investigation using quantitative analysis. This study has identified areas where empirical research might provide more light on the dynamics of intrinsic motivation, learner engagement, and satisfaction in MOOCs and online courses by carefully examining the body of existing literature. The research will expand in the future to include quantitative studies aimed at verifying and expanding the conclusions drawn from the literature using empirical means. It's crucial to recognize the limits of the quantitative method, such as its possible inability to fully capture the intricate interplay between intrinsic motivation and learner engagement.

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