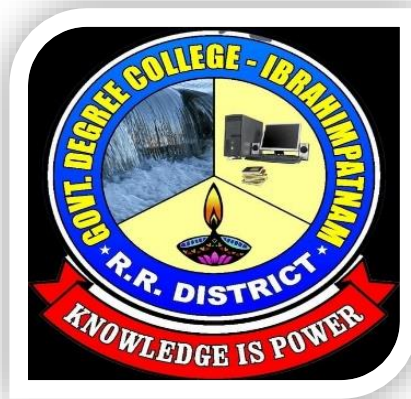


Research Project Report
ON
A PROJECT ON ROLE OF MOOCS IN SCALING UP
THE SKILLS OF UG STUDENTS - A STUDY ON
GOVERNMENT DEGREE COLLEGE
IBRAHIMPATNAM



Submitted in Partial Fulfilment for the Award of the Degree
of Bachelor of Commerce 2024-25
UNDER THE GUIDANCE OF

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STUDENT DECLARATION

This is to certify that I have completed the Research Project titled “**A Project On Role Of MOOCs In Scaling Up The Skills Of UG Students - A Study On Government Degree College Ibrahimpatnam**” under the guidance of “**N. Suresh Naidu**” in partial fulfillment of the requirement for the award of degree of Bachelor **of Commerce (Computer Applications)** at Government Degree College, Ibrahimpatnam. This is an original piece of work & we have not submitted it earlier elsewhere.

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This is to certify that the research project titled “Role of MOOCs In Scaling Up the Skills of UG Students” is an academic work done by “Md. Yaseen, Md. Aleem, Md. Osman, Ravikanth, Arun” submitted in the partial fulfillment of the requirement for the award of the degree of Bachelor of Commerce from Government Degree College, Ibrahimpatnam, under my guidance & direction. To the best of my knowledge and belief the data & information presented by them in the project has not been submitted earlier.

Signature

Name Of the Faculty Guide: Dr. S. Dhanraj

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In preparing and finishing this research project report, we acknowledge the encouragement and assistance given by a number of people and institutions.

We owe a great deal of gratitude to all of our teachers of the Commerce department, especially the honorable head of the B. Com (CA) department, Dr. S. Dhanraj, our class coordinator, his special guidance helps us in our graduation life. Basically, his support, encouragement, and availability to discuss ideas and problems have contributed much in completing this report.

All the relevant things we have tried our best in order to serve every objective of this report. To make the best understanding of the theoretical portion, relevant tables, bar diagram, pie chart has been produced.

And finally, we like to say that we have tried heart & soul to prepare this report accurately. However, there might be some errors & silly mistakes due to our limited aptitude & time constraint. In this regard, we seek your kind consideration as we in the process of learning.

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B.COM (CA) 6th Semester 2024-2025

EXECUTIVE SUMMARY

The research project report on “Role of MOOCs in Scaling up the skills of UG Students.” is as required by the N. Suresh Naidu, Professor, GDC IBP. The objectives of this report are to study and to analyze the accessibility of massive online open courses (MOOCs).

This report is divided into five chapters. The **first chapter** of this study deals with Introduction that presents the objectives, need for the study, methodology, scope and samples of the study. The **second chapter** concerns with the Theoretical framework. The **third chapter** is about the Profile of Government Degree College, Ibrahimpatnam. The **fourth chapter** is about Data analysis. The **fifth chapter** is about Conclusion.

The main findings of the research project are as follows:

- (1) Even though Majority of people know what MOOCs are, or have enrolled in them, there is still a lot of publics that does not know about MOOCs.
- (2) Most MOOCs enrolled in / completed by people are from Coursera, EdX or NPTEL. There are many other great platforms, but are under-utilized.
- (3) Most people who enrolled / completed a MOOC are UG Bachelor Degree Students with Specialization in Commerce or Management.
- (4) A majority of people enrolled / completed a MOOC eventually dropped out of it. It could have happened due to various factors.
- (5) The main advantages of MOOCs were found to be technological efficiency, cost effectiveness, and quality of content.

(6) The major barriers to MOOCs were found to be teaching presence, social presence and retention capacity of students.

(7) Internal Factors such as Self Efficacy, Self-Regulation and Retention Capacity also played a major role in the performance of MOOCs in India.

CHAPTER 1 – INTRODUCTION

1.1 Introduction:

Edu tech forms have been making rapid strides in terms of pedagogy & usage of innovative tools, to transact the curriculum and reaching millions of students across the globe. The aggressive innovations being made in Edutech sectors have drastically brought down the cost of pursuing the courses, indeed there are many Edutech forms operating through MOOCs (Massive Open Online Courses) offering free courses to the students and working professionals. For example; Khan Academy of Bangladesh has discriminated online education to more than 10 million students, without charging any fee.

Government of India has also launched an Edutech platform called SWAYAM and offering many certificate courses irrespective of age, qualification, and social status, but it is found that most of the students from Government institutions are not volunteering to enroll themselves into such courses. Therefore, it is proposed to conduct a live project on the Role of Edutech forms and MOOCs in skilling and upskilling the students of Government Degree College with the following objectives.

1.2 Objectives of the study

- To understand the emerging trends of MOOCs and Edutech forms.
- To analyze the importance of MOOCs in promoting skills of UG students.
- To access the perceptions of UG students of Government Degree College Ibrahimpatnam on MOOCs and Edutech Forms.

1.3 Need for the study

This project is considered to be essential due to the following aspects.

1. The enrollment of Government College students in MOOCs is very weak comparing to the non-government institutions. Therefore, there is a need to study the reasons behind such poor enrollments.
2. The infrastructure needs & digital environment of Government institutions must be critically analyzed to see whether colleges can collaborate with Edutech forms in implementing the MOOCs.
3. It is also important to assess the awareness level of teachers and students before deciding whether MOOCs can be to improve the skills of students at places like Ibrahimpatnam.

1.4 Scope of the study

This project has got a very limited scope of one government degree college located at Ibrahimpatnam for the purpose of collecting primary data. However, it has got a macro level of scope of analyzing the trends of Edutech and MOOCs across the country.

1.5 Research Methodology

The first objective is examined through plotting the trend lines of Edutech forms and MOOCs on a two-dimensional group, and the third objective is accomplished with the help of primary data which is proposed to be collected from students at Government Degree College Ibrahimpatnam. On the other hand, the second objective is tested with the following hypothesis.

1.6 Hypothesis

1. Null Hypothesis (H_0): MOOCs cannot impact the learning skills of UG students at Government Degree College Ibrahimpatnam.
2. Alternative Hypothesis (H_1): MOOCs can impact the learning skills of UG students at Government Degree College Ibrahimpatnam.

1.7 Research tools and techniques

This project proposes an ANOVA model to test the hypothesis which shall be one-way model establish correlation between learning skills and MOOCs. Apart from this, pie chart and questionnaire shall also be use for interpret the primary data.

1.8 Samples

This project proposes a random sample of 60 Students from Government Degree College Ibrahimpatnam, such that equal no. of students from BA, BCOM, BSC shall be selected to Administer the questionnaire.

1.9 Research Design

The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. Note that the research problem determines the type of design you should use, not the other way around!

The research design used in this study is **Survey / Descriptive Research Design**, with emphasis on the **Phenomenological Approach to Quantitative Research**, which takes into account the personal opinions, experiences and perceptions of the target

audience. A questionnaire was given to respondents, and based on their responses, data was analyzed to draw meaningful conclusions. For betterment, we used a control method, where people younger than the age of 12 won't be able to participate in the study, and other respondents would simply submit the questionnaire, if they answer 'No' to the questions:

- Have you ever heard of Massive Open Online Courses (MOOCs)?
- Have you ever completed/enrolled in any MOOC?

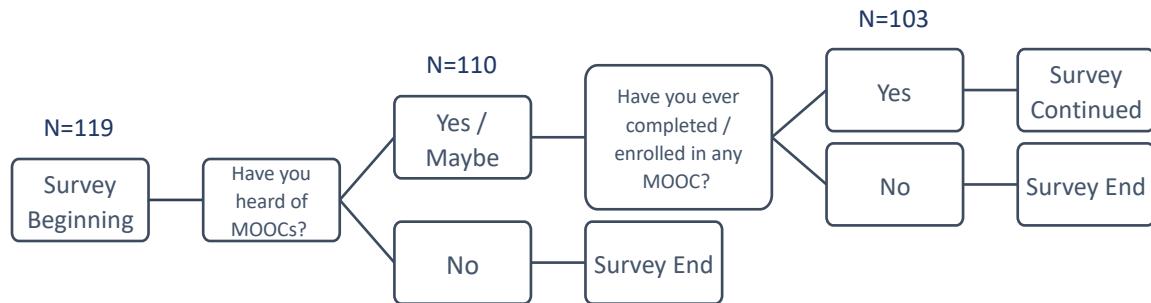


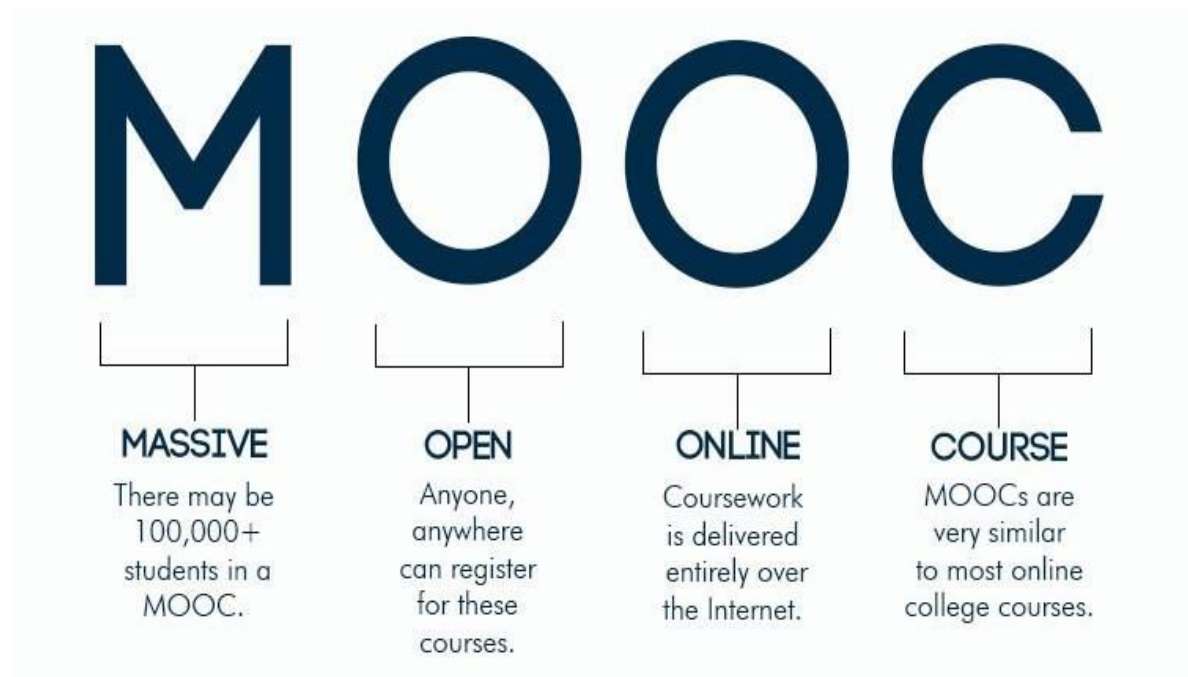
Figure 1. Research Design

Out of **119** total responses, **110** had heard / maybe heard about MOOCs, and out of those, **103** had enrolled / completed any MOOC course. So, **majority of our data was analyzed on this sample size of 103 responses.**

CHAPTER 2 – THEORETICAL FRAMEWORK

2.1 Meaning of MOOCs

A **Massive Open Online Course (MOOC)** is an online course aimed at unlimited participation and open access via the Web. In addition to traditional course materials, such as filmed lectures, readings, and problem sets, many MOOCs provide interactive courses with user forums or social media discussions to support community interactions among students, professors, and teaching assistants (TAs), as well as immediate feedback to quick quizzes and assignments. MOOCs are a widely researched development in distance education, **first introduced in 2008**, that emerged as a popular mode of learning in 2012.



2.2 Historical Origin of MOOCs

Early MOOCs (cMOOCs: Connectivist MOOCs) often emphasized **open-access features**, such as *open licensing of content, structure and learning goals, to promote the reuse and remixing of resources*. Some later MOOCs (xMOOCs: extended MOOCs) use closed licenses for their course materials while maintaining free access for students.

Before the Digital Age, **distance learning appeared in the form of correspondence courses in the 1890s–1920s** and later radio and television broadcast of courses and early forms of e-learning. Typically, fewer than five percent of the students would complete a course. The ***first MOOCs emerged from the open educational resources (OER) movement***, which was sparked by **MIT Open Courseware project**. The OER movement was motivated from work by researchers who pointed out that class size and learning outcomes had no established connection, with Daniel Barwick's work being the most oftencited example.



Within the OER movement, the **Wikiversity was founded in 2006** and the **first open course on the platform was organized in 2007**. Ten-week course with more than 70 students was used to test the idea of making Wikiversity an open and free platform for education in the tradition of Scandinavian free adult education, Folk High School and the free school movement. **The term MOOC was coined in 2008 by Dave Cormier of the**

University of Prince Edward Island in response to a course called Connectivism and Connective Knowledge (also known as CCK08). CCK08, which was led by George Siemens of Athabasca University and Stephen Downes of the National Research Council, consisted of 25 tuition-paying students in Extended Education at the University of Manitoba, as well as over 2200 online students from the general public who paid nothing.

Alongside the development of these open courses, **other E-learning platforms emerged** – such as Khan Academy, Peer-to-Peer University (P2PU), Udemy, and Alison – which are viewed as similar to MOOCs and work outside the university system or emphasize individual self-paced lessons. As MOOCs developed with time, multiple conceptions of the platform seem to have emerged. **Mostly two different types can be differentiated: those that emphasize a connectivist philosophy, and those that resemble more traditional courses.**

2.3 Origin of MOOCs in India

The emergence of Massive Open Online Courses (MOOCs) in India reflects the nation's progressive approach to democratizing education and addressing its unique challenges. As one of the fastest-growing economies with a vast, diverse population, India recognized the potential of MOOCs to transform its education system by expanding access, enhancing quality, and fostering lifelong learning

Millions of students have signed up for massive open online courses, and hundreds of universities are offering some form of Web-based curriculum. Most students aren't paying much for these classes, if they're paying anything at all. Ever since the emergence of OER (Open Educational Resources) Movement, there have been many

players in the MOOC industry, but very few have managed to stamp their authority.

These are:

COURSERA



Coursera Inc. is a U.S.-based massive open online course provider founded in 2012 by Stanford University computer science professors Andrew Ng and Daphne Koller. Coursera works with universities and other organizations to offer online courses, certifications, and

degrees in a variety of subjects. In 2021 it was estimated that about 150

universities offered more than 4,000 courses through Coursera. In March 2020, in response to the global COVID-19 pandemic, Coursera alongside its partners sponsored over 115 certification courses for people who may have been affected by the global pandemic

This is part of an outreach initiative for people who may have lost their jobs, have been retrenched, have had their salaries reduced, or who may merely want to improve and grow by learning and developing their technical skills through recognized certifications

EdX



EdX is an American massive open online course (MOOC) provider created by Harvard and MIT. It hosts online university level courses in a wide range of disciplines to a worldwide student body, including some courses at no charge. It also conducts research into learning based on how people use its platform. edX runs on the free Open edX open-source software platform. 2U is the parent company, with edX operating as its global online learning platform and primary brand for products and services.

KHAN ACADEMY



Khan Academy Khan Academy is an American non-profit educational organization created in 2008 by Sal Khan. Its goal is creating a set of online tools that help educate students. The organization produces short lessons in the form of videos. Its website also includes supplementary practice exercises and materials for educators. It has produced over 8,000 video lessons teaching a wide spectrum of academic subjects, originally focusing on mathematics and sciences. All resources are available for free to users of the website and application.

As of 2018, over 70 million people use Khan Academy, out of which 2.3 million students use it to prepare for SAT. As of February 2022, the Khan Academy channel on YouTube has 7.11 million subscribers and Khan Academy videos have been viewed more than 1.94 billion times.

STANFORD ONLINE



Stanford Online is an educational initiative launched by Stanford University which offers a

variety of professional education opportunities. As a part of Stanford Online, Stanford University created an open access OpenEdX platform which offered a variety of massive open online courses (MOOCs) in 2013, but that site is no longer accessible. Online classes previously offered on that platform can now be accessed on an updated platform EdX that offers a wide range of online courses covering many topics. Some of the online classes offered by Stanford Online on this platform are available free of charge. Classes can be accessed from anywhere around the world.

MITx Online



MITx Online

MITx is the massive open online course

(MOOC) program at Massachusetts Institute of Technology. A constituent program of MIT's Office of Digital Learning, MITx produces MOOCs from MIT departments and faculty that appear on the edX platform. MITx also supports residential experiments with scalable learning technologies and research on digital learning. MOOCs offered through edX by MITx are open-enrollment and free to take. In September 2012, edX and MITx introduced the option to receive an ID verified certificate on some courses.

FUTURELEARN



FutureLearn is a British digital education platform founded in December 2012. The company is jointly owned by The Open University and SEEK Ltd. It is a Massive Open Online Course (MOOC), ExpertTrack, microcredential and Degree learning platform. As of November, included over 250 UK and international partners, including industry and government partners.

2.4 Advantages of MOOCs

There is a number of advantages of MOOC for learners. Some major benefits are listed below:

- A. Through multimedia, the learning can be made more interactive.
- B. It is possible for the learners to learn according to their schedule. So, there is no need of instructor all the time.
- C. It provides the learners with the freedom to select the desired course by the desired instructor from the desired institute.
- D. As the course is available online, a learner can access the content from disparate geographical locations.
- E. It is easy for the instructors to share their expertise with a large number of learners without being physically present.
- F. It helps in inculcating the habit of self-learning within an individual.
- G. There is no time or geography barrier. h. It can be easily and quickly organized.
- H. As it involves group learning so it allows the learners to learn from each other and not from the instructor only.
- I. It is open in terms of enrolment.

- J. There are no admission or eligibility criteria.
- K. Provides an opportunity for lifelong learning.
- L. . Provides the learner with an insight into the concept.

2.5 Disadvantages of MOOCs

While MOOCs have revolutionized education, they face several challenges that hinder their effectiveness:

1. **Low Completion Rates:** A significant drawback of MOOCs is their low completion rate, often below 10%. Many learners register for courses but drop out due to a lack of discipline, motivation, or personal accountability in self-paced learning environments.
2. **Limited Interaction:** MOOCs lack the direct interaction and personal connection that traditional classrooms offer. Students may feel isolated, as the primary form of communication is through discussion forums or pre-recorded content, which may not always address individual doubts effectively.
3. **Digital Divide:** One of the most significant barriers to MOOCs is the lack of equitable access to technology and the internet. In rural and economically weaker regions, learners often face challenges such as unreliable internet connectivity or the unavailability of devices like computers or smartphones.
4. **Language and Cultural Barriers:** The majority of MOOCs are offered in English, creating a language barrier for non-English speakers. Additionally, the course content may not always align with local contexts or cultural nuances, limiting its relevance for some learners.

5. **Lack of Accreditation:** Although many MOOCs provide certificates, they are not universally recognized by employers or academic institutions. This limits their value, particularly when compared to traditional degrees or diplomas.
6. **Overwhelming Choice:** The abundance of courses can be overwhelming for learners, making it difficult to choose the right course. This lack of guidance may lead to poor decision-making and ineffective learning outcomes.
7. **Focus on Theoretical Knowledge:** Many MOOCs emphasize theoretical learning over practical application, which may not adequately prepare students for real-world challenges.

Despite these challenges, MOOCs have immense potential to address educational gaps if these issues are systematically addressed through targeted interventions and policy support.

2.6 Overview on EdTech Firms Functioning in India

India's EdTech industry has emerged as a global leader, revolutionizing the way education is delivered. With a rapidly growing digital infrastructure and increasing smartphone penetration, EdTech platforms are reshaping learning experiences. Here is an overview of some prominent EdTech firms:

1. **BYJU'S**



The largest EdTech platform in India, BYJU'S focuses on interactive video-based learning for K-12 students and competitive exams. It offers engaging content that simplifies complex topics

through animations and storytelling.



2. Unacademy

This platform specializes in live classes and tutorials for competitive exams like UPSC, NEET, and CAT. It provides learners access to top educators and structured courses.

3. Vedantu



Vedantu is known for its live online tutoring. It offers personalized sessions for students and focuses on real-time doubt-solving.

4. UpGrad



UpGrad focuses on higher education and skill-based learning. It offers professional certifications and degree programs in collaboration with global universities, targeting working professionals.

5. Coursera and edX



These global platforms have a strong presence in India, offering diverse MOOCs, including professional certifications and degree programs.

6. WhiteHat Jr



It introduces coding to children, helping them develop skills in programming and artificial intelligence from an early age.

2.7 Introduction To SWAYAM



SWAYAM (meaning 'Self') is a Sanskrit acronym that stands for "Study Webs of Active Learning for Young Aspiring Minds". It is an Indian Massive open

online course (MOOC) platform. The SWAYAM initiative was launched by the then Ministry of Human Resource Development (M.H.R.D.) (now Ministry of Education), Government of India under Digital India to give a coordinated stage and free entry to web courses, covering all advanced education, High School and skill sector courses. It was launched on 9th July 2017 by Ram Nath Govind, Honorable President of India

SWAYAM has been developed cooperatively by MHRD (Ministry of Human Resource Development) and AICTE (All India Council for Technical Education) with the help of

Microsoft and is equipped for facilitating 2,000 courses. The platform offers free access to everyone and hosts courses from class 9 to post-graduation. It enables professors and faculty of centrally funded institutes like IITs, IIMs, IISERs, etc. to teach students

2.8 Profile of Higher Education Institutions in India

India boasts one of the largest and most diverse higher education systems in the world, catering to millions of students annually. The system is a mix of central, state, private, and deemed universities, along with standalone colleges and institutes offering specialized education. The sheer scale of this network demonstrates India's commitment to providing educational opportunities to its population.

Key Features of Higher Education in India:

1. **Large Network of Institutions:** India is home to over 1,100 universities and more than 40,000 colleges. These institutions include central universities, state universities, private universities, and autonomous institutes like the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs).
2. **Multi-disciplinary Education:** Higher education covers a wide range of disciplines, including arts, sciences, engineering, medicine, law, and vocational training, with an increasing focus on interdisciplinary learning.
3. **Global Aspirations:** Many Indian institutions are striving for international recognition, with several ranking in global university rankings. Institutes like IIT Bombay, IISc Bangalore, and Delhi University have gained prominence globally.

➤ **Challenges in Higher Education:**

Quality Variations: While premier institutions offer world-class education, many colleges face issues like outdated curricula, lack of infrastructure, and faculty shortages.

Accessibility: Despite having a vast network, higher education remains out of reach for students in rural and economically weaker sections.

Skill Gap: Many graduates lack the practical skills required in the job market, leading to employability concerns.

➤ **Government Initiatives:**

To address these challenges, the government has launched initiatives like National Education Policy (NEP) 2020, which emphasizes digital education, multidisciplinary programs, and skill development. Schemes like RUSA (Rastriya Uchchatar Shiksha Abhiyan) focus on infrastructure development and quality enhancement in universities.

2.9 Overview of Higher Education Institutions in Telangana

Telangana, a hub of education in southern India, has made significant progress in developing its higher education system. The state is home to some of the country's premier institutions, which cater to a diverse student population. With a focus on skill development and research, Telangana has become a prominent educational destination.

Key Features of Telangana's Higher Education System:

1. **Universities and Colleges:** Telangana has over 16 state universities, including Osmania University (one of the oldest in India), Kakatiya University, and Jawaharlal Nehru Technological University (JNTU). These universities offer a range of undergraduate, postgraduate, and doctoral programs.

2. **Private Institutions:** The state also hosts several private universities and autonomous colleges, such as the Indian School of Business (ISB) and BITS Pilani Hyderabad Campus, which attract students nationwide.

3. **Focus on Technology and Research:** Institutions like IIT Hyderabad and IIIT Hyderabad are known for their cutting-edge research in engineering, technology, and computer science.

➤ **Initiatives and Innovations:**

The government emphasizes digital education and e-learning through platforms like TSAT (Telangana State Educational Television) to bridge the educational divide.

The Telangana Academy for Skill and Knowledge (TASK) collaborates with industries and educational institutions to provide skill-based training, ensuring students are job-ready.

➤ **Challenges:**

- **Infrastructure:** Many government colleges face infrastructure and resource constraints.
- **Rural Access:** Students from rural areas often struggle to access higher education due to financial or logistical issues.

Telangana's higher education system is evolving rapidly, balancing tradition and modernity. With strategic investments in research, technology, and vocational training, the state is paving the way for an inclusive and skill-driven educational environment.

2.10 Overview of Government Degree Colleges in Telangana

Government degree colleges in Telangana serve as vital institutions for providing affordable and accessible higher education to a significant segment of the state's population. These colleges primarily cater to students from rural and economically disadvantaged backgrounds, bridging the educational gap in underserved regions.

The state has a network of 132 government degree colleges, offering undergraduate and postgraduate programs in arts, science, commerce, and vocational fields. Affiliated with state universities like Osmania University, Kakatiya University, and Palamuru University, these colleges follow a standardized curriculum designed to meet academic and professional needs. Over the years, there has been a growing emphasis on introducing skill-based and interdisciplinary courses to align with the demands of the modern workforce.

➤ **Key Features and Contributions:**

Government colleges in Telangana are known for their affordability, with minimal tuition fees, making higher education accessible to students from low-income families. They provide essential academic infrastructure such as libraries, laboratories, and computer centers. Many colleges have also adopted digital classrooms to facilitate e-learning, supported by government initiatives.

➤ **Challenges and Limitations:**

Despite their contributions, these colleges face challenges such as inadequate infrastructure, faculty shortages, and limited exposure to industry-relevant skills. Rural

colleges, in particular, struggle with issues like poor internet connectivity and lack of advanced facilities, impacting the learning experience.

➤ **Government Support:**

To address these challenges, initiatives like Rashtriya Uchchatar Shiksha Abhiyan (RUSA) and Telangana Academy for Skill and Knowledge (TASK) have been implemented. These programs focus on infrastructure development, digital literacy, and skill-based training to enhance the quality of education.

Government degree colleges in Telangana continue to play a crucial role in empowering students by offering them opportunities for academic growth and skill development, fostering an inclusive and equitable education system.

2.11 Common Attributes of Government Degree College Students

Government degree college students in Telangana come from diverse backgrounds, reflecting the inclusive and accessible nature of these institutions.

Predominantly, these students represent the rural and economically weaker sections of society, making their profiles unique in terms of aspirations, challenges, and potential.

➤ **Socio-Economic Backgrounds**

A significant majority of students in government degree colleges hail from rural areas where access to private education is limited due to financial constraints. Many of them belong to families engaged in agriculture, daily-wage labor, or small-scale businesses. For many students, these colleges provide their first opportunity to step into formal higher education, as they are often first-generation learners. Scholarships and fee waivers provided by the government play a pivotal role in enabling their education.

➤ **Educational Aspirations**

Students in these colleges primarily pursue traditional courses like B.A., B.Sc., and B. Com, which are affordable and align with opportunities in government jobs or teaching professions. Recently, there has been an increased interest in vocational and skill-based programs, driven by initiatives such as TASK (Telangana Academy for Skill and Knowledge).

➤ **Challenges Faced by Students**

Many students encounter challenges like language barriers, as they are more comfortable with Telugu or other regional languages, while curricula are often in English. Additionally, a lack of exposure to modern technology, limited access to the internet, and minimal industry interaction affect their ability to compete in the job market.

➤ **Resilience and Potential**

Despite these challenges, students from government degree colleges demonstrate remarkable resilience and determination. They actively participate in government initiatives like SWAYAM, skill workshops, and career counseling programs, showcasing their eagerness to learn and grow.

These attributes highlight the transformative role government degree colleges play in shaping the lives of students and preparing them for a brighter future.

2.12 Role of MOOCs in Improving the Skills of Government Degree College Students

Massive Open Online Courses (MOOCs) are revolutionizing education by providing government degree college students with access to world-class learning resources, helping them acquire new skills and improve their employability. MOOCs offer an inclusive and flexible learning experience, especially for students from underprivileged and rural backgrounds, who may not have access to advanced resources in traditional college settings.

One of the primary advantages of MOOCs is their ability to bridge skill gaps by offering industry-relevant courses in areas such as data analytics, programming, artificial intelligence, digital marketing, and communication skills. Many platforms like Coursera, edX, and India's own SWAYAM provide certifications that are widely recognized by employers. These courses complement traditional education, enabling students to build technical, analytical, and soft skills that are essential in today's job market.

The self-paced nature of MOOCs is particularly beneficial for students juggling academic, personal, and financial responsibilities. They can choose courses that align with their interests and career goals, learning at their convenience. Furthermore, MOOCs often include interactive elements like quizzes, assignments, and peer discussions, fostering engagement and enhancing practical knowledge.

For government degree college students, affordability and accessibility are critical factors. Most MOOCs are free or have minimal certification fees, making them a viable option for students from low-income families. Additionally, platforms like SWAYAM

provide content in regional languages, overcoming language barriers and ensuring inclusivity.

Despite these benefits, challenges such as limited internet access, lack of digital infrastructure, and low awareness about MOOCs persist. However, with government initiatives like free Wi-Fi in colleges, digital literacy programs, and awareness campaigns, these barriers are gradually being addressed.

MOOCs are playing a transformative role in empowering government degree college students by equipping them with the skills needed to excel in a competitive, technology-driven world.

2.13 Government of Telangana Initiatives in Promoting Online Education

The Government of Telangana has taken significant steps to promote online education as a means of democratizing access to quality learning opportunities.

Recognizing the potential of digital platforms to address educational disparities, the state has implemented initiatives that cater to students across rural and urban areas, with a focus on affordability, inclusivity, and skill development.

One of the flagship initiatives is the TSAT (Telangana State Educational Television), which broadcasts educational programs through TSAT Vidya and TSAT Nipuna channels. These programs cover a wide range of topics, including school and college-level courses, competitive exam preparation, and skill-development modules. Accessible via television and online platforms, TSAT ensures that even students in remote areas can benefit from high-quality educational content.

The integration of digital classrooms in government schools and colleges is another critical initiative. Equipped with smart boards, projectors, and internet connectivity, these classrooms enable interactive and multimedia-based learning. They also act as a bridge between traditional teaching methods and modern educational practices.

The Telangana government actively promotes the use of MOOC platforms like SWAYAM, encouraging students and faculty to participate in online courses and certifications. Workshops, webinars, and awareness campaigns are regularly conducted to familiarize students with these platforms and the benefits of online learning.

Efforts to improve digital infrastructure include providing free Wi-Fi in educational institutions and setting up e-learning kiosks in public libraries and community centers. Additionally, programs like TASK (Telangana Academy for Skill and Knowledge) use online tools to deliver skill-development courses, focusing on employability and industry alignment.

These initiatives have transformed the learning landscape in Telangana, making online education a vital part of the state's education system. By leveraging technology, the government is empowering students to overcome barriers and achieve academic and professional success.

2.14 Government Initiatives in Improving the Skills of Government College Students in Telangana

The Government of Telangana has been instrumental in implementing various initiatives aimed at improving the skills and employability of students in government degree colleges. Recognizing the challenges faced by these students, such as limited access to advanced learning resources and lack of industry exposure, the government has introduced targeted programs to bridge the gap between academic learning and practical skills required in the job market.

One of the key initiatives is the Telangana Academy for Skill and Knowledge (TASK), which focuses on enhancing technical and soft skills among students. TASK collaborates with industries, educational institutions, and government bodies to provide training in areas like coding, communication, data analytics, and digital literacy. These skill-enhancement programs help students align with industry requirements and improve their chances of securing employment.

Another significant effort is the promotion of MOOCs (Massive Open Online Courses) through platforms like SWAYAM. The government encourages students to enroll in these courses, offering certifications in a variety of disciplines, including emerging fields like artificial intelligence, machine learning, and entrepreneurship. These courses are affordable, often free, and accessible in regional languages, ensuring inclusivity for rural and economically disadvantaged students.

To address infrastructure challenges, the government has invested in digital classrooms and computer labs in government colleges.

CHAPTER 3 – PROFILE OF GOVERNMENT DEGREE COLLEGE IBRAHIMPATNAM

3.1 Profile of Government Degree College, Ibrahimpatnam

Established in 2008, Government Degree College, Ibrahimpatnam, is a co-educational institution located in the Rangareddy district of Telangana, India. Affiliated with Osmania University, Hyderabad, the college was founded to provide higher education opportunities to the marginalized sections of society, particularly Scheduled Castes (SCs), Scheduled Tribes (STs), and Backward Classes (BCs). Many of its students are first-generation learners, reflecting the institution's commitment to educational inclusivity.

3.2 Academic Programs and Courses

The college offers a range of undergraduate programs designed to cater to diverse academic interests and career aspirations. The Bachelor of Arts (B.A.) program includes combinations such as Computer Applications, History, and Political Science. The Bachelor of Commerce (B.Com.) program focuses on Computer Applications, integrating traditional commerce education with modern technological skills. For science enthusiasts, the Bachelor of Science (B.Sc.) program offers specializations in Life Sciences, including Dairy Sciences and Crop Production, as well as Physical Sciences.

3.3 Infrastructure and Facilities

Currently, the college operates its degree classes in the premises of the Government Junior College during the afternoon shift. Despite infrastructural constraints, the institution strives to provide essential facilities to its students. The campus includes well-equipped laboratories that offer practical experience fundamental to learning. The library, though modest, houses a collection of textbooks, reference materials, and resources for competitive examinations, serving as a valuable knowledge repository for

both students and staff. Additionally, the college provides Wi-Fi access to facilitate digital learning and research activities.

3.4 Faculty and Student Body

The college maintains a student-teacher ratio conducive to personalized learning, with approximately 381 students and 20 faculty members. This ratio ensures that educators can focus on the individual needs of learners, fostering an environment where students receive adequate attention and support. The faculty comprises dedicated professionals committed to delivering quality education and mentoring students in their academic pursuits.

3.5 Extracurricular Activities and Holistic Development

Understanding the importance of holistic development, Government Degree College, Ibrahimpatnam, encourages students to engage in various extracurricular activities. The institution offers facilities for sports and games, promoting physical well-being and teamwork among students. Additionally, the college organizes events and workshops aimed at enhancing critical thinking, ethical values, and leadership skills, preparing students to contribute positively to society.

3.6 Community Engagement and Social Responsibility

The college places a strong emphasis on community engagement and social responsibility. Through initiatives like the National Service Scheme (NSS), students participate in various community service activities, fostering a sense of civic duty and social awareness. These programs not only benefit the community but also enrich the students' educational experience by instilling values of empathy and public service.

3.7 Challenges and Future Prospects

Despite its achievements, the college faces challenges typical of emerging educational institutions, such as the need for expanded infrastructure and resources to accommodate a growing student population. However, with ongoing support from the government and the community, Government Degree College, Ibrahimpatnam, is poised to overcome these hurdles. The institution remains committed to its mission of providing accessible and quality education, continually adapting to meet the evolving needs of its students and society.

3.8 Vision and Mission

Vision

The vision of Government Degree College, Ibrahimpatnam, is to empower students with quality education, ensuring that they become knowledgeable, skilled, and responsible citizens. The institution aims to foster critical thinking, ethical values, and leadership through innovative teaching and research methodologies.

Mission

1. Providing Affordable Education: Offering cost-effective, high-quality education to all students, especially those from marginalized communities.

2. Enhancing Employability Skills: Equipping students with practical knowledge and skills to boost their employability.

3. Encouraging Research and Innovation: Promoting research culture among students and faculty members.

4.Fostering Ethical Values and Social Responsibility: Encouraging students to contribute positively to society through community engagement and social initiatives.

5.Ensuring Holistic Development: Integrating academics, sports, and extracurricular activities to promote all-around student growth.

3.9 Skill Development and Career Guidance

The college emphasizes skill-based education and career readiness by integrating the following:

1. Career Counseling and Placement Assistance

Regular career guidance seminars and workshops by industry professionals.

Placement assistance through job fairs and campus recruitment drives.

2. Vocational and Add-On Courses

Short-term courses in soft skills, entrepreneurship, data analytics, and digital marketing.

Skill-based training programs to improve students' employability.

3. Internships and Industry Exposure

Collaboration with local industries and research institutions for internships.

Guest lectures from industry experts to bridge the gap between academia and the job market.

3.10 Extracurricular Activities and Student Life

The college promotes holistic student development through a variety of activities:

1. Sports and Cultural Events

Annual college fest, inter-college sports competitions, and literary activities.

Encouragement of student participation in state and national-level competitions.

2. National Service Scheme (NSS) and Social Outreach

Active NSS units engage in environmental awareness programs, health camps, and rural development initiatives.

Students participate in blood donation camps, tree plantation drives, and community service projects.

3. Student Clubs and Committees

Debate Club, Drama Society, Science Forum, and Entrepreneurship Cell.

Students organize and participate in various leadership and skill-building workshops.

3.11 Conclusion

Government Degree College, Ibrahimpatnam, stands as a beacon of learning and empowerment in the Rangareddy district. Through its dedicated focus on inclusive education, comprehensive academic programs, and commitment to holistic student development, the college plays a pivotal role in shaping the futures of its students and contributing to the broader societal good. As it continues to grow and evolve, the institution remains steadfast in its dedication to fostering academic excellence and social responsibility among its learners.

CHAPTER – 4 DATA ANALIYSIS

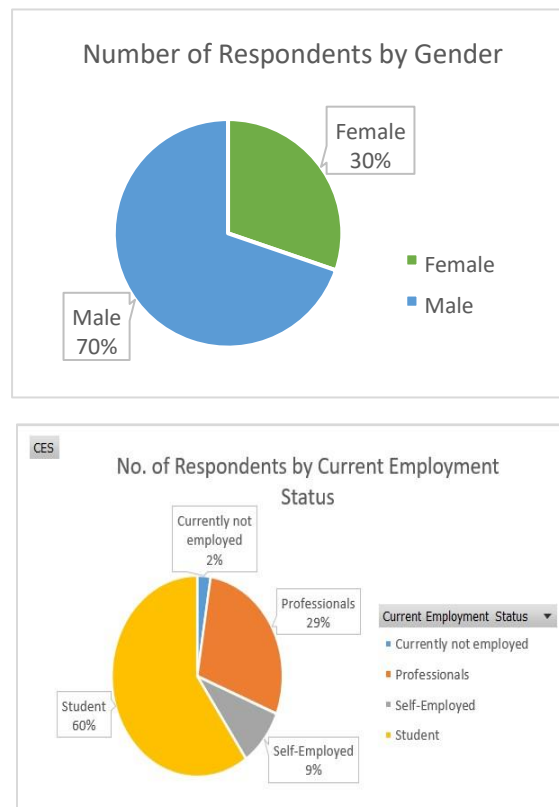
4.1 Basic Demographics

The basic Demographics were collected initially. These contained 5 parameters –

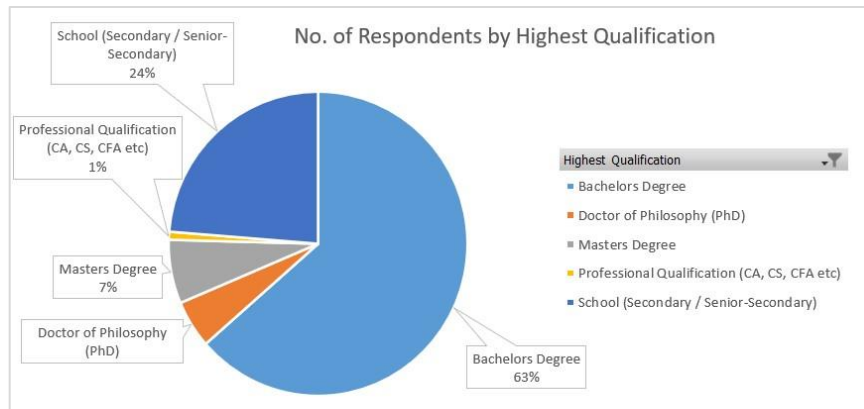
Gender,

Current Employment Status, Highest Qualification, Current Education, and Department /

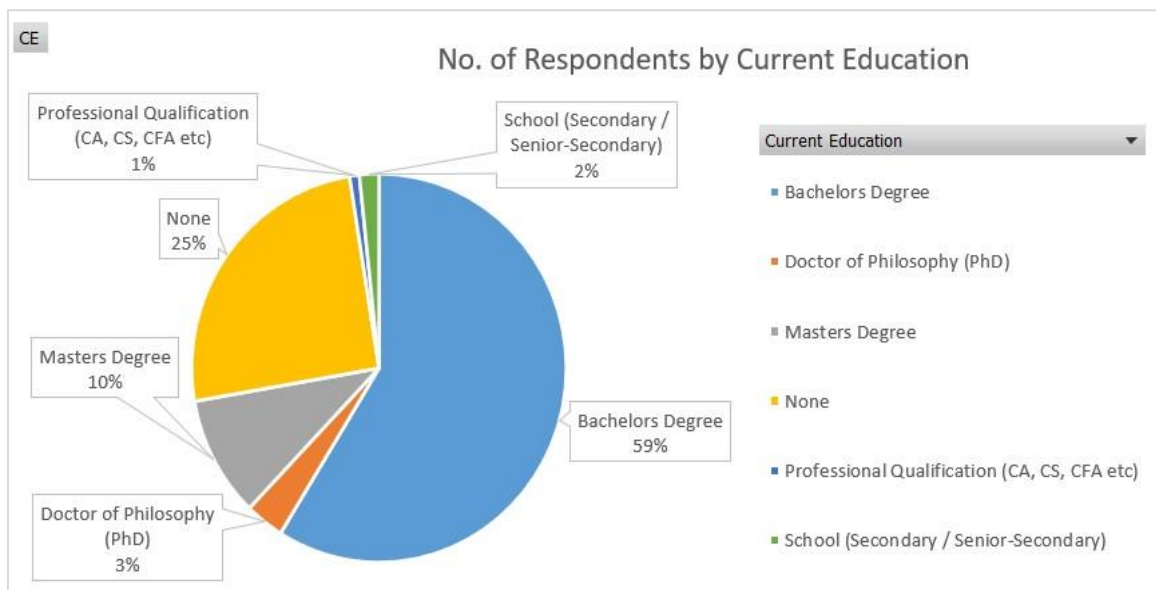
Specialization. The data for these parameters is visualized below –



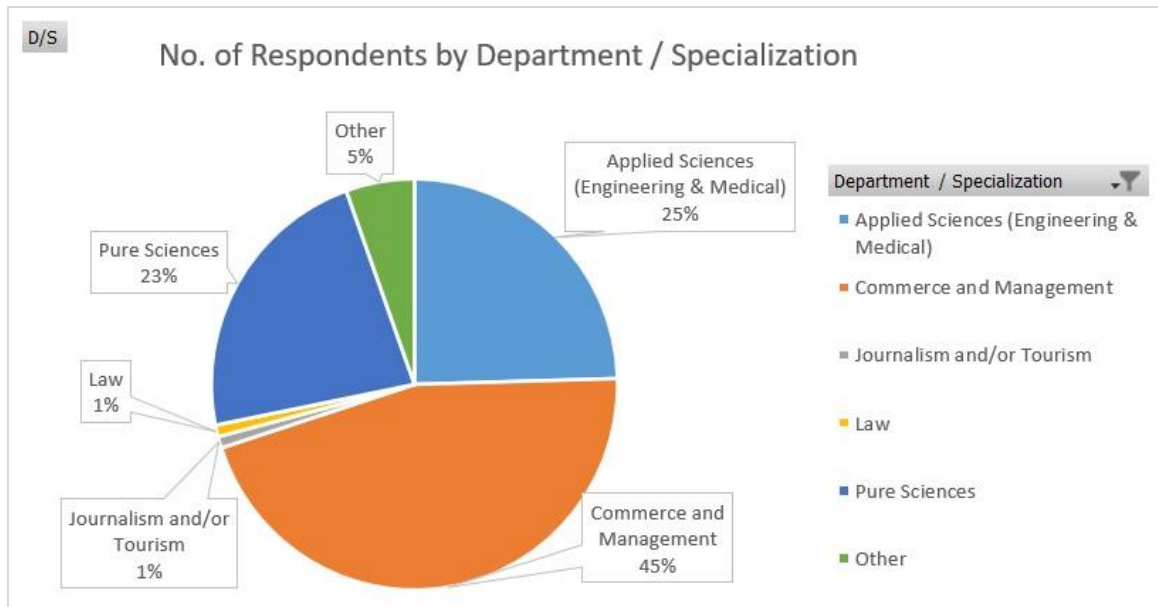
As we can see, **most of the respondents were Male respondents**. As per the current employment status, **most respondents** that participated in this study are **Students**, **followed by Professionals**.



Here, it is quite visible that **majority of the respondents are Graduates** (they have Bachelor Degrees). Hence, this study's data would be largely influenced by the responses of this group.



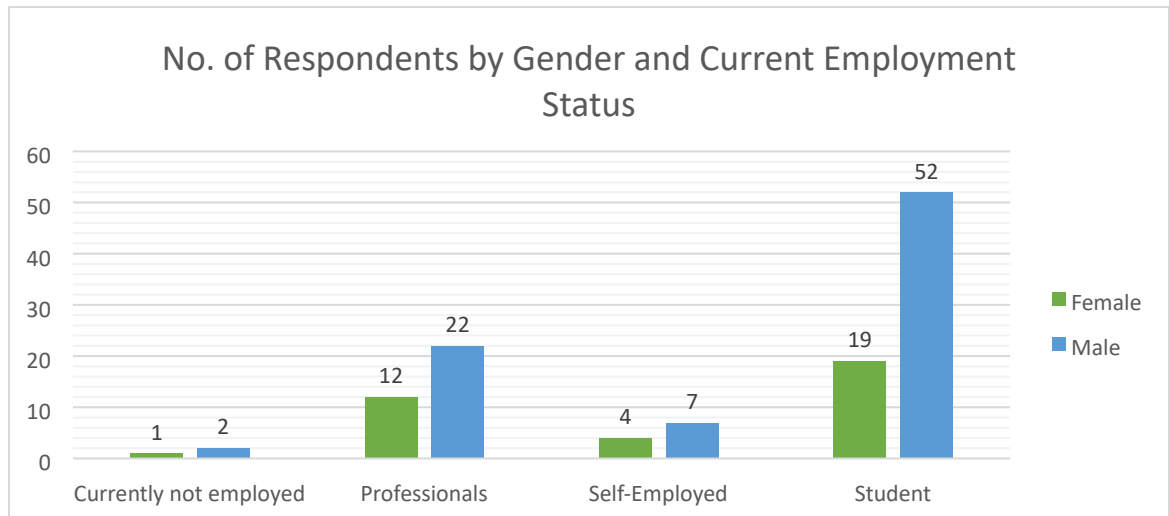
More than 50% of the respondents are either studying a Bachelors degree, or pursuing a bachelors' degree, while a quarter of the respondents (25%) are currently not studying. This makes sense as majorly students like to do MOOCs alongside their college studies, as they can invest more time in them.



Majority of the participants belonged to the Commerce and Management stream, with applied sciences and pure sciences taking up the majority of the rest. This seems logical as currently, most MOOCs are STEM (Science, Technology, Engineering, Mathematics) and Business-centric.

4.2. Advanced Demographics

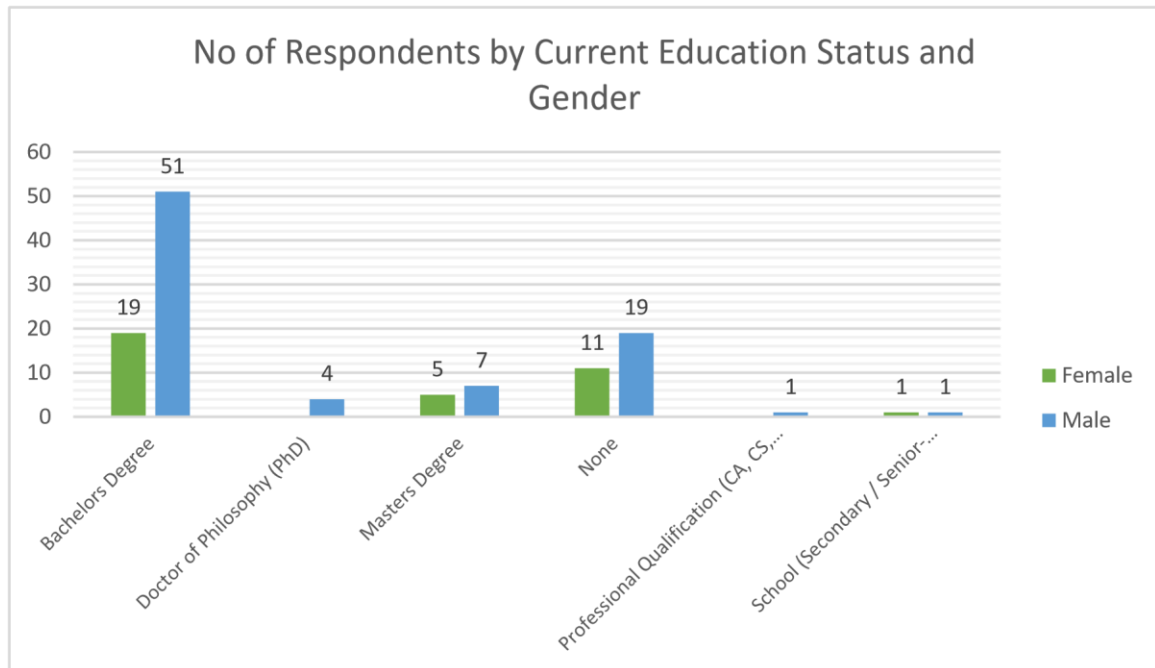
Here, we will analyze some advanced demographics, by using a combination of two or more basic demographics.



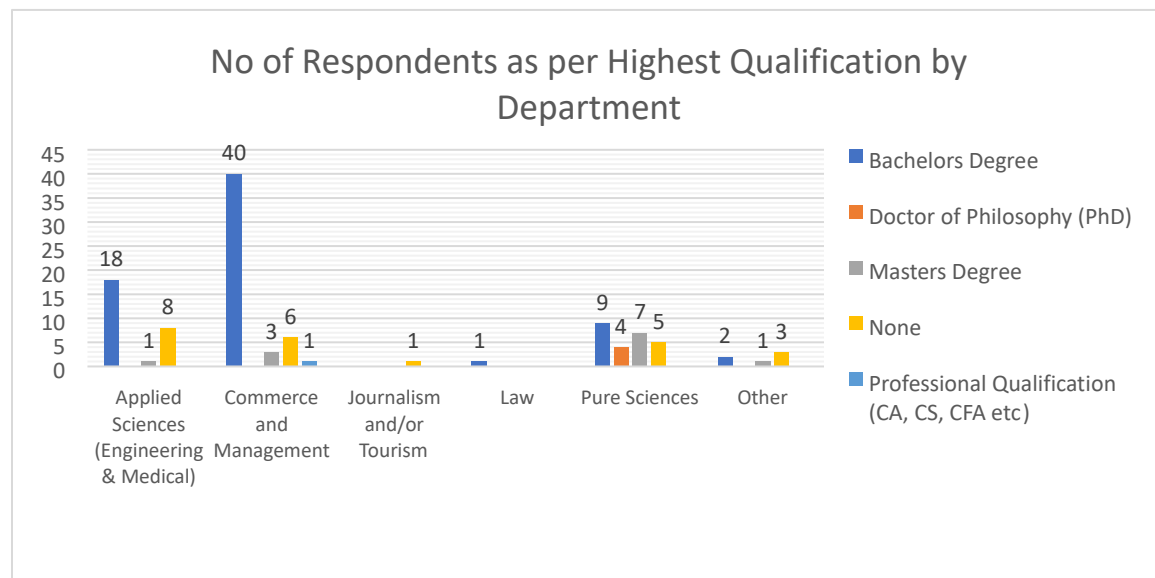
It is clearly visible that **in either male or female case, male respondents are much higher than female respondents.**

The smallest gap between male and female respondents are for Professionals, whereas for self-employed and current not employed respondents, data is not statistically significant.

Now, let's see some visualization for Gender with Current Education Status.

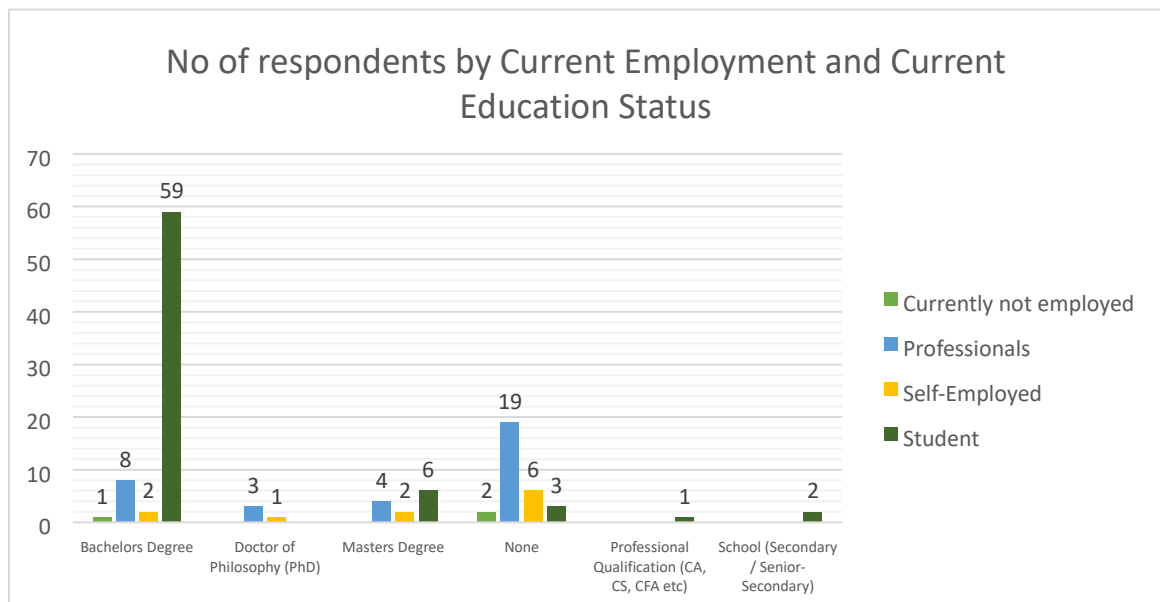


Here, it is clearly visible that **even in Bachelor's degree, Male respondents are way higher than Female respondents.** That is as much conclusion as we can take for Gender. Now, let us see some statistics for other parameters.

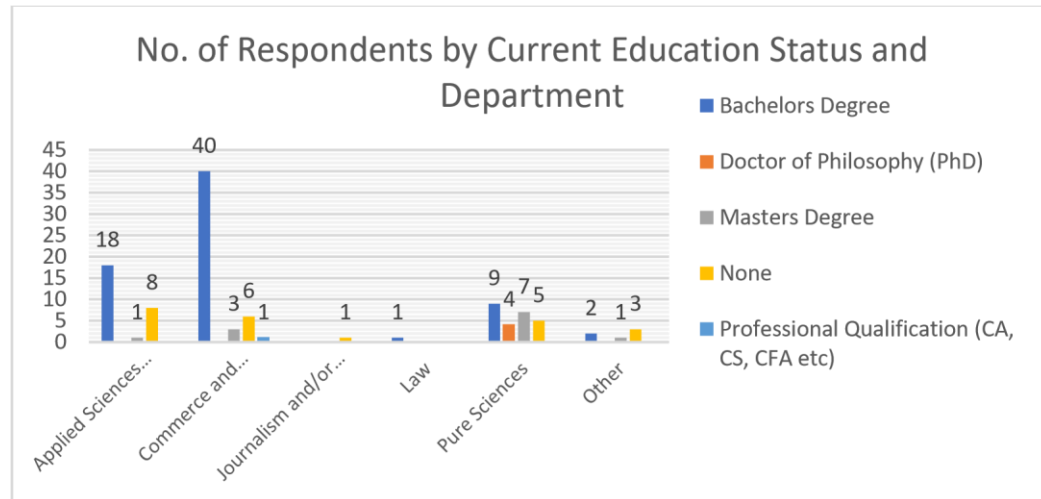


Bachelor's degree respondents are dominating this particular data set, with Commerce and Management Graduate Students coming out on top (40), followed by Applied Sciences (18).

Next, let us see what we can infer from the combination of Current Education Status, and Current Employment Status.



Here, it is clearly visible that **Bachelor Degree students are the majority of our respondents, by a long margin (40 entries from the second-highest, Professionals who are currently not studying).**



We can clearly see that once again, **Respondents pursuing / studying bachelors in Commerce and Management are highest, followed by Applied Sciences.**

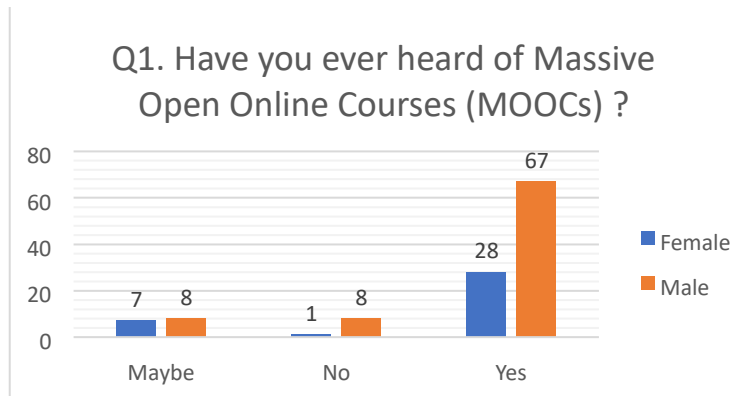
MAJOR INFERENCE

Male respondents who are currently studying / have studied Bachelor's Degree in Commerce and Management are dominating our data set, and hence, their responses are most likely going to influence our conclusions the most. This is followed by respondents studying / completed Bachelor's Degree in Applied Sciences (Engineering & Medical).

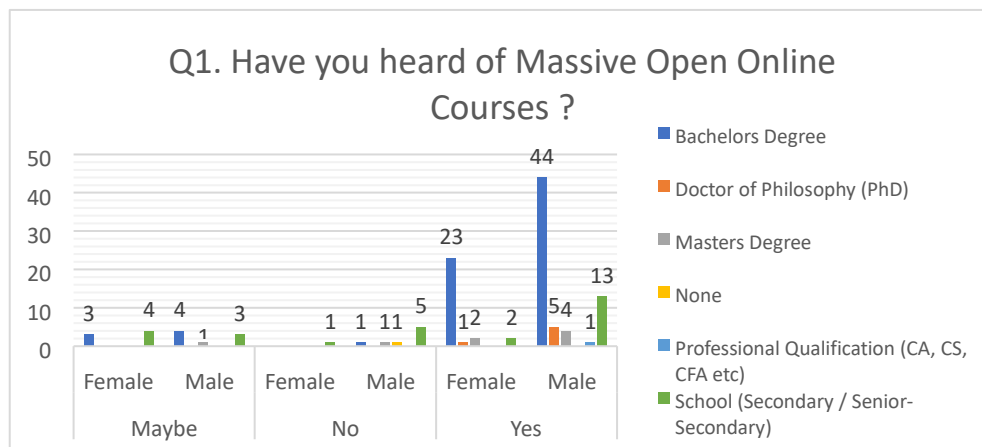
4.3. Multiple Choice Questions

These questions mark the beginning of our questionnaire. Here, we will evaluate these questions on the basis of the responses received.

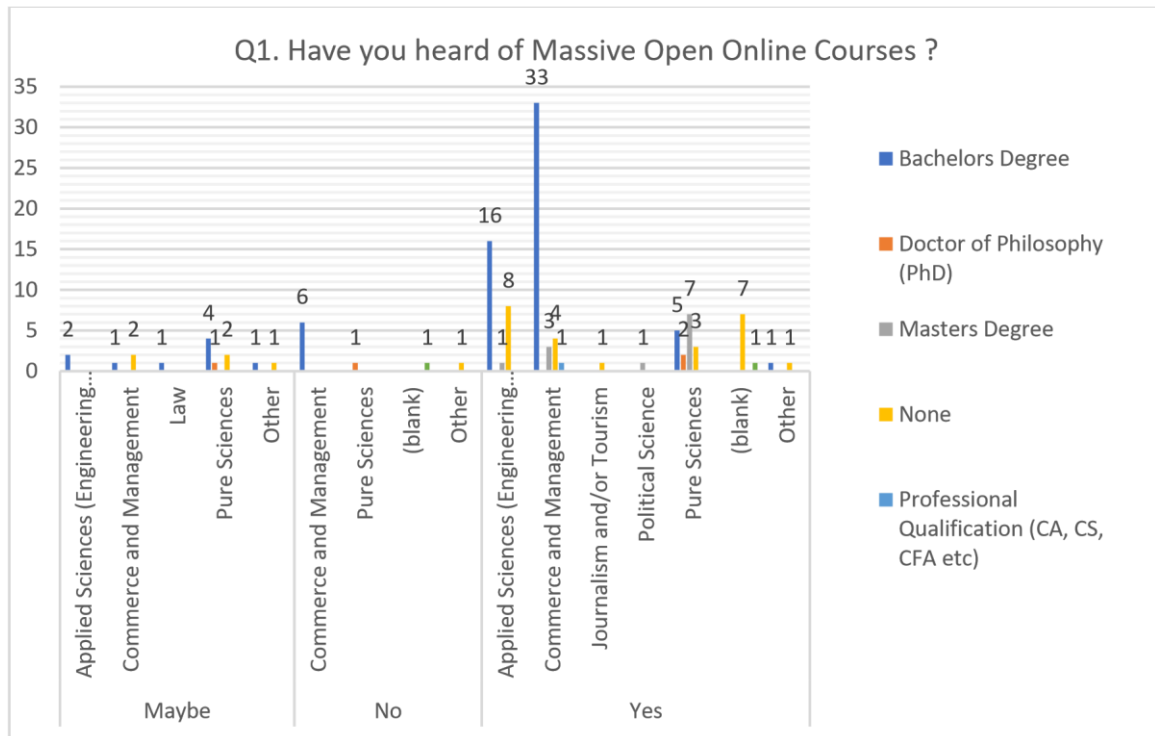
Q1. Have you ever heard of Massive Open Online Courses (MOOCs)?



The graph tells us that **majority of our respondents knew what MOOCs are**. Even in the female category, 70% of the respondents knew about MOOCs. Let us see what all we can draw from this.

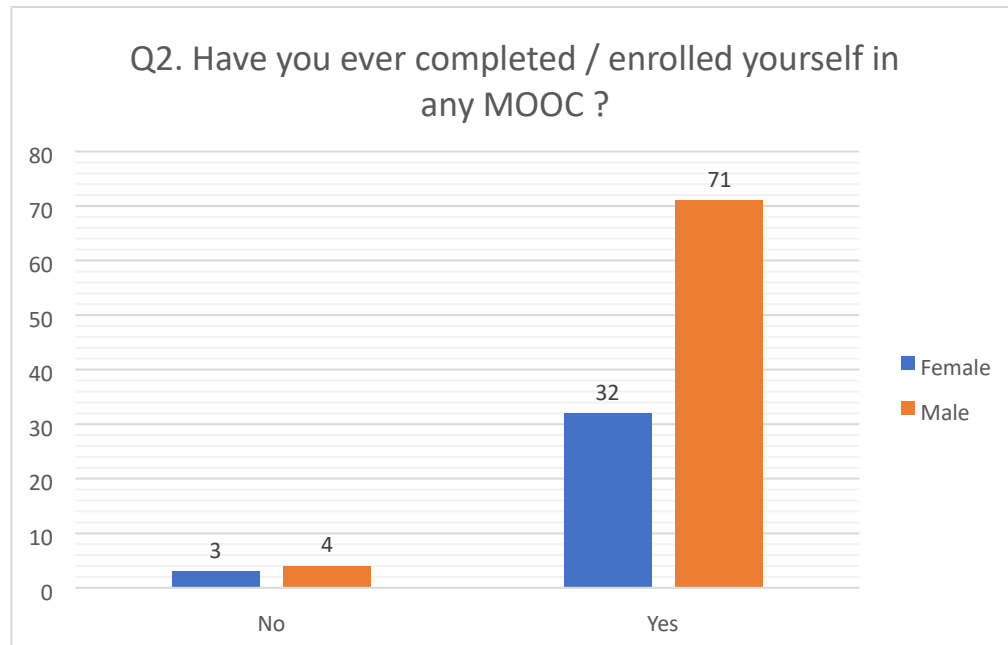


It is clearly visible that **majority of the respondents who said 'Yes' are currently studying Bachelor Degree**, from both male and female.

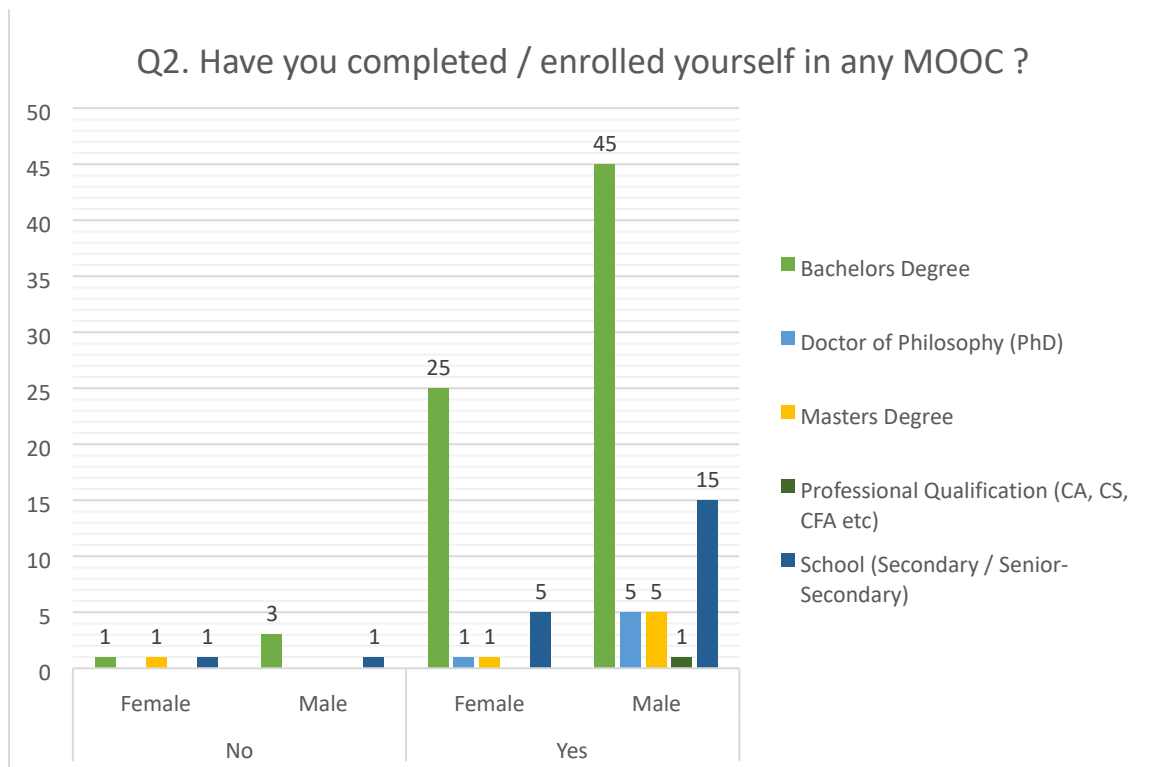


Here, we can clearly see that **Respondents belong majorly to the Departments of Commerce and Management, with Bachelors** in these domains dominating their subcategories, followed by Applied Sciences.

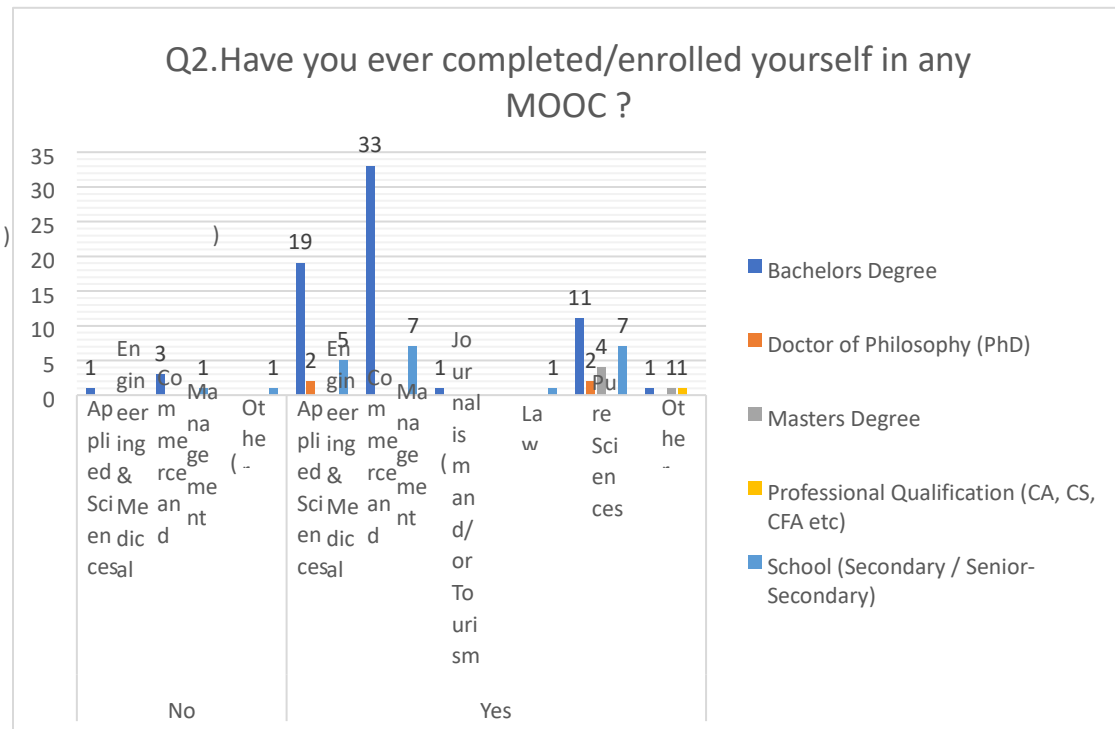
Q2. Have you ever completed / enrolled yourself in any MOOC?



This graph clearly states that **majority of the respondents have either completed or enrolled themselves in MOOCs**. Let us see more for this question.



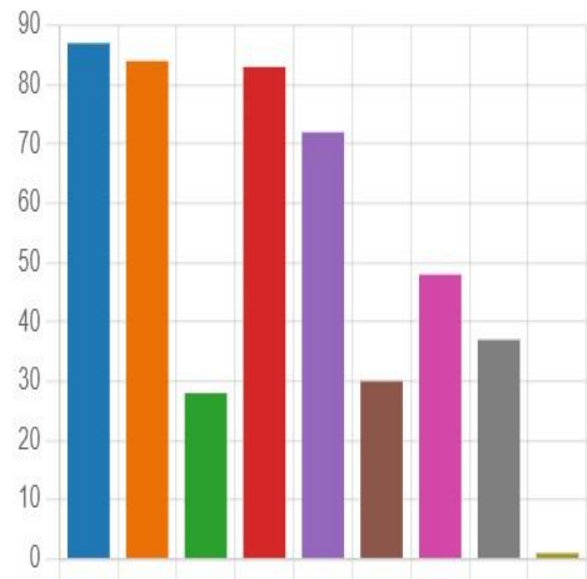
This graph clearly states that **majority of the respondents who have either enrolled themselves in any MOOC, or completed any MOOC are Bachelor degree holders.**



As the graph conclusively tells us, **most respondents who have enrolled in any MOOC or completed any MOOC are of the Commerce and Management department, at the Bachelors level of study.**

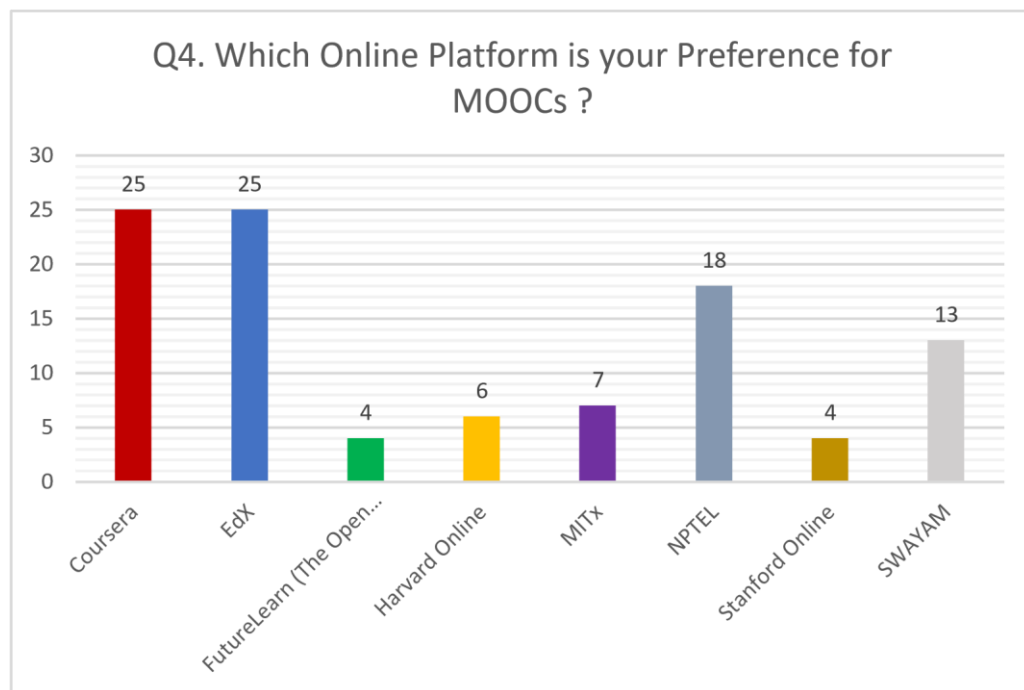
Q3. From where did you enroll in / complete the MOOC? Select all that apply.

● Coursera	87
● EdX	84
● Harvard Online	28
● NPTEL	83
● SWAYAM	72
● FutureLearn (The Open Universit...	30
● MITx	48
● Stanford Online	37
● Other	1

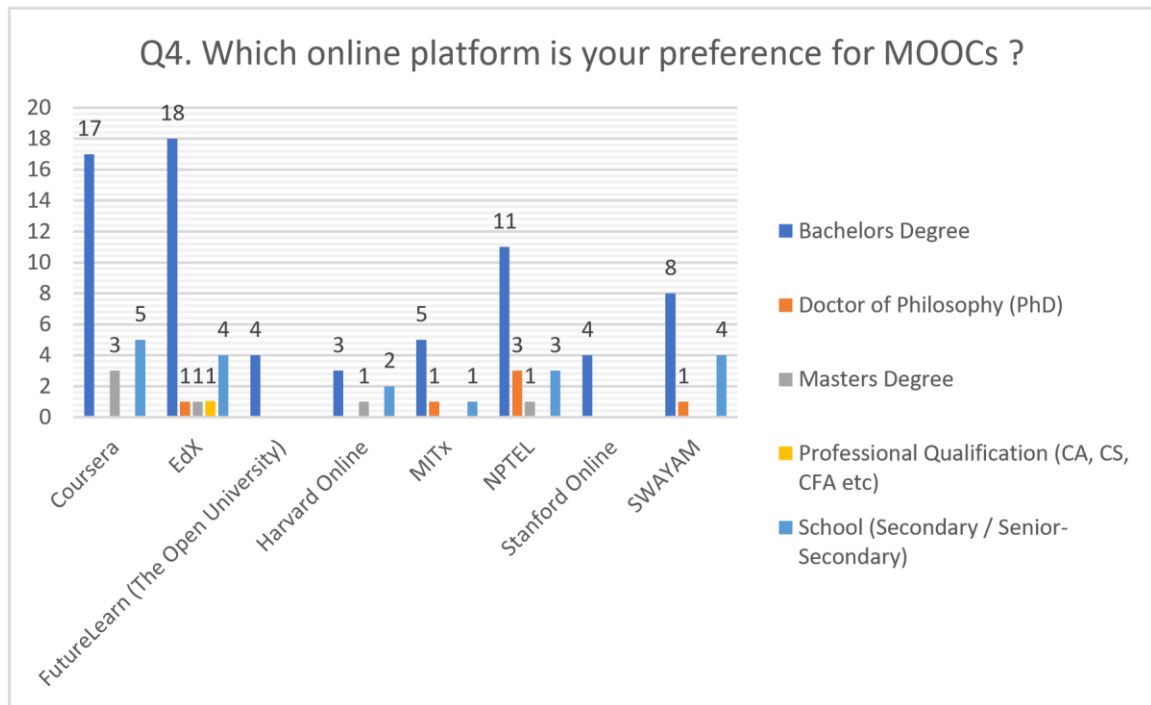


This statistic clearly tells us that **Coursera, EdX and NPTEL** are the most popular MOOC platforms, whereas **SWAYAM** comes close to them.

Q4. Which online platform is your preference for MOOCs?

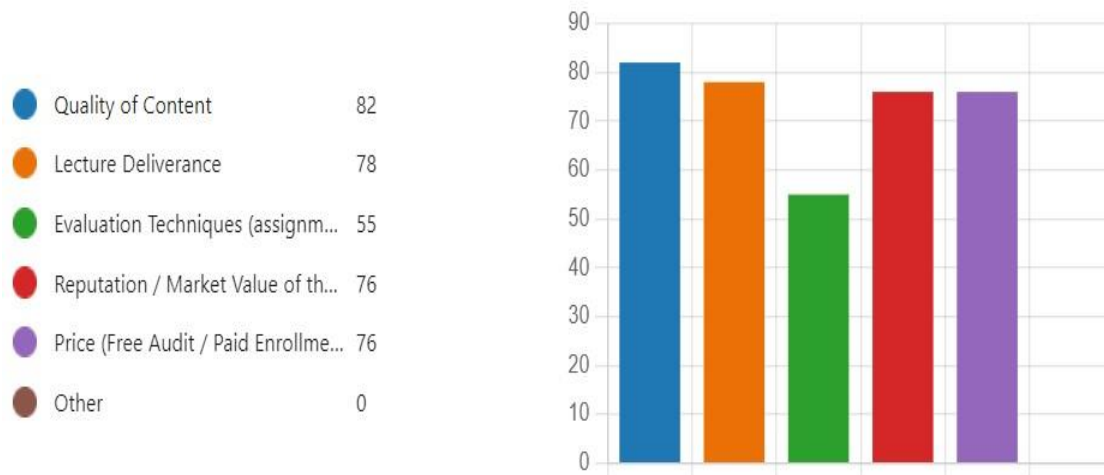


This graph tells us that people prefer **Coursera, EdX or NPTEL** as three major online platforms for enrolling into / completing MOOCs.



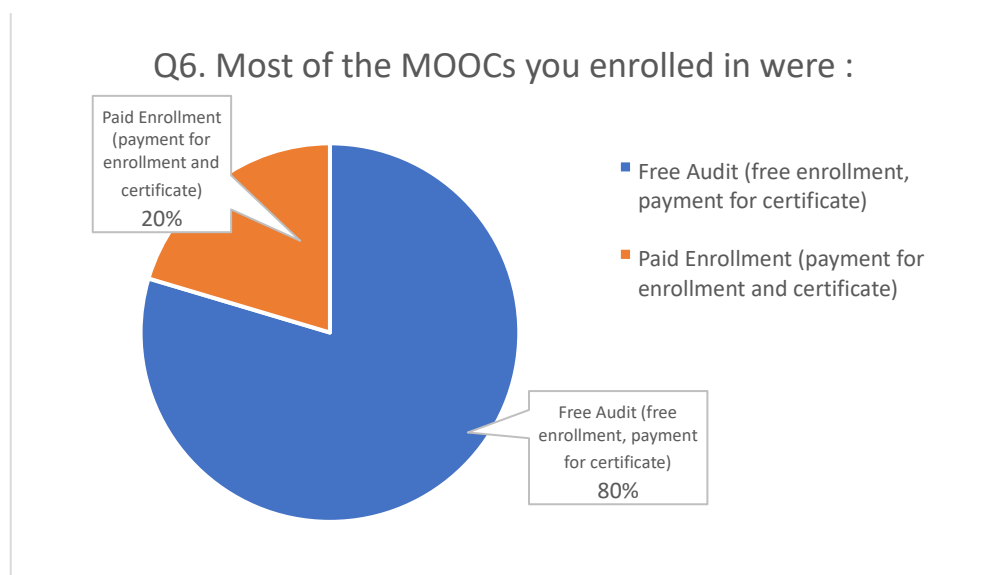
This graph tells us while **bachelor degree holders and master degree holders** prefer **Coursera**, higher degrees like **Ph.D. and Professional Qualification holders** prefer **EdX or NPTEL** for MOOCs.

Q5. What is the reason behind your preference for this platform? Select all that apply.



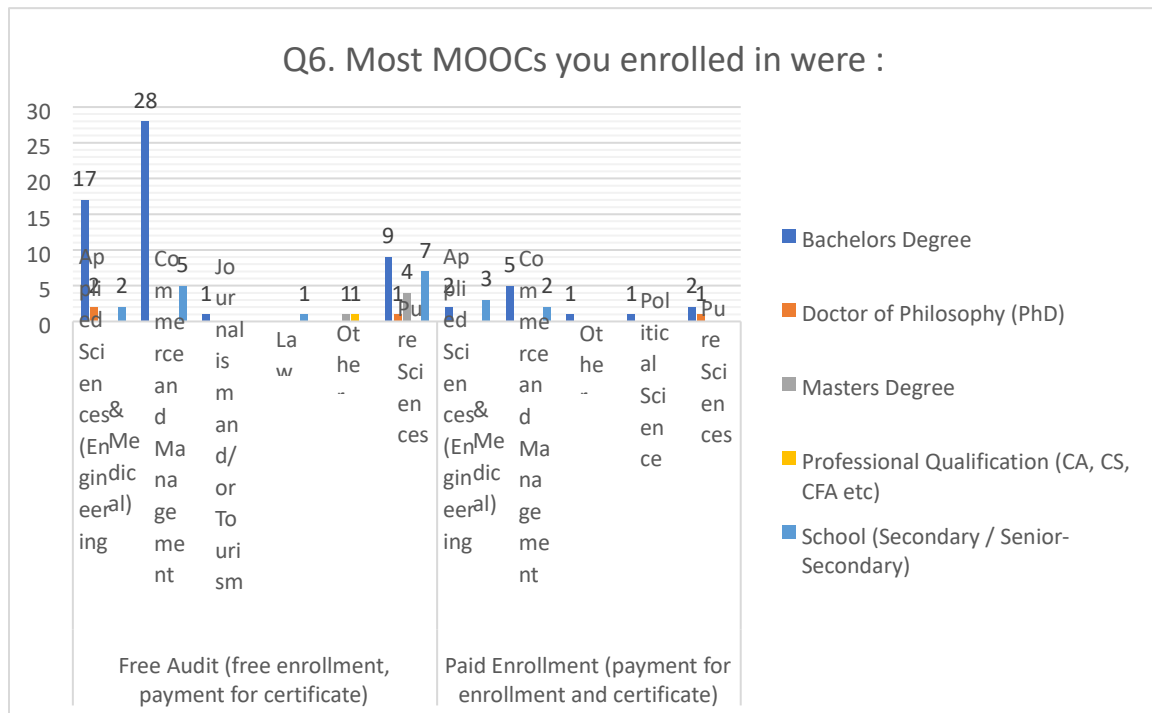
This chart shows us that the main factors that are behind the choice for a MOOC Platform are **Quality of Content**, **Lecture Deliverance**, **Reputation / Market Value of the MOOC Platform**, and **Price**.

Q6. Most of the MOOCs you completed / enrolled in, were:



It is clearly visible that most MOOCs enrolled by the respondents are **Free Audit**.

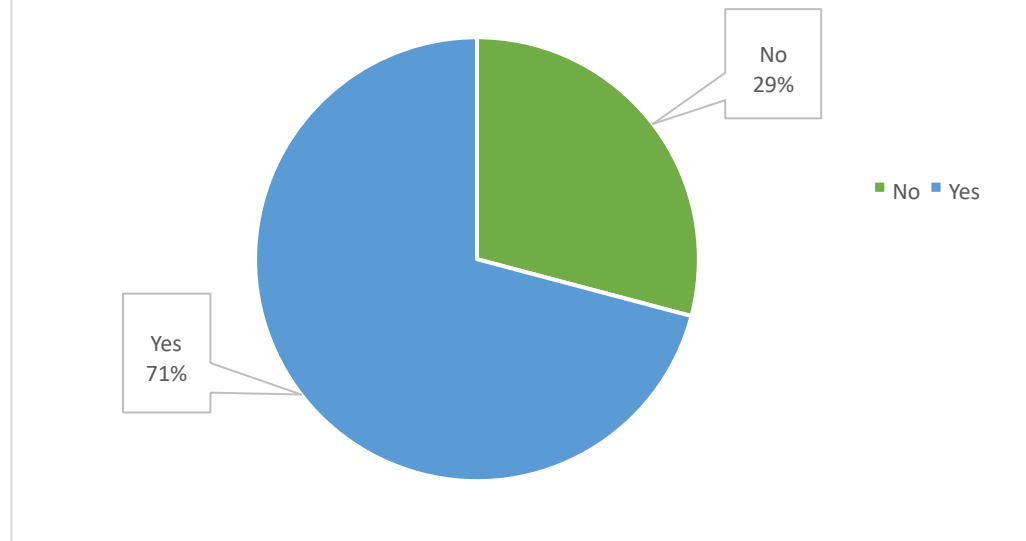
Hence, it is imperative to say that **Price / Cost Effectiveness** may be more influential than other factors in the performance of MOOC.



This graph clearly tells us that **Free Audit** option improves the popularity and the accessibility of a MOOC. Here, as expected, major contributors are Bachelor Degree holders in the Commerce & Management department followed by Applied Sciences.

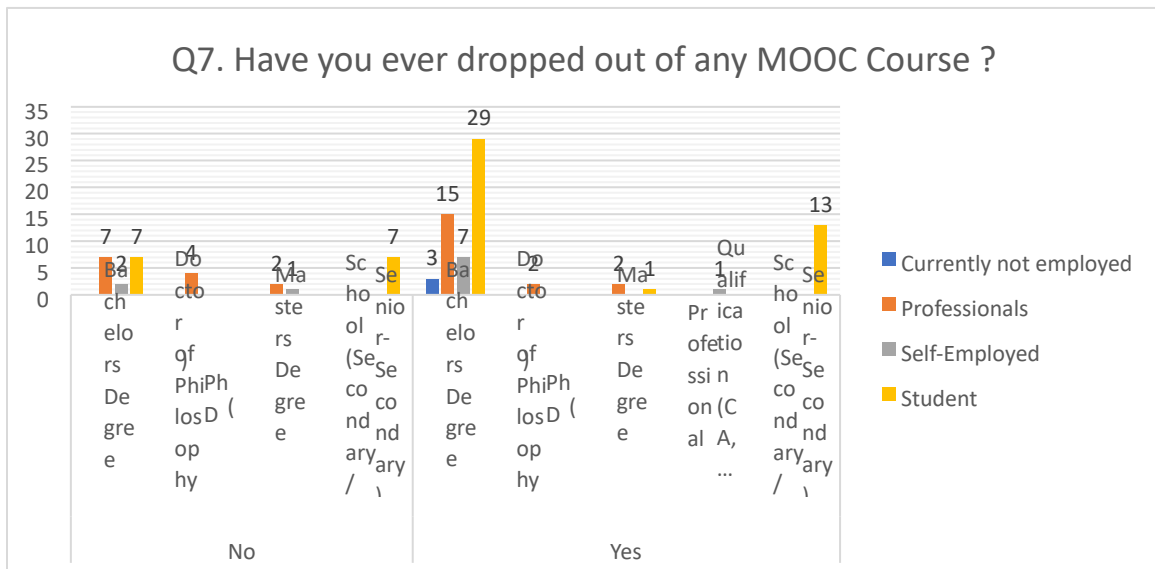
Q7. Have you ever dropped out of any MOOC Course?

Q7. Have you ever dropped out of any MOOC Course?



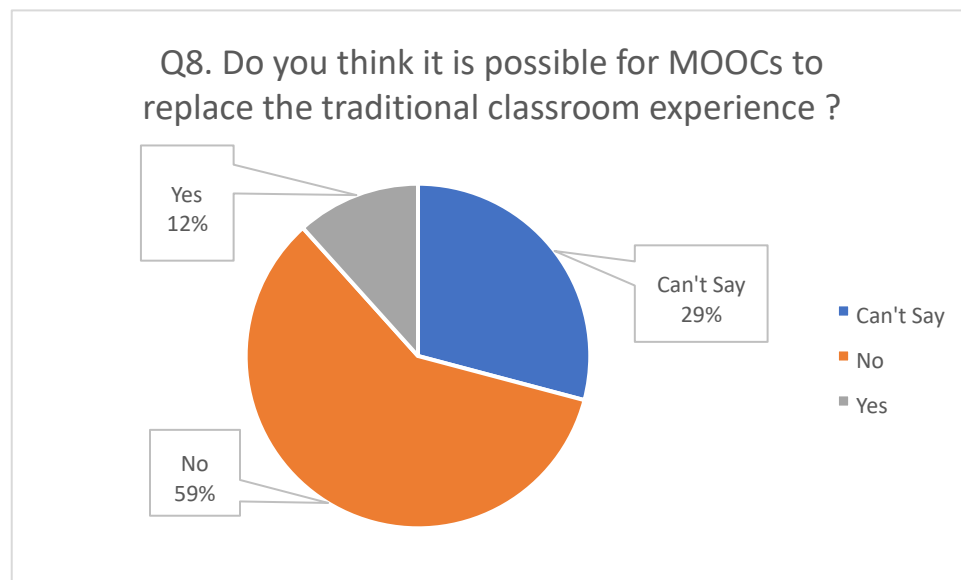
The pie chart tells us that most of the respondents that enrolled in a MOOC tend to drop out of it, due to one reason or the other. **This could be considered as a barrier to the success of the MOOC Model.**

Q7. Have you ever dropped out of any MOOC Course ?



This graph tells us that most MOOC Drop-outs in our respondents are **Bachelor Degree Students, Professionals and School-going Students**. All of them normally have a very tight schedule. *There must be something in this model regarding time management* that is contributing to such high drop-out percentage.

Q8. Do you think it is possible for MOOCs to replace the traditional classroom experience?



This pie chart is depicting that majority of the respondents think that **MOOCs cannot replace the traditional classroom experience**. This may be one of the reasons that the dropout rate is coming out so high. This could also be due to **social presence**, which is an important component of traditional classrooms.

HERE, THE MULTIPLE-CHOICE QUESTIONS ARE OVER. So far, we have found

2 factors that contribute to the performance of MOOCs –

1. Cost Effectiveness

2. Technological Efficiency of MOOC Platform

4.4. Likert Scale Questions

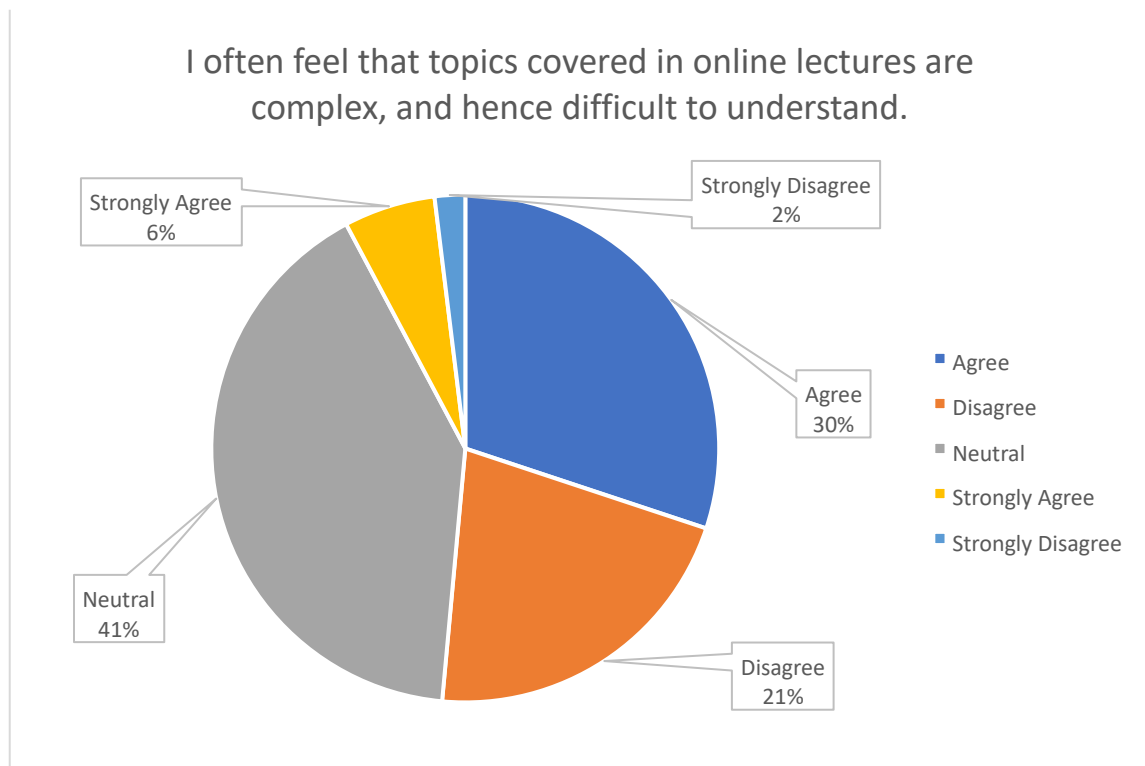
These questions are the ordinal scale questions, that asked for respondents' opinion on various statements. The questions of this type, included in the study are:

Q1	I often feel that topics covered in online lectures are complex, and hence difficult to understand
Q2	I can complete a MOOC with a good grade.
Q3	I am able to initiate social interaction and effectively communicate with other students enrolled in the MOOC
Q4	I expect my use of MOOCs to further increase in the future
Q5	I frequently reply to others' message in a discussion board of the MOOC.
Q6	I am happy with the teacher–student relationship that I have with the professor / Instructor teaching the MOOC
Q7	I often struggle to grasp concepts in online sessions due to lack of live interaction with the instructor(s)
Q8	Sometimes I feel that the teaching pedagogy used in online lectures is tough to follow
Q9	I fail to clear my doubts post online sessions, unlike live classroom sessions

The ordinal scale for these questions that was chosen is :

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

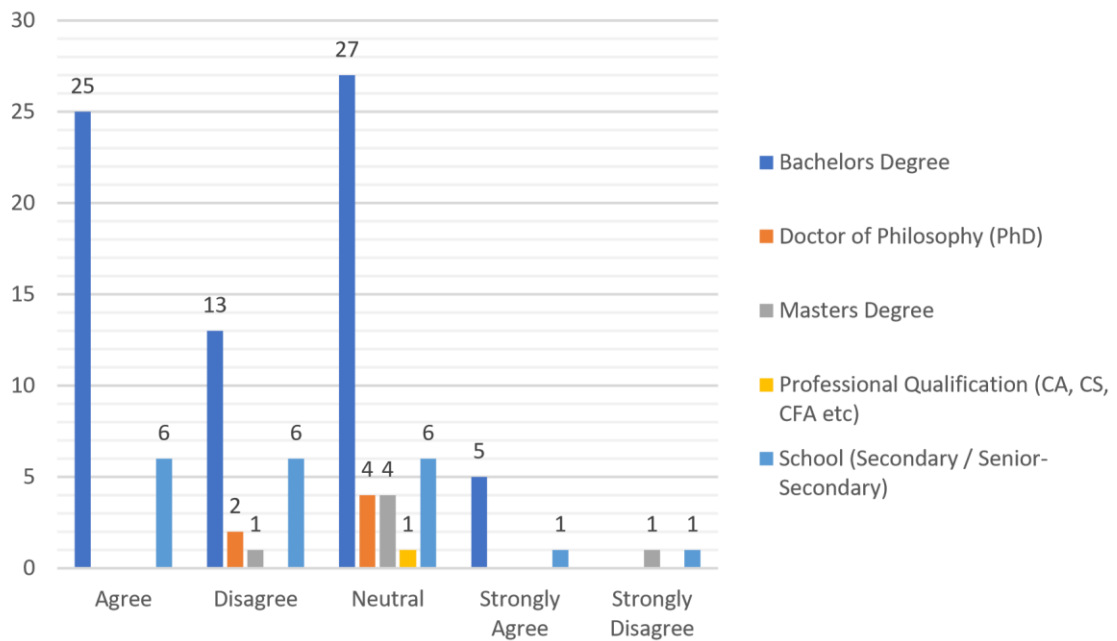
Statement 1: I often feel that topics covered in online lectures are complex, and hence difficult to understand.



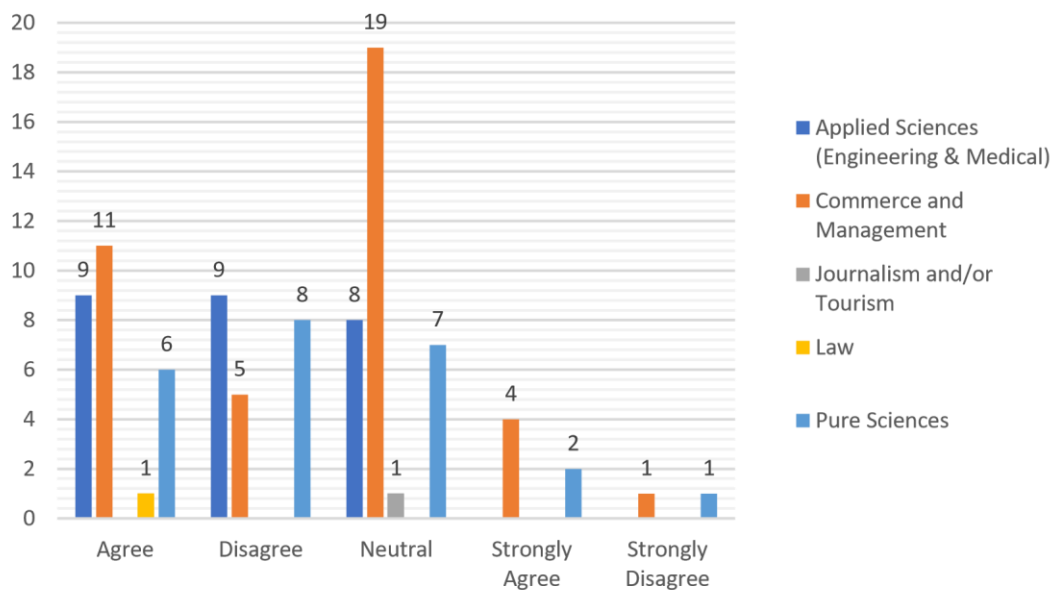
As the pie chart tells, a majority of the respondents seem to be **Neutral** on the statement, while a good percentage of them **agree** to it. This means that **students' retention capacity** is not great in case of MOOCs, for this particular study. Although this could also be due to the respondent's **self-efficacy**, still we need to think of external factor.

Let us look at some more statistics. Here, we will see some clustered bar charts of the statements' responses along with our demographics, to better understand and analyze this statement.

I often feel that topics covered in online lectures are complex, and hence difficult to understand.

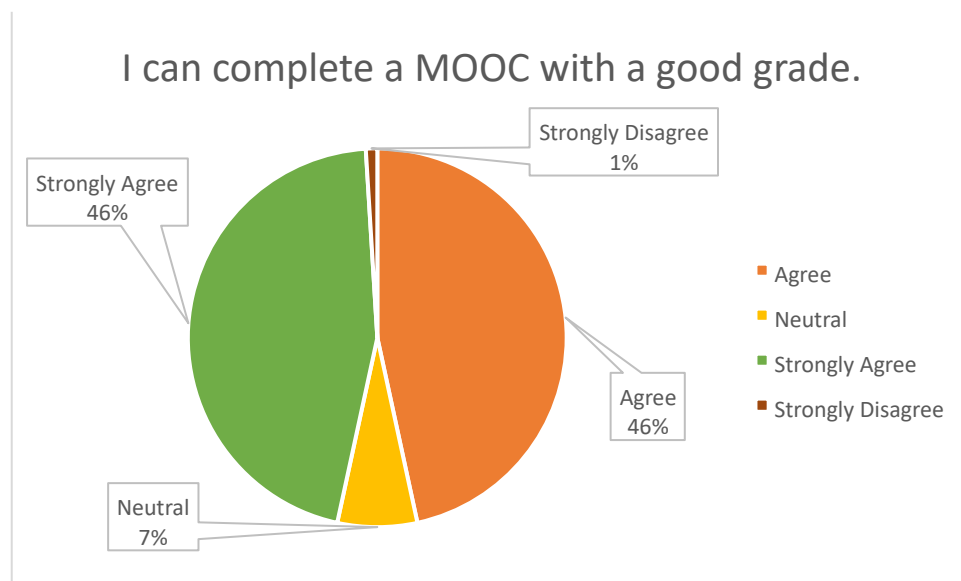


I often feel that topics covered in online lectures are complex, and hence difficult to understand.

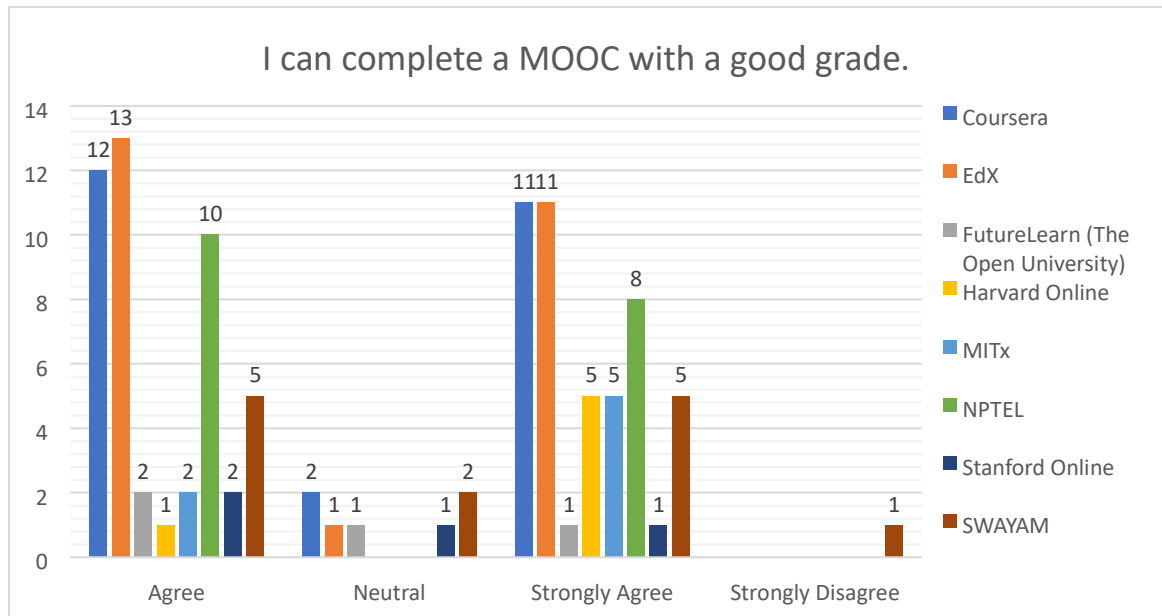


These two statistics tell us that most respondents that agree to statement 1 are from the **Commerce / Management and the Applied Sciences** background. This is followed by Pure Sciences, whereas any other category is basically insignificant.

Statement 2: I can complete a MOOC with a good grade.

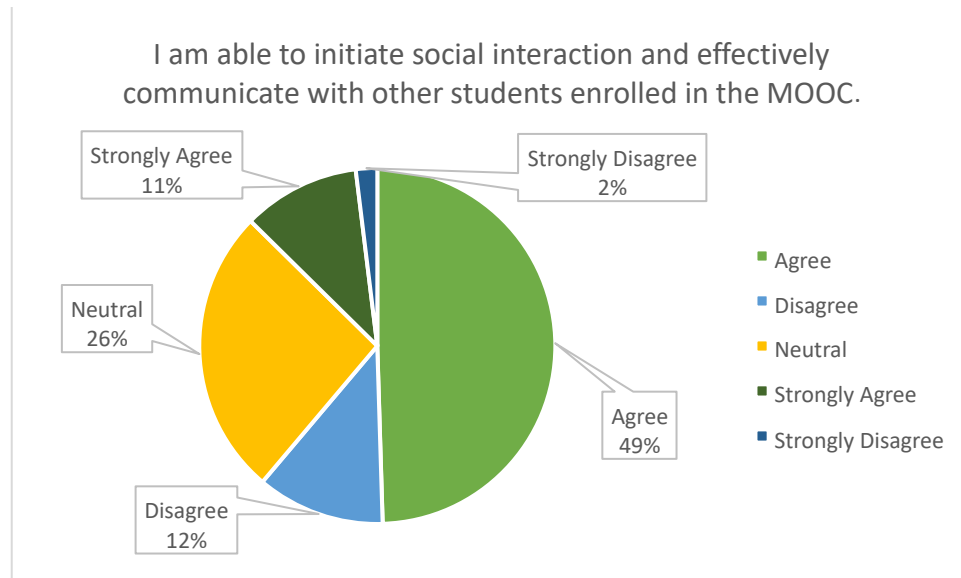


This chart tells us that most respondents (92%) are confident that they will be able to complete a MOOC with a good grade. This speaks highly of the **self-regulation**, **self-efficacy** and **retention capacity** of the students. This can also be counted as the **technological efficiency** of the MOOC platform. Let us see what we can infer from it.

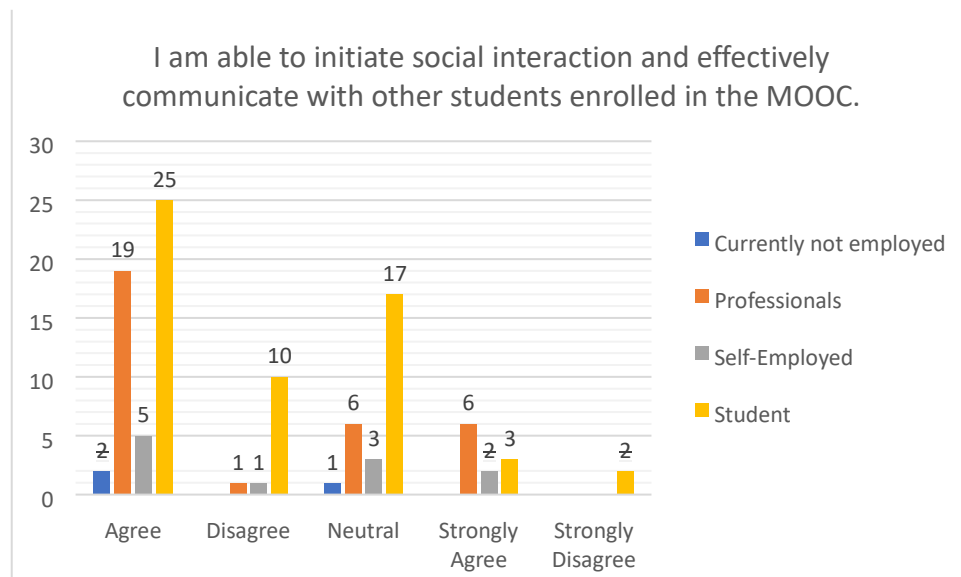


This tells us that for popular MOOC Platforms like Coursera and NPTEL, respondents are confident of scoring a good grade in the MOOC, which further vouches for the **Technological Efficiency of the MOOC Platform**. Hence, it could also be a contributing factor to the performance of MOOCs in India.

Statement 3: I am able to initiate social interaction and effectively communicate with other students enrolled in the MOOC.



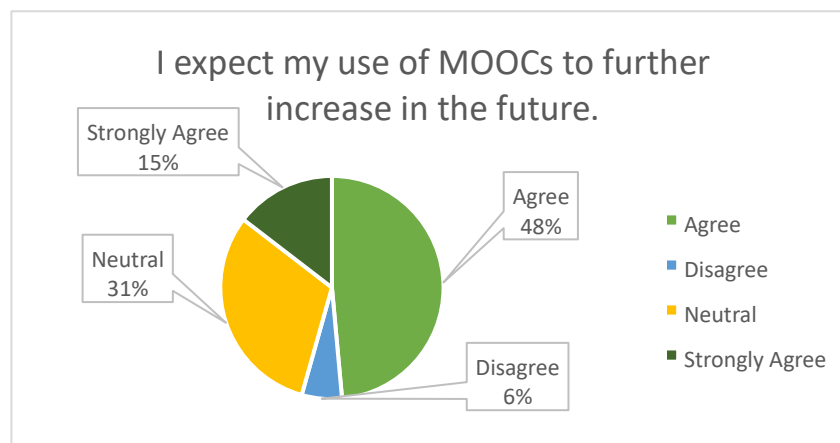
The pie chart tells us that most of the respondents' (75%) are able to socially interact with the other people who are enrolled in the MOOC. This brings forward a previously mentioned term – **Social Presence**. Let us see what else can we infer from this.



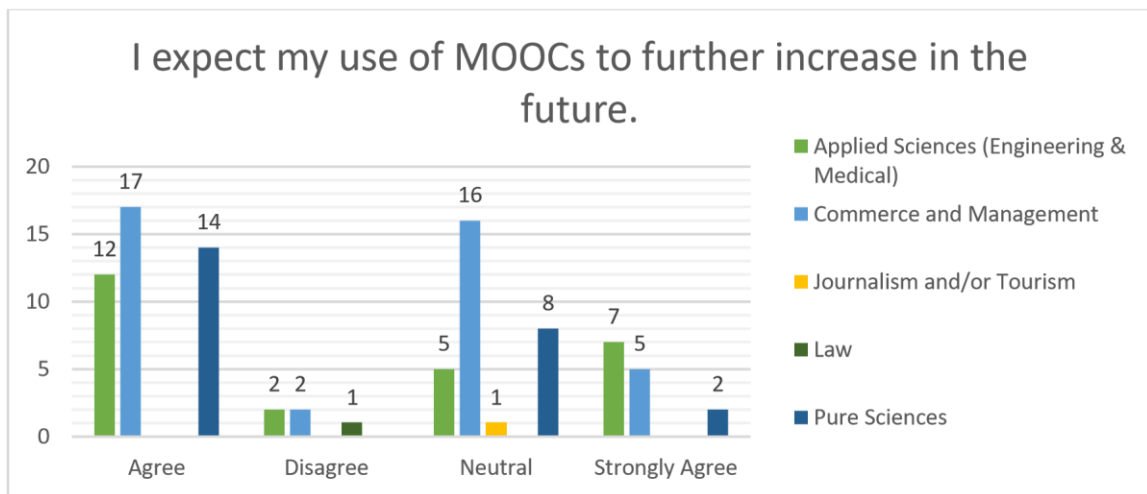
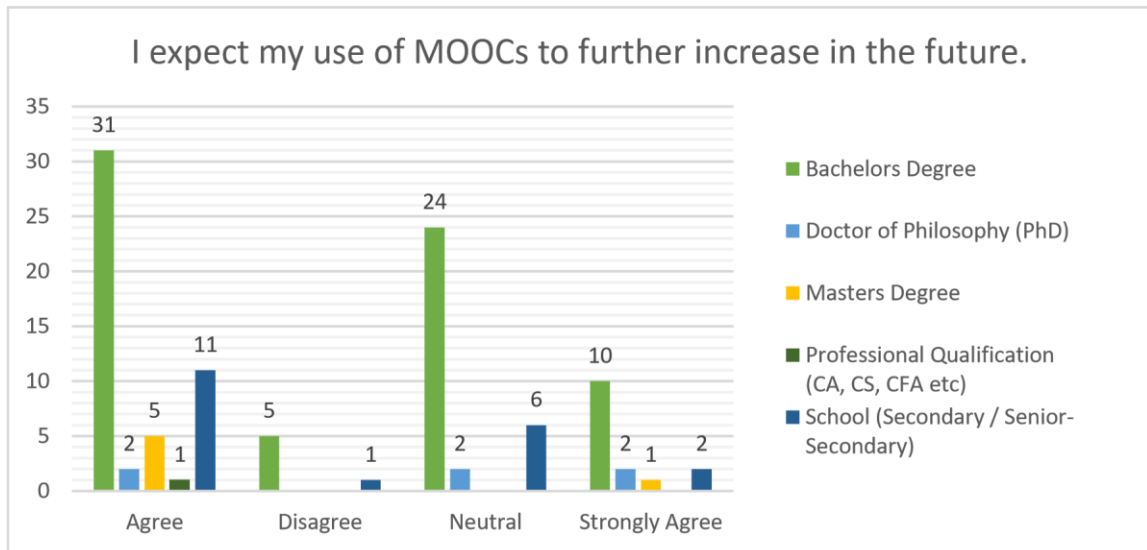
This chart tells us that **Students** and **Professionals** are the ones that agree to the statement, and hence, we can infer that they find it easier than others to socialize.

Either way, **Social Presence** comes out as an important factor affecting the performance of MOOCs. Further, we will try to analyze this parameter more.

Statement 4: I expect my use of MOOCs to further increase in the future

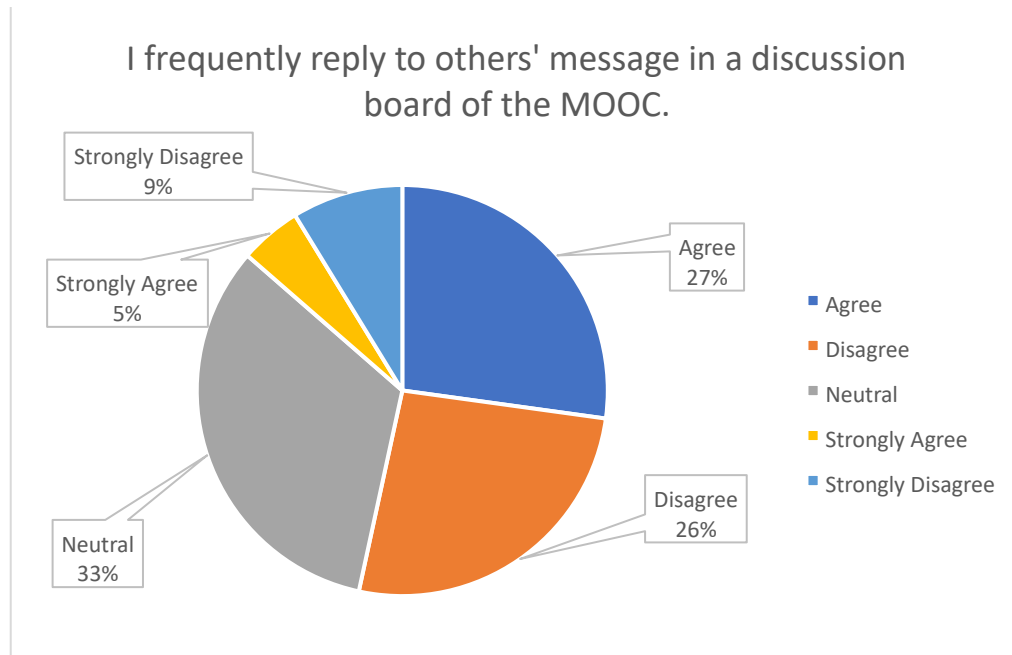


It is clearly visible that a **majority** of the respondents (63%) **agree** to the statement, depicting that MOOCs have been received positively in India so far. Although there is still a significant portion of respondents who are not sure about MOOCs as part of their future, that portion can be expected to decrease with time. Let us see some more statistics.



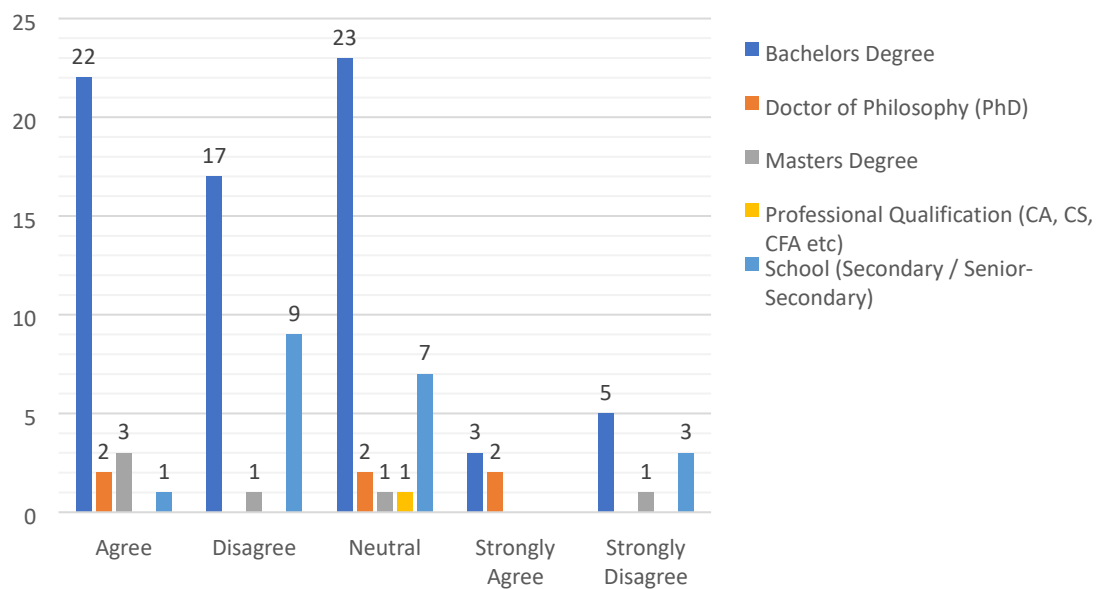
While there is a big portion of bachelor degree participants who can see MOOC as a part of their future, this ratio is relatively low for other categories.

Statement 5: I frequently reply to others' message in a discussion board of the MOOC.

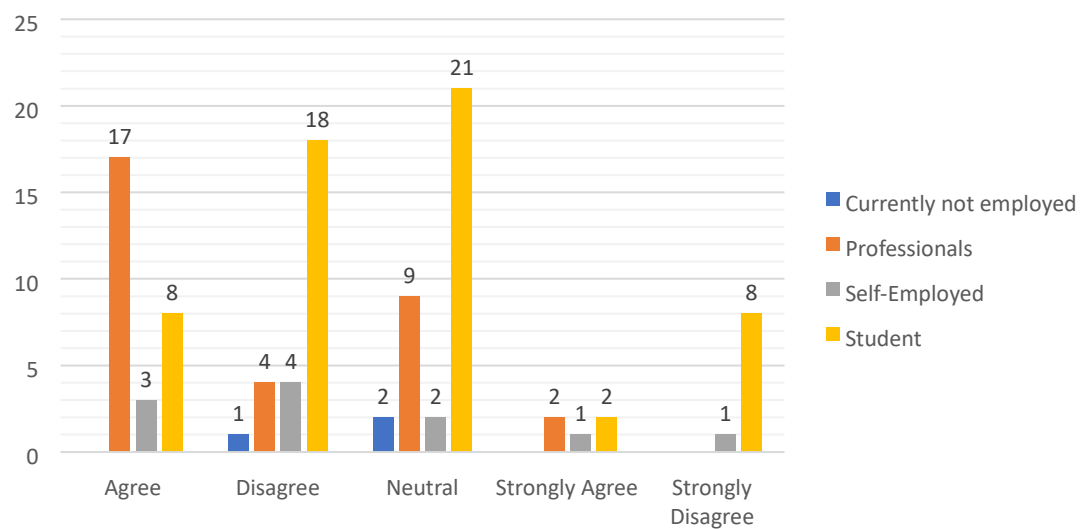


The pie chart depicts that there is a balanced outcome for this statement. While around 32% of the respondents agree to it, 33% are not sure, and 35% do not agree with it. This brings out the factor of **Social Presence**. Let's see some more statistics.

I frequently reply to others' message in a discussion board of the MOOC.

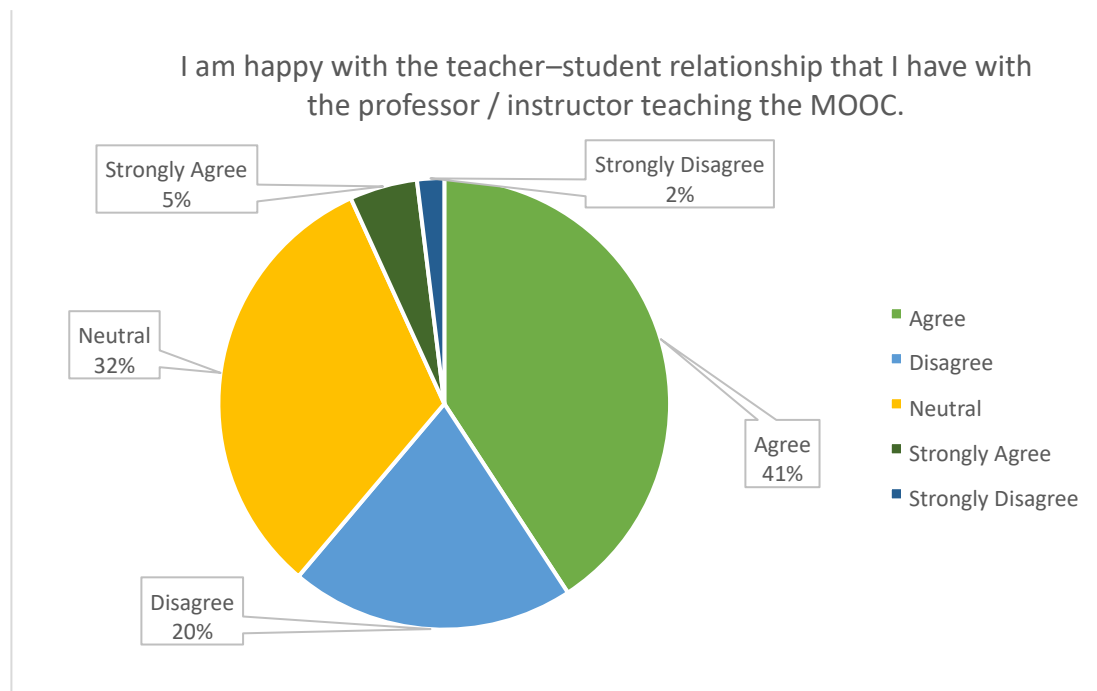


I frequently reply to others' message in a discussion board of the MOOC.

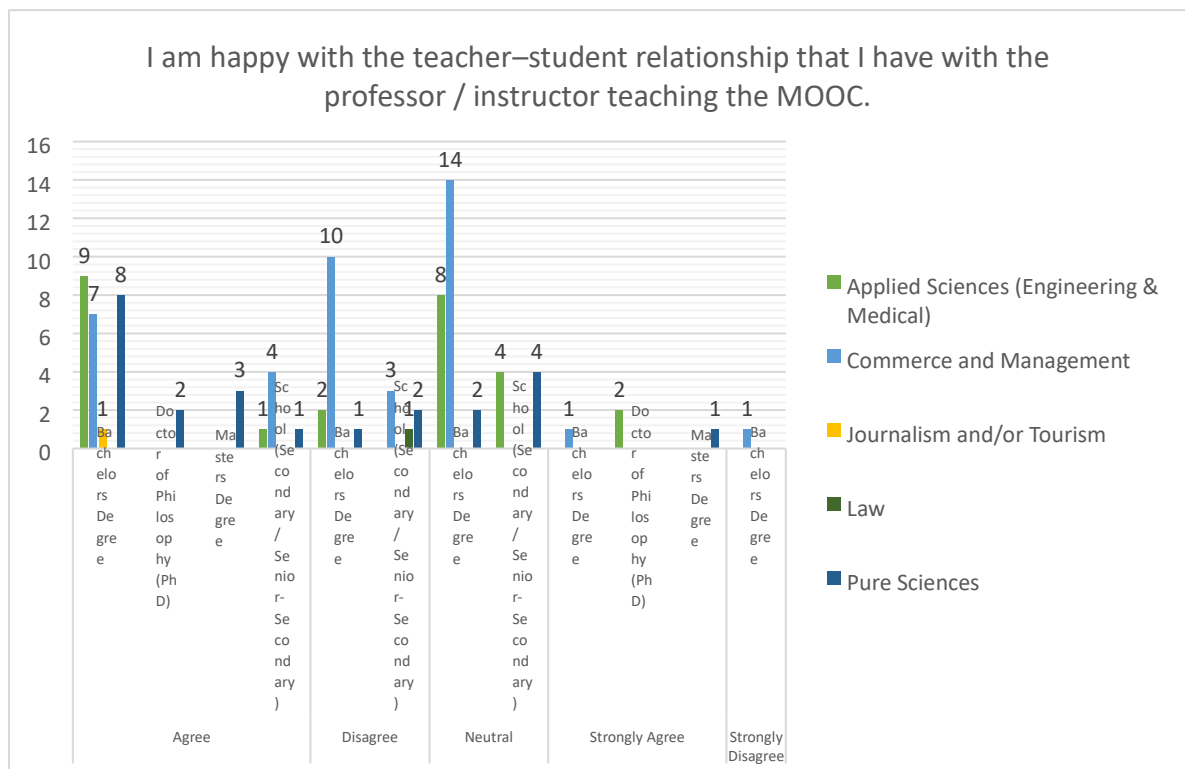
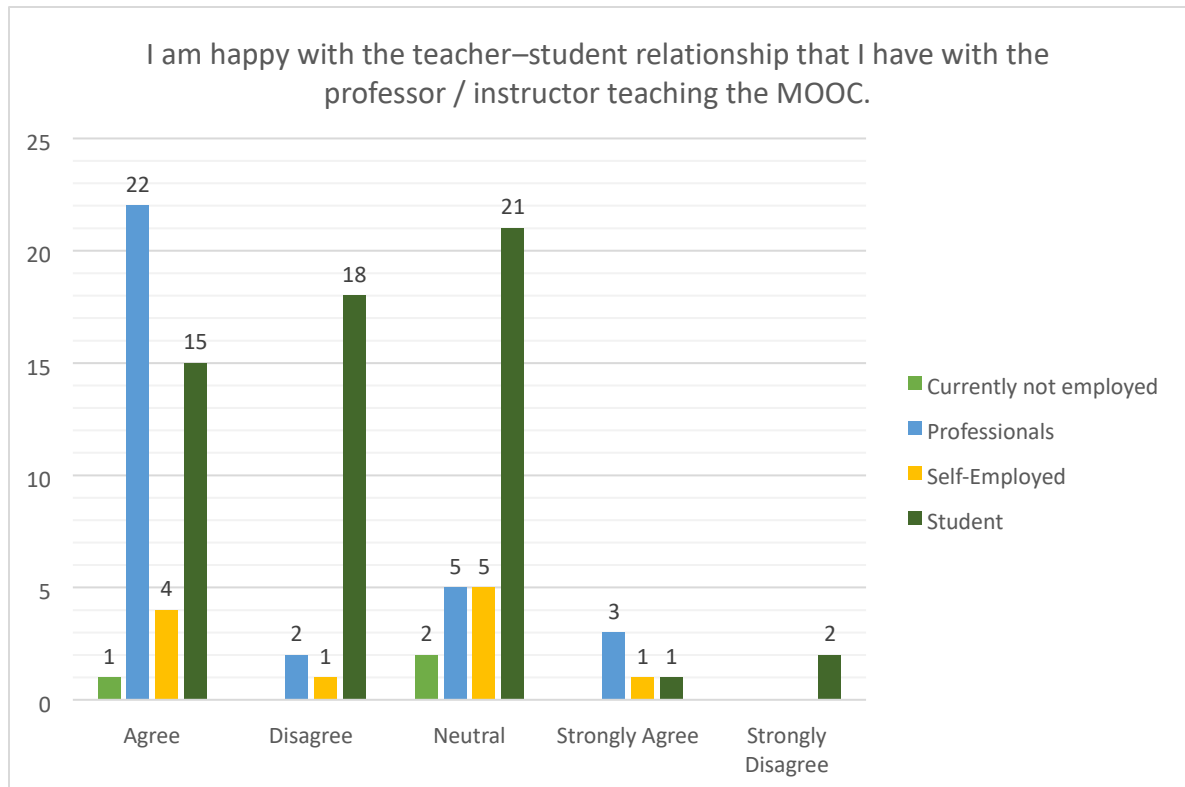


As the study's respondents are dominated by students, we can clearly see that many students disagree to our statement. Anyhow, **Social Presence** as an important factor is discovered.

Statement 6: I am happy with the teacher–student relationship that I have with the professor / instructor teaching the MOOC.

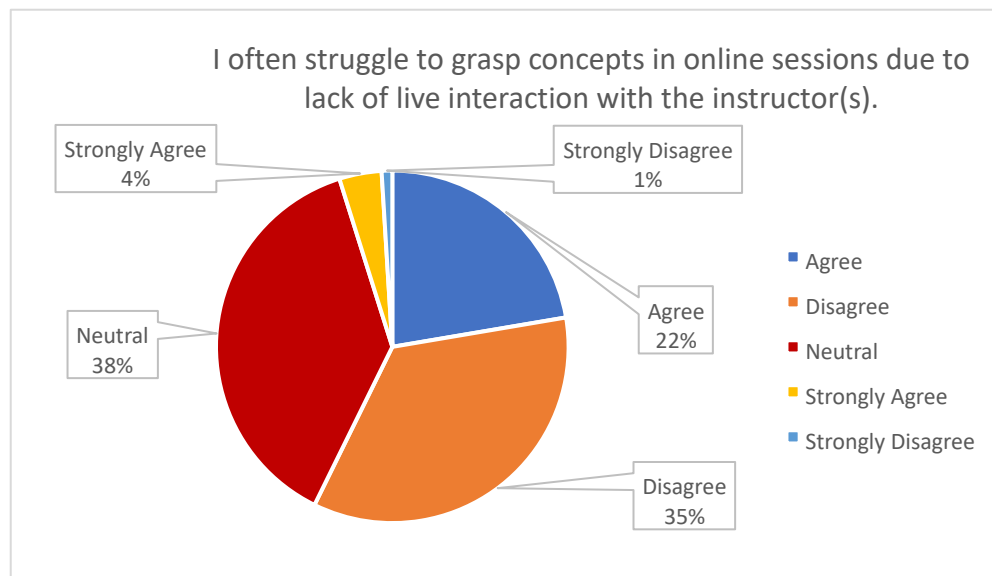


The pie chart tells us that 45% of the respondents feel happy / satisfied with the teacher student dynamic with the instructor / teacher teaching the MOOC. This calls for a new factor – **Teaching Presence**. Let us see some more statistics regarding this.

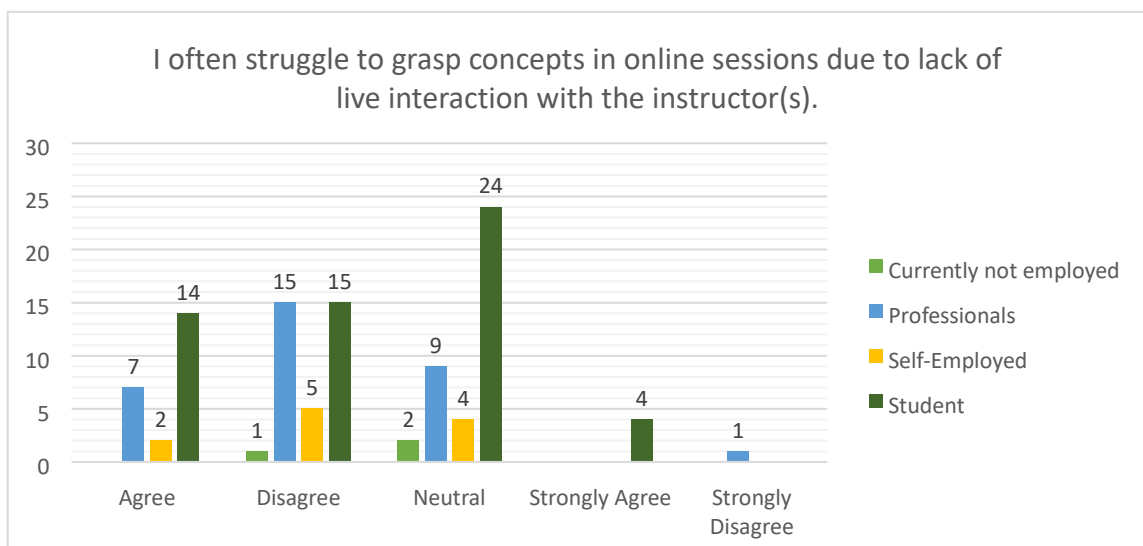
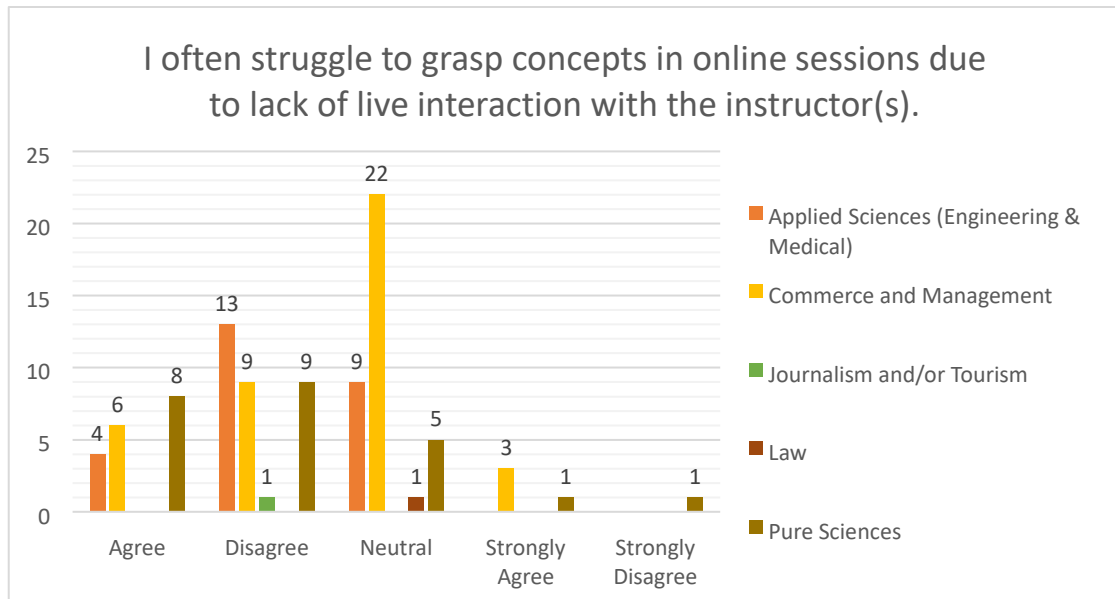


These charts tell us that while most Bachelor Degree Students are neutral about the teaching presence in MOOCs, a good number of professionals are satisfied with the current paradigm. In any case, it can be inferred that **Teaching Presence** is an essential factor that determines the performance of a MOOC.

Statement 7: I often struggle to grasp concepts in online sessions due to lack of live interaction with the instructor(s).

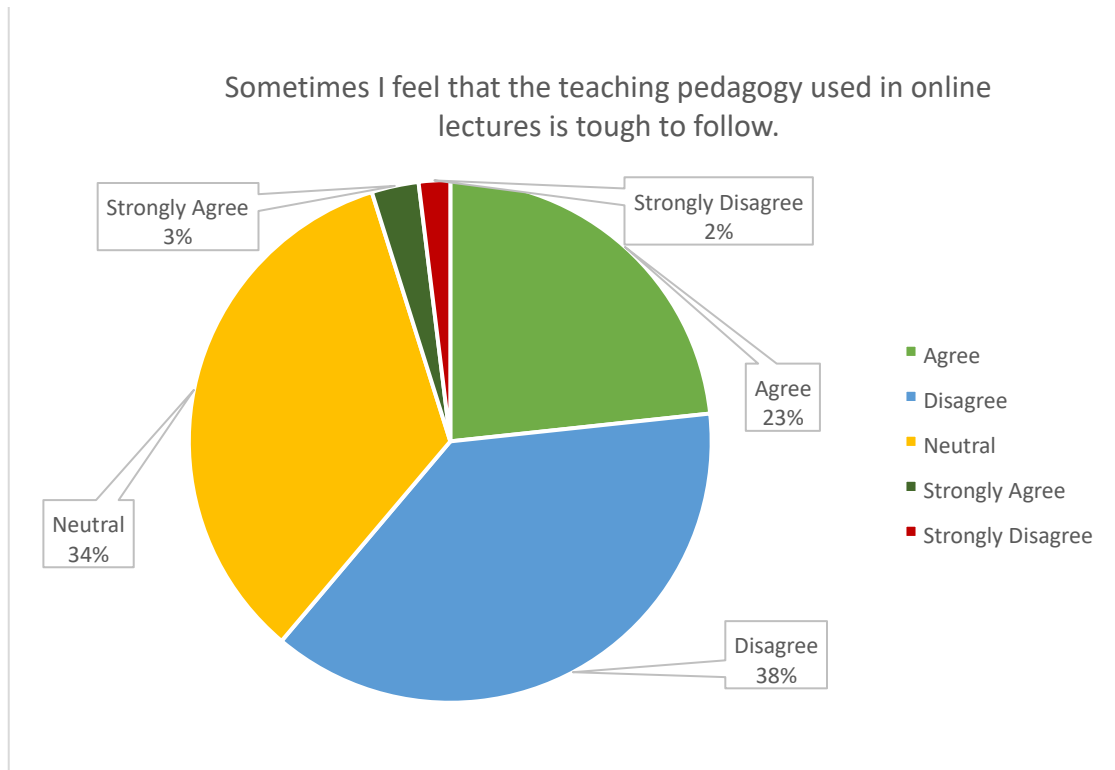


This pie chart tells us that respondents are mostly neutral to the statement. While a good proportion of them, have disagreed to the statement, around 23% have agreed. Still, we can look at the lack of **social presence** and **teaching presence** as contributing factors.

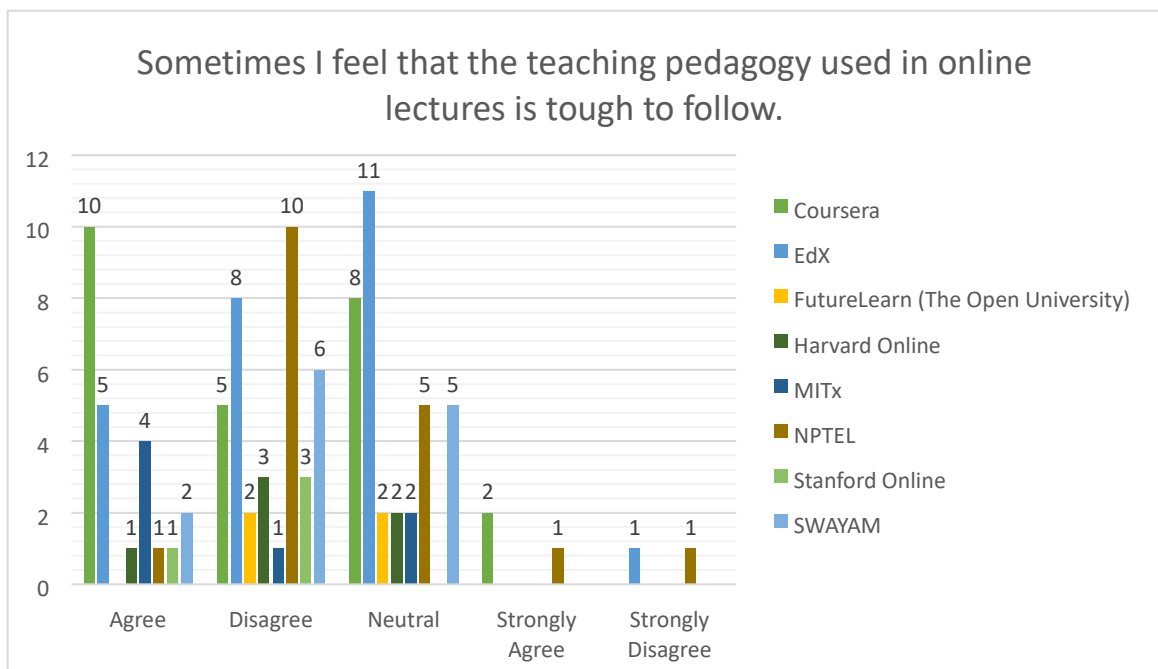


While there is a majority that is neutral to the statement, it can be inferred that the **social presence** and the **teaching presence**, both can have a negative effect on the MOOC's performance as well.

Statement 8: Sometimes I feel that the teaching pedagogy used in online lectures is tough to follow.

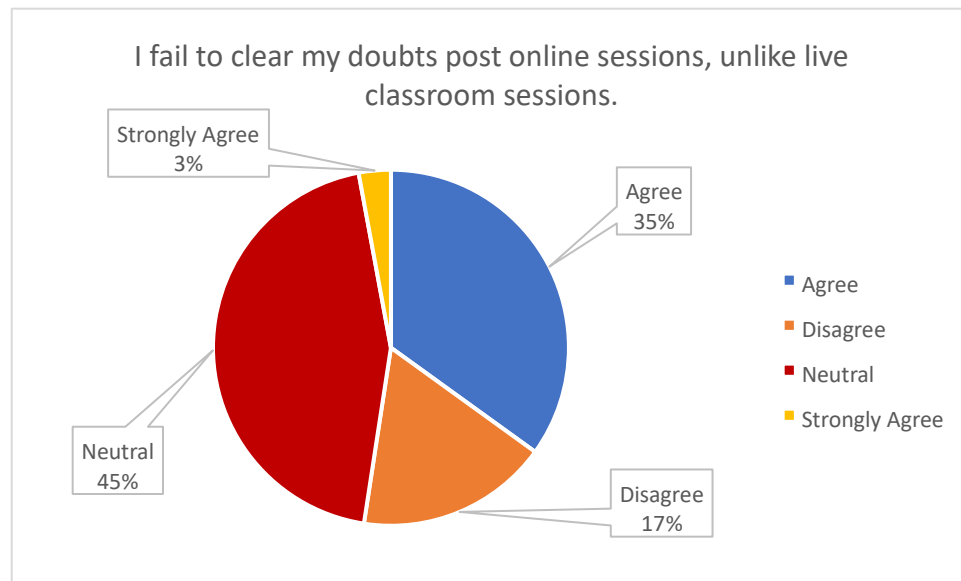


It is clearly visible that majority (40%) of the respondents disagree with the statement, which means that they are satisfied with the teaching pedagogy used in MOOCs.

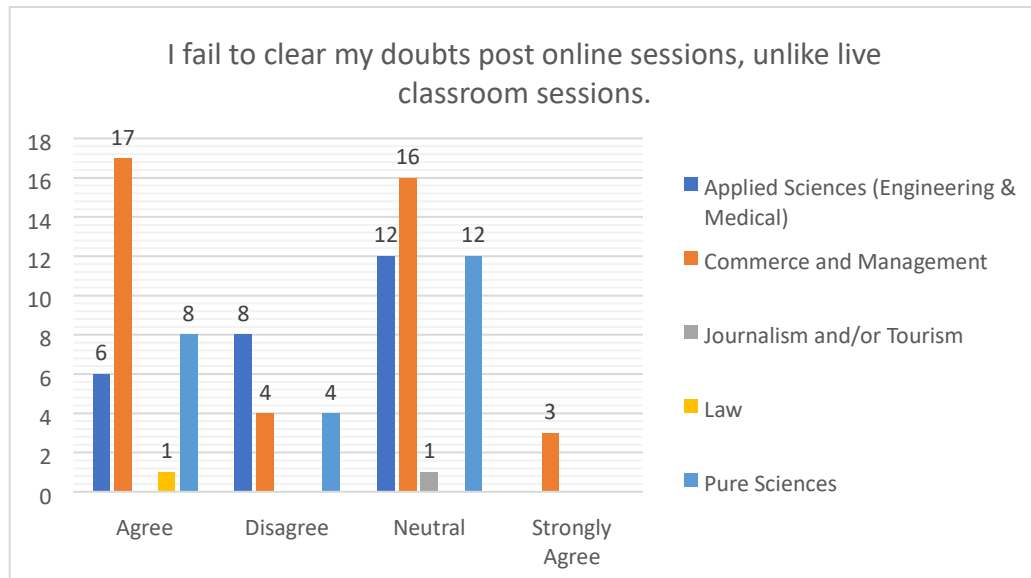


As the graph shows, this could contribute to the factors of **Technological Efficiency of MOOC Platforms**, and/or **Teaching Presence**, and to some extent, the **Self-efficacy** and the **Self-Regulation** of the candidate.

Statement 9: I fail to clear my doubts post online sessions, unlike live classroom sessions

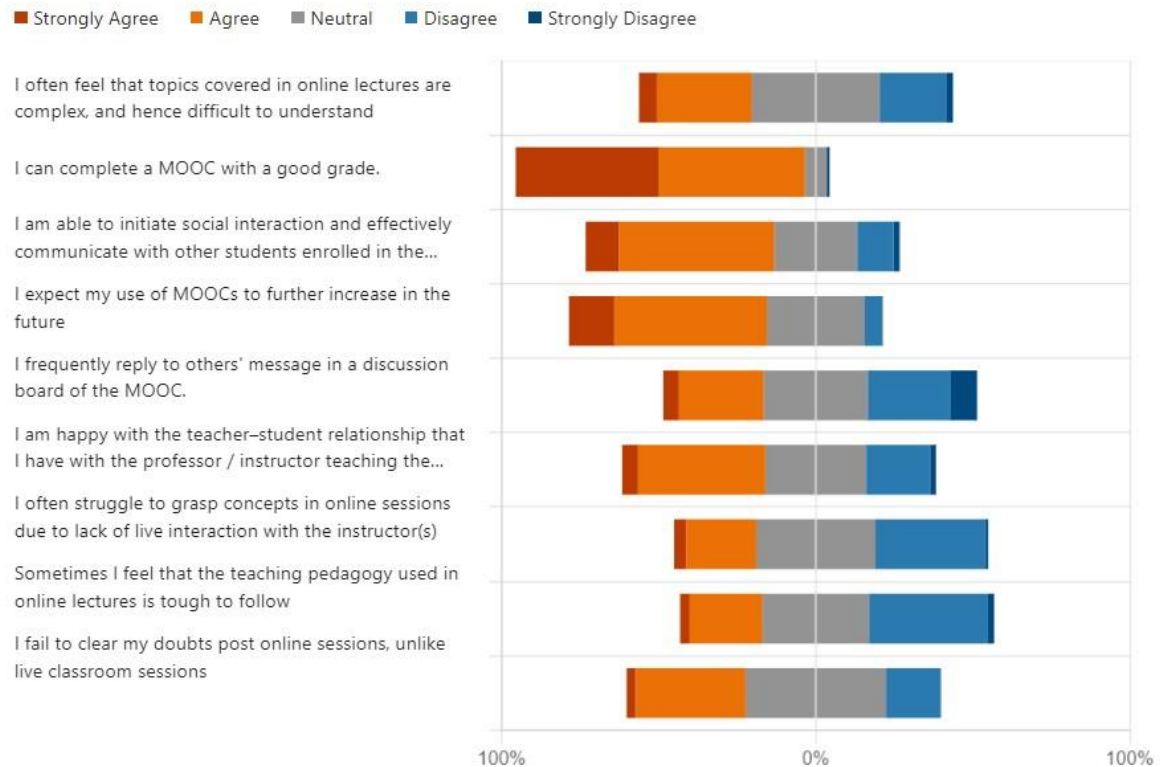


As the pie chart shows, majority (45%) of the respondents feel that they are not able to clear their doubts post online sessions, contrary to live, on-site classroom courses. This brings the factor of **social presence**, **teaching presence**, and the **technological efficiency of MOOC platform** into question.



According to this bar chart, this happens often in the case of either **Commerce / Management** MOOCs, or in the case of **Applied Sciences** MOOCs. It is not surprising, since majority of MOOCs are focused on these domains. Anyhow, it is now clear that **Social and Teaching Presence** influence the performance of MOOCs both positively and negatively.

**THE OVERALL ANALYSIS FOR ALL THE LIKERT SCALE QUESTIONS
IS DONE VIA STACKED BAR CHART:**



So far, we have discovered **5 factors** in the Likert Scale Section, that influence the performance of MOOCs in India – 1.Retention Capacity of Candidate

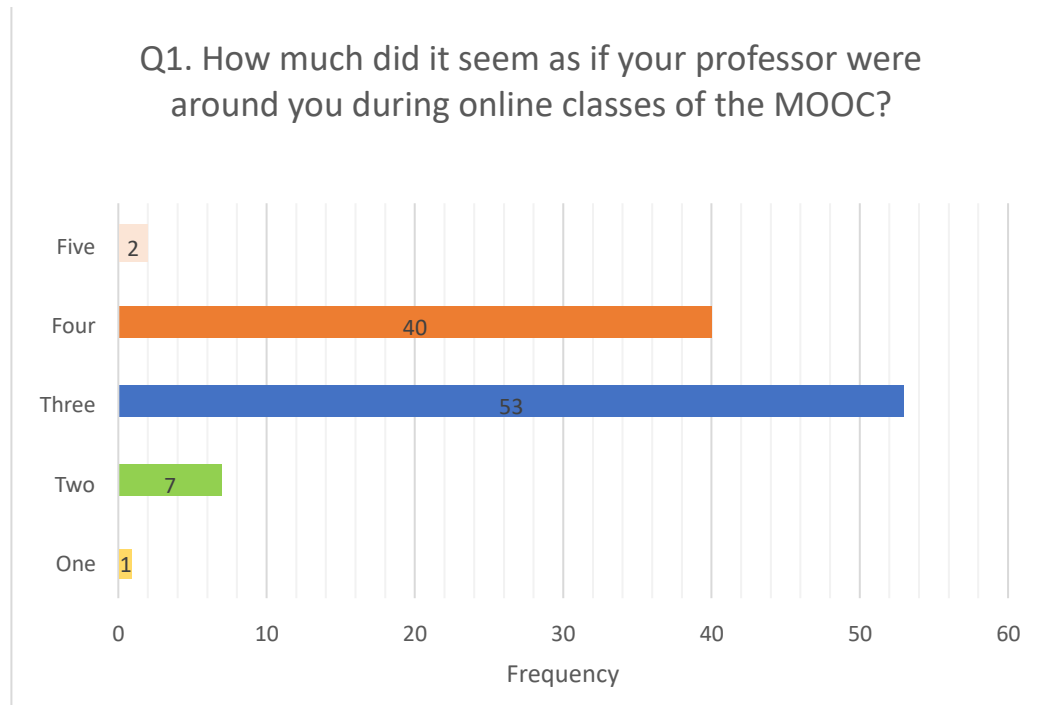
2. Social Presence
3. Teaching Presence
4. Self-Efficacy
5. Self-Regulation

4.5. Rating Scale Questions

These questions were made to get feedback on various aspects of MOOCs, on a scale of 1 to 5, with 1 being lowest rating, and 5 being the highest rating. The questions used in the questionnaire are –

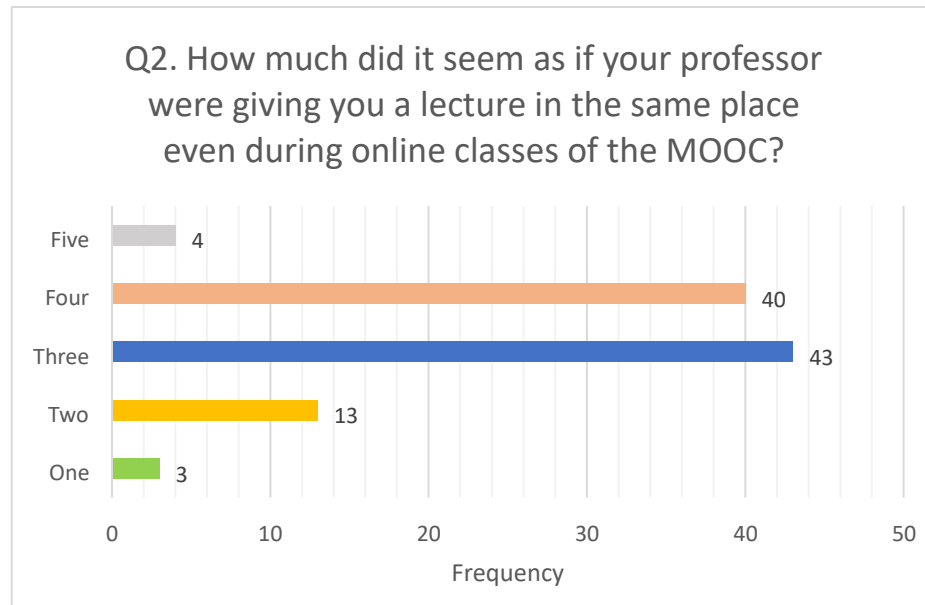
Q1	How much did it seem as if your professor were around, you during online classes of the MOOC?
Q2	How much did it seem as if your professor were giving you a lecture in the same place even during online classes of the MOOC?
Q3	How much did it seem as if you, your professor, and classmates were together in the same place during online classes of the MOOC?
Q4	How much did it seem as if your professor were talking to you in the same place during online classes of the MOOC?
Q5	How would you rate the practical exposure / hands-on experience provided by the MOOC(s)?
Q6	How would you rate the quantity and quality of the study material provided to you by the MOOC Instructors?
Q7	Overall experience of MOOCs
Q8	How likely are you to recommend doing MOOCs to a friend or colleague?

Q1: How much did it seem as if your professor were around you during online classes of the MOOC?



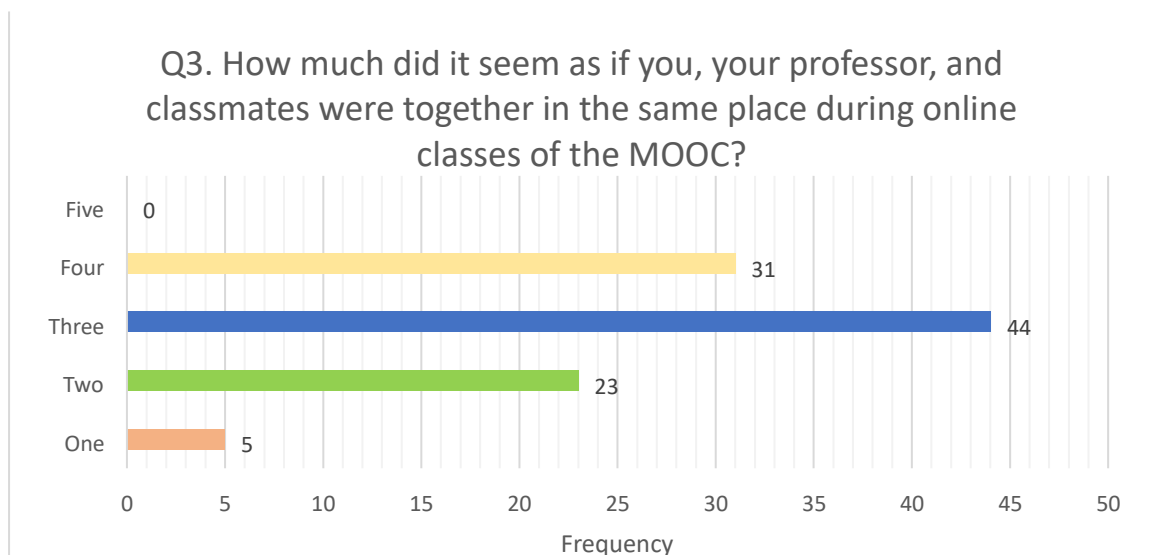
This chart shows a mode of 53 entries for the rating 3. This means that most respondents do not feel the complete presence of teacher / instructor in online classes of the MOOC(s). This shows the importance of **Teaching Presence**.

Q2: How much did it seem as if your professor were giving you a lecture in the same place even during online classes of the MOOC?



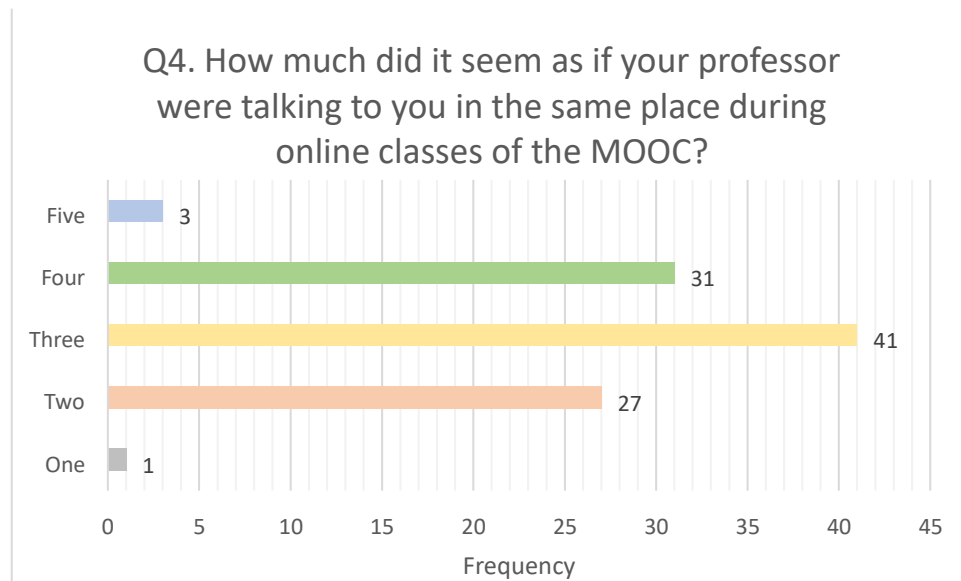
This chart shows a mode of 43 entries for the rating 3. This means that most respondents found it difficult / neutral to feel the presence of the teacher in the online class of the MOOC. It is yet another strong emphasis on **Teaching Presence**.

Q3. How much did it seem as if you, your professor, and classmates were together in the same place during online classes of the MOOC?



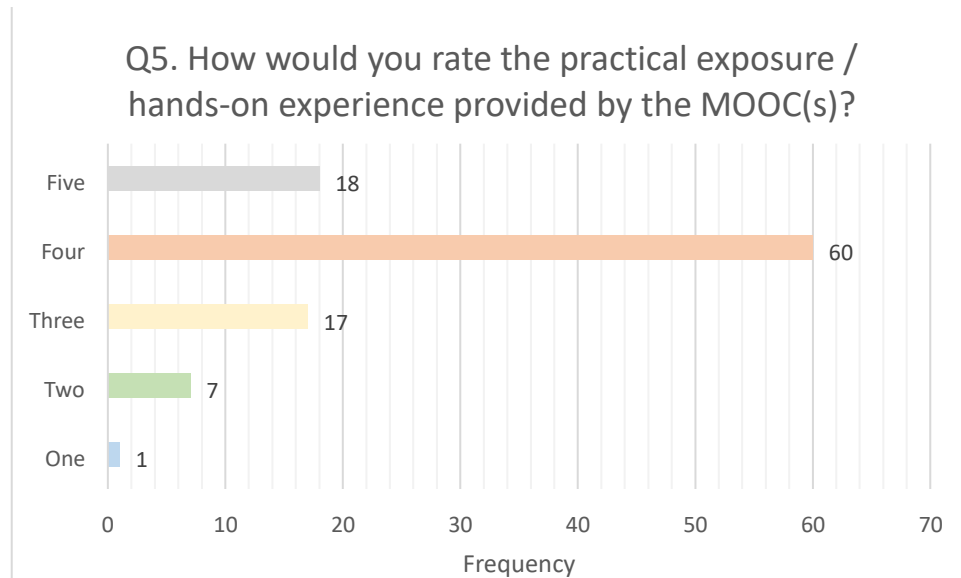
This graph shows a mode of 44 entries for the rating 3. This means that most of the respondents feel neutral; like they are sitting in a classroom amongst other students and a teacher. This is a strong emphasis on **Social Presence** and **Teaching Presence**.

Q4. How much did it seem as if your professor were talking to you in the same place during online classes of the MOOC?



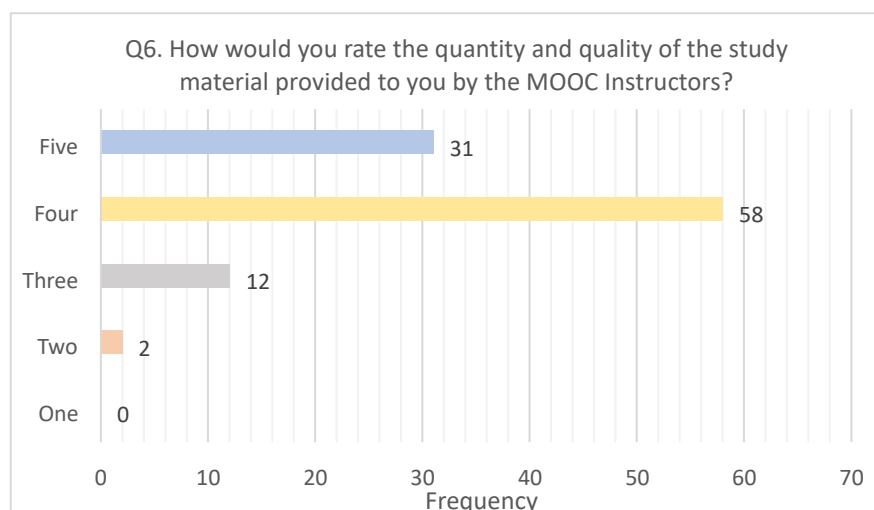
This graph shows a mode of 41 entries for the rating 3. It also has 31 entries for rating 4, which means that more or less, the respondents are somewhat satisfied with this parameter of the MOOC. This focuses on **Teaching Presence**.

Q5. How would you rate the practical exposure / hands-on experience provided by the MOOC(s)?



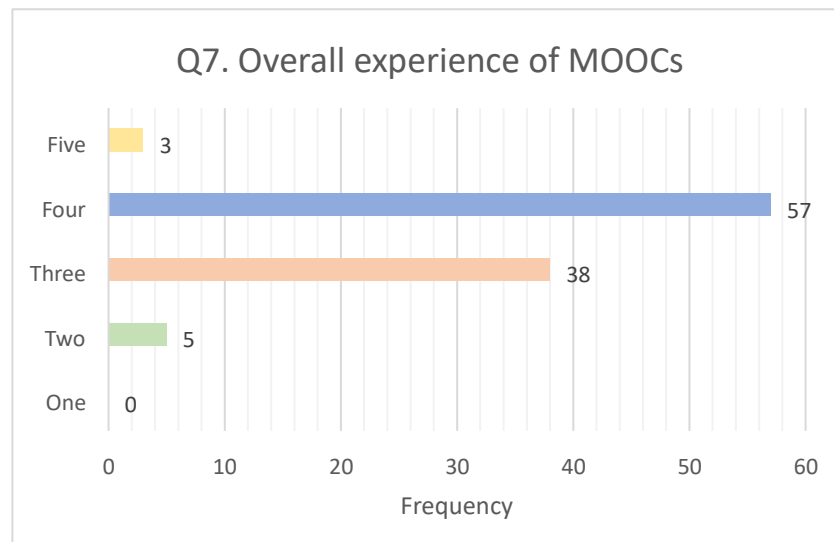
This chart shows a mode of 60 entries for the rating 4. It also has a significant number of 5-star ratings. This means that the practical exposure / hands-on experience provided by the MOOC has made the students more than satisfied. This is a good emphasis on the **Technological Efficiency of MOOC Platforms**, and on the **Teaching Presence**.

Q6. How would you rate the quantity and quality of the study material provided to you by the MOOC Instructors?



This chart shows a mode of 58 for the rating 4, and also has significant entries for the highest rating, 5. Hence, we can infer that the quality and quantity of the study material provided by the MOOC Instructors is better than what the candidates expected. This is another emphasis on **Teaching Presence**, and **Technological Efficiency of the MOOC Platform**.

Q7. Overall experience of MOOCs



This graph shows a mode of 57 entries with rating 4, and second-best is 38 entries with rating 3. It is safe to assume that MOOCs are rated somewhere between 3 and 4, as an overall experience.

Q8. How likely are you to recommend doing MOOCs to a friend or colleague?

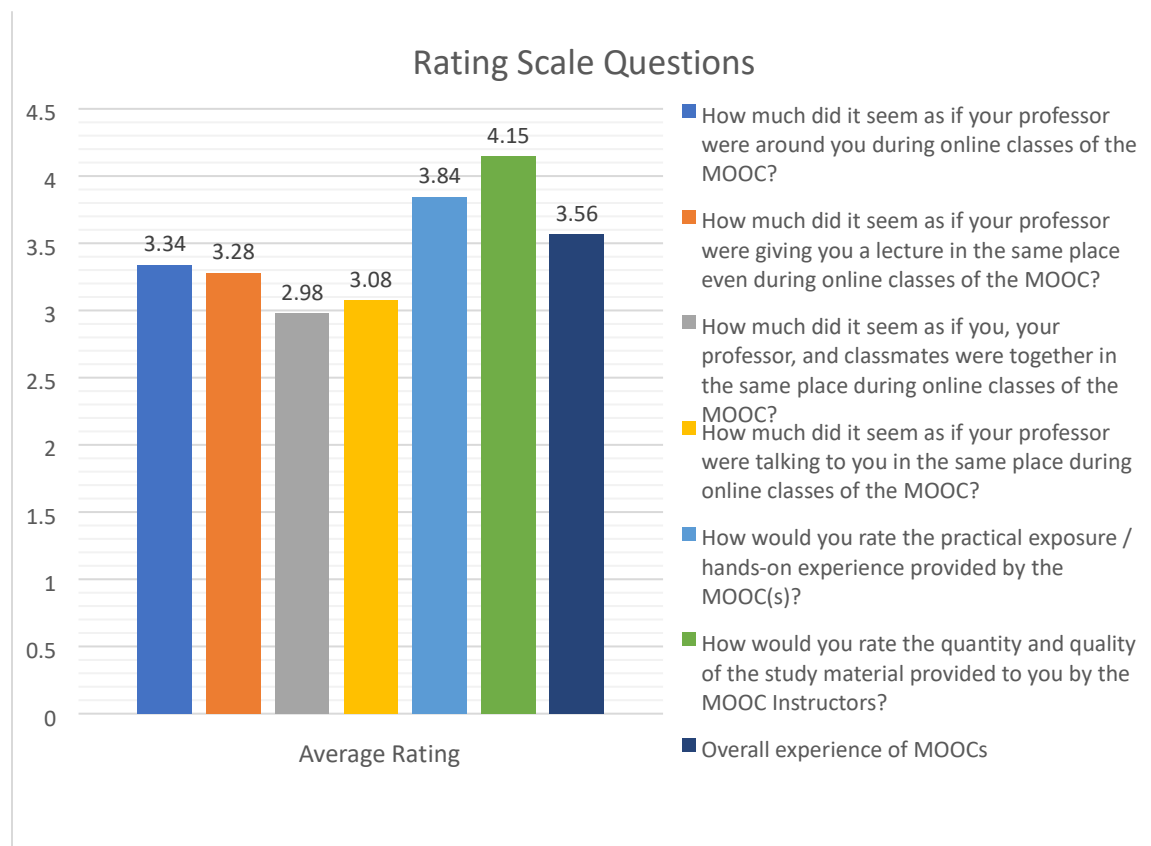
We have used **NPS (Net Promoter Score)** for the analysis of the data for this question. The Net Promoter Score (NPS) is determined by subtracting the percentage of responders who are detractors from the percentage who are promoters. What is

generated is a score between -100 and 100 called the Net Promoter Score. It has 3 terms – Promoters (≥ 9), Detractors (≤ 6), and Passives (7 or 8).

Any NPS Score above 0 is considered ‘Good’. Let us now check the Net Promoter Score as per our data –



Hence, the recommendation for doing MOOCs is Good. Finally, we have plotted the **average ratings for each rating scale** question:



4.6. Factors Determined from Data Analysis

On the basis of our Data Analysis, we have been able to determine 7 factors that affect the performance of MOOCs in India –

1. Self-Efficacy
2. Self-Regulation
3. Social Presence
4. Teaching Presence
5. Retention Capacity of Student / Candidate
6. Cost Effectiveness
7. Technological Efficiency of MOOC Platform

CHAPTER 5 - CONCLUSION

5.1. Conclusions

Every study has some or the other conclusion, to summarize what was learnt. The conclusions from this study on ‘Factors that affect the Performance of Massive Open

Online Courses (MOOCs) in India’ are as follows: -

- 1) A Majority of people have a decent idea of what MOOCs are, and in fact, some of them even have completed MOOC courses from various platforms.
- 2) The most preferred platforms for MOOCs are Coursera, EdX, and NPTEL.
- 3) Mostly Students, who have finished / are currently enrolled in / are pursuing graduation in STEM Courses and/or Commerce and Management Courses enroll and complete MOOCs.
- 4) The major advantages of MOOCs are their technological efficiency, quality of content, and cost effectiveness.
- 5) The major barriers to MOOCs are social presence, teaching presence, and retention capacity.
- 6) Students’ internal factors such as Self-Efficacy, Self-Regulation and Retention Capacity also play an important role in how MOOCs perform.

5.2. Recommendations

As famously quoted, “There is always room for improvement”. Every process has some things to improve. As much as I loved working on this project, there were some areas where it could have done better. These recommendations are –

- 1) The barriers to MOOCs like Teaching Presence / Social Presence can be somewhat addressed by making sure that the students are able to get to know

each other as well as the teacher. Some group activities in the starting of each session could be one way to do it. Another way would be to keep some dedicated classes to share your experiences, bond with each other and other activities.

- 2) To improve the current MOOC awareness, educational institutions should start including MOOCs as an introductory subject in Schools, whereas they should give options to students to enroll in MOOCs when they go into college.
- 3) To gain students' attention to MOOCs, it is important to make sure MOOCs are considered a credible qualification to recruiters in the corporate sector. Hence, awareness, and competency of MOOCs should also be spread into the corporate sector, so that students would enroll into MOOCs thinking that doing these courses would strengthen their resume and help them enhance their skills.

Assigning Credits to MOOC courses as per education policy norms could help in making this successful.
- 4) If possible, Colleges and Schools can try to inculcate MOOCs as a part of their curriculum, which would make students enroll into MOOCs for their coursework completion. Some colleges, including our own, Maharaja Agrasen Institute of Management Studies have already adapted this model.