

AN EMPIRICAL ANALYSIS ON DIFFERENT MODES OF LEARNING
SYSTEMS

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ABSTRACT

Preamble - In the current education scenario, the popular learning system can be classified into three types namely; Regular, Online and Distance. On foreseeing post-Graduation, it is clear that the number of enrolments to Online and Distance modes of education will be outnumbering Regular modes of Education. Therefore, this study becomes an essential controversial topic that focuses on Online and Distance learning systems along with Regular learning systems.

Aim - The purpose of this study is to assess the quality of education provided by postgraduate institutions in the district of Chennai. In addition, the study examines the teaching methodology, learning outcomes and career opportunities provided to regular, online and distance-mode education students.

Research Methodology - The study used a descriptive research design. The researchers adopted a stratified sampling technique and collected data through a structured questionnaire from 517 samples, out of which 436 were scrutinized and considered for analysis.

Findings - The researcher adopted various types of parametric tests, through which it was found that there is a significant difference in the quality of education, teaching methodology, learning outcomes, and career opportunities for students perusing through regular, online and distance modes. The study result concluded that Open distance learning is the best platform to peruse the post-Graduation followed by Online Learning. The correlation value indicates that there is a positive relationship between the quality of education, teaching methodology, learning outcomes, and career opportunities. Despite there is begin a positive relationship between the quality of education, teaching methodology, learning outcomes, and career opportunities. It was only teaching methodology and career opportunities influencing the quality of education.

Keywords: Mode of education, Quality of education, Teaching Methodology, Learning Outcomes and Career Opportunities.

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I. Introduction

Education is a fundamental and indispensable aspect of human development. It independently decides a person's life path. Although the concept of delivering education dates back to the eleventh century, its quick expansion in terms of study depth, progressiveness, and technology is unexplainable. From studying under a tree to attending school to online learning through computer displays, education has evolved (Peat, 2004). Today, several online courses, certifications, and distance education courses are available apart from the regular mode of education.

Sir Isaac Pitman introduced the first distance education course in the 1840s, employing an inventive shorthand system that is still widely used and relevant today. The first CBT (Computer-Based Training) programme was created in the 1960s when eLearning was first coined. These phrases are frequently used interchangeably, yet they have very different connotations (Behzadi, 2011). This has made online learning and distance education available to any student in the world, and they are currently in high demand.

Online learning is a virtual method of sharing knowledge in which the educator records and uploads lessons and related resource materials for the students to access or review topics whenever possible, and as many times as they like. Today, students can pursue online degree programmes from anywhere and at their own pace (Team Careers360, 2021).

However, correspondence courses better defined as distance learning programmes. This concept is around self-study in which universities, colleges, or educational institutes offer online learning courses that can be attended from any location, including at home (Jayasinghe, 2015). The course materials are sent to registered applicants by mail, post, or online resources.

On the other hand, distance and online education courses are an upgrade or alternative to conventional academic qualifications. It is only offered in the courses and modules covered by the full-time or regular schooling curriculum. Another element distinguishes online learning from distance education. Comparing the quantity or extent of mentor-mentee connections in distance education and online learning courses reveals significant disparities (Yerby, 2013). In the former, interaction with professors and teachers of the chosen curriculum or subject is minimal to non-existent, as students are expected to self-study and learn through study materials. It may be possible to contact teachers in the event of questions, but this is not a prominent element or characteristic of distance education. In this situation, online learning differs from this conception (Hurlbut, 2018). First, online learning courses are recorded version of instruction that includes actual virtual lectures as opposed to only study materials and notes. When online courses are posted by trainers to a website or portal, they typically allow live dialogue via comments, direct contacts, and other social media interactions, such as Facebook groups and networks. Even after years of publication, they continue to offer complete support for their courses (Nduagbo, 2023). Therefore, the interactive features of online learning are better than even traditional or full-time education.

Students can participate in online learning in a virtual classroom where an instructor is present while they complete their digital lessons and assessments. Using distance learning, candidates complete assignments online or at home after the instructor assigns and digitally grade them. There is virtual proximity between the teacher and student in eLearning, which makes it more interactive and comparable to classroom discussions (Team Careers360 , 2021). This is another significant distinction between online learning and distance education. Distance education courses are relatively more expensive than online learning courses because their value and worth are significantly higher. Somewhat less expensive, or at least half the price of the original full-time courses offered by universities, are the costs of distance programmes.

The target audience is one of the most important factors distinguishing distance learning from online learning. The target audience for distance education courses is much more limited than that for online learning courses (Alam, 2023). This is primarily due to the higher cost of distance education courses, which causes applicants to pause before applying, whereas online certification courses are typically pursued by those seeking to improve their current status, salary, or job profile. People will not enrol in a distance education programme for amusement or to fill their spare time with productivity or additional knowledge (Al Bashaireh, 2023). Online learning courses have a lighter approach and a broader target audience, which can range from a five-year-old learning to

build blocks to an eighty-year-old learning to knit. Intensity, relevance, and necessity are distinct between these two alternatives. People of all ages, from teenagers to middle-aged adults, make up the majority of distance learning education students, as there are no eligibility restrictions imposed by the university, which are irrelevant even in an online course. This study is an attempt to explore the difference between teaching methodology, learning outcomes and career opportunities provided to regular, online and distance-mode education students. Further, the research will attempt to find the underlying connection between teaching methodology, learning outcomes and career opportunities with Quality Education.

II. Review of Literature

The recent pandemic situation had rendered the entire world immobile. In all types of institutions, normal operations were suspended for weeks. In addition, educational and vocational institutions cancelled classes indefinitely. However, the online education system allowed teachers to communicate with their students (Dhiman, 2023).

The world's schools, colleges, and universities continued their instruction by transitioning to an online platform. Institutions have adopted online teaching methods, and even well-established educational institutions continue to operate online even now. Several academies are using online distance learning programmes to instruct students (Madikizela-Madiya, 2023).

However, students have misconceptions about distance and traditional courses. The majority of students believed that traditional correspondence learning was not equal and absolute. Regular courses are designed for students who can attend physical classes continuously. On the other hand, distance education provides opportunities for working students who are unable to attend traditional classes (Inganah, 2023). Thus, everything depends on the students' comfort-based decisions.

In recent years, distance education has become increasingly popular as a result of the convenience it provides to applicants. After enrolling in this course, students have the opportunity to pursue dual degree programmes and can pursue education and employment concurrently. Education instructs us about the world and its inhabitants. We can change the world through education. The flexibility and availability of distance education have increased. People used to choose a career path and stick with it, whereas many people must now work two jobs. Changing times necessitate new skills, and individuals may need to constantly acquire new skills to survive (Dey, 2023).

The primary difference is that distance education is self-paced and online. Regular education provides students with regular classes. Students can utilise the Distance Education mode at their convenience and their own pace; they are provided with study materials to help them better comprehend the course material. On weekends, most universities and colleges offer distance learning (Rudenko-Morgun, 2023). The class may be held on both Saturday and Sunday or Sunday only.

As mentors are assigned for each subject in the student's chosen programme, the physical appearance of the teachers is an advantage for students who opt for the regular model. Self-learning and self-preparation play a larger role in distance education, so students are provided with the most qualified and experienced instructors and study materials. The online is the combination of regular and distance modes of education, wherein most qualified faculties are provided, but unlike distance mode which is carried out only on weekends, the online mode of education is carried out on a daily basis till the course is completed. Herein in the online mode of education, the faculties frequently interact with students online.

III. Research Gap

The researchers could identify a comparative study either on online and distance mode or distance and regular mode of education. A comparative study on online, distance and regular modes of education is a long time forgotten to study. Further, most of the studies were very narrow, that is they are confined to limiting factors. Despite the entire education system in India has experienced the online, distance and regular modes of education since COVID, there have not been enough studies pertaining to the topics and important factors therein.

IV. Statement of Problem

Identified the major research gap, which is the lack of studies pertaining to online, distance and regular modes of education. Herein a comparative study on online, distance and regular modes of education is made. Through various works of literature, it was clear that the quality of education can be determined by the teaching methodology, learning outcomes and career opportunities. Yet, no attempt was recently made to understand the connections between these factors. Hereby this study has made an attempt to explore the connection and differences existing between teaching methodology, learning outcomes and career opportunities among regular, online and distance-mode education students.

V. Objectives of The Study

The study aims to investigate the quality of education rendered by the Post graduate institutions in the Chennai district. Also, the study explores the teaching methodology, learning outcomes and career opportunities provided to regular, online and distance-mode education students. Further, the research will make attempt to find the underlying connection between teaching methodology, learning outcomes and career opportunities with Quality Education.

VI. Methodology

For the study, three different sets of samples were considered, i.e., students perusing through regular mode, online mode and distance mode. Hereby the researcher utilised a stratified sampling technique. Herein students perusing through regular mode is 1st strata, through online mode is 2nd strata and through distance, the mode is 3rd strata. The researchers herein adopted a descriptive research design i.e. survey technique to collect the data. The Structured questionnaire was the data collection instrument.

The structured questionnaire was constructed and circulated over online mode. The 12 institutions that are providing all three modes of education i.e., regular, online and distance mode post-graduation for students were only considered. 517 respondents answered, but considering the missing data and unengaged respondents, the data set is scrutinized to 436. This study was also pilot-tested with 35 samples, the Cronbach Alpha test yielded satisfactory results i.e. greater than 0.7 for all the constructs and variables therein. It was during the Pre-testing and Pilot study period the researchers finalized the research methodology of the study, It was after that the research was carried on.

VII. Analysis and Interpretation

Descriptive statistics and simple percentage analysis were carried out to identify the demographic profile of the respondents considered for the study.

Table 1 Percentage analysis – demographic profile

		Frequency	Percentage
Gender	Male	255	58.5
	Female	181	41.5
	Total	436	100.0
Mode of Education	Full-time (Regular)	231	53.0
	Online Learning	108	24.8
	Open Distance Learning	97	22.2
	Total	436	100.0
Reason for Choosing a Particular Mode of Education	Career Upgradation	264	60.6
	Learn Concepts In-Depth	77	17.7
	Affordability	9	2.1
	Accessibility	12	2.8
	Time Flexibility	74	17.0
	Total	436	100.0
Age	Valid	436	
	Missing	0	
	Mean	23	
	Median	22	
	Mode	21	
	Maximum	49	
	Minimum	20	

Source: (Primary data)

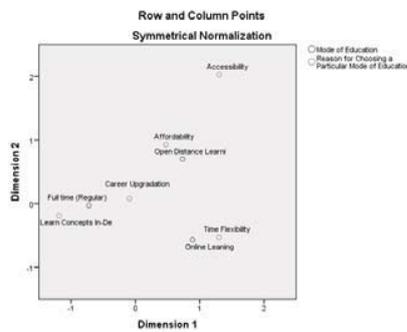
From the percentage analysis, it was understood that 58.5% of the samples considered were male and 41.5% of the samples were female. Thus, it can be interpreted that, considering female students, a higher amount of male students are perusing Post Graduation. Further, It was found that among 436 students considered, 231 (53%) students are perusing through regular mode, while 108 (24.8%) were perusing through online mode and the rest 97 (22.2%) students were perusing through. Through this, it can be perceived that most students are preferring a Full-time mode of education followed by the online mode of education and finally the distance mode of education. The reason for choosing a particular mode of education was mostly for career Upgradation (60.6%) and to Learn Concepts in-depth (17.7).

The analysis was carried out to identify the association existing between the mode of education and the reason for choosing a particular mode of education.

Table 2 Correspondence analysis – reason for choosing a particular mode of education

Correspondence Table					
Mode of Education	Reason for Choosing a Particular Mode of Education				
	Career Upgradation	Learn Concepts In-Depth	Affordability	Accessibility	Time Flexibility
Full-time (Regular)	149	76	3	0	3
Online Learning	57	1	2	3	45
Open Distance Learning	58	0	4	9	26
Active Margin	264	77	9	12	74
Summary					
Dimension	Singular Value	Inertia	Chi-Square	Sig.	
1	.592	.350		.000 ^a	
2	.189	.036			
Total		.386	168.122		
a. 8 degrees of freedom					

Source: (Primary data)



The calculated significance value is less than 0.05. meaning the null hypothesis is rejected. Therefore, there is a significant association between the mode of education and the reason for its selection. From the cross-tabulation and correspondence graph, it can be interpreted that, students choose full-time or regular modes of education, especially for career upgradation (149) and to learn concepts in-depth (76). While the students choose online mode for career upgradation (57) and time flexibility (45). Furthermore, the students choose a distance mode of education for career upgradation (58) and to learn concepts in-depth (26). Overall, it was understood that the students perusing online and distance education modes share a similar attitude and purpose for choosing a particular mode of education, that is for career upgradation and to learn concepts in-depth. On other

hand, full-time students have an attitude towards learning the concept, apart from career upgradation goals.

The analysis herein was carried out to identify whether there is a significant difference in the quality of education rendered by the regular, online and distance modes of education.

Table 3 Anova test – quality of education

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
1. Quality faculty were provided to teach the Course	Between Groups	3.526	2	1.763	1.215	.298
	Within Groups	628.407	433	1.451		
	Total	631.933	435			
2. Eminence facilities were provided to peruse the Course	Between Groups	3.245	2	1.622	1.342	.262
	Within Groups	523.471	433	1.209		
	Total	526.716	435			
3. Best Study materials were provided to peruse the Course	Between Groups	6.734	2	3.367	2.544	.080
	Within Groups	573.217	433	1.324		
	Total	579.952	435			
4. Effective knowledge transfer is happening during every lecture session.	Between Groups	9.153	2	4.577	4.261	.015
	Within Groups	465.113	433	1.074		
	Total	474.266	435			
5. Effective assessments were rendered to make us more competitive.	Between Groups	5.377	2	2.688	1.888	.153
	Within Groups	616.596	433	1.424		
	Total	621.972	435			
6. The grading system is significantly good.	Between Groups	14.601	2	7.301	5.144	.006
	Within Groups	614.562	433	1.419		
	Total	629.163	435			
7. Decent transformation can be sensed while perusing this course.	Between Groups	10.368	2	5.184	4.949	.007
	Within Groups	453.565	433	1.047		
	Total	463.933	435			
8. The overall department is strategically working to	Between Groups	3.630	2	1.815	1.514	.221
	Within Groups	519.049	433	1.199		
	Total	522.679	435			

enhance the quality of education in different periods of time.						
9. The existing administrative system is approachable.	Between Groups	3.231	2	1.616	1.468	.232
	Within Groups	476.629	433	1.101		
	Total	479.860	435			
10. The current educational policies are supportive.	Between Groups	4.716	2	2.358	1.808	.165
	Within Groups	564.594	433	1.304		
	Total	569.310	435			

Source: (Primary data)

The estimated significance value is greater than 0.05 for most of the cases. This illustrates that the null hypothesis is accepted. Meaning there is no significant difference in the quality of education rendered by the regular, online and distance modes of education.

But, in certain cases like knowledge transfer, grading system and personal transformation (items – 4, 6 and 7), the estimated significance value is less than 0.05 means the null hypothesis is rejected. Therefore, there is a significant difference in the opinion among students perusing through regular, online and distance modes for knowledge transfer, grading system and personal transformation.

Having found there is a significant difference in opinion in certain cases. The rank analysis using the mean score was carried out to identify the important aspects followed by the institutions to provide quality education.

Table 4 Rank test – quality of education

Mode of Education	Full-time (Regular)		Online Learning		Open Distance Learning	
	Mean	Rank	Mean	Rank	Mean	Rank
Quality faculty were provided to teach the Course	3.8139	3	4.0278	4	3.9278	7
Eminence facilities were provided to peruse the Course	3.8095	4	3.9630	8	4.0000	3
Best Study materials were provided to peruse the Course	3.5714	10	3.7778	10	3.8557	10
Effective knowledge transfer is happening during every lecture session.	3.7489	7	4.0463	3	4.0309	2

Effective assessments were rendered to make us more competitive.	3.6710	8	3.8796	9	3.9072	8
The grading system is significantly good.	3.6147	9	3.9630	7	4.0000	4
Decent transformation can be sensed while perusing this course.	3.7489	6	4.0185	5	4.0928	1
The overall department is strategically working to enhance the quality of education in different periods of time.	3.8658	1	4.0833	1	3.9794	5
The existing administrative system is approachable.	3.8615	2	4.0648	2	3.8763	9
The current educational policies are supportive.	3.7532	5	3.9722	6	3.9485	6

Source: (Primary data)

Using the rank analysis value, it was understood that, the important quality aspects adopted for regular students are; The overall department is strategically working to enhance the quality of education in different periods of time, The existing administrative system is approachable and Quality faculty were provided to teach the Course. Similarly, the important quality aspects adopted for online students are; The overall department is strategically working to enhance the quality of education in different periods of time, The existing administrative system is approachable and Effective knowledge transfer is happening during every lecture session. Further, the important quality aspects adopted for distance mode students are; Decent transformation can be sensed while perusing this course, Effective knowledge transfer is happening during every lecture session and Eminence facilities were provided to peruse the Course.

The analysis herein was carried out to identify whether there is a significant difference in the teaching methodology rendered to the students perusing through regular, online and distance modes.

Table 5 Anova test – teaching methodology

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
1. E-Learning	Between Groups	21.709	2	10.855	6.571	.002
	Within Groups	715.307	433	1.652		
	Total	737.016	435			
2. Brain Storming	Between Groups	2.827	2	1.413	1.055	.349
	Within Groups	579.932	433	1.339		
	Total	582.759	435			

3. Worksheet	Between Groups	.789	2	.395	.317	.729
	Within Groups	539.401	433	1.246		
	Total	540.190	435			
4. Inductive methods	Between Groups	.275	2	.138	.110	.896
	Within Groups	543.752	433	1.256		
	Total	544.028	435			
5. Problem-solving	Between Groups	8.777	2	4.388	4.490	.012
	Within Groups	423.175	433	.977		
	Total	431.952	435			
6. Project Method	Between Groups	13.356	2	6.678	5.506	.004
	Within Groups	525.194	433	1.213		
	Total	538.550	435			
7. Case Studies	Between Groups	23.499	2	11.750	11.571	.000
	Within Groups	439.700	433	1.015		
	Total	463.200	435			
8. Group Discussion	Between Groups	2.704	2	1.352	.938	.392
	Within Groups	624.367	433	1.442		
	Total	627.071	435			

Source: (Primary data)

The estimated significance value is less than 0.05 for 4 items in the construct and greater than 0.05 for 4 items in the construct. This illustrates that the null hypothesis is accepted for half items in the construct and rejected for the other half items in the construct. Meaning there is a significant difference in the teaching methodology rendered to the students perusing through regular, online and distance modes.

Having found there is a significant difference in opinion in certain cases. The rank analysis using the mean score was carried out to identify the important teaching methodology followed by the institutions to provide quality education.

Table 6 Rank test – teaching methodology

Mode of Education	Full-time (Regular)		Online Learning		Open Distance Learning	
	Mean	Rank	Mean	Rank	Mean	Rank
E-Learning	3.1558	8	3.5648	1	3.6392	2
Brain Storming	3.3766	7	3.3241	7	3.5464	4
Worksheet	3.4416	5	3.4444	4	3.3402	8
Inductive methods	3.4069	6	3.3981	5	3.4639	6
Problem-solving	3.8095	2	3.4722	3	3.6289	3
Project Method	3.6970	3	3.3426	6	3.3505	7
Case Studies	3.8095	1	3.2870	8	3.8557	1
Group Discussion	3.6407	4	3.4815	2	3.4845	5

Source: (Primary data)

Using the rank analysis value, it was understood that, for regular student Case Studies, Problem-solving and Project Methods are important teaching methodologies adopted. While for the students perusing through online mode E-learning, Group Discussion and Problem-solving were the important teaching methodology adopted. Similarly, for students perusing through distance education mode Case studies, problem-solving and E-learning teaching methodology was predominantly adopted.

The analysis herein was carried out to identify whether there is a significant difference in the Learning outcomes for the students perusing through regular, online and distance modes.

Table 7 Anova test – Learning outcomes

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
1. Technical Skills	Between Groups	2.041	2	1.021	1.302	.273
	Within Groups	339.452	433	.784		
	Total	341.493	435			
2. Social Skill	Between Groups	2.978	2	1.489	1.745	.176
	Within Groups	369.344	433	.853		
	Total	372.321	435			
3. Analytical Skill	Between Groups	1.517	2	.759	.894	.410
	Within Groups	367.455	433	.849		
	Total	368.972	435			
4. Creative thinking	Between Groups	1.864	2	.932	1.058	.348
	Within Groups	381.537	433	.881		
	Total	383.401	435			
5. Self-Confident	Between Groups	1.473	2	.737	.888	.412
	Within Groups	359.341	433	.830		
	Total	360.814	435			
6. Decision-making Skill	Between Groups	.262	2	.131	.132	.876
	Within Groups	429.481	433	.992		
	Total	429.743	435			
7. Learning Attitude	Between Groups	5.939	2	2.969	3.102	.046
	Within Groups	414.527	433	.957		
	Total	420.466	435			
8. Adaptability Skill	Between Groups	2.601	2	1.301	1.524	.219
	Within Groups	369.461	433	.853		
	Total	372.062	435			
9. Assertiveness	Between Groups	2.861	2	1.431	1.537	.216
	Within Groups	403.090	433	.931		
	Total	405.952	435			
10. Systematic Approach	Between Groups	4.252	2	2.126	2.305	.101
	Within Groups	399.296	433	.922		
	Total	403.548	435			

Source: (Primary data)

The estimated significance value is greater than 0.05 for most of the cases, meaning the null hypothesis is accepted. Therefore, the no significant difference in the Learning outcomes for the students perusing through regular, online and distance modes mostly. But for item -7 i.e., Learning attitude, there is a significant difference among the students perusing through regular, online and distance modes.

Having found there is a significant difference in opinion in a single item, there is a possibility of rank value getting deviated when calculated for students perusing through regular, online and distance education modes. Thereby the rank analysis using the mean score was carried out to identify the important learning outcomes from the regular, online and distance mode students.

Table 8 Rank test – Learning outcomes

Modeof Education	Full-time (Regular)		Online Learning		Open Distance Learning	
	Mean	Rank	Mean	Rank	Mean	Rank
Technical Skills	3.5758	10	3.7315	7	3.5670	10
Social Skill	3.6277	9	3.6667	9	3.8351	7
Analytical Skill	3.6926	7	3.6944	8	3.8351	8
Creative thinking	3.7619	5	3.8981	3	3.8866	5
Self-Confident	3.9264	1	4.0185	1	4.0619	1
Decision-making Skill	3.8831	3	3.8241	5	3.8557	6
Learning Attitude	3.7532	6	4.0185	1	3.9381	4
Adaptability Skill	3.9091	2	3.7407	6	3.9381	3
Assertiveness	3.6710	8	3.5926	10	3.8247	9
Systematic Approach	3.7922	4	3.8796	4	4.0412	2

Source: (Primary data)

From the result obtained through rank analysis, it was found that Self-Confident, Adaptability Skill and Decision-making Skills are important learning outcomes for regular students. Similarly, Self-Confident, Learning Attitude and Creative thinking are important learning outcomes for online students. Furthermore, Self-Confident, Systematic Approach and Adaptability Skills are important learning outcomes for the students perusing through distance education mode.

The analysis herein was carried out to identify whether there is a significant difference in the career opportunities for the students perusing through regular, online and distance modes.

Table 9 Anova test – career opportunities

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
The course perused has upgraded my skills.	Between Groups	2.384	2	1.192	1.165	.313
	Within Groups	443.255	433	1.024		
	Total	445.640	435			
Through the course, I have obtained various career opportunities.	Between Groups	10.876	2	5.438	5.227	.006
	Within Groups	450.525	433	1.040		
	Total	461.401	435			
While perusing the course, I have been allowed to explore various careers related to my stream.	Between Groups	11.744	2	5.872	4.825	.008
	Within Groups	526.997	433	1.217		
	Total	538.741	435			
I was given chances to attend placement drives on campus.	Between Groups	2.140	2	1.070	.847	.429
	Within Groups	546.932	433	1.263		
	Total	549.071	435			
I could sense a better transformation in my personality that supports my career.	Between Groups	13.508	2	6.754	5.796	.003
	Within Groups	504.572	433	1.165		
	Total	518.080	435			

Source: (Primary data)

The estimated significance value is lesser than 0.05 for most of the cases, meaning the null hypothesis is rejected. Therefore, there is a significant difference in the career opportunities for the students perusing through regular, online and distance modes.

Having found there is a significant difference in the career opportunities for the students perusing through regular, online and distance modes. Rank analysis using the mean score was carried out to identify the important career opportunities provided by regular, online and distance mode education to students.

Table 10 Rank test – career opportunities

Mode of Education	Full-time (Regular)		Online Learning		Open Distance Learning	
	Mean	Rank	Mean	Rank	Mean	Rank
The course perused has upgraded my skills.	3.7662	3	3.7500	1	3.9381	4
Through the course, I have obtained various career opportunities.	3.8182	1	3.6111	4	4.0722	2
While perusing the course, I have been allowed to explore various careers related to my stream.	3.6494	4	3.6759	3	4.0515	3

I was given chances to attend placement drives on campus	3.6061	5	3.4444	5	3.6082	5
I could sense a better transformation in my personality that supports my career.	3.7749	2	3.6944	2	4.1649	1

Source: (Primary data)

Using the rank analysis made using the mean score, it was perceived that, students perusing through regular mode are getting career opportunities through the course they learn, personality transformation during the course and skill upgradation made by the course. On other hand, students perusing through online mode are getting career opportunities through skill upgradation, personality transformation and career exploration at the time of perusal of course. Similarly, the students perusing through distance mode are getting career opportunities via personal transformation, courses they learn and career exploration at the time of perusal of the course.

The researchers attempted to make use of the multi-variate test to explore whether there is a significant difference in the quality of education, teaching methodology, learning outcomes, and career opportunities for students with respect to gender and students perusing through regular, online and distance mode.

Table 11 Multivariate test – constructs

Multivariate Tests						
Effect		Value	F	Hypothesis df	Error df	Sig.
Gender	Pillai's Trace	.019	2.067 ^b	4.000	429.000	.084
	Wilks' Lambda	.981	2.067 ^b	4.000	429.000	.084
	Hotelling's Trace	.019	2.067 ^b	4.000	429.000	.084
	Roy's Largest Root	.019	2.067 ^b	4.000	429.000	.084
Mode of Education	Pillai's Trace	.046	2.554	8.000	860.000	.009
	Wilks' Lambda	.954	2.556 ^b	8.000	858.000	.009
	Hotelling's Trace	.048	2.559	8.000	856.000	.009
	Roy's Largest Root	.037	3.935 ^c	4.000	430.000	.004
Tests of Between-Subjects Effects						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	Quality of education	2.701	1	2.701	3.082	.080
	Teaching Methodology	1.361	1	1.361	1.894	.170
	Learning Outcomes	.329	1	.329	.624	.430
	Career Opportunities	9.502E-06	1	9.502E-06	.000	.997
Mode of Education	Quality of education	6.854	2	3.427	3.910	.021
	Teaching Methodology	1.504	2	.752	1.047	.352
	Learning Outcomes	.654	2	.327	.620	.538
	Career Opportunities	3.725	2	1.863	2.414	.091

Source: (Primary data)

The calculated Pillai's trace significance is greater than 0.05 for Gender and less than 0.05 for the mode of education. This means there is no significant difference in the quality of education, teaching methodology, learning outcomes, and career opportunities for students with respect to gender. But, with respect to the mode of education, there is a significant difference in the quality of education, teaching methodology, learning outcomes, and career opportunities for students perusing through regular, online and distance modes.

A descriptive statistic was performed to analyse the best mode of education with respect to the quality of education, teaching methodology, learning outcomes, and career opportunities for students.

Table 12 Descriptive statistics – constructs

Mode of Education	Full-time (Regular)		Online Learning		Open Distance Learning	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Quality of education	3.7394	0.92198	3.9574	0.86632	3.9567	1.0484
Teaching Methodology	3.5314	0.7938	3.4236	0.93226	3.5631	0.87707
Learning Outcomes	3.7632	0.75197	3.8148	0.6811	3.8084	0.70979
Career Opportunities	3.7333	0.84661	3.6963	1.03309	3.9423	0.75164
Overall Average	3.691825	0.82859	3.723025	0.878193	3.817625	0.846725
Rank	3		2		1	

Source: (Primary data)

From the mean score calculated, for quality of education – an online learning platform is the best approach followed by open distance education. Similarly, for teaching methodology – Open Distance Education is the best approach followed by the Regular mode of education. Further, with respect to learning outcomes – the Online Learning platform is the best approach followed by distance mode education. Finally for career opportunities - Open Distance Education is the best approach followed by the Regular mode of education.

At this point, we have attempted to investigate whether the considered constructs or factors i.e. quality of education, teaching methodology, learning outcomes, and career opportunities have a significant relationship with each other.

Table 13 Correlation analysis – constructs

Correlations					
		Quality of education	Teaching Methodology	Learning Outcomes	Career Opportunities
Quality of education	Pearson Correlation	1	.313**	.319**	.594**
	Sig. (2-tailed)		.000	.000	.000
	N	436	436	436	436
Teaching Methodology	Pearson Correlation	.313**	1	.562**	.323**
	Sig. (2-tailed)	.000		.000	.000
	N	436	436	436	436
Learning Outcomes	Pearson Correlation	.319**	.562**	1	.402**
	Sig. (2-tailed)	.000	.000		.000
	N	436	436	436	436
Career Opportunities	Pearson Correlation	.594**	.323**	.402**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	436	436	436	436

** . Correlation is significant at the 0.01 level (2-tailed).

Source: (Primary data)

From the table value calculated, it was noted that the significance value is less than 0.05 for all the cases. Meaning there is a significant relationship between the quality of education, teaching methodology, learning outcomes, and career opportunities with each other. Further from the Pearson correlation coefficient value are positive for all cases ranging from (0.313 – 0.594), meaning there is a positive relationship between quality of education, teaching methodology, learning outcomes, and career opportunities. This in turn illustrates that increasing the quality of education or Teaching methodology or learning outcomes or career opportunities will significantly increase the other factors.

Having found that, quality of education, teaching methodology, learning outcomes, and career opportunities have a significant relationship with each other. Here regression analysis was carried out to identify the impact of teaching methodology, learning outcomes, and career opportunities on the quality of education.

Table 14 Regression analysis – constructs

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.608 ^a	.370	.366	.75061		
a. Predictors: (Constant), Career Opportunities, Teaching Methodology, Learning Outcomes						
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.082	3	47.694	84.651	.000 ^b
	Residual	243.398	432	.563		
	Total	386.480	435			
a. Dependent Variable: Quality of education						
b. Predictors: (Constant), Career Opportunities, Teaching Methodology, Learning Outcomes						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.019	.214		4.757	.000
	Teaching Methodology	.131	.052	.118	2.525	.012
	Learning Outcomes	.046	.063	.035	.737	.462
	Career Opportunities	.580	.045	.542	12.895	.000
a. Dependent Variable: Quality of education						

Source: (Primary data)

The estimated R-value is 0.608, meaning there is a 60.8% relationship between quality of education, teaching methodology, learning outcomes, and career opportunities. The estimated R-Square value is 0.370, meaning the forecasting accuracy of the regression equation is 37%. This illustrates that the quality of education is influenced or impacted by some more factors which haven't been considered in this research. The ANOVA significance value is less than 0.05, meaning the model is a fit. Further, the coefficient significance valuer is less than 0.05 for Teaching methodology and career opportunities. This indicates that the quality of education is influenced by the teaching methodology and career opportunities provided by the educational institution.

Here regression equation is given by;

$$\text{Quality of Education} = 1.019 + (0.131 \times \text{Teaching Methodology}) + (0.580 \times \text{Career opportunities})$$

VIII. Findings and Conclusion

From the analysis, it was understood considering female students, a higher amount of male students are perusing Post Graduation. Further, it can be perceived that most students are preferring a Full-time mode of education followed by the online mode of education and finally the distance mode of education. The reason for choosing a particular mode of education was mostly for career Upgradation and to Learn Concepts in-depth.

In order to provide quality education, it was understood that the important quality aspects adopted for regular and online students are; The overall department is strategically working to enhance the quality of education in different periods of time, The existing administrative system is approachable and Quality faculty were provided to teach the Course. Similarly, the important quality aspects adopted for distance mode students are; Decent transformation can be sensed while perusing this course, Effective knowledge transfer is happening during every lecture session and Eminence facilities were provided to peruse the Course.

On taking an insight into teaching methodology, it was understood that, for regular students Case Studies, Problem-solving and Project Methods are important teaching methodologies adopted. While for the students perusing through online mode E-learning, Group Discussion and Problem-solving were the important teaching methodology adopted. Similarly, for students perusing through distance education mode Case studies, problem-solving and E-learning teaching methodology was predominantly adopted.

From the result obtained through rank analysis, it was found that Self-Confident, Adaptability Skill and Decision-making Skills are important learning outcomes for regular students. Similarly, Self-Confident, Learning Attitude and Creative thinking are important learning outcomes for online students. Furthermore, Self-Confident, Systematic Approach and Adaptability Skills are important learning outcomes for the students perusing through distance education mode.

On considering career aspects, it was perceived that students perusing through regular mode are getting career opportunities through the course they learn, personality transformation during the course and skill upgradation made by the course. On other hand, students perusing through online mode are getting career opportunities through skill upgradation, personality transformation and career exploration at the time of perusal of course. Similarly, the students perusing through distance mode are getting career opportunities via personal transformation, courses they learn and career exploration at the time of perusal of the course.

Overall, the quality of education, teaching methodology, learning outcomes and career opportunities for distance-mode education students is comparatively best followed by the Online mode of education. Through the analysis result, it was discovered that there is a positive relationship between the quality of education, teaching methodology, learning outcomes, and career opportunities. Also, the study confirms that the quality of education is influenced by the teaching methodology and career opportunities provided by the educational institution.

IX. Discussion and Suggestions

The full-time or regular mode of education is thought to be superior. But the result obtained through the analysis confirms that the current existing Distance mode of education and online mode of education is outperforming the regular mode of education in disseminating quality education. This is because students perusing through online mode and distance mode are experiencing business and industrial functioning. Hereby they better understand the concepts and can apply them in the real world and business scenarios. Further, the degree they obtain is providing them with ample opportunities. While the regular students despite getting in personal touch with lecturers and subject experts daily, their way of conceptual understanding is still in the visualisation of the entire situation. Hence the learning outcomes are limited to regular students compared to online and distance students.

Despite the career opportunities through campus being well provided by the institutions, they are placed into entry-level due to a lack of experience. While considering the distance and online students, they were already in the career line of business experience while they were perusing the course. On completion, they will be having a degree as well as experience to move on to middle or higher level in the company's operations. Now, the UGC has an accredited distance, online mode of education. Hence, it can be well said that in forthcoming years the number of students enrolling on P.G. courses will rise exponentially and there will be a linear decrease in the students enrolling on the regular mode of education.

Furthermore, the upgrading and updating technology on LMS (Learning Management Systems) have opened a more interactive way of learning approach resulting in better teaching methodology thus overall rendering quality education. Despite, this is not well aware of the students as the distance mode of education, after a while when there is significant awareness, online education will be dominating the distance and regular modes in India over the next decade for students perusing P.G. courses.

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