## Massive Open Online Course (MOOC): Instructor Student Rapport and Student Interests Among College Students of Karnataka

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#### Abstract

Massive Open Online Courses (MOOCs) have gained immense popularity in re-cent years, with the emergence of various platforms such as Coursera, Udacity, edX, etc. These platforms offer courses in various fields, ranging from computer science to humanities. The objective of the present study is to examine the association between student-instructor rapport and student interest while pursuing MOOCs. The sample comprised 383 college students pursuing undergraduate and postgraduate courses in Karnataka, and employed two measures, namely the Instructor-Student Rapport Scale and the Student Interest Scale. The findings of the study suggested a significant positive relationship between instructor-student rapport and student interest. Personal connection, one dimension of instructor-student rapport was found to be a significant predictor of emotional interest in students; whereas enjoyable interaction, another dimension of instructor-student rapport, was demonstrated as a significant predictor of cognitive interest. The study throws light into the scope of utilizing instructor-student rapport in enhancing student interest, thereby enhancing the efficacy of MOOCs across the country.

Keywords: MOOCs, Instructor-Student Rapport, Student Interest, College Students

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### Introduction

Massive Open Online Courses (MOOCs) are online courses that offer free or affordable access to educational resources to anyone with an internet connection. MOOCs have revolutionized the way we learn and have become an essential tool for individuals, organizations, and institutions around the world. The importance and uses of MOOCs are numerous and have impacted the way we approach education and professional development. One of the most significant advantages of MOOCs is their accessibility. Anyone with an internet connection can enroll in a MOOC, regard-less of their location or financial situation (Al-Rahmi et al., 2019). MOOCs are a great way for people who cannot afford traditional education or are located in remote areas with limited access to educational resources to learn new skills and acquire knowledge (Liyanagunawardena et al., 2013). MOOCs also offer a wide range of courses on various topics, from computer science and business to language learning and creative writing. The diversity of courses available on MOOC platforms means that learners can tailor their learning to their interests and needs (Pomerol et al., 2015). This flexibility also allows individuals to learn at their own pace and on their schedule. In addition to individual learners, MOOCs have also become a valuable tool for organizations and institutions. Companies can use MOOCs to provide training and development opportunities for their employees (Park et al., 2018). MOOCs can help organizations upskill their employees and prepare them for new roles or responsibilities. Institutions such as universities and colleges can also use MOOCs to supplement their traditional classroom teaching and provide their students with additional re-sources and learning opportunities. Furthermore, MOOCs have become an essential tool for individuals looking to switch careers or acquire new skills. MOOCs can help learners develop new skills and knowledge that are in high demand in today's job market. Learners can earn certificates or credentials from MOOCs to demonstrate their skills and knowledge to employers. MOOCs also provide a platform for learners to connect with experts in their field of study. Learners can participate in online forums and discussions, ask questions, and receive feedback from peers and instructors. This collaboration and interaction with others can enhance the learning experience and provide learners with a sense of community and support (Galán et al., 2022).

Massive Open Online Courses (MOOCs) have gained immense popularity in recent years, with the emergence of various platforms such as Coursera, Udacity, edX, etc. These platforms offer courses in various fields, ranging from computer science to humanities. In India, MOOCs have also gained traction and have been used by many to enhance their skills and knowledge. A study by Venkatesh et al. investigated the perception of students toward MOOCs in India. The authors found that the majority of students found MOOCs to be beneficial for improving their knowledge and skills. However, they also noted that the completion rates of MOOCs were relatively low, which could be attributed to various factors such as lack of motivation, time constraints, and inadequate guidance (Venkatesh et al., 2003). Sahoo et al. examined the effectiveness of MOOCs in promoting lifelong learning among working professionals in India. The authors found that MOOCs were effective in enhancing the skills and knowledge of professionals, especially in the fields of computer science and engineering; MOOCs could serve as a cost-effective alternative to traditional forms of education (Sahoo et al., 2018). The availability of high-speed internet and the credibility of the platform were significant factors that influenced the adoption of MOOCs and the lack of interaction with instructors and peers, and the absence of formal recognition were some of the factors that hindered the adoption of MOOCs (Muti Altalhi, 2021).

MOOCs have been effective in enhancing the employability of graduates in India, especially in the fields of data science, artificial intelligence, and machine learning (Mohan et al., 2020). The quality of content, the credibility of the platform, and the level of interaction with instructors and peers were significant factors that influenced the satisfaction of students with MOOCs, and the lack of guidance and feedback, and the absence of formal recognition, were some of the factors that hindered the satisfaction of students with MOOCs (Nilashi et al., 2022). The Government of India has launched several initiatives to promote the use of MOOCs in the country, including SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds), which is a platform for online courses offered by Indian universities and approved by the University Grants Commission (UGC). Several colleges and universities in Karnataka have also adopted MOOCs as part of their curricula, with some offering credit for the completion of these courses. The objective of the present study is to examine the association between student-instructor rapport and student interest while pursuing MOOCs.

# Methodology

The study employed two measures, namely the Instructor-Student Rapport Scale & Student Interest Scale. The Instructor-Student Rapport Scale (ISRS) was developed by Brandi N. Frisby and S.A. Myers in 2008, and it consists of two dimensions, personal connection (5 items) and enjoyable interaction (6 items) (Tatum, 2019). ISRS measures the extent of the rapport between the instructor and the student in the instructional communication context. The Student Interest Scale (SIS) was developed by Joseph P. Mazer in 2012, and it consists of two dimensions, emotional interest (9 items) and cognitive interest (7 items). SIS assesses student experiences of emotional and cognitive forms of interest in instructional communication (Mazer, 2012). Both scales are measured on a 5-point rating scale. The sample comprised 383 college students pursuing undergraduate and postgraduate courses in Karnataka. More than half of the participants are females (53.5%), around three-fourths of them below 20 years of age (72.8%) and hailing from urban localities (73.6%). The majority of them study in aided colleges (52.5%) and pursue commerce and management studies (40.7%), followed by social sciences and humanities (31.6%), science (20.1%), and other (7.6%) courses. Informed consent was taken from the participants and the measures were distributed among them for self-reporting. The obtained data was checked, edited, and coded in Microsoft Excel. Descriptive, correlation, and regression analysis (Version 23) was carried out to obtain the study results, using Statistical Package for Social Sciences (SPSS), Version 23.

## **Results and Discussion**

| between instructor-student rapport and student interest |       |      |     |        |        |        |  |
|---|-------|------|-----|--------|--------|--------|--|
| Variable  | Mean  | SD   | (1) | (2)    | (3)    | (4)    |  |
| Personal Connection (1)                                 | 17.81 | 3.90 | 1   | .333** | .946** | .337** |  |
| Enjoyable Interaction (2)                               | 13.97 | 4.26 |     | 1      | .234** | .975** |  |
| Emotional Interest (3)                                  | 26.46 | 6.03 |     |        | 1      | .242** |  |
| Cognitive Interest (4)                                  | 20.10 | 5.57 |     |        |        | 1      |  |
| **p<0.01  |       |      |     |        |        |        |  |

 Table 1: The Pearson correlation coefficient indicates a significant positive relationship

 between instructor-student rapport and student interest

As demonstrated in Table 1, the Pearson correlation coefficient indicates a significant positive relationship between instructor-student rapport and student interest. The analysis

suggests that personal connection has a fairly strong correlation with emotional interest (r= .946, p <.01) whereas enjoyable interaction is strongly correlated with cognitive interest (r= .975, p <.01). To confirm this trend, a linear regression analysis was carried out, enquiring the extent to which personal connection and enjoyable interaction can predict the emotional interest and cognitive interest respectively. The findings are illustrated in Table 2 and Table 3.

| Table 2: Linear regression predicting emotional interest from personal connection |      |       |       |                     |         |         |
|---|------|-------|-------|---------------------|---------|---------|
| Predictor   | β    | t     | $R^2$ | Adj. R <sup>2</sup> | F       | Sig.    |
| Personal<br>Connection  | .946 | 57.02 | .895  | .895                | 3251.51 | < 0.001 |

Linear regression analysis revealed that personal connection is a significant predictor of emotional interest ( $\beta = .946$ , t = 57.02, p<0.00). The rise of online education has dramatically changed the way people learn and acquire knowledge. With the convenience and flexibility of online learning, more people are now turning to this alternative form of education. However, the success of online education depends not only on its convenience and accessibility but also on the emotional interest of students. Emotional interest, or the degree to which students are engaged and invested in their learning, is crucial for learning outcomes and retention. In recent years, research has shown that personal connection is a significant predictor of emotional interest in online education. Research has shown that personal connection is a significant predictor of emotional interest in online education. A study conducted by the Online Learning Consortium found that students who felt connected to their instructors and classmates had higher levels of motivation and engagement in their courses. The study also found that personal connection was a stronger predictor of emotional interest than the quality of the course content or the technology used (Gray, 2016). In conclusion, personal connection is a significant predictor of emotional interest in online education. When students feel connected to their instructors, they are more likely to be engaged, motivated, and invested in their learning. Therefore, instructors and course designers need to prioritize creating opportunities for personal connection in online education to ensure the success of their courses. By doing so, they can create a sense of community and belonging that is crucial for human motivation and well-being.

| Table 5. Linear regression predicting cognitive interest noin enjoyable interaction |      |       |       |                     |         |         |  |
|---|------|-------|-------|---------------------|---------|---------|--|
| Predictor   | β    | t     | $R^2$ | Adj. R <sup>2</sup> | F       | Sig.    |  |
| Enjoyable<br>Interaction  | .975 | 86.41 | .951  | .951                | 7467.34 | < 0.001 |  |

Table 3: Linear regression predicting cognitive interest from enjoyable interaction

Linear regression analysis also suggested that enjoyable interaction is a significant predictor of cognitive interest ( $\beta = .975$ , t = 86.41, p<0.00). When individuals find the learning experience enjoyable, they are more likely to become engaged and motivated to continue learning. This is particularly important in online education, where many distractions and challenges can cause learners to disengage. By focusing on creating engaging and enjoyable learning experiences, educators can increase learners' cognitive interest and ultimately improve their learning outcomes. Therefore, educators need to prioritize creating engaging and enjoyable online learning experiences that foster enjoyable interaction, as this will lead to a greater level of cognitive interest and success in online education.

### Conclusion

Online education has become increasingly popular in recent years, with the number of students enrolled in online courses growing steadily. This trend has only accelerated during the pandemic, with many universities and colleges forced to shift their courses online. According to a survey conducted by BestColleges.com, 87% of students said they were interested in taking online courses. One reason for the popularity of online education is its convenience. Online courses offer students the ability to study from anywhere, at any time, as long as they have a computer and an internet connection. This flexibility is particularly appealing to students who have work or family obligations that make it difficult to attend traditional classes. Another factor contributing to the growing interest in online education is the perceived cost savings. Many online courses are less expensive than traditional courses, and students can avoid additional expenses such as commuting and housing costs. Additionally, online courses offer students the ability to complete their degrees at their own pace, allowing them to save money by taking fewer courses per semester. One of the main reasons for the growing popularity of MOOCs in India is their accessibility. MOOCs are free or low-cost, and students can access them from anywhere, at any time. This makes them particularly appealing to students who are unable to attend traditional courses due to financial or geographic constraints. Another reason for the popularity of MOOCs in India is the quality of education they offer. Many MOOCs are designed and delivered by leading universities and experts from around the world, and they offer students the opportunity to learn from the best. This is particularly important in a country like India, where access to high-quality education is often limited. MOOCs also offer students the opportunity to acquire new skills and knowledge that can help them in their careers. This is particularly important in a country like India, where there is a growing demand for skilled workers in areas such as technology, data science, and management. However, there are also challenges associated with MOOCs in India. One of the main challenges is the lack of accreditation for MOOC courses. While some universities in India are now offering credit for MOOC courses, this is still not widespread. As a result, many students may be hesitant to invest their time and money in MOOC courses that may not be recognized by employers. MOOCs have become an essential tool for individuals, organizations, and institutions looking to learn, grow and adapt in today's rapidly changing world. The accessibility, flexibility, and diversity of courses available on MOOC platforms have revolutionized the way we approach education and professional development. The importance and uses of MOOCs will only continue to grow as technology advances and the demand for life-long learning increases.

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