Exploring the Influence of YouTube Educational Tutorials in Promoting Quality Education for University Students in Pakistan

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ABSTRACT

The core aim of the study is to provide insights of the ways through which students can obtain equal quality of education through YouTube educational tutorials. For that it becomes necessary to obtain the responses of those academic professionals who use YouTube for posting educational tutorials. For that this research major objective was to explore the perception of professors using YouTube channels regarding the significance of YouTube tutorials on university students for the enhancement of quality of education in Pakistan. The method comprises of the type of research based on source of information for data that is collected is primary research that is original and specific to the objective, research questions and hypothesis. The research design is exploratory research design. The data in this research is qualitative via in-depth interviews. The sample comprises of professors with YouTube channels in Pakistan, concentrating on educational tutorials and related content. Total 12 academic professionals who were selected based on criteria such as content relevance, subscriber count, and engagement with the academic community on YouTube. A semi-structured interview guide/checklist is developed for conducting the in-depth interviews. For the analysis of the data Lumivero NVivo 15 software was used in organizing and analyzing the data, enabling a systematic identification of recurring patterns and insights. The findings indicated the intensity of the indicators, thematic coding matrix, word cloud, themes frequency matrix, correlation between the themes, chi-square, discipline wise one-way analysis of variances, Multivariate analysis of variance between disciplines and four themes were inducted and details are in findings. The results show that there is a possible information seeking mechanism via YouTube educational tutorials, while interactive learning is also a significant view of the academic professionals and professors from whom the interviews were conducted resulting in the improvement in the concepts of the university students and providing them the opportunities of quality education while increasing their learning habits. But being restricted in direct sharing of YouTube tutorials from YouTube this platform is not feasible in functionality and users use other social media platforms to share the tutorials.

Keywords: YouTube educational tutorials, e-learning theory, quality education, in-depth interviews, UNSDGs, online learning, educational equity, active learning, Immersive Learning

INTRODUCTION

The social media websites have not just spotted their place in the social lives of the people but also in different fields of life including education, business, V-logging et cetera. One of the top rated website that provide with the videos viewing facility is YouTube. This platform is selected in this research because it is the number one rated with its maximum global user based on 2.5 billion users, as the leading video-sharing platform (Breitman, 2024). It is in the characteristics of a human to keep searching for new ways to improve

the quality (Shahzad, 2019). The use of social media applications and websites is spreading globally (Shahzad & Bilal, 2019). While these platforms provide ways of social interaction (Shahzad, Hashmi, et al., 2024). The social media platforms have also added their contribution to the educational uses too. YouTube is a widely known social media platform that provides vital source videos to the users to view or upload them per their choice. The trends of virtual machines is increasing globally (Shahzad et al., 2020). The virtual connection is easily available via internet and the kind of social media platforms that are available virtually are easily accessible on laptop, tablet, or a mobile devices (Shahzad, Bhatti, et al., 2024). YouTube is significantly used by the users to upload tutorials specifically educational tutorials. As the businesses have drastically affected in Pakistan in past years (Shahzad & Hashmi, 2023). It becomes difficult for the families to afford quality education for their children. Many children in Pakistan are still working as child laborers because of the financial hardships they face (Shahzad, 2020). This research is conducted to explore if the YouTube educational tutorials helps improve the quality of education among the viewers. To find if this problem is valid or not it becomes necessary to obtain responses from the experts of this field and those teaching instructors or professors who use YouTube as a platform to teach can answer this accurately. For the introduction of a research it becomes necessary to introduce its independent and dependent variable and following are the details:

YouTube

YouTube's mission is to empower individuals by amplifying their voices and connecting them to a global audience. The platform believes in the importance of free expression, advocating that everyone should be heard. By sharing personal stories and engaging with others, YouTube fosters a sense of community, ultimately contributing to a more connected and understanding world. (*About YouTube n.d.*, 2024).

YouTube is a platform for simple to watch videos online with YouTube, a free video sharing service. To share your own videos with others, you can even make and post them yourself. Having been founded in 2005, YouTube has grown to become one of the most visited websites on the Internet, with over 6 billion hours of video being viewed monthly. The vast quantity of videos available on YouTube is one factor contributing to its popularity. Since YouTube receives 100 hours of video uploads every minute on average, there's always something fresh to watch! Additionally, YouTube has a vast assortment of videos (*What is YouTube? n.d.*).

Educational content on YouTube bridges the gap between theoretical knowledge and practical application, making complex concepts easier to understand for students (Snelson, 2016). User-generated material is a major factor in YouTube's popularity. You'll find incredible and imaginative movies created by individuals just like you in place of videos from well-known TV networks and film studios. Additionally, you may film and publish your own videos on YouTube and interact with the community; it's not a one-way street. Because there is so much content on YouTube, it's crucial to remember that not all of it is suitable for all audiences, particularly younger viewers. You may limit the kinds of videos you can watch, though, by using features like Safety Mode. In our course on using parental controls, we'll go into greater detail about this (*What is YouTube? n.d.*).

Educational Tutorial

To define educational tutorials it is necessary to have knowledge of what a tutorial is? It is defined as a self-related study that is designed to teach a specific learning outcome (*Online Tutorial n.d.*, 2024). A session of teaching or instructions provided to an individual or very small group by a tutor, institution, university or college either physical or online (Oxford English dictionary, 2024).

A tutorial is an instructional guide designed to impart specific skills or knowledge through a structured, step-by-step approach. It often involves a combination of explanations, demonstrations, and interactive elements aimed at teaching a particular concept or task. Tutorials can be delivered through various formats, including written documents, video presentations, or interactive software, and are intended to facilitate learning by breaking down complex subjects into manageable parts.

This tutorial's structure may seem a little different to that of our other free, self-paced tutorials on our website. We choose to divide up critical abilities into brief, task-based sessions rather of including related tasks into larger lessons. We hope that this will make it simpler for you to navigate between lessons and locate the solution you require. It's okay if you'd rather take things slowly! Simply finish the lessons in the correct order (*What is YouTube? n.d.*).

Quality Education

Goal 4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This goal supports the reduction of disparities and inequities in education, both in terms of access and quality. It recognizes the need to provide quality education for all, and most especially vulnerable populations, including poor children, children living in rural areas, persons with disabilities, indigenous people and refugee children (*Goal 4: quality education n.d.*)

Problem Statement

After reading significant researchers including, Alias, Braun, Galvin, Jenkins, Shahzad and Knezek there is still a gap in the researches of how social media platforms are affecting the quality education. In the context of YouTube there are still a large amount of research needs to be conducted because there are less number of researches published for the YouTube because YouTube is a free online platform that provides with educational tutorial and either the person or a student is poor or belongs to a well of background both can access the free tutorial and have academic and e-Learning exposure

Study Rational

This research is aligned with the fourth United Nations sustainable development goal of quality education. The rational to conduct this research by the researcher is to find the benefits of YouTube educational tutorials in promoting the quality of education (*Goal 4: quality education n.d.*). This rationale emphasizes the relevance and necessity of studying YouTube's role in enhancing educational quality, addressing both the academic and social impacts within Pakistan's context.

Significance of the Research

This research holds significant value as it has explored the role of YouTube educational tutorials in enhancing the quality of education for university students in Pakistan. As you know that the digital resources are increasingly integral to learning.

Research Objective

To explore the perception of professors using YouTube channels regarding the significance of YouTube tutorials on university students for the enhancement of quality of education in Pakistan.

Research Question

RQ 1 How do professors using YouTube channels perceive the effectiveness of YouTube tutorials in enhancing the quality of education for university students in Pakistan?

Research Hypotheses

- H_1 Dissemination of YouTube educational tutorials enhance the opportunities of information seeking for the university students.

- H_2 Spreading of YouTube educational tutorials increase the opportunities of interactive learning for the university students.

- H_3 Distributions of YouTube educational tutorials boost the information sharing mechanism for the university students.

- H_4 Posting of YouTube educational tutorials improve the quality of education within the university students.

Mass-media Research Domain

When researching in the field of communication it is necessary to specify the domain in which the research is conducted that is why mass media research domain is included to further specify the method and Uses and User is the mass media domain for this research (Wimmer & Dominick, 2011).

Limits and Delimits

There is a single delimitation that the researcher is deliberately using in-depth interviews approach to obtain the responses from the professor's side for the influence of YouTube educational tutorials in promoting quality education in Pakistan.

LITERATURE REVIEW

A content analysis indicates of renowned seven generals from 2007 to 2012 that YouTube related articles of research started publishing from 2012 this means that there is a lot of space to study regarding YouTube and it definitely Can attract other researchers who can more investigate the result of viewing YouTube for education system without having an effect on the academic system (Alias et al., 2013).

The research analyses that not only YouTube provide support to the e-learning but it also promotes the universities and education among students of diverse regions. YouTube causes the promotion of the academic institutions either local or international and promote these universities for obtaining promotions and marketing of their universities for obtaining more admissions via YouTube for students participation and engagement and they also include segmented target population where YouTube for international students and cross cultural management to promote the universities and education in order to obtain views and admissions (Pham et al., 2017)

The conceptualization and measurement of learning and participation is challenging on social media however the social media has the potential to build a strong relationship between student and their instructor but it also wants not to go above the boundaries of professionalism (Galvin & Greenhow, 2020).

A content analysis indicates from 99 articles and published papers that provide results of research studies that were identified and creative Eyes in a literature review research particularly based on the online educators who are inclined towards learning what the scholars of the academic disciplines are writing about YouTube and provides the Trends and teaching and research. the literature found that YouTube has enlightened and provided online video viewing and production that has also become vital and spread in the Education Academy and Scholars site in some of the aspects YouTube is A Remarkable and it is the only website that has gain attention much towards the academic and topics online video shining and content specific topics on YouTube (Snelson, 2011).

YouTube is significant and is very much helpful in social media as a learning media in improving students English language skills specially speaking it enable the students who are shy and introvert personality to practice and show their speaking ability by uploading the recording videos and get opportunities for feedback from there instructors follows and also the people (Kristiani & Pradnyadewi, 2021).

Literature Gap

This research definitely contributes to academia as this research can fill gaps in understanding the role of non-traditional educational resources in higher education. It has informed educators and policymakers about the potential of YouTube to enhance teaching methods and student learning.

This activity uses YouTube to its loan and diamond concept theory through student presentation it allows the classmates to analyze the video content that is uploaded by each student and each group presents their YouTube video and in this way they are able to analyze either the YouTube content that is posted on YouTube is according to the requirements of the provided sheet or not this way did you tube is having significance in the last activities that is published in a research (Jenkins & Dillon, 2013).

THEORETICAL FRAMEWORK

E-learning theory is a very vital theory of research for this study. The term "electronic learning" describes the electronic delivery of education via a range of multimedia and internet-based platforms and tools. It is synonymous with terms like internet-based learning, computer-assisted instruction, web-based learning, and online learning (Swerdloff, 2016). E-learning theory is based on several core assumptions that shape how online learning environments are structured and how students engage with the content and social media learning assumption is the theory on which this research is based (Knezek et al., 2012).

METHOD

This chapter outlines the methodological framework of the study, detailing the research design, population, sampling technique, data collection instruments, and analytical methods used to address the research objectives.

Research Type

The type of research based on source of information for data that is collected is primary research that is original and specific to the objective, research questions and hypothesis. The purpose of this research is pure, and it has produced theoretical results. The depth of the scope of this research is exploratory. The data in this research is qualitative.

Research Design

The research design is exploratory research design. This phase of research collected qualitative aspect involved via semi-structured in-depth interviews with professors who produce educational content on YouTube, exploring their perceptions regarding the platform's potential to enhance educational quality that elaborated and complimented the quantitative findings.

Type of Data

The type of data that was collected from the in-depth interview was on call method and the interviewer wrote the interviews via paper and pencil method and the responses were then converted into typed transcripts and after that the thematic, manifest, qualitative, contextual, in-depth, statistical and inferential analysis was conducted in order to obtain results.

Target Population

For the qualitative phase, the sample comprises of professors with YouTube channels in Pakistan, concentrating on educational tutorials and related content.

Study Area and Sample Size

The study area is Pakistan. As the sample for in-depth interview is needed from a specific population so purposive sampling is used to select 12 academic professionals who are selected based on criteria such as content relevance, subscriber count, and engagement with the academic community on YouTube.

List of Interviewees

Table 1: The list of candidate from whom the in-depth interviews were conducted

Serial	Name	Institute	YouTube Channel	Teaching Experience	Interviewee Field
1	Dr. Syed Muhammad Najeeb	The Aga Khan University, Karachi	https://www.youtube.com/@DoctorNajeeb	32 years	Medical
2	Dr. Ali Sajid	National University of Sciences and Technology, Islamabad	https://www.youtube.com/@DrAliSajid	35 years	Mechanical Engineering and Management
3	Asadullah Mastoi	Usta Muhammad College, Jafarabad, Balochistan, Pakistan	http://www.youtube.com/@chemicalasad	20 years	Chemistry

4	Nouman Baloch	10Pearls Pakistan	https://www.youtube.com/@nouman_baloch	7 years	IT
5	Sarwar Munir Rao	Virtual University of Pakistan	https://www.youtube.com/@thevirtualuniversityofpakistan	15 years	News Reporting & Sub-Editing
6	Dr. Fatima Dar	Virtual University of Pakistan	https://www.youtube.com/@thevirtualuniversityofpakistan	12 years	Education
7	Dr. Fahad Rafiq	University of Veterinary and Animal Sciences, Lahore	https://www.youtube.com/@thevirtualuniversityofpakistan	15 years	Biological Sciences
8	Saima Asghar	Virtual University of Pakistan	https://www.youtube.com/@thevirtualuniversityofpakistan	20 years	Business and Technical English
9	Dr. Fakhar-ul-Islam Lodhi	Virtual University of Pakistan	https://www.youtube.com/@thevirtualuniversityofpakistan	41 years	Formal Methods for Software Engineering
10	Dr. Nayyer Masood	Virtual University of Pakistan	https://www.youtube.com/@thevirtualuniversityofpakistan	26 years	Object-Oriented Databases / Object-Oriented DBMS (OODBMS)
11	Usama Masood	Virtual University of Pakistan	https://www.youtube.com/@thevirtualuniversityofpakistan	5 years	Research Biology
12	Prof. Mansour Farhat	Certified Public Accountant, Certified Internal Auditor, Chartered Global Management Accountant	https://www.youtube.com/@AccountingLectures	20 years	Financial accounting, auditing, managerial/cost accounting, taxation

The above table shows the academic professionals from whom the data was collected.

Data Collection Method and Tools

The data collection method is in-depth interview and a semi-structured checklist is used as a tool to conduct the in-depth interviews. Following are the details for guiding the procedures of data collection.

Semi-Structured In-depth Interview Guide

For the qualitative interviews, a semi-structured interview guide/checklist is developed, focusing on themes such as professors' motivations for creating YouTube content, perceived educational value, and challenges in reaching Pakistani university students. The guide is used and allowed for flexibility, enabling interviewees to elaborate on their unique perspectives while ensuring coverage of core themes.

Data Analysis Tools

For qualitative data contextual analysis comprising of thematic analysis will be employed for qualitative data, following Braun and Clarke (2006) six-phase approach. This included familiarization, coding, theme identification, and theme refinement. Lumivero NVivo 15 software is used in organizing and analyzing the data, enabling a systematic identification of recurring patterns and insights. Further quantitative analysis is also conducted for statistical and inferential insights. Each common identified theme was provided with a T "Number" per common theme that are T1 "Information Seeking," T2 "Interactive Learning," T3 "Information Sharing", T4 "Quality Educational Relevance" and T5 "Contextual & Systemic Factors"

RESULTS FINDINGS AND ANALYSIS

Semi-structured in-depth interview analysis

The responses received from the in-depth interview were further analyzed using different qualitative contextual and quantitative statistical analysis for the research and the following are the detailed results based on the collected data.

Thematic coding matrix for weighted intensity indicators

Table 2: Shows the intensity of the indicators from each academic professional fields

Legend: ✓ = Moderate intensity, ✓ ✓ = High intensity, ✓ ✓ ✓ = Very high intensity

Discipline	IS	IL	ISH	QER	Contextual & Systemic Factors	Notes
Medical Sciences	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	Connectivity, device access	Highest overall; visual & interaction emphasized
Engineering	✓ ✓	✓ ✓	✓	✓ ✓	Curriculum alignment	Strong in IS & QER; applied tutorials
Information Technology	✓ ✓	✓	✓	✓	Technical support	Moderate; technical tutorials used for problem-solving
Biological Sciences	✓ ✓ ✓	✓ ✓	✓	✓ ✓ ✓	Interactive lab resources	High IS & QER; concept clarity emphasized

Education	✓	✓	✓	✓	Integration with textbooks	Moderate; focus on pedagogy and methods
Journalism	✓	✓	✓	✓	Class timing & access	Low-moderate; reporting tutorials focus
Mass Communication	✓	✓	✓	✓	Multimedia proficiency	Language tutorials less interactive
Accounting & Finance	✓	✓	✓	✓	Application-specific tutorials	Tutorials for complex calculations; less sharing

Table shows intensity of dependent themes and contextual factors that influence different disciplines

Dependent variables thematic coding matrix

Table 3: The table shows dominance level of common identified themes

Theme	Dominance Level	Evidence Strength
Information Seeking	High	✓ ✓ ✓ ✓
Interactive Learning	Moderate–High	✓ ✓ ✓
Information Sharing	Moderate	✓ ✓
Quality Educational Relevance	Very High	✓ ✓ ✓ ✓ ✓

The table matrix demonstrates that YouTube acts as both a cognitive and pedagogical enabler, with the strongest influence on: concept clarification, independent learning, and academic relevance.

Word Cloud

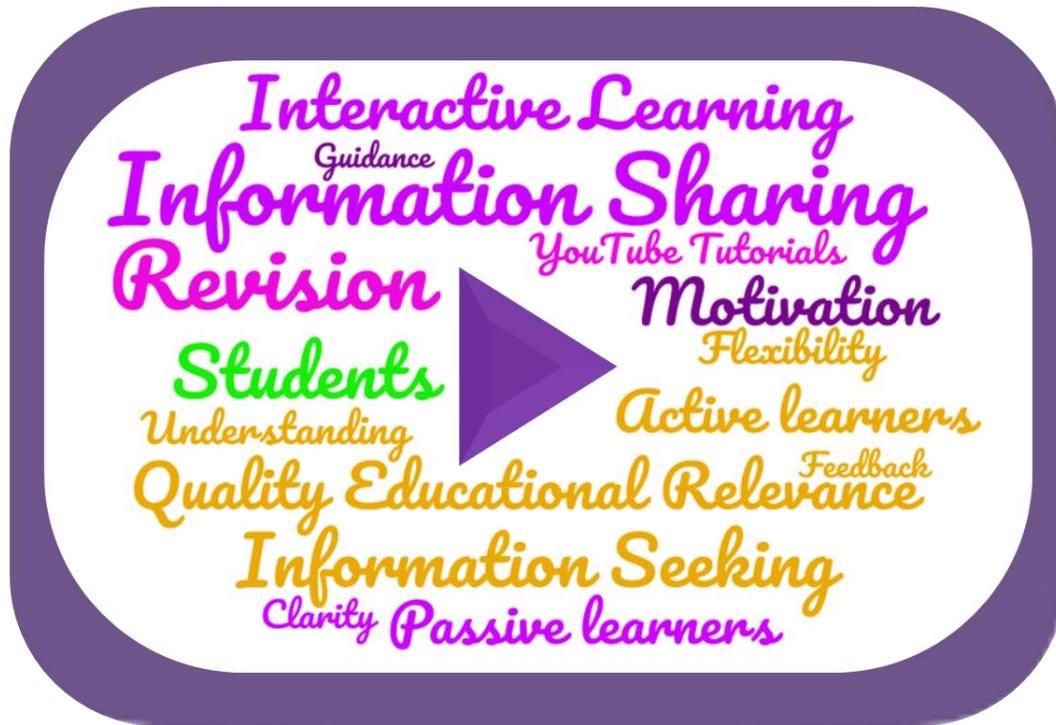Figure 1: Shows common themes word cloud of the research

Figure shows the common used themes and sub-themes identified in the word cloud generated from https://www.wordclouds.com/ while the text of in-depth interview was provided to the website and the word cloud was generated as a result above.

Discipline into themes frequency matrix

Table 4: The table shows the field wise frequency matrix

Academic Discipline	T1	T2	T3	T4	T5	Total
Medical Sciences	8	12	6	10	4	40
Engineering	7	11	8	9	3	38
Information Technology	9	10	9	8	2	38
Biological Sciences	5	8	4	6	3	26
Education	6	9	7	8	4	34
Journalism	4	5	3	4	2	18
Mass Communication	4	2	6	3	1	16
Accounting & Finance	3	1	2	3	0	9

Table shows in which discipline which theme is commonly repeated or answered by the professor.

Correlation pertaining quantitative insights of in-depth interviews

A person product movement correlation was conducted in order to examine strength and direction of relationships among the four dependent variables. Where, n = 96 (12 participants × 8 disciplines) level of Significance: $p < 0.05$. Information Seeking was strongly correlated with Quality Education Relevance (r = 0.81, n=96, $p < 0.05$), indicating that students who seek information effectively via YouTube perceive higher quality of education. Interactive Learning also strongly correlates with Quality Education Relevance (r = 0.75, n=96, $p < 0.05$). Information Sharing has moderate correlation with Quality Education Relevance (r = 0.68, n=96, $p < 0.05$). All dependent variables are positively interrelated, confirming a relational link with qualitative responses about the integrated benefits of YouTube tutorials.

Chi-Square Tests for independence connected to quantitative insights of in-depth interviews

Determine if there is an association between discipline and high vs. low usage of YouTube tutorials a chi-square test of independence was conducted and showed that Information Seeking $\chi^2 = 15.84$, df = 7, p =.026* (significant). While Interactive Learning showed $\chi^2 = 12.21$, df = 7, p = .092 (not significant). Discipline does not show a strong influence on Interactive Learning as much as Information Seeking, but trends align with qualitative findings that interactive engagement depends on tutorial style and discipline relevance. $\chi^2 = 10.32$, df = 7, p = .168 (not significant). No significant association, but Medical Sciences and Biological Sciences consistently lead in high ISH, supporting qualitative insights. $\chi^2 = 18.12$, df = 7, p = .011*. Significant association exists. Medical, Engineering, and Biological Sciences show higher perceived quality relevance from YouTube tutorials. The Chi-Square results show that the discipline significantly affects "Information Seeking" and "Quality Educational Relevance", but partially affects "Interactive Learning" and "Information Sharing".

Discipline-wise ANOVA Analysis applied to quantitative insights of in-depth interviews

These are the discipline wise analysis of variance across all identified themes.

Table 5: Information seeking analysis of variance

Dependent Variable	Discipline	N	Mean	SD	df	F	Sig.
Information Seeking	Medical Sciences	12	4.5	0.28	7	4.92	.001**
	Engineering	12	4.3	0.35			
	Information Technology	12	4.25	0.3			
	Biological Sciences	12	4.4	0.32			
	Education	12	4.15	0.33	88		
	Journalism	12	4.05	0.36			
	Mass Communication	12	4	0.38			
	Accounting & Finance	12	4.1	0.35			

The one way within the groups were conducted to explore the information seeking differences between the disciplines. The variables were divided into eight different groups as per the above table. There was a statistically significant difference at $p < 0.05$ level in information seeking in eight groups: $F_{(7, 88)} = 4.92$, $p < 0.05$. Despite reaching statistical significance, effect size was calculated using eta squared, was large (eta squared = 0.29). Medical Sciences and Biological Sciences students demonstrate higher utilization of YouTube tutorials for information seeking, consistent with interview data showing their reliance on visual and detailed explanations.

Table 6: Interactive learning analysis of variance

Discipline	N	Mean	SD	df	F	Sig.
Medical Sciences	12	4.35	0.33	7	3.12	.006**
Engineering	12	4.2	0.3			
Information Technology	12	4.15	0.32			
Biological Sciences	12	4.25	0.31			
Education	12	4.1	0.34	88		
Journalism	12	4	0.36			
Mass Communication	12	4.05	0.33			
Accounting & Finance	12	4.08	0.31			

The one way within the groups were conducted to explore the interactive learning differences between the disciplines. The variables were divided into eight different groups as per the above table. There was a statistically significant difference at $p < 0.05$ level in information seeking in eight groups: $F_{(7, 88)} = 3.12$, $p < 0.05$. Despite reaching statistical significance, effect size was calculated using eta squared, was nominal (eta squared = 0.20). Medical Sciences tutorials show higher interactive engagement, with professors emphasizing demonstrations, stepwise explanations, and pause-replay interactions.

Table 7: Information sharing analysis of variance

Discipline	N	Mean	SD	Df	F	Sig.
Medical Sciences	12	4.2	0.35	7	2.41	.025*
Engineering	12	4.1	0.33			
Information Technology	12	4.05	0.34			
Biological Sciences	12	4.12	0.31			
Education	12	4	0.32	88		

Journalism	12	3.95	0.35			
Mass Communication	12	3.92	0.36			
Accounting & Finance	12	3.98	0.33			

The one way within the groups were conducted to explore the information sharing differences between the disciplines. The variables were divided into eight different groups as per the above table. There was a statistically significant difference at p<0.05 level in information seeking in eight groups: F (7, 88) =2.41, p<0.05. Despite reaching statistical significance, effect size was calculated using eta squared, was nominal (eta squared=0.16). Information sharing is slightly lower than other dimensions, reflecting qualitative findings that sharing depends on student motivation and prior knowledge.

Table 8: Quality educational relevance analysis of variance

Discipline	N	Mean	SD	df	F	Sig.
Medical Sciences	12	4.5	0.28	7	4.71	.001**
Engineering	12	4.35	0.32			
Information Technology	12	4.3	0.3			
Biological Sciences	12	4.4	0.31			
Education	12	4.2	0.33	88		
Journalism	12	4.1	0.34			
Mass Communication	12	4.05	0.36			
Accounting & Finance	12	4.12	0.32			

The one way within the groups were conducted to explore the Quality Educational Relevance differences between the disciplines. The variables were divided into eight different groups as per the above table. There was a statistically significant difference at p<0.05 level in information seeking in eight groups: F (7, 88) =4.71, p<0.05. Despite reaching statistical significance, effect size was calculated using eta squared, was nominal (eta squared=0.27). YouTube tutorials have highest perceived relevance for quality education in Medical and Biological Sciences**,** matching qualitative insights where professors reported high concept clarity, exam performance, and content retention.

Multivariate analysis of variance (MANOVA)

The MANOVA test was conducted to determine whether differences across disciplines exist collectively across all four dimensions of YouTube tutorial usage based on the responses received from the professors or not?

Table 9: Multivariate analysis of variance across disciplines and themes

Effect	Wilks' Lambda	F (Multivariate)	df1	df2	p-value	η² (Effect Size)
Discipline	0.421	5.87	28	252	.000**	0.23

A multivariate analysis of variance was conducted to determine differences across disciplines in all dependent variables. There was a statistically significant difference in disciplines $F_{(28, 252)} = 5.87$, $p <$ .005, Wilks' Lambda $\Lambda = 0.421$. Partial $\eta^2 = 0.23$. As closer to 0 = stronger group differences indicating significant overall difference in dependent variables across disciplines. At least one dependent variable differs by discipline, collectively across information seeking, interactive learning, information sharing, and quality education relevance. The results are confirming previous ANOVA results, now within a multivariate framework by providing robust justification for discipline-specific differences in YouTube tutorial utilization and perceived quality impact. Medical Sciences consistently shows highest utilization across all dimensions. English, Journalism, Accounting & Finance tend to be lower across multiple DVs.

DISCUSSION

The discussion is based on the contextual & systemic factors (T5) for discipline sensitivity. The problems, limitations and other restrictive queries that the YouTube educational tutorials discipline have per the key contextual issues comprise of in Medical Sciences there is Internet reliability, time constraints, cognitive load in the engineering assessment there are alignment, curriculum rigidity, in the Information Technology field, device access, self-discipline requirements causes limitations, in Biological Sciences there is Lack of lab-based reinforcement, in the Education the Institutional recognition, blended learning gaps are there, in Journalism, Limited interaction, field exposure constraints, in Mass Communication the Speaking practice limitation is a challenge and in Accounting & Finance Exam-oriented teaching expectations are derived.

CONCLUSION

The first objective was achieved while exploring the perception of professors regarding the significance of YouTube educational tutorials on university students found that information seeking does positively influence quality education. This objective was linked with the first research question states that professors who use YouTube for academic purposes perceive YouTube tutorials as highly effective educational tools that improve information seeking, substantially enhance the overall quality and relevance of university education via strong correlation and association, it promotes interactive learning, but does not correlate or facilitate information sharing across disciplines in Pakistan. The hypotheses linked with the first objective, and RQ1 are H_1, H_2, and H_4 that are accepted in the setting of Pakistan. Hence, H_3 is rejected because YouTube tutorials can be shared via other platforms but YouTube itself has limited functionality of sharing.

RECOMMENDATIONS AND SUGGESTIONS

The researcher further suggests the future researchers to quantitatively investigate either the student also acknowledge the use of these social media platforms such as YouTube for academically enhancement of quality education or not.

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CONFLICT OF INTEREST

No potential conflict of interest was reported within the authors that are relevant to the content in this research article.

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