

Library Online Services, User Satisfaction and Online Learning of Preservice Teachers During the New Normal

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Abstract:- When the information outbreak is enormous, the importance of libraries and the role of librarians in meeting the learning needs of the students are highly important. The libraries are also on the front lines to ensure that all students can access the resources and services of the library. This *survey-correlational research aimed to determine the preservice teachers' learning experiences, perception of quality, coping mechanisms, and learning satisfaction in online learning during the COVID-19 Pandemic. The participants were the two hundred thirty-three (233) preservice teachers. Data were collected using the standardized coping mechanism questionnaire adopted from Carver, et al. and researcher-made learning experiences questionnaire, perceived quality questionnaire, and learning satisfaction questionnaire. The findings showed that the learning experiences in online learning were good. The perceived quality of online learning was high. The coping mechanism in online learning was high. The learning satisfaction in online learning was high. There were significant differences in the online learning experiences based on the perceived quality, coping mechanism, and learning satisfaction. There were significant relationships among online learning experiences, perceived quality, coping mechanisms, and learning satisfaction in online learning.*

Keywords:- Library Online Services, New Normal, Online Learning, Preservice Teachers, User Satisfaction.

I. INTRODUCTION

During the COVID-19 pandemic, when the information outbreak is enormous, the importance of libraries and the role of librarians in meeting the learning needs of the students are highly important. The libraries are also on the front lines to ensure that all students can access the resources and services of the library. This is vital to help the students receive the support, resources, and services they need to succeed.

The online services offered by the library facilitate the sharing of educational resources within an institution. These systems and procedures are purposefully developed and effectively utilized by higher learning institutions to support teaching and learning at a distance [1]. The library provides

various models for accessing materials, with some content offered free of charge and others available for a fee [2].

There is a critical need for learning support services to significantly enhance distance education curricula. Among these services, library support has historically played a pivotal role in expanding distance learning programs at higher learning institutions. Just as library systems cater to traditional students, it is equally the responsibility of university libraries to provide comprehensive services to distance learners [1].

According to the Standards for Distance Learning Library Services Association of College and Research Libraries (ACRL), every student, faculty member, administrator, staff member, or any other affiliate of a higher education institution has the right to access the institution's library services and resources, including direct communication with library personnel, regardless of their enrollment status or location. Academic libraries are thus mandated to fulfill the information and research requirements of all these individuals, regardless of their geographical location. This principle of universal access is fundamental to the standards governing distance learning library services [3].

In adapting to the "new normal," Anandamurugan [4] highlights that libraries are confronted with fresh challenges such as new competitors, evolving demands, heightened expectations, and diverse user needs for information services tailored to their specific requirements. Consequently, the library assumes a pivotal role as the nerve center of educational institutions, serving as a primary source of information for all patrons. Universities cannot achieve their mission without a well-equipped library that includes printed materials, information and communication technology, related facilities, trained staff, and high-quality services to meet users' information needs [5].

Zeithman and Bitmar defined user satisfaction as the assessment by users of whether a product or service meets their needs and expectations. If products or services fail to meet these criteria, users are likely to express dissatisfaction [5]. Similarly, Iwhiwhu and Okorodudu [6] indicated that user satisfaction with library information resources and services reflects users' assessment of whether these resources and services meet their expectations.

Library user satisfaction encompasses users' feelings after utilizing information resources and services, influencing their likelihood of returning to the library for future needs [7]. To attract and retain clients, increase awareness among non-users, and promote available services and resources effectively, libraries must employ strategies to market their offerings. These promotional efforts aim to inform target audiences about the availability and value of library services and resources, encouraging both current users and non-users to engage [8].

In a study by Aravind [9], user satisfaction was evaluated based on awareness and compliance with library rules, achieving a high awareness level of 92% and a compliance level of 82.29%. Overall satisfaction with library systems and services was reported at 89.17%.

Academic libraries play a crucial role in fostering academic excellence within educational institutions, particularly in the realm of online learning, where they are indispensable. While online learning cannot entirely replace traditional face-to-face education, it has rapidly emerged as a significant supplementary method, offering diverse learning opportunities to a broad spectrum of learners [10]. Many library and information professionals utilize online platforms to support students in both traditional campus settings and distance learning environments.

The transition from in-person to online learning poses significant challenges for educators, students, and administrators alike. Libraries contribute by assisting educators in developing tailored online courses, including tutorials, instructional videos, and specialized [11].

Abbasi and Zardary [12] highlight the pivotal role of digital libraries in bolstering online learning through the provision of digitized services and electronic resources accessible via the Internet. Public libraries also play a vital role in facilitating online learning as remote learning hubs and providers of information resources. Traditionally seen as custodians of information, public libraries now serve as active facilitators and gateways to knowledge [13].

The online services provided by the library have played a crucial role in supporting education and promoting literacy. This study is grounded in Reigeluth's instructional support theory [14], which offers clear guidance on enhancing learning and development. The theory predicts outcomes and reasons for various teaching and learning activities, while also suggesting methods for evaluating them. In the context of library online services, this theory underscores the critical role of academic support services in achieving the core missions of teaching, learning, and research within academic institutions. It emphasizes that the academic library, alongside well-equipped laboratories and faculties, serves as a benchmark for assessing the stature of academic institutions.

User satisfaction in this study aligns with Thomassen's customer satisfaction theory. According to this theory, satisfaction is determined by customers' perceptions when

comparing their experiences with their expectations of a product or service. Applied to library services, this theory helps identify the most effective services that libraries can provide to address gaps in student learning and information access. Libraries are continuously committed to enhancing their services by implementing innovative ideas and leveraging technologies tailored to their specific needs [15].

To effectively meet user needs, library authorities need to engage in ongoing dialogue with their user community to understand their information requirements. Evaluating library services from the customer's perspective is crucial for establishing user-centered services that meet diverse needs and expectations. Library staff must be proactive in identifying and fulfilling these needs by providing relevant information resources and services that satisfy their users.

In this study, online learning was framed within Piaget's constructivism theory. This theory underscores the active involvement of learners in constructing their own knowledge. Learners utilize existing knowledge and concepts to facilitate the acquisition of new information. When encountering new information, learners experience a cognitive disequilibrium, prompting a restructuring of their cognitive framework. This restructuring integrates previous and new information to form an enhanced cognitive schema [16].

Applying this theory to library use, integrating the library into the teacher-student educational process can assist students in developing crucial information literacy skills vital to their academic success. Librarians play a pivotal role in helping students learn effective methods to access and utilize high-quality information and resources, improve their study and research abilities, and harness the latest technologies to enrich their learning experiences.

II. PURPOSE OF THE STUDY

This study aimed to determine the library online services, user satisfaction, and online learning of college students during the new normal in the College of Teacher Education for the school year 2022-2023. Specifically, it sought to answer the following questions:

- What is the level of library online services as an entire group and in terms of access and use of library materials, automation, orientation and information sessions, online reservation of books, and library awareness and activities?
- What is the level of user satisfaction as an entire group and in terms of customer service, facilities, and resources?
- What is the level of online learning of college students as an entire group and in terms of teaching, course material, technological support, assessment, and attitudes and readiness?
- Are there significant differences in online learning of college students based on the library's online services and user satisfaction?
- Are there significant relationships among the library online services, user satisfaction, and online learning of college students?

III. METHODOLOGY

This research utilized a survey-correlational method involving 157 students with experience in online learning and using library resources. Participants were selected via stratified random sampling, with sample size determined using Slovin’s formula. Data collection employed validated questionnaires developed by the researcher: one each for library online services, user satisfaction, and online learning. These instruments underwent rigorous validation, including pilot testing and factor analysis using SPSS software, to ensure reliability and validity. Library online services and user satisfaction were investigated as independent variables, while online learning outcomes were examined as the dependent variable. Statistical analyses included descriptive statistics and inferential methods such as ANOVA and Pearson correlation coefficient at a significance level of 0.05.

IV. RESULTS AND DISCUSSION

A. Level of Library Online Services

The level of library online services as an entire group and in terms of access and use of library materials, automation, orientation and information sessions, online reservation of books, and library awareness and activities is shown in Table 1. Data show that the level of library online services is high ($M = 3.89, SD = .56$). It also shows that the access and use of library materials ($M = 3.98, SD = .59$), automation ($M = 3.84, SD = .61$), orientation and information sessions ($M = 3.84, SD = .64$), online reservation of books ($M = 3.83, SD = .62$), and library awareness and activities ($M = 3.95, SD = .62$) are high.

Table 1: Mean and Standard Deviation of Library Online Services

Category	Mean	Description	SD
Library Online Services	3.89	High	.56
Access and Use of Library Materials	3.98	High	.59
Automation	3.84	High	.61
Orientation and Information Sessions	3.84	High	.64
Online Reservation of Books	3.83	High	.62
Library Awareness and Activities	3.95	High	.62

Note Interval. 4.21–5.00: Very High, 3.41–4.20: High, 2.61–3.40: Moderate, 1.81–2.60: Low, and 1.00–1.80: Very Low

The level of online library services is very high. This suggests that college students are interested in learning how to use the internet to get information and resources. This may indicate that they are becoming less interested in traditional print materials and more interested in digital stuff. This is because it is likely that college students will find it easy to access and convenient to use online library services, which may be appealing to individuals who are unable to attend physical library sites or who have busy schedules.

The high rate of usage and access to library resources implies that college students have a significant need for knowledge and information. This suggests that they are looking for resources on a proactive basis to help further their interests in their personal, professional, or academic lives. This illustrates how relevant and valuable online library resources are for giving college students access to a variety of information that may be tailored to their specific needs. The reason for this is that online libraries are essential for assisting with educational activities since they give users access to books, journals, databases, and other materials that promote learning and intellectual development.

The high automation in library resources signifies easy access to library resources by making them available online 24/7. College students no longer have to be restricted by physical library hours or locations to conduct material searches, access digital collections, or borrow e-books or other electronic resources remotely. This is because automated technologies allow libraries to provide a greater

range of services, including online material renewal, self-checkout stations, and customized recommendation systems. These services are made possible by automated systems. By enabling college students to interact with library materials in ways that best fit their needs and preferences, these features improve the overall user experience.

The high orientation and information sessions in online library services suggest a strong commitment to supporting college students in efficiently utilizing online library resources. This shows that the library respects the experience of college students and works to guarantee that they have the information and abilities needed to fully employ digital services. This is because training on digital literacy skills, such as how to search for resources, access databases, assess information sources, and use library platforms efficiently, was a part of the orientation sessions for online library services. This shows a commitment to helping library users become digitally literate so they may confidently navigate the digital world.

The high rates of online reservation of books imply that college students find it convenient to reserve books from the comfort of their own homes or while on the go. It suggests that they appreciate not having to physically visit the library to peruse the catalog and place holds on the titles they want. This is because online reservation systems improve access to library materials, especially for college students who might find it difficult to visit the library in person owing to mobility challenges, transportation constraints, or busy schedules.

The high library awareness and engagement in library activities suggest a strong sense of active engagement and participation from college students. This implies that they are interested in the library's offerings and are willing to participate in events, programs, and services. This is because libraries often offer a variety of educational programs, workshops, and events aimed at promoting literacy, lifelong learning, and personal development of college students.

B. Level of User Satisfaction

The level of user satisfaction as an entire group and in terms of customer service, facilities, and resources is shown in Table 2. The result shows that the level of user satisfaction is high (M = 3.87, SD = .50). Data also show that customer service (M = 3.87, SD = .49), facilities (M = 3.79, SD = .59), and resources (M = 3.95, SD = .58) are high.

Table 2: Mean and Standard Deviation of User Satisfaction

Category	Mean	Description	SD
User Satisfaction	3.87	High	.50
Customer Service	3.87	High	.49
Facilities	3.79	High	.59
Resources	3.95	High	.58

Note Interval. 4.21–5.00: Very High, 3.41–4.20: High, 2.61–3.40: Moderate, 1.81–2.60: Low, and 1.00–1.80: Very Low

The high level of user satisfaction with library services suggests that college students' needs and expectations are being successfully met by the library. They are finding the library's services, resources, and programs valuable, which suggests that these offers fit with their objectives, interests, and preferences. This is because college students believe library staff workers, whether in person, online, or over the phone, are providing them with timely, kind, and useful support.

The high-quality resources in a library imply that the library provides a broad range of current and varied knowledge to promote learning across a range of disciplines and for a range of age groups, interests, and educational levels. The library's function as a knowledge center for the school and community is strengthened by the wealth of information available. This suggests that a variety of resources are available to college students, including books, archive documents, databases, specialist academic periodicals, and multimedia resources.

The high customer service provided by libraries implies that college students are generally more satisfied when they receive high-quality customer service. The reason for this is that they have great experiences and impressions of the library overall because they feel appreciated, respected, and well-supported by the personnel. This suggests that librarians can pay close attention to the needs of college students, deliver precise information, and provide supportive advice and assistance.

C. Level of Online Learning of College Students

The level of online learning of college students as an entire group and in terms of teaching, course material, technological support, assessment, and attitudes and readiness is shown in Table 3. The result shows that the level of online learning of college students as an entire group is good (M = 4.10, SD = .37). It shows that teaching (M = 4.35, SD = .50) in online learning is very good. On the other hand, the course material (M = 4.13, SD = .47), technological support (M = 4.00, SD = .40), assessment (M = 4.09, SD = .51), and attitudes and readiness (M = 3.95, SD = .51) are good.

The high-quality facilities provided by the library imply that college students are satisfied and happy to have a positive experience in the library. This shows that college students enjoy spending time in libraries, whether they are studying, reading, or attending activities because the spaces are cozy and well-kept. When the facilities are welcoming, easily accessible, and suit their needs and preferences, they are more likely to attend and make use of the library's services.

Table 3: Mean and Standard Deviation of Online Learning of College Students

Category	Mean	Description	SD
Online Learning	4.10	Good	.37
Teaching	4.35	Very Good	.50
Course Material	4.13	Good	.47
Technological Support	4.00	Good	.40
Assessment	4.09	Good	.51
Attitudes and Readiness	3.95	Good	.51

Note Interval. 4.21–5.00: Very Good, 3.41–4.20: Good, 2.61–3.40: Fair, 1.81–2.60: Poor, and 1.00–1.80: Very Poor

The good level of online learning among college students implies that they have successfully adapted to digital learning environments and are actively participating in them. This shows that college students can adjust to learning in digital contexts. They feel at ease using digital resources, navigating online platforms, and participating in online activities and course materials. The reason for this is that they actively participate in group projects, assignments, online chats, and other cooperative activities that enhance and personalize the learning process.

The teaching in online learning is very good. This indicates that teachers can effectively convey course content, concepts, and learning objectives to students in a clear, engaging, and organized manner. This is because they employ a variety of instructional strategies, multimedia resources, and interactive activities to enhance student understanding and engagement. This fosters active engagement and participation among online learners. Teachers encourage college students to ask questions, participate in discussions, collaborate with peers, and apply course concepts to real-world scenarios, creating a dynamic and interactive learning environment.

The course material in online learning is good. This shows that the online learning platform offers high-quality course materials. This suggests that well-written course materials cover the material in-depth, guaranteeing that college students will have access to all the knowledge, ideas, and tools required to fulfill the course's learning objectives. It is because teachers arrange information logically, complete with headers, subheadings, and clear explanations to make it easier for students to follow along and get what they need.

The technological support in online learning is good. This manifests that the provision of technology support guarantees a smooth and seamless online learning platform, tool, and resource experience for both teachers and college students. This means that there are minimal technical glitches, quick loading times, and user-friendly interfaces that are easy to navigate. This is because the technological support in

online learning platforms and resources are reliable and available when needed.

The assessment in online learning is good. This suggests that the assessments are aligned with the stated learning objectives of the course. They make sure that assessment activities are pertinent and meaningful by gauging college student's comprehension of the major ideas, abilities, and competencies specified in the course curriculum. This suggests that to meet students' diverse learning preferences and styles, teachers are using a range of evaluation formats and approaches. This gives students several chances to show what they have learned through tests, quizzes, essays, projects, presentations, conversations, and peer assessments.

The attitudes and readiness for online learning are good. This implies that college students see online learning as a useful and efficient form of instruction and are open to the virtual learning environment. Their eagerness, curiosity, and optimistic outlook when taking online courses enhance their overall learning experiences. It is because college students are prepared and eager to study online, engage in class activities, contribute to conversations, complete assignments on time, and look for extra resources to help them understand the course material.

D. Differences in Online Learning Experiences of College Students

The differences in online learning based on the effectiveness of library online services and user satisfaction are shown in Table 4. Data show that there is a significant difference in the online learning of college students based on the library's online services ($F = 46.304^* = .000, p > .05$ in favor of the very high library online services ($M = 4.48; SD = .28$). There is also a significant difference in the online learning of students based on the user satisfaction ($F = 61.991^* = .000, p > .05$, in favor of the very high user satisfaction ($M = 4.51; SD = .28$). Therefore, the null hypothesis which states that there are no significant differences in online learning of college students based on the library online services and user satisfaction is rejected.

Table 4: ANOVA on the Differences in Online Learning of College Students Based on the Library Online Services and User Satisfaction

Category	Sum of Squares	df	Mean Square	F	Sig
Library Online Services					
Between Groups	8.246	2	4.123	46.304*	.000
Within Groups	13.535	152	.089		
Total	21.781	154			
User Satisfaction					
Between Groups	9.990	2	4.995	61.991*	.000
Within Groups	12.086	150	.081		
Total	22.076	152			

* $p < .05$ – significant at 5% level

There is a significant difference in the online learning of college students based on the library's online in favor of the very high library online services. This suggests that the level of online learning among college students varies significantly based on the quality and extent of the library's online services.

Specifically, it suggests that college students who have access to very high-quality online library services have a discernible advantage over those who have limited or lower-quality online resources when it comes to their online learning. It is because the availability of comprehensive and reliable digital

resources supports their learning, enables deeper exploration of course topics, and facilitates the development of critical thinking and research skills, all of which contribute to academic success.

There is also a significant difference in the online learning of students based on user satisfaction in favor of very high user satisfaction. This implies that college students' experiences with online learning differ greatly depending on how satisfied they are with the process, with a notable advantage observed for those with very high levels of user satisfaction. This is because college students who exhibit very high levels of user satisfaction are probably more driven and involved in their virtual education. Their passion and dedication to learning were cultivated by their positive experiences and contentment with the learning platform, course materials, and interactions with teachers and classmates.

E. Relationships among Library Online Services, User Satisfaction, and Online Learning of College Students

The relationships among the library online services, user satisfaction, and online learning of college students are shown in Table 5. Data reveal that there is a positive, strong association, and significant relationship between library online services $r = .630^*$, $p = .000 < .05$ and online learning of college students. There is a positive, strong association, and significant relationship between user satisfaction $r = .718^*$, $p = .000 < .05$ and online learning of college students. Furthermore, there is a positive, strong association, and significant relationship between library online services $r = .650^*$, $p = .000 < .05$, and user satisfaction. Therefore, the null hypothesis which states that there are no significant relationships among library online services, user satisfaction, and online learning of college students is rejected.

Table 5: Pearson r among the Library Online Services, User Satisfaction, and Online Learning of College Students

Variables	r-value	Sig
Library Online Services and Online Learning	.630*	.000
User Satisfaction and Online Learning	.718*	.000
Library Online Services and User Satisfaction	.650*	.000

* $p < .05$ – significant at 5% level

There is a strong, positive, and significant relationship between library online services and online learning of college students. This implies that high-quality library online services may contribute to the academic success of college students by providing them with the resources and support they need to succeed in their online courses. This indicates that the higher access to online library resources the better the online learning of the college students. It is because the library's online services likely provide college students with access to a wide range of digital resources. This access enhances students' ability to conduct research, access course materials, and engage with relevant content to support their online learning.

This shows that online library services contribute 40% to the online learning of college students. This means that 40% of the variation in the online learning of college students can be directly attributed to online library services. This idea emphasizes the importance of high-quality library online services in supporting the academic success of college students, particularly in the context of online learning. It highlights the role of these services in providing essential resources, facilitating learning activities, and enhancing the overall online learning experience for students.

There is a strong, positive, and significant relationship between user satisfaction and online learning of college students. This suggests that among college students, there is a strong, positive, and statistically significant association between user satisfaction and the efficiency of online learning. This implies that college students, who are the main consumers of library materials, learn better online when they are more satisfied using the library resources.

These elements are crucial for enhancing and guiding the online learning of college students, contributing 51% to their development. This indicates that 51% of the variation in online learning is directly attributed to the user satisfaction of library resources. This underscores the importance of user satisfaction as a key determinant of the effectiveness and success of online learning among college students. Colleges that prioritize the satisfaction of their online learners are likely to see positive outcomes in terms of engagement, retention, and academic achievement in their online programs.

Moreover, there is a positive, strong association, and significant relationship between online library services and user satisfaction. This implies the importance of online library services in meeting the needs and expectations of users, thereby contributing to higher levels of user satisfaction. Libraries that prioritize the accessibility, quality, and usability of their online services are more likely to cultivate positive relationships with users and enhance their overall satisfaction with library resources and support.

Together, they contribute significantly to the overall satisfaction of users and online library services, with 42% of their association being attributed to their combined influence. This positive user satisfaction may also stem from the quality of service and support provided by online library staff. Users who receive prompt assistance, guidance, and support from library staff when accessing resources or seeking assistance are more likely to feel satisfied with their overall experience using online library services.

V. CONCLUSIONS

The library has adapted adeptly to the digital era by prioritizing user needs and integrating technology to ensure convenient access to information and resources remotely. It emphasizes a positive user experience, supported by responsive customer services and well-maintained physical spaces conducive to research and study. The school has successfully transitioned to online learning with effective teaching methods and robust support structures, fostering a favorable learning environment. The quality of online teaching underscores educators' proficiency in utilizing digital tools for engaging instruction. Variations in college students' online study habits correlate with user satisfaction and online library services, highlighting their pivotal role in enhancing academic achievement. As such, libraries are crucial in supporting and enhancing college students' online learning experiences, urging institutions to prioritize and improve online library services to bolster user satisfaction and academic success.

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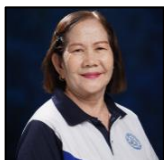
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