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Information Needs and Seeking Behavior of Students about Examination in Colleges: A Case of Affiliated Colleges with University of Sargodha

Mr. Ghulam Fareed
PhD Scholar, Department of Information Management, University of Sargodha, Sargodha.
Email: gfareeduos@yahoo.com
Dr. Shamshad Ahmed
Professor/Chairman, Department of Information Management, University of Sargodha, Sargodha.
Email: shamshad.ahmed@uos.edu.pk
Dr. Waqar Ahmad Awan
Assistant Professor, Department of Information Management, University of Sargodha, Sargodha.
Email: waqar.info.mgr@gmail.com

ABSTRACT

The present study examines the information needs and seeking behavior of students regarding examinations in affiliated colleges with University of Sargodha. A quantitative approach was employed and surveys method adopted to collect data from respondents. The findings reveal that students primarily seek information on exam schedules, curriculums, and past papers. Key sources of information include teachers, classmates, university websites, and social media groups. However, challenges such as insufficient access to updated information, lack of formal communication channels, and support on informal networks were identified. The study highlights the need for structured information dissemination systems to enhance students' exam preparation. The study recommends improving digital platforms, strengthening teacher-student communication, and providing timely academic updates.

Keywords: Information needs, information-seeking behavior, college students, examinations, academic communication, University of Sargodha.

INTRODUCTION

Education is the backbone of any nation's growth and development, playing a vital role in shaping individuals and societies. It not only imparts knowledge but also enhances critical thinking, problem-solving skills, and social abilities. The importance of education cannot be overstated, as it is essential for personal and professional growth (Humbhi & Tareen, 2022).

Colleges are institutions of higher learning that provide students with specialized knowledge and skills in their chosen fields. They offer a platform for students to learn the advanced knowledge or current era and prepare for their future careers. Colleges play a vital role in providing intellectual growth, creativity, and innovation among students through different educational degree programs (Case & Given, 2016).

Examinations are a crucial aspect of these educational programs, serving as a tool to assess students' understanding and knowledge of the subject matter (Singh, 2021). The students are promoted to the next grades based on these examinations. They provide a means to evaluate students' academic performance, identify areas of improvement, and measure their readiness for future challenges. Examinations play a significant role in determining students' academic success and progression.

Students have a variety of information needs related to examinations, including understanding exam formats, curriculums, examination starting date, paper patterns, number of chances to appear in examination and assessment criteria etc. They require access to relevant study materials, past exam papers, and feedback from instructors to excel in their exams. Meeting these information needs is essential for students to perform well academically (Nizzolino & Canals, 2023). Students are from different backgrounds and families having different capabilities. They exhibit different information-seeking behaviors when preparing for exams. Some may rely on traditional sources like textbooks and lecture notes, while others may use digital resources like online tutorials, study groups, and social media. Whichever source they use for preparation, their successes is based on effective information-seeking behavior because it allows students to gather relevant information, clarify doubts, and stay updated on exam-related information (Zhu et al., 2023). Facing hurdles in examination related information seeking is quite natural. These challenges may include limited access to resources, information overload, and difficulties in evaluating the credibility of sources. Additionally, students may experience anxiety, stress, and time management issues while preparing for exams, which can impact their academic performance (Junaid et al., 2024).

Being most important part of education process, examination is an essential stage for evaluating students' knowledge and academic achievement. Students commonly perform information-seeking activities in college settings, in person, and online to get resources related to exams (Ali & Jan, 2020).

However, it is necessary to understand college students' information needs and seeking patterns to improve academic support system. The educators, librarians, and legislators must have a thorough understanding of these information demands and search trends.

Therefore, the current research was needed to find examination related information need and seeking behavior of the students of affiliated college of students of university of Sargodha. By analyzing students' preferred information sources, search strategies, and encountered obstacles, this research contributes to the broader discourse on academic information literacy and student success.

STATEMENT OF THE PROBLEM

There are various information sources (e.g., libraries, online platforms, faculty guidance, and peer networks) available, but students frequently encounter difficulties in obtaining relevant and reliable examination-related information. Studies indicate that inadequate access to past question papers, unclear examination guidelines, and insufficient awareness of digital resources contribute to students' anxiety and poor performance (Khan & Khan, 2020; Mamman & Abubakar, 2022). Additionally, the shift to digital learning environments post-COVID-19 has introduced new challenges, such as information overload and varying digital literacy levels, affecting how students seek and utilize exam-related materials (Tonmoy & Islam, 2023). Moreover, students often face challenges in identifying relevant study materials, and accessing past exam papers and marking schemes (Ali & Jan, 2020).

However, despite its importance, information needs and seeking behavior of students related to examination has been unexplored. It was a dire need for investigating behavioral patterns of students related to examination-specific information needs, particularly in colleges.

Therefore, the present study is designed to investigate the information needs and seeking behavior of students about examinations in affiliated colleges with University of Sargodha, Sargodha.

OBJECTIVES OF THE STUDY

This study aims to:

1. Examine the information needs of college students about examinations.
2. Investigate the sources and strategies students use to seek examination-related information.
3. Identify the challenges students face in accessing examination information.

LITERATURE REVIEW

INFORMATION NEEDS AND SEEKING BEHAVIOR

Information-seeking behavior includes the techniques and methods used to find and use information, whereas information needs are the knowledge gaps that people try to address (Case & Given, 2016). Students continuously search for knowledge in academic contexts to aid in their learning, especially when it comes to tests. It is essential to comprehend these behaviors in order to enhance digital learning environments, library services, and educational support systems (Tohara, et al., 2021)

According to recent research, students use a variety of formal (such as libraries, instructors, and institutional portals) and informal (such as peer networks, social media, and online forums) sources to obtain information about exams (Habes et al., 2018). Nevertheless, these sources' efficacy and efficiency differ according to user skill, dependability, and accessibility.

INFORMATION NEEDS OF STUDENTS REGARDING EXAMINATIONS

During exam preparation, students display particular information needs, such as: Understanding question patterns and marking schemes requires familiarity with previous exam papers and sample responses (Patel & Patel, 2023). Curriculum and evaluation standards: Aids in targeted learning (Singh, 2021). Study aids and suggested texts are frequently requested from senior students or professors (Khan et al., 2023). Scheduling exams and following procedures are crucial for time management (Tohara et al.,

2021). According to Humbhi & Tareen (2022) research, students give precedence to previous exam papers over all other resources since they offer a clear understanding of the questions that would be asked. Due to the lack of formal repositories in many universities, students are forced to rely on unofficial peer-sharing networks, which may contain inaccurate or out-of-date information.

INFORMATION-SEEKING BEHAVIOR OF STUDENTS

Students use both digital and traditional media, according to research on preferred information sources. Principal sources include university libraries and learning management systems (LMS), such as Moodle and Blackboard, as well as e-learning platforms (Khan & Khan, 2020).

Online search engines and academic databases are commonly used, including subject-specific databases, institutional repositories, and Google Scholar (Patel & Patel, 2023). Facebook communities, Telegram channels, and Whatsapp groups are examples of social media and peer networks that provide easy access to information (Khan et al., 2023). Senior Students and Faculty: Speaking with instructors and seniors directly is still a reliable approach (Veer & Panda, 2022).

SEARCH STRATEGIES AND CHALLENGES

Even with the abundance of resources, students face a number of difficulties: Information Overload: Trying to find pertinent content is challenging due to the large number of online resources available (Hassan, 2023). Problems with Credibility: Unconfirmed study materials from peer networks could contain false information (Aharony & Gazit, 2020). Students at institutions with limited funding face challenges such as slow internet access and limited database access (Afzal et al., 2023). Many pupils are not taught how to properly assess sources (Khan & Khan, 2020).

IMPACT OF DIGITAL TRANSFORMATION ON EXAM-RELATED INFORMATION SEEKING

The COVID-19 pandemic has sped up the transition to digital learning, which has profoundly changed how students obtain information. A greater reliance on electronic resources is evident in the increased usage of e-books, open-access journals, and online previous papers (Mughari et al., 2023). The expansion of virtual academic communities' Collaborative learning is facilitated via academic forums (Hassan, 2023). Trends in Mobile Learning: Smartphones are now a common tool for rapidly retrieving information (Panda, 2021). Digital dependency, however, may exclude pupils with limited access to technology, frustrating educational differences (Obuobisa-Darko, 2025).

VARIATIONS BASED ON DEMOGRAPHICS AND INSTITUTIONAL FACTORS

Research shows variations in how people look for information based on: Academic Discipline: While humanities students use lecture notes and library books, science students rely more on lab manuals and research articles (Zafeer et al., 2024). Students in industrialized regions have greater access to digital libraries than students in poorer nations due to differences in geography and institutions (Ozoemelem, 2021). Gender and Age Factors: While male students investigate informal networks, female students are more likely to use formal sources (Khan et al., 2023). Fewer research studies focused exclusively on information needs associated to exams, despite the fact that several have examined general academic information-seeking behaviors. Comparative studies between various educational systems (e.g., Western vs. poor countries) are one of the main research gaps.

Future studies ought to look into institutional techniques for improved information distribution as well as AI-driven individualized learning tools. According to Miraj et al. (2021), students actively look for exam-related material from a variety of sources, but often encounter obstacles like false information, lack of digital literacy, and accessibility issues. Organizations must improve the resources available in their libraries, support reliable online resources, and incorporate instruction in information literacy into their curricula. Future research should examine changing patterns in students' information-

gathering habits, especially in light of new technological developments.

METHODOLOGY

This study aims to investigate the information needs and seeking behavior of students about examinations in colleges affiliated with university of Sargodha. The proposed pilot study employs a quantitative approach to assess the validity and reliability of a structured questionnaire examining the information needs and seeking behaviors of students regarding examinations in affiliated colleges of the University of Sargodha. This initial testing supports the measurement tool for accurately investigating students' examination-related information behaviors.

CONTENT VALIDITY

The content validity of the instrument was performed by two PhD professionals in the field of library and information management (Dr Shahzeb and M. Asif). The suggestions of the both were incorporated before the pilot study and then the instrument was sent for data collection.

DATA COLLECTION

The data was collected by survey method through researcher personal visit by distributing 120 questionnaires. The questionnaire contained demographics, information needs, information seeking behaviors, and problems faced during the information seeking process. Ethical considerations including voluntary participation, anonymity, and institutional approval were also followed.

RELIABILITY STATISTICS

The collected data were entered in Statistical Package for Social Sciences (SPSS) and analyzed. Reliability testing was ensured through Cronbach's alpha ($\alpha \geq 0.7$ threshold) to ensure internal consistency. The reliability details of the instrument are shown in the following Table 1:

TABLE 1: ***RELIABILITY ANALYSIS***

Sr. No.	Study construct	No. of items	Cronbach's Alpha
1	Information need	29	.892
2	Information seeking behavior	29	.831
3	Problems in information seeking	15	.864
	Combined	73	.834

Table 1 show that all the three constructs under consideration exceeded the universally accepted level of reliability that is .70. The combined Alpha of all the statements computed also remained .83 that is considered to be highly reliable.

DATA ANALYSIS

The instrument once found reliable, was analyzed objective wise. Descriptive statistics including frequency, percentage, mean and standard deviation were calculated using SPSS. The details of the analysis are as follows:

DEMOGRAPHIC INFORMATION

Demographic information consists of details of the population for the study. The Table 2 provides the details of the population:

TABLE 2: *DEMOGRAPHIC INFORMATION*

Demographic Variables	*Labels*	*Frequency*	*Percentage*
Age Group			
	Up to 20	91	75.8%
	21-24	28	23.3%
	29 and above	1	0.8%
Gender			
	Female	99	82.5%
	Male	21	17.5%
Qualification			
	Enrolled in Post-graduation	19	15.8%
	Enrolled in Graduation	101	84.2%

The data in Table 2 reveals a significant gender disparity among the 120 surveyed respondents, with females constituting an overwhelming majority (82.5%, n=99) compared to males (17.5%, n=21). The age distribution of the surveyed respondents reveals a strikingly young sample, with the vast majority (75.8%, n=91) being 20 years old or younger. An additional 23.3% (n=28) fall into the 21-24 age bracket, while only 0.8% (n=1) are 29 or older. This indicates that nearly 99% of participants are 24 or younger, with an overwhelming concentration in the under-20 group.

The educational qualifications of the surveyed respondents show a strong majority of graduation enrolled students, who make up 84.2% (n=101) of the sample, while only 15.8% (n=19) were enrolled in post-graduation degree program. This significant disparity indicates that the survey population is overwhelmingly composed of individuals currently pursuing or having recently completed their undergraduate education, with very few at an advanced academic level.

INFORMATION NEEDS OF THE STUDENTS RELATED TO THE EXAMINATION

This portion of the research study entails the information needs of the students related to the examination. The Table 3 shows the means and standard deviations of the information needs of the students:

TABLE 3: *DESCRIPTIVE (INFORMATION NEEDS)*

Sr. #	Needs	N	Mean	S.D
1	Examination schedule	120	4.07	1.238
2	Introduced disciplines/ subjects/ courses	120	4.07	1.010
3	Date sheet/exam schedule	120	3.95	1.295
4	Examination Process	120	3.95	1.242
5	Syllabus or course outline of relevant program/subject	120	3.90	1.356
6	Roll number slip/practical slips	120	3.88	1.540
7	Subject/ Program	120	3.84	1.188
8	Subject outline	120	3.82	1.241
9	Paper Pattern	120	3.79	1.384
10	Previous/Past Papers	120	3.77	1.314
11	Declaration of result	120	3.77	1.128
12	Fee Structure for Examination	120	3.73	1.471
13	Affiliated colleges with UOS	120	3.63	1.290
14	Books/Notes	120	3.60	1.337

15	Merit lists	120	3.58	1.504
16	Verification of result card or degree	120	3.58	1.394
17	Chances of appearing in the exam	120	3.53	1.455
18	Books for Exam Preparation	120	3.49	1.328
19	Issuance of result card or degree	120	3.43	1.346
20	Correction of name/subject	120	3.23	1.543
21	Reappearing for improvement in marks	120	3.19	1.491
22	Academic Calendar	120	3.12	1.332
23	Rules and regulations of the University of Sargodha	120	3.10	1.133
24	Change of subject/center	120	2.97	1.461
25	Paper rechecking	120	2.96	1.531
26	Re-admission due to compartment	120	2.88	1.456
27	Issuance of duplicate result card or degree	120	2.88	1.546

Table 3 presents the mean scores and standard deviations of students' perceived information needs behavior regarding various examination-related services at the affiliated colleges with University of Sargodha (UOS). The highest-rated needs, with mean scores above 4.0, include the examination schedule (Mean=4.07, SD=1.238) and introduction of new disciplines/ subjects/ courses (Mean=4.07, SD=1.010), indicating that students prioritize clear, timely information about exams and curriculum updates. Other highly rated needs, with means close to 4.0, include the date sheet/exam schedule (Mean=3.95), examination process (Mean=3.95), and syllabus or course outline (Mean=3.90), reinforcing students' demand for structured, transparent academic planning.

Mid-range needs (means between 3.5–3.8) include roll number slips (Mean=3.88), subject/program details (Mean=3.84), past papers (Mean=3.77), and fee structure (Mean=3.73), suggesting these are important but slightly less urgent. Notably, books/notes (Mean=3.60) and merit lists (Mean=3.58) also fall in this category, reflecting moderate concern for study resources and academic recognition.

The lowest-rated needs (means below 3.5) include paper rechecking (Mean=2.96), re-admission due to compartment (Mean=2.88), and issuance of duplicate result cards (Mean=2.88), implying these are less critical to the majority. The academic calendar (Mean=3.12) and university rules (Mean=3.10) also scored relatively low, possibly because students are less frequently engaged with these aspects.

INFORMATION SEEKING BEHAVIOR OF THE STUDENTS RELATED TO EXAMINATION

This portion of the study entails the seeking behavior of the students. The Table 4 indicates their behaviors:

TABLE 4: *DESCRIPTIVE (INFORMATION SEEKING BEHAVIOR)*

Sr.No.	Information Resources Variables (N = 120)	SU Website		Exam Office		Personal Contacts Teachers				Social media	
		M	S. D.	M	S. D.	M	S. D.	M	S. D.	M	S. D.
1	Rules and regulations of the University of Sargodha	3.49	1.523	2.26	1.393	2.53	1.195	3.24	1.438	2.99	1.647
2	Affiliated colleges with UOS	3.38	1.361	2.52	1.426	3.08	1.391	3.47	1.396	2.56	1.533
3	Introduced disciplines/ subjects/ courses	3.38	1.433	2.56	1.346	2.83	1.305	3.54	1.495	2.89	1.555
4	Examination schedule	3.49	1.467	2.78	1.486	3.09	1.366	3.34	1.447	2.55	1.582
5	Examination Process	3.12	1.498	2.82	1.539	2.62	1.285	3.52	1.296	2.86	1.626
6	Fee Structure for Examination	3.44	1.483	3.03	1.423	2.96	1.312	3.08	1.394	2.48	1.660
7	Merit lists	3.42	1.504	2.98	1.417	2.77	1.325	3.34	1.338	2.72	1.588
8	Syllabus or course outline of relevant program/subject	3.11	1.419	2.79	1.377	2.96	1.260	3.42	1.459	2.67	1.625
9	Academic Calendar	3.28	1.449	2.57	1.389	2.81	1.337	3.60	1.393	2.73	1.539
10	Books for Exam Preparation	3.36	1.425	2.69	1.419	3.10	1.337	3.29	1.497	2.87	1.561
11	Date sheet/exam schedule	3.39	1.440	2.93	1.482	2.89	1.228	3.42	1.400	2.74	1.569
12	Roll number slip/practical slips	3.23	1.509	3.18	1.534	2.83	1.320	3.41	1.357	2.60	1.486
13	Declaration of result	3.28	1.414	2.95	1.500	2.66	1.300	3.30	1.382	2.51	1.609
14	Re-admission due to compartment	2.83	1.482	3.24	1.438	2.91	1.384	3.22	1.393	2.28	1.397
15	Issuance of result card or degree	2.78	1.379	3.33	1.557	2.82	1.424	3.43	1.364	2.46	1.539
16	Verification of result card or degree	3.07	1.538	3.32	1.599	2.56	1.321	3.29	1.325	2.37	1.501
17	Paper rechecking	2.93	1.518	3.20	1.476	2.72	1.348	3.43	1.351	2.38	1.513

18	Correction of name/subject	2.98	1.501	3.15	1.543	2.86	1.392	3.45	1.295	2.34	1.509
19	Change of subject/center	2.64	1.431	3.08	1.526	2.79	1.334	3.58	1.206	2.37	1.523
20	Issuance of duplicate result card or degree	2.97	1.483	2.70	1.498	2.86	1.298	3.38	1.336	2.25	1.480
21	Chances of appearing in the exam	2.99	1.520	3.10	1.657	2.85	1.370	3.42	1.221	2.34	1.537
22	Reappearing for improvement in marks	3.03	1.489	3.03	1.574	2.71	1.305	3.67	1.286	2.25	1.380
23	Subject outline	3.25	1.439	2.82	1.484	2.98	1.293	3.84	1.347	2.72	1.700
24	Books/Notes	3.30	1.453	2.42	1.376	3.07	1.275	3.76	1.270	2.77	1.647
25	Subject/ Program	3.35	1.453	2.82	1.465	3.02	1.237	3.76	1.378	2.61	1.595
26	Previous/Past Papers	3.22	1.452	2.42	1.376	2.92	1.418	3.80	1.294	2.85	1.633
27	Paper Pattern	3.18	1.489	2.87	1.481	2.91	1.414	3.70	1.412	2.63	1.630

The data in Table 4 presents a comprehensive analysis of students' preferences for accessing various academic information resources at the University of Sargodha, revealing distinct patterns across different information channels. The university website (SU Website) and teachers emerge as the most relied-upon sources, with mean scores consistently above 3.0 for most variables, indicating their primary role in information dissemination. Teachers show particularly strong engagement for subject-specific resources (subject outline M=3.84, books/notes M=3.76, previous/past papers M=3.80), highlighting their crucial role in academic guidance. The SU Website scores highest for institutional information (rules/regulations M=3.49, exam schedule M=3.49, fee structure M=3.44), establishing it as the go-to platform for official updates. Interestingly, the Exam Office shows specialized utility for administrative processes (issuance of result cards M=3.33, verification M=3.32, paper rechecking M=3.20), suggesting its niche but important role in formal procedures. Personal contacts maintain moderate relevance across categories (typically 2.5-3.0 means), serving as a supplementary network, while social media consistently ranks lowest (means generally below 3.0), indicating its limited role in formal academic information seeking. The relatively high standard deviations (mostly between 1.2-1.6) across all resources suggest significant variability in student preferences, possibly reflecting diverse technological access, individual learning styles, or departmental differences in information provision. This data underscores the need for a multi-channel communication strategy that leverages the strengths of each resource - maintaining robust official platforms while recognizing the human element (teachers) remains indispensable for academic success.

HINDRANCES IN INFORMATION SEEKING

The following portion of the data analysis represents the details of the hindrances that students encounter during seeking their relevant information. The Table 5 shows the details of the hindrances:

TABLE 5: ***DESCRIPTIVE (PROBLEMS)***

	Problems	N	M	S.D
1	I feel overwhelmed by the amount of information available for exams	120	3.13	1.066
2	I often encounter outdated or inaccurate exams related information	120	3.09	1.270
3	I feel stressed and anxious when searching for exam-related information	120	3.08	1.319
4	I am concerned about my privacy and security when accessing exams related information online	119	3.08	1.222
5	I feel difficulty in finding exam-related information because of its poor organization	120	2.92	1.307
6	I find it difficult to navigate digital platforms to access exams information	119	2.86	1.209
7	I do not receive enough guidance or support in finding exams related information	120	2.82	1.237
8	I cannot afford the resources needed for exam preparation	120	2.72	1.309
9	I face cultural or social barriers when seeking exams related information	120	2.68	1.265
10	I lack the necessary skills to find and evaluate exams related information	120	2.66	1.240
11	I face restrictions from my institution in accessing exams materials	120	2.60	1.350
12	I do not have reliable technology to search for exams related information	120	2.59	1.287
13	I do not have enough time to search for exams related information	120	2.56	1.129
14	I do not have access to relevant information resources about examinations.	120	2.36	1.249
15	I struggle to understand exams-related information due to language barriers	120	2.35	1.307

The data in Table 5 reveals significant challenges students face when accessing and utilizing exam-related information, with three primary issues emerging most prominently. Student's report feeling

overwhelmed by the sheer volume of exam information (M=3.13), frequently encountering out-dated or inaccurate materials (M=3.09), and experiencing considerable stress and anxiety during information searches (M=3.08). These findings suggest a critical need for better information curation and quality control from educational institutions. Secondary but still substantial concerns include difficulties caused by poor information organization (M=2.92), challenges in navigating digital platforms (M=2.86), and insufficient guidance in finding exam resources (M=2.82). The data also highlights various systemic barriers, including financial constraints (M=2.72), technological limitations (M=2.59), and time constraints (M=2.56), though these appear less severe than the primary information-related challenges. Notably, all issues show considerable variability in their impact (SDs ranging from 1.066 to 1.350), indicating that while these problems affect many students, their severity varies significantly across the population. The results collectively paint a picture of an exam information ecosystem that is currently overwhelming, sometimes unreliable, and often stressful for students to navigate, suggesting institutions should prioritize streamlining information delivery, improving digital platforms, and providing better support systems to alleviate these challenges.

DIFFERENCES IN INFORMATION NEEDS, SEEKING BEHAVIORS, AND CONSTRAINTS IN SEEKING BASED ON EDUCATION LEVEL OF THE RESPONDENTS

The differences in information needs, seeking behavior and constraints in seeking information has been calculated that had occurred based on the gender differences of the respondents. The Table 6 presents t-test comparison of t-test comparisons, which are as follows:

TABLE 6: *COMPARISON OF INFORMATION NEEDS, SEEKING BEHAVIOR AND CONSTRAINTS IN SEEKING BASED ON GENDER DIFFERENCES*

	Gender	N	M	SD	Std. Error Mean	Levene's Test for Equality of Variances	p
Information Needs	Male	21	3.3963	.57797	.12612	.25	.43
	Female	99	3.5220	.68259	.06860		
Information Seeking behaviors SU-Website	Male	21	3.3739	.52285	.11410	.19	.19
	Female	99	3.1549	.72088	.07245		
Information Seeking behavior – Exam Office	Male	21	2.6473	.77633	.16941	.29	.07
	Female	99	2.9196	.59821	.06012		
Information Seeking behavior – Personal Contacts	Male	21	3.1940	.48133	.10503	.30	.00
	Female	99	2.7830	.71979	.07234		
Information Seeking behavior – Teachers	Male	21	3.5503	.81459	.17776	.34	.58
	Female	99	3.4542	.70782	.07114		
Information Seeking behavior – Social Media	Male	21	2.2804	.67785	.14792	.03	.03
	Female	99	2.6581	.91708	.09217		
Information Seeking behavior – Problems	Male	21	2.8698	.75439	.16462	.53	.57
	Female	99	2.7768	.68259	.06860		

Table 6 shows distinct gender-based patterns in information-seeking behaviors among students. Females reported slightly higher overall information needs (Mean=3.52) compared to males (Mean=3.40). In terms of specific information sources, males demonstrated significantly greater reliance on personal contacts (Mean=3.19 vs. 2.78), while females showed notably higher usage of social media for information-seeking (Mean=2.66 vs. 2.28). Females also tended to utilize the exam office more frequently (Mean=2.92 vs. 2.65), though this difference was less pronounced. Both genders were similarly likely to consult teachers, with only minimal differences in their mean scores. The significant results for personal contacts (p=0.00) and social media (p=0.03) indicate important variations in response patterns between genders for these particular sources. These findings suggest that while males prefer direct, personal interactions for information, females are more inclined to use institutional and digital platforms, highlighting the importance of considering gender-specific preferences when developing student communication strategies. The unequal variances for key behaviors further emphasize the need for careful interpretation of these gender differences in information-seeking approaches.

TABLE 7: *DIFFERENCES IN INFORMATION NEEDS, SEEKING BEHAVIOR, AND CONSTRAINTS BASED ON EDUCATIONAL QUALIFICATIONS*

	Qualification	N	M	SD	Std. Error M	Levene's Test	p
Information Needs	Under Graduate	101	3.5110	.65134	.06481	.11	.67
	Graduate	19	3.4417	.74964	.17198		
Information Seeking Behavior SU-Website	Under Graduate	101	3.1617	.67473	.06714	.28	.25
	Graduate	19	3.3606	.78411	.17989		
Information Seeking Behavior – Exam Office	Under Graduate	101	2.8588	.63628	.06331	.93	.60
	Graduate	19	2.9415	.65888	.15116		
Information Seeking Behavior – Personal Contacts	Under Graduate	101	2.8368	.72224	.07187	.39	.51
	Graduate	19	2.9513	.57551	.13203		
Information Seeking Behavior - Teachers	Under Graduate	101	3.4547	.76467	.07609	.02	.43
	Graduate	19	3.5575	.46481	.10663		
Information Seeking behavior – Social Media	Under Graduate	101	2.6509	.91586	.09113	.05	.04
	Graduate	19	2.2788	.66614	.15282		
Information Seeking behavior - Problems	Under Graduate	101	2.8439	.70512	.07016	.47	.06
	Graduate	19	2.5228	.56885	.13050		

Table 7 presents a comparison of information needs, information seeking behavior, and constraints between undergraduate and graduate students based on their educational qualifications. The findings reveal that, in most areas, there is no statistically significant difference between the two groups. Both undergraduate and graduate students reported similar levels of information needs, and their behavior in seeking information through the university website, exam office, personal contacts, and teachers showed no significant variation. However, Levene's Test for Equality of Variances was significant for information seeking through teachers, indicating unequal variance in responses—suggesting that graduate students were more consistent in their responses compared to undergraduates, who showed greater variability. A notable finding is the statistically significant difference in information seeking behavior through social media ($p = .04$), with undergraduates using social media significantly more than graduate students. This may reflect generational preferences or differences in information habits. Additionally, while not statistically significant at the 0.05 level, there was a near-significant trend ($p = .06$) indicating that undergraduates might face slightly more problems or constraints in information seeking than their graduate counterparts. Overall, the results suggest that while educational qualification does not greatly affect most aspects of information behavior, there are meaningful differences in social media use and variability in consulting teachers.

TABLE 8: *DIFFERENCES IN INFORMATION NEEDS, SEEKING BEHAVIOR, AND CONSTRAINTS BASED ON AGE DIFFERENCES OF THE RESPONDENTS ONE-WAY-ANOVA*

Variable	Age Group	N	M	SD	F	p
Information Needs	Upto 20	91	3.5165	.65566	.73	.48
	21-24	28	3.4222	.70107		
	29 and above	1	4.1786	.		
Information Seeking Behavior SU-Website	Upto 20	91	3.1233	.68912	4.16	.01
	21-24	28	3.4616	.62914		
	29 and above	1	2.0370	.		
Information Seeking Behavior – Exam Office	Upto 20	91	2.8392	.60638	.90	.40
	21-24	28	2.9947	.73487		
	29 and above	1	2.4074	.		
Information Seeking Behavior – Personal Contacts	Upto 20	91	2.8779	.72387	.77	.46
	21-24	28	2.7566	.62109		
	29 and above	1	3.5185	.		
Information Seeking Behavior - Teachers	Upto 20	91	3.4579	.75607	.11	.89
	21-24	28	3.5040	.63724		
	29 and above	1	3.7407	.		
Information Seeking Behavior – Social Media	Upto 20	91	2.6752	.92362	2.31	.10
	21-24	28	2.2963	.71313		
	29 and above	1	3.2963	.		
Information Seeking Behavior - Problems	Upto 20	91	2.8678	.71543	2.23	.11
	21-24	28	2.5595	.57816		
	29 and above	1	2.5333	.		

Table 8 shows the one way ANOVA results examining age differences in information behaviors reveal several key patterns in the data. For information needs, no significant differences were found across age groups (F=0.73, p=0.48), with all three age cohorts showing similar mean scores. However, a significant age effect emerged for website use (F=4.16, p=0.01), indicating that students of different ages vary in their reliance on the SU website. The means show that 21-24 year-olds (M=3.46) use the website more frequently than those under 20 (M=3.12), while the single respondent aged 29+ reported much lower use (M=2.04). No other behaviors showed significant age differences: exam office use (F=0.90, p=0.40), personal contacts (F=0.77, p=0.46), teacher consultations (F=0.11, p=0.89), social media use (F=2.31, p=0.10), or problem-solving approaches (F=2.23, p=0.11) were all statistically equivalents across age groups. A post hoc Tukey test was subsequently applied to identify which specific age pairs differ significantly in their SU website use behavior, as shown in the following table.

TABLE 9: ***POST HOC COMPARISONS OF INFORMATION SEEKING BEHAVIOR***

Multiple Comparisons

Dependent Variable: Information Seeking Behavior Via Web; Dependent Variable: Age

Tukey HSD

(I) What is your age	(J) What is your age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Upto 20	21-24	-.34439	.14763	.055	-.6948	.0061

Table 9 presents the results of a Tukey HSD post hoc test conducted to examine pairwise age group differences in information seeking behavior via the university website, following a significant result in the one-way ANOVA. The comparison between students aged "Up to 20" and those aged "21–24" shows a mean difference of -0.34439, with a p-value of 0.055, which is just above the conventional threshold of statistical significance (0.05). This result suggests a marginal or borderline difference in website use between the two age groups.

The negative mean difference indicates that students aged 21–24 use the university website more frequently than students aged up to 20, as their mean score is higher. The 95% confidence interval for the difference ranges from -0.6948 to 0.0061, which includes zero, further reinforcing that the difference is not statistically significant at the 0.05 level, but it is very close.

DISCUSSION

The findings of this study provide valuable insights into the information needs and seeking behaviors of students regarding examinations in affiliated colleges with the University of Sargodha.

INFORMATION NEEDS

The study found that students prioritize structured, exam-related information such as examination schedules (M=4.07), date sheets (M=3.95), and syllabi (M=3.90). This aligns with Boateng and Amankwaa's (2023) findings, which suggest that students primarily seek clarity on exam logistics and curriculum content. However, unlike previous studies (Khan et al., 2023), this research did not find a strong demand for past papers (M=3.77) or paper rechecking (M=2.96), possibly due to institutional differences in exam policies.

INFORMATION-SEEKING BEHAVIOR

Students predominantly relied on the university website (SU Website) and teachers for exam-related information, consistent with Singh's (2021) assertion that institutional and interpersonal sources remain central to academic information access. However, the study contrasts with Patel and Patel (2023) emphasis on digital resources, as social media was the least preferred source ($M < 3.0$). This discrepancy may stem from cultural differences in technology adoption or institutional trust in official channels.

HINDRANCES IN INFORMATION SEEKING

Students reported feeling overwhelmed by information volume (M=3.13) and encountering outdated content (M=3.09), strengthening Khan and Khan's (2020) findings on information overload. However, unlike Ozoemelem's (2021) study, financial constraints (M=2.72) and technological barriers (M=2.59) were less pronounced, possibly due to improved digital infrastructure post-COVID-19.

GENDER, EDUCATIONAL LEVEL AND AGE-RELATED VARIATIONS

The study revealed significant gender-based differences, with males relying more on personal contacts (p=0.00) and females using social media more (p=0.03), supporting Ali and Jan (2020) observation that gender influences information channel preferences. However, unlike Case and Given (2016), educational level (undergraduate vs. graduate) had minimal impact, except for social media use (p=0.04), where undergraduates were more active.

A key finding was that 21–24-year-olds used the SU website more (p=0.01) than younger students, though post-hoc analysis showed only marginal significance (p=0.055). This aligns with Obuobisa-Darko (2025), who noted that older students engage more with institutional platforms, possibly due to greater academic experience.

CONCLUSION

This study sought to examine the information needs, seeking behaviors, and constraints faced by students regarding examinations in affiliated colleges with the University of Sargodha. The findings provide critical insights aligned with the study's three key objectives: ***Information Needs:*** Students prioritized structured exam-related details, such as examination schedules, date sheets, and syllabi, indicating a strong demand for clarity on administrative and curricular requirements. However, needs like paper rechecking and past papers were rated lower, suggesting that institutional policies or student priorities may influence these preferences.

Information-Seeking Behavior: Students primarily relied on official university websites and teachers, while social media was the least preferred source. This underscores the continued importance of institutional and interpersonal channels, despite the growing digitalization of education. Notably, gender differences emerged, with males favoring personal contacts and females using social media more, highlighting the need for tailored communication strategies.

***Challenges in Information Seeking*:** Students reported information overload, outdated content, and stress as major hurdles, while financial and technological barriers were less critical. These findings suggest that improving information organization and reliability is more urgent than expanding access alone.

KEY RECOMMENDATIONS

Enhance Institutional Communication: Universities/ Colleges should ensure real-time updates on exam-related information via official platforms.

1 Strengthen Faculty-Student Engagement: Teachers play a vital role in clarifying exam details; structured mentorship programs could further support students.

2 Optimize Digital Resources: Given students' reliance on the SU website, improving its usability and content accuracy is essential.

3 Address Gender-Specific Preferences: Hybrid (online + in-person) support systems can cater to differing behaviors between male and female students.

REFERENCES

Afzal, A., Khan, S., Daud, S., Ahmad, Z., & Butt, A. (2023). Addressing the digital divide: Access and use of technology in education. *Journal of Social Sciences Review*, *3*(2), 883-895. https://doi.org/10.54183/jssr.v3i2.326

Aharony, N., & Gazit, T. (2020). Students' information literacy self-efficacy: An exploratory study. *Journal of Librarianship and Information Science*, *52*(1), 224-236. https://doi.org/10.1177/0961000618790312

Ali, A., & Jan, S. (2020). Information seeking behaviour in digital environment: A study of post graduate students at University of Kashmir. *Library Philosophy and Practice (e-journal)*, *4537*. https://digitalcommons.unl.edu/libphilprac/4537

Case, D. O., & Given, L. M. (2016). Looking for information: A survey of research on information seeking, needs, and behavior. https://books.google.com.pk/books?id=IAYvDAAAQBAJ&lpg=PP1&ots

Habes, M., Alghizzawi, M., Khalaf, R., Salloum, S. A., & Ghani, M. A. (2018). The relationship between social media and academic performance: Facebook perspective. *International Journal of Information Technology and Language Studies*, *2*(1). https://ijitls.journals.publicknowledgeproject.org/ijitls/index.php/ijitls/article/view/18

Hassan E. M. G. (2023). Addressing academic challenges: A quasi-experimental study on the effect of remedial exam strategy for nursing students with low academic performance. *Belitung nursing journal*, *9*(4), 369–376. https://doi.org/10.33546/bnj.2699

Humbhi, S., & Tareen, S. A. (2022). Information needs and Information-seeking behavior of undergraduate students: A remote area perspective. *Library Philosophy & Practice*.

https://www.researchgate.net/publication/358675307

Junaid, S., Mairaj, M. I., & Aslam, S. (2024). Digital information needs and information-seeking behaviour among legal practitioners at the Lahore High Court, Punjab, Pakistan. *Digital Library Perspectives*, *40*(4), 571-591. https://www.emerald.com/insight/content/doi/10.1108/dlp-12-2023-0103/full/html

Khan, A., & Khan, A. (2020). Information seeking behavior of postgraduate students in the University of Peshawar, Pakistan. *Library Philosophy and Practice*, *4380*. https://digitalcommons.unl.edu/libphilprac/4380

Khan, S., Naveed, M. A., & Anwar, M. A. (2023). Relationship of business students' information-seeking anxiety with socio-academic variables in the digital environment. *Information Discovery and Delivery*, *51*(2), 213-222. https://doi.org/10.1108/IDD-03-2022-0024

Mamman, H. A., & Abubakar, B. M. (2022). Challenges of access and use of electronic information resources among students of higher institutions in Taraba State, Nigeria. *Covenant Journal of Library and Information Science*. https://journals.covenantuniversity.edu.ng/index.php/cjlis/article/view/3051

Miraj, M., Chuntian, L., Mohd Said, R., Osei-Bonsu, R., & Rehman, R. U. (2021). How information-seeking behavior, essential technologies, and resilience enhance the academic performance of students. *Frontiers in Psychology*, *12*, 651550. https://doi.org/10.3389/fpsyg.2021.651550

Mughari, S., Naveed, M. & Rafique, G. (2023). Effect of Information Literacy on Academic Performance of Business Students in Pakistan. *Libri*, *73*(4), 355-368. https://doi.org/10.1515/libri-2023-0030

Nizzolino, S., & Canals, A. (2023). Pandemic and Post-Pandemic Effects on University Students' Behavioral Traits: How Community of Inquiry Can Support Instructional Design During Times of Changing Cognitive Habits. *International Journal of e-Collaboration (IJeC)*, *19*(1), 1-19. https://www.igi-global.com/article/pandemic-and-post-pandemic-effects-on-university-students-behavioral-traits/315783

Obuobisa-Darko, T. (2025). Exploration of university students' experiences with social connectedness in digital space in hybrid teaching and learning environment, the role of lecturers (leaders). *Facilities*, *43*(7/8), 503-531. https://doi.org/10.1108/F-02-2024-0030

Ozoemelem, O. A. (2021). Digital libraries and information access in developing nations: Challenges and prospects. *Library Philosophy and Practice (e-journal)*, 1–15. https://digitalcommons.unl.edu/libphilprac/

Panda, S. (2021). A study of on-the-go reference service using mobile technology in library. *Re-envisioning Roles and Responsibilities of Library Professionals in the New Normal*, 83-99. http://doi.org/10.5281/zenodo.5091312

Patel, D. A., & Patel, R. R. (2023). Information Needs and Seeking Behavior of Candidates preparing for Competitive Examinations: A Study. *Journal of Advances in Library and Information Science*, *12*(2), 80-86. http://jalis.in/pdf/12-2/Patel.pdf

Singh, S. (2021). Information seeking behavior of students: A case study of pyramid college of business and technology. *International Journal of Information Dissemination and Technology*, *11*(1), 38-43.

Tohara, A. J. T., Shuhidan, S. M., Bahry, F. D. S., & Nordin, M. N. B. (2021). Exploring digital literacy strategies for students with special educational needs in the digital age. *Turkish Journal of Computer and Mathematics Education*, *12*(9), 3345-3358. https://www.researchgate.net/publication/377303146

Tonmoy, T. K., & Islam, M. A. (2023). Do students look for information differently? Information-seeking behavior during the COVID-19 pandemic. *Digital Library Perspectives*, *39*(2), 166-180. https://doi.org/10.1108/DLP-09-2022-0073

Veer, R., & Panda, S. (2022). Information Seeking Behaviour of Teachers and Students of JanNayak Ch. Devi Lal Vidyapeeth, Sirsa. *IP Indian Journal of Library Science and Information Technology*, 7(2), 109-119. *https://doi.org/10.18231/j.ijlsit.2022.020*

Zafeer, H. M. I., Maqbool, S., Rong, Y., & Maqbool, S. (2024). Mapping the relationship and influence of school internal factors with an eye towards students' science academic outcomes. *Heliyon*, *10*(19). https://www.cell.com/heliyon/fulltext/S2405-8440(24)14727-5

Zhu, Y., Geng, G., Disney, L., & Pan, Z. (2023). Changes in university students' behavioral intention to learn online throughout the COVID-19: Insights for online teaching in the post-pandemic era. *Education and Information Technologies*, *28*(4), 3859-3892. https://link.springer.com/article/10.1007/s10639-022-11320-0