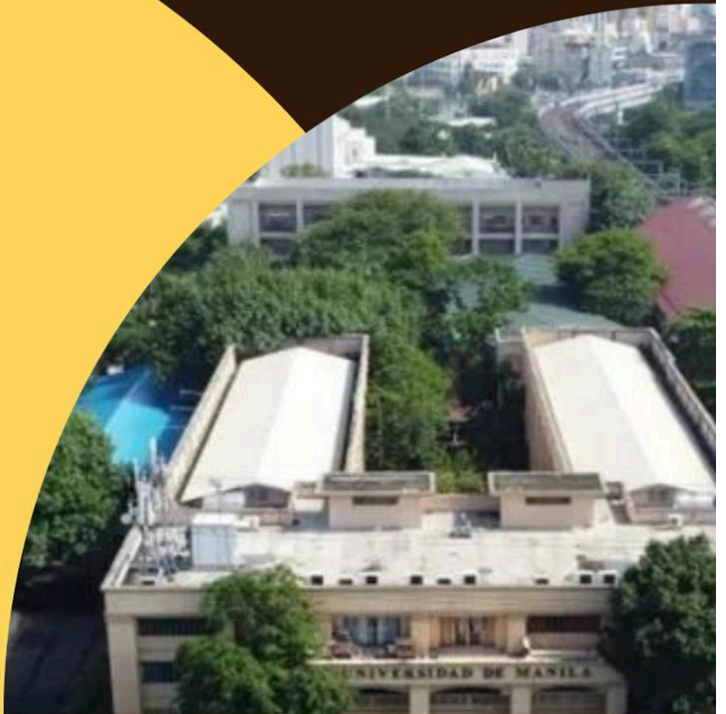






THE PROFESSIONALS

AN INTERDISCIPLINARY RESEARCH

FOREWORD

Research undoubtedly provides the world valuable information about how every member of society, especially the academic community, learns best so they can be more effective vehicles of information. It enables us to develop new techniques and methods by exploring different topics and sound ideas.

It is deemed imperative that every educational institution develop its faculty, students, and other stakeholders into becoming more research oriented. We should plant the seeds for the next generation's scientific inquiry that will foster greater confidence and solid basis to carry out informed decisions. Remarkable research open the eyes of individuals to opinions and facts giving clarity to problems. The curiosity that every researcher exudes promotes critical thinking.

This among others is the very purpose of educational research—is meant to expand the existing and unexplored body of knowledge and provide possible avenues to otherwise untapped learnings.

The contents of this journal only shows that the University is not remiss of its duty to further one of the core pillars of every academic institution which is research. The University is proud to produce critical and inquisitive leaders of our society. After all, learning is a lifelong process which knows no age nor boundaries.

MA. FELMA CARLOS-TRIA, Ed.D.
University President

About the Journal

The Professionals is an annual, multidisciplinary, peer-reviewed journal produced by the University Research Center (URC) of the Universidad De Manila (UDM). It focuses on the promotion of new knowledge and ideas throughout the University's academic program offerings, including Arts and Sciences, Business and Management, Criminal Justice, Education, Engineering and Technology, Health Sciences, and Law. And how these new ideas and innovations contribute to enhancing, advancing, and advancing disciplines and research with a local context but global relevance.

The Professionals welcomes a wide range of ideas, disciplines, techniques, and beliefs. The journal welcomes a variety of strategies for empirical research (qualitative, quantitative, and mixed), as well as systematic reviews and meta-analyses of the highest quality.

Aims and Scope

The Professionals publishes papers of original research, systematic reviews, policy briefs, and meta-analyses in the following fields:

- Arts and Sciences
- Business and Management
- Criminal Justice
- Education
- Engineering and Technology
- Health Sciences
- Law
- Public Administration

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The Professionals
An Interdisciplinary Journal
Volume 1. No. 1 2022

The Universidad de Manila Faculty Portal: Usability Analysis	8
Francis Arlando L. Atienza; Willmen A. Macmac <i>Information and Communications Technology Office (ICTO)</i> Leila R. Gano, Ph.D., Ed.D.; Leny Delloso, Ed.D. <i>Institute of Graduate and Professional Studies (IGPS)</i>	
Post Covid Roadmap for Education Development: An Empirical Study of Academicians Opinion	24
Virgiania I. Berganio; Alona M. Timbre; Ricardo Reyes III; Amalfi B. Tabin, Jr.; <i>College of Education</i>	
The Online Shopping Experience of UDM Faculty Members in Manila's Market Place	42
Silvia C. Ambag <i>University Research Center</i> Elena R. Cerenias; Luz Banes; Rolando Maso; Reggie Bautista <i>College of Business</i>	
Research Capability of UDM Teaching Personnel: Its Correlates, Determinants, and Implications for University Research Capacity Building Program	65
Amalfi B. Tabin, Jr.;Aurisita M. Delos Reyes; Carl Bryan Nucum Enriquito E. Mahinay, Jr.; Ronnie F. Sta. Maria; Ma. Jacqueline B. Patarata; Joel M. Ramos; Rodolfo M. Martinez, Jr.; Analyn B. Datu <i>College of Health Sciences</i>	

O-World VR: An E-Learning For Exploring The Universe Virtual reality (VR) Technology	93
Christina P. Atal; Joy N. Sadol; Ronald B. Fernandez <i>College of Engineering</i>	
Motivation in Conducting Research Among Faculty of Arts and Sciences of Local Colleges and University in the Philippines	101
Joseph Mercado <i>University Research Center</i> Ritchie Horario; Jacquelin Javier; Perfecto Barrameda <i>College of Arts and Sciences</i>	
Fear of Crime: Victimization Risks among Selected University Students of Universidad de Manila	131
Rodolfo V. Castillo, Jr.; Rizalino D. Flores III,; Béma P. Fulgencio, Jopher F. Nazario,; Voltaire L. Perales <i>College of Criminal Justice</i>	
The Effectiveness and Responsiveness of the Universidad de Manila Curriculum: An Illuminating Analysis	154
Ronald Herrera, Ph.D. Leila Gano, PhD., EdD. Paolo Remon	

The Universidad de Manila Faculty Portal: Usability Analysis

*Collaborative Research Paper of Academic and Non-Academic
Departments*

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ABSTRACT

The Universidad de Manila (UDM), formerly known as City College of Manila, was established in 1995 by the City Council of Manila's Ordinance No. 7885. On its 25th Founding Anniversary in April 2020, UDM implemented a repositioning strategy to adhere to its original mission as the premier in science and technology in higher education institution in Manila, with Education 4.0 as the focal point of its core course offerings. The Universidad de Manila Portal was designed for current and prospective students and faculty at the university. The Universidad de Manila Portal enabled faculty members to perform a variety of academic-related tasks, including viewing course admission lists/status, the academic calendar, lectures, and encoding of grade. Beyond class hours, the portal facilitates communication between professors and students. This study is an initiative research activity to determine the usability of the UDM Faculty Portal to the UDM community and expand the service offerings of the University Information and Communications Technology Office (ICTO). The study

determined the Faculty Portal's usability in terms of its features and frequency of use. This serves as the foundation for enhancing the university-wide Faculty Portal usage policy.

INTRODUCTION

During pandemics, it is difficult for higher education institutions to resume operations, even on a partial basis.

The Universidad de Manila take advantage of the power of the Internet. The UDM Faculty and Student's Portal was used to continuously operate, reach the faculty member and students, and support online learning. Academic institutions have demonstrated the potential of web technologies in providing the link between the faculty members and students.

A web portal is a specially designed website that frequently serves as the sole access point to information. It can also be viewed as a collection of personalized and cataloged content. A web portal facilitates search navigation, personalization, notification, and information integration, and provides frequently task management, collaboration, business intelligence, and application integration features (Technopedia, 2017).

However, usability is crucial in the development of web portals, especially for educational institutions. It serves as a metric to examine the portal's efficacy, to determine whether the portal is achieving its goals, and to determine whether planned portal enhancements have the desired effects (Aziz, 2015).

To achieve these objectives, UDM provided a University Faculty Portal. Students and faculty members can thus communicate continuously from the comfort of their own homes. Faculty members may post lectures, lecture notes, seat work, assignments, and even quizzes. Instructional materials can be downloaded by students to keep them informed of the lessons. Faculty members can view their teaching load for the current semester, download class lists to confirm that all students are enrolled, and post student grades. As a result, a UDM Faculty Portal serves as a hub for diverse academic

endeavors, including lectures and reports, performance evaluation, and consultations.

The creation and upkeep of a UDM portal are time-consuming and costly. Web portals are costly to create and maintain, according to El-Said (2018). Thus, if created without user or usability preferences in mind, it is likely to have poor interactivity with humans or other computing entities, which raises usability concerns.

Consequently, it is essential that the UDM Faculty Portal's features achieve their intended purpose. Academic-related activities such as the downloading of class lists, uploading of lecture materials, interactive discussions, and encoding of grades should be addressed by the faculty portal. Despite the strategic features of the faculty portal, the records shows that the Faculty Portal features were not fully utilized by the academic community.

This prompted the researcher to examine the respondent evaluation of the portal's usability in order to meet the needs of the concerns academic users.

“Usability is the degree of ease with which products such as software and Web applications can be used to achieve required goals effectively and efficiently (techopedia, 2022).”

There is a vast amount of research on website usability, this prodded the researchers to make an assessment study on the University's Faculty Portal under the services of the Information and Communications Technology Office (ICTO). The findings will serve as a basis for optimizing the usability of Faculty Portal Features.

THEORETICAL FRAMEWORK

The "Cognitive Ergonomics Theory" guided the researcher throughout the course of this study. Cognitive Ergonomics is the study of cognition (i.e., awareness of thoughts and perceptions) in the workplace to optimize human health and system efficiency.

Cognitive ergonomics or cognitive engineering is an emerging branch of ergonomics that focuses on the analysis of cognitive processes – such as diagnosis, decision making, and planning – required of modern industrial operators. Cognitive ergonomics aim to improve cognitive task performance through a variety of interventions, including user-centered design of human-machine interaction and human-computer interaction (HCI), design of information technology systems to facilitate cognitive operations (e.g., cognitive artifacts), development of training programs, and redesigning work to manage cognitive workload and enhance human dependability.

Ergonomics is defined as "fitting the system to the human"; therefore, equipment, tools, environments, and tasks can be customized and adapted to each individual's unique abilities and limitations, to the extent that the institution permits. Cognitive ergonomics, on the other hand, is concerned with the compatibility between cognitive abilities and limitations of humans and institutional factors.

A similar study on the usability of web portal was made by Bringula and Basa (2011). They investigated the factors that could significantly influence the usability of a web portal. The findings serves as input for the development of a faculty web portal at the University of the East-Manila. The study also addressed guidelines for web portal developers, as well as its limitations and future research implications.

On the use of web portal in online teaching, Nigerian universities was examined by Kyari et al. (2018) to uncovered obstacles that inhibit the use of web portals for education. Another related study about e-learning in the era of COVID-19 was made by Adeoye et al. (2020), where they analyzed the Nigerian tertiary education system and the need for e-learning by identifying and discussing e-challenges.

The above study shows the institutional and academic aspects in the context of the web portal usability. This led Oliha and Festus (2021) to evaluate a social-academic platform as one of the essential services that foster collaborative learning and increase academic web portal usage.

Another study on the usability of the faculty website was conducted in Indonesia by Soewardi, H., et al. (2020). This study also assessed the level of website usability by faculty members at a selected university. The assessment was based on five dimensions: learnability, efficiency, memorability, error, and satisfaction. The findings show that faculty websites in certain universities occasionally encounter user-related issues.

The above-cited studies confirmed the importance of evaluating the website's usability to address the ergonomics theory of “fitting the system to the human”. Thus, the portal can be customized and adapted to the users’ unique abilities and limitations.

STATEMENT OF THE PROBLEM

The study assessed the usability of the Universidad de Manila Faculty Portal in terms of features and access. It sought to answer the following specific questions:

1. What is the assessment of the respondents on the usability of the Universidad de Manila Faculty Portal Features in terms of:
 - 1.1 appearance
 - 1.2 navigation
 - 1.3 content
 - 1.4 security
 - 1.5 performance and efficiency
 - 1.6 interactivity?
2. What is the assessment of the respondents on the usability of the UDM Faculty Portal in terms of Access?
3. Based on the findings, what strategic university-wide policy on the utilization of the UDM Faculty Portal can be developed and implemented by the Information and Communications Technology Office (ICTO)?

METHODOLOGY

The evaluation of the respondents on the UDM Faculty Portal usability in terms of its features and access was conducted during the second semester of the school year 2021-2022.

The usability of the UDM Faculty Portal in terms of features was evaluated in terms of 1) appearance, 2) navigation, 3) content, 4) security, 5) performance, 6) efficiency, and 7) interactivity. The usability of the UDM Faculty Portal Access was evaluated in terms academic-related activities like: Class list downloads, lecture material uploads, interactive discussions, and encoding of grade. In presenting, analyzing, and interpreting the data, the descriptive research design was employed.

RESEARCH INSTRUMENT

The UDM Research Director and the University Researcher validated the survey instrument. Five Institute of Graduate and Professional Studies professors were chosen for the pilot testing of the questionnaire. Modifications were done as per the recommendations in the pilot testing. Following these modifications, the questionnaires were distributed to the selected faculty members of the different colleges. The used 5-likert scale to measure the usability of UDM Faculty Portal, from 5-Strongly Agree/Very Usable to 1-Strongly Disagree/Not Usable.

RESULTS AND DISCUSSION

1. Appearance

The respondents agreed on the usability of the Universidad de Manila Faculty Portal feature in terms of appearance.

The respondents agreed on the usability of Universidad de Manila Faculty Portal in terms of appearance as shown by the mean score of 3.99 with verbal interpretation of Agree or Usable. The faculty members gave high mean score of 4.22 for graphics and images, and 4.03 for the color scheme. The color

scheme is aesthetically pleasing and well-coordinated, and the font is consistent and legible.

Table 1. Usability of the Universidad de Manila Faculty Portal Features in terms of Appearance

Appearance	WM	VI
1. The color theme of the UDM Student Portal is well-coordinated and pleasing to the viewer's eyes.	4.03	Agree
2. The web layout is clean and uncluttered of unnecessary objects/graphics.	3.93	Agree
3. The design elements (graphics, art, buttons, etc.) support/enhance the message/purpose of the site	3.75	Agree
4. The font used by the site is readable and standard throughout the webpage.	4.00	Agree
5. The graphics/images used for the site are not offensive and does not depict any negative notions in any way.	4.22	Agree
6. Only important and pertinent information are displayed in the main screen, and details are accessible via submenus and links.	4.00	Agree
Overall Weighted Mean	3.99	Agree
	Usable	

A quite low mean score 3.75 was given on the design elements (graphics, artwork, buttons, etc.). The respondents find the design usable, however, they commented that there is still a need for improvement on the design element of the portal.

Based on the study of Oliha, Festus, (2022) “... absence of social and academic aspects in the context of the platforms can result to decreased usage for stakeholders - tutors and students”.

2. Ease of Navigation

The respondents agreed on the usability of the Universidad de Manila Faculty Portal feature in terms of ease of navigation.

The overall mean score of 3.91 indicates that faculty members are comfortable using the UDM Faculty Portal. They agreed that, from any page of the website, the Faculty Portal has a HOME button that can return the viewer directly to

the homepage and that topics are properly organized by primary and secondary menus.

Table 2. Usability of the Universidad de Manila Faculty Portal Feature in terms – Ease of Navigation

Ease of Navigation	WM	VI
1. The portal utilizes a user-friendly interface that clearly shows how to navigate through screen.	4.09	Agree
2. Topics are grouped under general menus, with succeeding submenus clearly related to the header menus, and are organized properly.	4.00	Agree
3. Links redirect the user to the correct screens and does not require any complex action to execute.	3.70	Agree
4. Position of error/notification messages on screen is consistent	3.50	Agree
5. Messages on screen which prompt user for input is clear and easily recognizable.	4.06	Agree
6. The system keeps you informed about what it is doing (i.e., busy, waiting for input/action, etc.)	3.74	Agree
7. Error messages are helpful and describe exactly what the error encountered is.	3.83	Agree
8. Help messages on the screen are informative and describes clearly and what action is required.	3.74	Agree
9. There is a HOME button which can take you back directly to the main screen of the portal from any page of the website	4.19	Agree
Over-all Weighted Mean	3.91	Agree
	Usable	

The portal utilizes a user-friendly interface that clearly shows how to navigate through screen. is user-friendly and contains links that lead to the correct screens. There is also consistent and informative error notification that is useful. The portal system keeps the user apprised of its activities.

The importance of ease of navigation was stressed in the study of Alatawi et al. (2018). They mentioned that interactions, efficiency, and accessibility were among the most influential factors on the end users' level of satisfaction.

El-Said (2018) also emphasized in that portal created without user or usability preferences in mind is likely to have poor interactivity with humans.

3. Content

Table 3. Usability of the Universidad de Manila Faculty Portal Feature in terms of Content

Content	WM	VI
1. The portal content is current and updated regularly (Grades, Curriculum, Ledger, etc.)	4.00	Agree
2. The content is under the proper menu headings (i.e., the header description matches all content contained in the page)	4.00	Agree
3. The Grades page reflects the correct grades as received during the school term. Adjustments in grades are reflected properly in the portal.	4.00	Agree
4. e-Learning provides a very good source of lectures notes, take home exams and other academic materials to supplement classroom instruction.	4.00	Agree
Over-all Weighted Mean	4.00	Agree
	Usable	

The respondents agreed on the usability of the Universidad de Manila Faculty Portal feature in terms of content.

To play a more significant role and attract prospective students, university portal website content must be updated, menu pages matches all the contents, and accurate.

The faculty members agreed that the Faculty Portal's menu headings correspond appropriately with the content they contain. In addition, they agreed that the Grades and the Evaluation accurately reflect the correct and current student record information. This is demonstrated by the over-all mean score of 4.00 or Usable.

A similar study on content of the portal was made by Zhi-Yong Xiong (2021) where five indicators for evaluating the quality of university portals was used: accessibility, content, design, navigation, and organization.

4. Content

Table 4. Usability of the Universidad de Manila Faculty Portal Feature in terms of Security

Security	WM	VI
1. The portal maintains a high level of security by using passwords to access personal information.	5.00	Strongly Agree
2. The faculty have limited access of the portal; encoding is allowed at the end of every semester	3.70	Agree
3. Grades revision cannot be done any time in the portal	3.77	Agree
4. There is a limited number of incorrect logins allowed before the system disables the account.	3.45	Neither Agree nor Disagree
Weighted Mean	3.98	Agree
	Usable	

The respondents agreed on the usability of the Universidad de Manila Faculty Portal feature in terms of security.

The respondents rated with a highest mean score of 5.00 on the first statement, the Portal maintains a high level of security by requiring a username and password to access personal accounts.

However, the respondents rated statement 4, “There is a limited number of incorrect logins allowed before the system disables the account” with a mean of 3.45, neither agree nor disagree. The evaluation can still be viewed as positive in terms of security.

They also agreed that, for security reasons, students should only have read-only access to faculty-uploaded information.

5. Performance and Efficiency

The respondents agreed on the usability of the Universidad de Manila Faculty Portal feature in terms of performance and efficiency.

The mean score of 3.58 indicates that the UDM Faculty Portal meets the performance and efficiency expectations of the faculty members.

Table 5. Usability of the Universidad de Manila Faculty Portal Feature in terms of Performance and Efficiency

E. Performance and Efficiency	WM	VI
1. Provides 24/7 accessibility of review and lecture materials	3.83	Agree
2. It easily posts information/data uploaded by the students, and changes are reflected in a matter of seconds.	3.58	Agree
3. The website has the capability to recover data when error occurs, therefore content can be preserved.	3.32	Neither Agree nor Disagree
4. It can easily access uploaded review and lecture materials of considerable byte size.	3.67	Agree
5. Downloading of teacher's lecture note can be facilitated by the website.	3.35	Agree
6. The UDM portal has minimum downtime during the entire school year.	3.41	Agree
7. The UDM portal requires no complex programs on the user side to access the portal.	3.90	Agree
Weighted Mean	3.58	Agree
	Usable	

However, two areas need improvement: the website's ability to recover data in the event of an error so that content can be preserved; the website's capacity to facilitate the downloading of teachers' lecture notes; and the website's downtime during the school year. According to the findings of the Oliha, 2021 study, the social academic web portal platform in the pandemic era is adaptable, usable, and can be used to foster social academic interactions between lecturers and students in learning institutions, thereby increasing web portal usage.

6. Interactivity

The respondents neither agree nor disagree on the usability of the Universidad de Manila Faculty Portal feature in terms interactivity.

The respondents rated statement 1, “1. The E-forum functionality performs satisfactorily”.

Table 6. Usability of the Universidad de Manila Faculty Portal Feature in terms of Interactivity

Interactivity	WM	VI
1. The E-forum functionality performs satisfactorily.	3.50	Agree
2. The e-Learning functions well and provide online learning facilities and functions	3.20	Neither nor disagree
4. Chatting facility is available on the website.	3.25	Neither nor disagree
5. There is a feedback facility which welcomes user comments on site bugs and improvements.	3.20	Neither nor disagree
Over-all Weighted Mean	3.29	Neither nor disagree
	Moderately Usable	

However, they rated neither agree nor disagree on the following statements, “The e-Learning functions well and provide online learning facilities and functions”, Chatting facility is available on the website”, and “There is a feedback facility which welcomes user comments on site bugs and improvements.

The respondents neither agree nor disagree on the interactivity within the portal. Thus, feature needs improvement.

“A website is the best medium to communicate with users from all over the world. It is therefore essential; it should be designed in such a way that users should be attracted and be engaged on the site. This is when a website can reach its users effectively (Poonam in UI/UX, 2021).”

The interactive design of the portal can be woven creatively with website content to capture user-attention and utilization.

This was affirmed in the study of Jisoo, Ahn et al. (2020) where they mentioned that the level of interactivity was effective for enhancing systematic processing and, in turn, increased intentions to learn about the website. The study emphasized that this relationship was especially necessary for those who had negative preexisting particular matter (PM) information attitudes.

Table 7. Summative Presentation of the Usability of the Universidad de Manila Faculty Portal Features

Portal Features	Mean	Rank
Appearance	3.99	2
Ease of Navigation	3.91	3
Content	4.00	1
Security	3.98	4
Performance and Efficiency	3.58	5
Interactivity	3.29	6

Table 7 shows that the respondents highest mean score of 4.00 was in the content of the portal. This was followed by appearance, third is ease of navigation, fourth is security, and last is interactivity. The findings indicated the there is a need to further review and improve the system's interactivity.

Guided by the cognitive ergonomics theory, the portal can aim to improve cognitive task performance by including user-centered design of human-machine interaction and human-computer interaction (HCI) to facilitate cognitive operations and enhance usability.

Table 8. Usability of the UDM Faculty Portal in terms of Access

Indicators	OWM	Rank
View subject schedule	3.70	1.1
View faculty teaching assignment	3.61	2
Downloading of Class List	2.52	4
Uploading of Lecture Materials	2.73	3
Interactive Discussions	2.41	5
Encoding of Grades	3.91	1

Table 8 shows the respondents assessment on the UDM Faculty Portal in terms of Access. The findings show that the respondent's primary access to the Universidad de Manila Faculty Portal is in encoding of grades and view subject schedules.

View subject schedule, view faculty teaching assignment, and encoding of grades are the most frequently accessed sections, while interactive discussions, downloading class list, and uploading of lecture materials encoding of grades are the least frequently accessed.

The findings indicated limited access of the respondents on the UDM Faculty portal. Based on the comment of the respondents, they do need to download the class lists. The areas that need improvement are uploading of lecture materials and interactive discussion.

A similar study on university portal was conducted by Evangelista (2008) in the university's Student Information System (SIS) of Nueva Vizcaya State University. This system is a secure, web accessible interactive computer system that allows user access to grade reports, transcripts, schedule of classes, and remaining balance for the semester and register for classes online. Students was allocated a unique identification number through the system. However, the focus of the present study is faculty portal and not the student portal.

CONCLUSION

Based on the findings, the researcher draws the following conclusions:

1. Respondents concurred that the UDM Faculty Portal features are user-friendly. However, the system's interactivity requires additional reevaluation and enhancement.
2. The faculty members rarely accessed the UDM Faculty Portal academic-related activities like uploading lecture materials, downloading class list, and engaging in interactive discussions.

RECOMMENDATIONS

Based on the findings the following are recommended:

1. It is recommended that the features of the UDM Faculty Portal undergo continuous system enhancement.
2. It is further suggested that ICTO monitoring of the faculty access to the UDM Faculty Portal on academic-related activities be made improvement of the system.
3. The University Information and Communications Technology Office (ICTO) may review and developed a strategic university-wide policy on the utilization of the UDM Faculty Portal.

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Post Covid Roadmap for Education Development: An Empirical Study of Academicians Opinion

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ABSTRACT

Education plays a vital role in one's life. The basic values are inculcated in human beings in the education institutions where they spend a large amount of time. However, the covid-19 Pandemic has changed the scenario and taken a toll over the entire education industry. The education system was struck hard by the massive pandemic that forced the students to switch to online mode of education. There have been several changes in the policies of education sector and the practices have been aligned in the similar manner. This study is quintessentially an attempt to understand the revamped education system after the covid-19 has normalized a little bit to allow hybrid classes or even a collaboration of conventional and modern practices in the education system (Jandrić et al., 2021). Especially in the developing nations, the academic framework post-covid has become an area of interest for many scholars. Several transformations have come up such as the teaching methods, strategies, policies, the curriculum, and other aspects of education like co-curricular activities as well. The objective is to analyze the prevailing situation and find a roadmap for

suggesting the educational institutions for implementing necessary changes that would be beneficial to the students in the long run. This will in turn let the specialists to improve the quality of education and training for individuals in the days to come. Sample of 197 Academicians were surveyed to know their opinion regarding Post Covid Roadmap for Education Development. Effective collaborations to incorporate innovation and technology in the education system, reviving the education system with lot more precautions and safety guidelines, Learning through learning platforms is possible due to smooth support provided by the digital and IT interventions and Organizations are instructed to carry out functional exploration, and utilize relevant demonstrating ways to deal with the educational loopholes are all post covid roadmaps and are effective for education development.

Key Words: Education, Roadmap, Strategy, School, Online, Covid-19, Pandemic, Teachers, Students, Universidad De Manila

Introduction

The covid-19 pandemic was a big obstruction to all the economic activities prevailing in the world. It initiated from China, in a city named Wuhan and thereafter spread the entire globe like wildfire. In an environment which typically had a lower humidity, that is less than fifty percent, the covid-19 was known to last longer (Su et al., 2020). Therefore, it became a huge concern for everyone, as it was affecting almost everyone with serious adversities in their health. The government decided to shut down the majority of places to prevent people from getting infected by the virus. The World Health Organization analysed the environment and suggested the administrations of all the countries to declare a medical emergency as all the people were subjected to the risk of the outrage which covid-19 had caused (Wang, & Wang, 2020). This furious news had an impact on all people and sectors. The developing nations took

necessary precautionary measures. The closure of travel restricted education systems' operation, the students switched from physical learning to online medium of education. For avoiding the social contact, the teachers started teaching through distance modes of teaching. This was a preventive measure against contracting the covid-19 pandemic. The news of first wave of covid-19 came in around June in the year 2020, the education system started reviving again, but this time with a lot more precautions and safety guidelines (Crawford et al., 2020).

The lockdown which was imposed in different nations to avoid the spread of virus, affected the education system in several ways. More than over 16 crore students in all the countries suffered a downfall in the education patterns. The students feared to go back to school, rather their parents were afraid of sending them back. The online medium of education has its own drawbacks, there was lack of training, lack of resources, capacity of schools to accommodate all the staffs as well as the students with proper social distancing, and the required support from faculties (Lau & Lee, 2021). Numerous states face an irregularity in their instructive strategy frameworks at all pre-college and advanced education levels. Not just due to the great shock which is coming about because of the rising number of covid-cases, yet in addition on account of the absence of coordinated and adequate vital investigations to foster schooling frameworks and address difficulties in all areas, including instructive strategies, educational settlement and the policies framed on account of this, instructive administration, the main curricula and the other regular and non-regular courses, the techniques of teaching, the productivity of instructor or the tutor, plans of expenditure and financing and the interaction of educators with the students and the nature of training results (Wei, et al., 2021).

During this emergency, numerous nations were reluctant to manage this instructive difficulty because of the low degree of educators to manage advanced training innovation, the low capacity of the high

school students to self-study, and the absence of logical points in the mother dialects of schooling. Additionally, clashing development and educational assessment frameworks, accordingly, invented internet presentation levels which offer unreasonably expensive and exorbitant educational programs that are subjects of policies framed by public administrative bodies. There is no question that the expenses of elective schooling frameworks are restrictive and can't be managed by low-pay residents. Many guardians need additional time at home to guarantee their youngsters' schooling and prosperity brings numerous issues (Peters, et al., 2020). Figure 1 shows the post covid strategies of education:

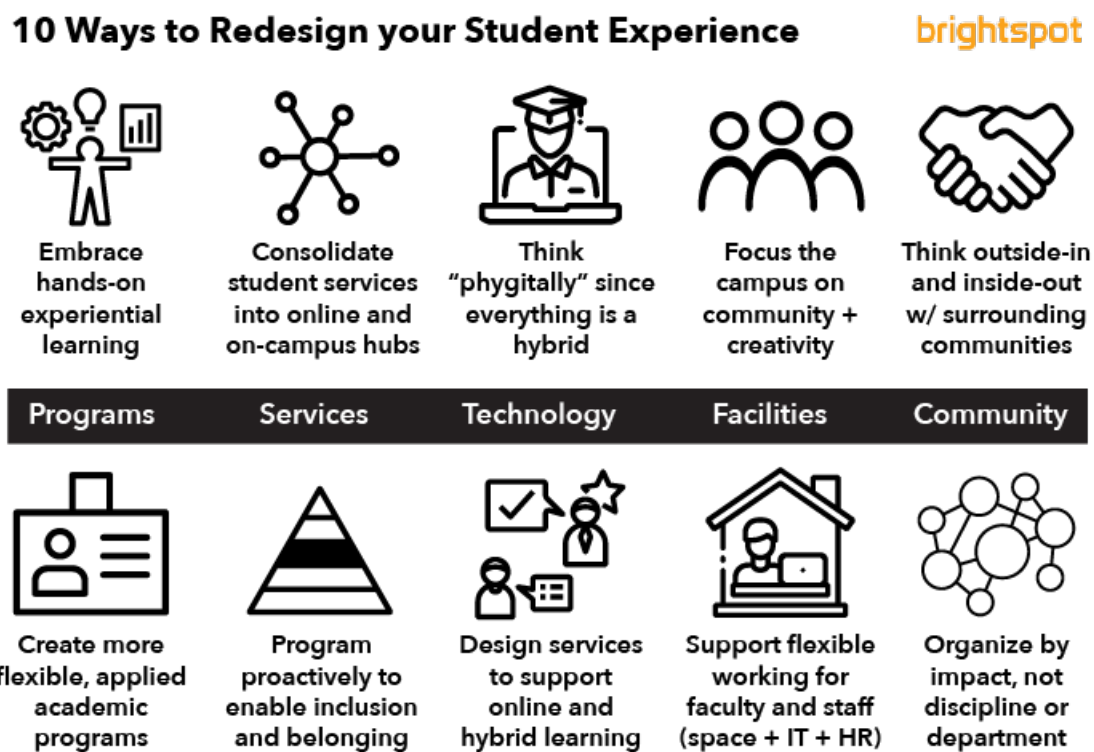


Figure 1: 10 Ways to Redesign your Student Experience
Source: Brightspot Strategy

They might be driven away from their occupations and accordingly hurt financial execution. A few nations have followed the technique of intuitive alleviation and study hall conclusion while deciding the

quantity of wounds among understudies while decreasing the base non-appearance; this method doesn't really guarantee that classes proceed. It has become fundamental for Governments to foster clear instructive approaches that address the past stage's impediments before the pandemic episode. These arrangements depend on distinguishing movements of every kind and cycles in all the previously mentioned educational domains to accomplish genuine renaissance in education to serve improvement programs for the students' prosperity and their career. In this study of roadmap to education post this pandemic situation, the main objective is carrying out functional exploration, and utilizing relevant demonstrating ways to deal with the educational loopholes post the pandemic scenario (Leach et al., 2021). This shall be done by ceaselessly developing learning results by expanding managerial and administrative productivity, eradicating the drawbacks, and limiting mistakes to fill the gaps which are causing lower efficiency in the educational sector.

LITERATURE REVIEW

The planet has experienced a drastic transformation in the wake of covid-19 pandemic. In the earlier years, education system had never faced such a havoc, but this pandemic has given a huge shock to the entire structure of academics. It has led to serious repercussions around the world especially in the advancements that happened earlier, most probably the ones which had great developments on the educational front. The investments which were made in the academics and co-curriculars for students were also hampered because of the financial crunch that happened in the world because of the lockdown. Several investors sponsored education institutions with funds to run the schools and colleges. However, the inflow of money was halted because of monetary depreciation all around the world. This would have an aftereffect in the post-covid period as well. Therefore, the roadmap of education must be laid based on the

external environment which has a direct or indirect impact on the education system.

The world is watching out to foster immunization or vaccines among the population, various clinical arrangements, and rules to re-control and lessen contaminations among individuals, particularly kids, and students at schools and colleges. The interference of educational and instructive projects and the decrease of academic interactions because of the rules subjecting suspension of tutoring and the wrapping-up of schools and colleges have contrarily impacted the students' results and the important years of childhood that address the country's social capital. This unfortunate chaos hurts the feasible advancement program supported by the United Nations, which will fundamentally affect national economies in large.

The unfortunate scenario which had troubled the economies have disrupted the education system and caused serious disturbances in the learning process of individuals. The efforts made in teaching students through a distance mode have been spectacular but still there's a huge gap with respect to the physical or conventional mode of education. There are loopholes existing in the newly adapted mode of education. After the lockdowns had been removed, the fear persisted and the parents were scared in sending back their wards, especially the mothers. This chaos may impact on the future income of the graduating school almost by over \$10 trillion. The basic guidance is imparted in schools and colleges hence, it is highly important in one's life. It serves as an important source which nourish the understanding and intelligence of students by helping them in major aspects such as social, psychological, security and all other things which are pertinent to face the ferocious things in life. This way, the terminations which have happened in schools have troubled the kids' development and general well-being along with the basic learnings they got in the institutions. Thus, the research work being done on the education system and its revamping methods suitable for several schools to rearrange the system which had been

crushed over, due to pandemic. One should assist schools with getting ready to offer that help and address the tremendous difficulties of the months ahead. An opportunity to act is currently; the fate of the entire age is in question (Williamson et al., 2020).

The covid-19 global pandemic has focused a cruel light on the weaknesses and difficulties that mankind faces. It has given an unmistakable image of existing imbalances and a clearer image of what steps forward we want to take, have an edge over them tending to the academia of more than 1.5 billion graduate students whose learning has been hampered because of school or college terminations. It is obvious that we can't get back to the world as it was previously (Wang & Jones, 2020). One of the most grounded messages in the connected report is that our normal humankind requires worldwide fortitude. We can't acknowledge the degrees of disparity that have been allowed to arise on our planet. It is especially vital that the finance support available in the world's emerging nations with interest in 21st century schooling frameworks; this will require the activation of assets and a great support from the already developed nations, specifically with obligation crossing out, rebuilding, and new financing. The greatness of this test is plainly clear with respect to the lack of resources especially in the digital front in Africa. For instance, just 11% of students in sub-Saharan Africa have a family PC and just 18% have family web, when contrasted with the half of students worldwide who have PCs in the home and the 57% who approach web (Wodon, 2020). As of now we see that the disturbances welcomed on by the pandemic are fuelling disparities both inside and across nations. We earnestly need venture and underlying change so that transient misfortunes don't develop into bigger, enduring issues.

China took a step ahead and closed the economy, until things got under control. The Chinese government body formulated specific guidelines to be implemented by the ministry of Education and the related affairs. In the January month of 2020 itself, the

administrative body asked the educational institutions to choose online and digital mode of education for the days to come. This was set up as a properly functioning formal means of teaching and learning as things started to worsen. This transformation took place in a huge scale. This decision also compelled the private and autonomous institutions to delay the semester exams which was supposed to happen in the month of February and March. From April 2020, nearby instructing started to re-open subsequently, for school graduates, beginning with graduating classes in secondary schools (Capano, 2020). By 11 May, all central area regions/districts and independent areas had recommenced nearby instructing for senior secondary schools and 26 allowed understudies back nearby in advanced education establishments, which means around 107.79 million graduate students, close to 39% of China's individuals or students' populace from kindergarten, essential and the primary school, along with advanced education organizations, had gotten back to grounds. The students graduating recently who are called for classes happening in their institutions nearby are needed to have their temperature taken for the duration of the day, wear defensive covers except for the times when they are outside or in generally safe conditions and eat independently from one another (Huang, 2020).

In certain urban areas, for example, Guangzhou and Shenyang, the entire Years 9 and 12 student population, staff and workforce were approached to take the COVID-19 nucleic acid analysis prior to getting back to grounds (Zhang et al., 2021). It is perceived nucleic acid testing has likewise been embraced by a few individual foundations, particularly advanced education establishments, as a preventive measure. To help schooling foundations' progress to web-based learning, the MoE gave on 4 February 2020 the "Direction on the association and the board of internet instructing and learning in customary advanced education organizations". The report mentioned advanced education foundations to utilize online stages to work with remote review and suggested 22 internet-based stages

in China fit for giving 24,000 advanced education courses to free (Zou et al., 2021).

There are two phases in which the covid-19 pandemic has hit the educational domain. One way in which there are just drawbacks and loopholes visible, which has obstructed growth and made it very difficult for the transformation of offline to online mode of education. This has come up as a shortcoming, wherein there have been visible moments of disparity and the inability to completely be aligned to the new medium. However, as it is said there's always a silver lining in darker clouds; the one thing which is commendable is the way teachers, staffs, families, and children have made collaborative efforts to make this happen and the good part is the students are still continuing the online mode of learning. The number of opportunities were also not less. There is a tremendous growth in learning via a plethora of learning platforms which are available because of the smooth support provided by the digital and IT interventions. the reestablishment of instruction, human association and prosperity should be given due weightage. Innovation, especially computerized innovation that empowers correspondence, coordinated effort and learning across distance is an impressive apparatus, not a panacea but rather an outcome or wellspring of advancement and extended possibilities (Liu et al., 2019).

However, one needs to be progressively concerned about a shift to the web-based learning from a remote location and it will fuel disparities, in the Global South as well as even in the most well-resourced corners of the planet. One must guarantee that digitalization doesn't sabotage security, free articulation, enlightening self-assurance, or lead to harmful reconnaissance. It is a deception to imagine that web-based learning is the way forward for all. Three main focused factors ought to be recollected always namely, the local and state funded academic institutions, basic education related products, and the corporates must also be able to

sponsor education so that individuals are not devoid of the fundamentals to learn and grow (Weng, & Zhu, 2020). This isn't an ideal opportunity to venture back and debilitate these standards, but instead to insist and build up them. There are chances to secure and propel public schooling, to strengthen worldwide normal merchandise, and to propel global participation as for continuation of the learning process.

The basic idea to construct the roadmap for education is to build on the fundamentals. The corrective action after covid-19 to revamp the education system can be done by committing to the system for the benefit of everyone. The inequalities in the world prevail because of lack of education. Thus, it is a social need for which everyone is responsible for providing others as well as taking the benefit for one's own self. The next thing which one must focus is on the right to education. This highlights the major issues and the need to tackle them for availing education. It rejuvenates the fact that education is the most vital aspect of everyone's life. There is a scope of discussion on a global level to reinforce the education needs. The most pertinent step in revamping education is collaboration (Larsen et al., 2019). The teachers, earners and other stakeholders could effectively collaborate and work on the same agenda to incorporate innovation and technology in the education system to showcase resilience and encourage the educators and learners to participate with greater interest. Promoting education shall reinforce the participation of individuals in the change required in the entire system. The other steps in the roadmap would be to protect and inhibit the traditional learning culture in the classrooms. Whether it is on a hybrid mode, the schools and the learnings provided within the campus shall never be halted without a proper cause. The covid-19 as a disease is very erotic and toxic to the environment (Abdelhafiz et al., 2020). However, with safety protocols, as much interaction is possible within the campus environment must be protected. Technology has provided many means to continue education even sitting at distant places. This has acted as a boon and more innovative solutions to

education can be helpful in the development of education. There is a need to educate the kids on the scientific front, wherein they must be guided to act rationally and find logics to the unanswered questions. Investing in education will go a long way. Therefore, a greater number of sponsors must add on to the list of financing education (King, 2020). Covid-19 has shown the true colors of one's who are in power. The individuals who have got the authority have higher chances of exploiting the nation and misusing their power if they aren't guided by proper values. Henceforth, the system calls in for a greater sense of solidarity in the global levels along with empathy and the need for humanity which in true sense is very minimalistic and must be abided by all.

OBJECTIVES OF THE STUDY

1. To know the opinion of academicians regarding Post Covid Roadmap for Education Development.
2. To know the effectiveness of Post Covid Roadmap in Education Development.

RESEARCH METHODOLOGY

Sample of 197 Academicians were surveyed to know their opinion regarding Post Covid Roadmap for Education Development. The study is empirical in nature and the primary data for the study was collected through random sampling method with the help of a questionnaire particularly designed for this study. Statistical tools like mean and t-test were applied to analyze the data and reach to end results.

RESULTS AND DISCUSSIONS

Table 1 is showing general profile of the respondents. It is found from the table that total 197 people were surveyed in which 52.3% are males and 47.7% are females. Among them 35.0% are from the age

group of 32-38 years, 41.1% from 38-42 years and rest 23.9% are above 42 years of age. 24.9% of the respondents are working as Directors in different educational institutions, 26.9% are policy makers, 19.3% are Principals, 11.7% are teachers and rest 17.3% are working at different positions in educational institutions. 20.8% of them are working in schools, 17.3% in colleges, and 29.9% in universities and rest 32.0% of the respondents are working in other educational sectors.

Table 1 General Profile

Variables	Respondents	%Age
Gender		
Males	103	52.3
Females	94	47.7
Total	197	100
Age profile		
32-38 years	69	35.0
38-42 year	81	41.1
Above 42 years	47	23.9
Total	197	100
Occupation		
Directors	49	24.9
Policy makers	53	26.9
Principals	38	19.3
Teachers	23	11.7
Others	34	17.3
Total	197	100
Organization		
Schools	41	20.8
College	34	17.3
University	59	29.9
Others	63	32.0
Total	197	100

Table 2 Post Covid Roadmap for Education Development

S. No.	Post Covid Roadmap for Education Development	Mean score
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1.	It is good to have hybrid classes or even a collaboration of conventional and modern practices in the education system	3.16
2.	It is advised to revive the education system with lot more precautions and safety guidelines	4.01
3.	Organizations are instructed to carry out functional exploration, and utilize relevant demonstrating ways to deal with the educational loopholes	3.97
4.	It is important to expand managerial and administrative productivity	3.65
5.	Nucleic basic testing is embraced by some individual foundations, particularly advanced education establishments, as a preventive measure	3.74
6.	Customary advanced education organizations are following “Direction on the association” and “board of internet instructing and learning” approaches	3.90
7.	Learning through learning platforms is possible due to smooth support provided by the digital and IT interventions	4.00
8.	Corporate to sponsor education so that individuals are not devoid of the fundamentals to learn and grow	3.31
9.	Effective collaborations to incorporate innovation and technology in the education system	4.11
10	Protect and inhibit the traditional learning culture in the classrooms	3.29

Table 2 is demonstrating mean values for the statements related to Post Covid Roadmap for Education Development. It is observed from the table that the respondent says that it is good to have Effective collaborations to incorporate innovation and technology in the education system with mean values 4.11 and it is advised to revive the education system with lot more precautions and safety guidelines with mean value 4.01. Learning through learning platforms is possible due to smooth support provided by the digital and IT interventions with mean value 4.00 and Organizations are instructed to carry out functional exploration, and utilize relevant demonstrating ways to deal with the educational loopholes with mean value 3.97. It is also found that Customary advanced education organizations are following “Direction on the association” and

“board of internet instructing and learning” approaches with mean value 3.90 and Nucleic basic testing is embraced by some individual foundations, particularly advanced education establishments, as a preventive measure with mean value 3.74. It is important to expand managerial and administrative productivity with mean value 3.65 and Corporate to sponsor education so that individuals are not devoid of the fundamentals to learn and grow with mean value 3.31. In respondent’s opinion it is important to Protect and inhibit the traditional learning culture in the classrooms with mean value 3.29 and it is good to have hybrid classes or even a collaboration of conventional and modern practices in the education system with mean value 3.16.

Table 3 Post Covid Roadmap for Education Development

S. No.	Post Covid Roadmap for Education Development	df	t value	Sig
1.	It is good to have hybrid classes or even a collaboration of conventional and modern practices in the education system	196	4.856	0.000
2.	It is advised to revive the education system with lot more precautions and safety guidelines	196	7.330	0.000
3.	Organizations are instructed to carry out functional exploration, and utilize relevant demonstrating ways to deal with the educational loopholes	196	6.863	0.000
4.	It is important to expand managerial and administrative productivity	196	2.146	0.017
5.	Nucleic basic testing is embraced by some individual foundations, particularly advanced education establishments, as a preventive measure	196	3.490	0.000
6.	Customary advanced education organizations are following “Direction on the association” and “board of internet instructing and learning” approaches	196	5.719	0.000
7.	Learning through learning platforms is possible due to smooth support provided by the digital and IT interventions	196	7.216	0.000
8.	Corporate to sponsor education so that individuals are not devoid of the fundamentals to learn and grow	196	2.754	0.003
9.	Effective collaborations to incorporate innovation and technology in the education system	196	8.736	0.000
10	Protect and inhibit the traditional learning culture in the classrooms	196	3.060	0.001

T-test was applied to know the significance of the various statements of Post Covid Roadmap for Education Development. Table 3 shows the results of the t-test. It is found that the value for all the statements is below 0.05 under significant column.

CONCLUSION

The study brings about the fact that choices made today with regards to COVID-19 will have long haul ramifications for the education industry. The scholar who are researching about education and the policy makers as well, along with other educators, instructors and networks should settle on high-stake decisions today. These choices ought to be directed by shared standards and they must be aligned to the future of education and the way it is going to be delivered to the students. Coronavirus has uncovered weaknesses; it has likewise surfaced phenomenal human creativity and potential. This is a period for practicality and speedy activity, yet it is additionally a time to ponder upon the structured framework of how the education system must be transformed. The study has covered the fundamental aspects which has hinted on the roadmap to the development of education standards in the near future. Everyone should hold onto the occasion which brings about turmoil because history has instructed time and again, that ground-breaking change can happen unexpectedly and frequently in the prompt fallout of any emergency. The study concludes that Post Covid Roadmap for Education Development includes Effective collaborations to incorporate innovation and technology in the education system, reviving the education system with lot more precautions and safety guidelines, Learning through learning platforms is possible due to smooth support provided by the digital and IT interventions and Organizations are instructed to carry out functional exploration, and utilize relevant demonstrating ways to deal with the educational loopholes. It is also found that all the post covid roadmaps discussed in the study are effective for education development.

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The Online Shopping Experience of UDM Faculty Members in Manila's Market Place

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ABSTRACT

This study is current and relevant in the new normal of understanding online shoppers' experiences on the online marketplace page. For UDM faculty, online enterprises are popular and convenient. The study focuses on the students' online purchasing experiences in Manila's market. This study intends to provide an overview of students' online shopping experiences and reactions by identifying important comments, consumer experiences on the web that focus on browsing, purchasing, and online flow. The purpose of this study is to evaluate online buying experiences from pragmatic, physical, and ideological perspectives. The researcher employed phenomenology as a qualitative research approach to collect participant responses from twenty customers who varied in terms of consumer experience, gender, and age. During the outbreak, participants were shopping in Manila for about a year. Based on online data and a guide question, the interview was personalized to the

participants. Faculty can readily visit the Online Market Place in Manila. Furthermore, they buy frequently because of the price, which advantages them as buyers, but they are skeptical of con artists and fake buyer/sellers.

The findings revealed that the obstacles faced by purchasers include product complexities and meet-up changes, as well as the central issues of online trust and social connection. Despite the fact that some product acquisitions are tough, the study discovered that the appropriateness, price set, and seller ties retained clients acquiring on the web market. Despite providing valuable insights into the internet shopping experience, this study has several drawbacks. The study is based on a qualitative inquiry with a total of twenty participants that was done and undertaken primarily in Manila; future research should involve populations from various areas. There are numerous potentials for future research to build on these findings. One of the suggested areas for future research is the creation of a typology of online encounters and circumstances. This study adds to future research on similar topics and is part of a growing body of work on online shopping in the marketplace.

Keywords: Buyers, *Experience, Manila, Online, Market Place, Online shoppers*

INTRODUCTION

What is the most important factor you will consider if you are about to purchase products from online stores? Currently, faculty members are fond of purchasing materials through social media, and its accessibility has vastly improved. Social media has played

such a significant role in our daily lives that every person on the opposite side of the globe can now communicate with ease. They can also search for information at any time, upload their daily photo, play games from a distance, and purchase items online. Currently, online shopping is widely accepted as a means of acquiring goods and services. Since its inception in 1994, the expansion of the guaranteed online shopping channel has increased significantly. Suppose you are browsing the internet on your laptop when you remember that you need to purchase something for your next class. There are numerous options provided by various online retailers. However, the exact piece you seek is missing, and your desired product cannot be located due to incompleteness. How would you feel if you realized that online shopping is a widespread fad that cannot meet your needs? Especially if your program stands out from the rest. Significant demographic differences play a significant role in analyzing the majority of consumers' behaviors and responses. In addition, there are resources to consider for a better comprehension of consumer behavior and the structure of a more successful and convenient market presentation. Current studies of online shopping have never addressed the experiences of UDM faculty members, despite the fact that they represent a significant demographic portion. The faculty at UDM are renowned for their eagerness to learn and adapt, intelligence, awareness, insights, access to a variety of resources, and expansive view of responsibilities. This study aims to gain a deeper understanding of the experiences and interactions of UDM faculty in UDM Buy and Sell, as well as their potential suggestions for the enhancement of the aforementioned Facebook page.

Not only is multi-channel shopping behavior a possibility, but it also represents the vast majority of shopping behaviors and modifies the overall consumer experience. The focus of this paper is on online shopping experiences.

Prior research has focused on consumption experiences (Sherry and Fischer, 2009), shopping motivations (e.g., Babin and Darden, 1996), and consumer experiences on the web with an emphasis on "browsing and flow" online (Hoffman, Novak, 1996, 2009). Although their contributions are numerous, these studies have focused on individual behaviors or experiences in a specific channel. In the literature, these contexts are quite separated, whereas consumer practices are becoming increasingly cross-channelled. In addition, the shopping experience has not yet been studied.

This paper intends to examine online shopping experiences as a whole, not just purchase experiences, taking into account online and offline shopping practices as well as the appropriation of commercial websites.

Along with the mobility of shoppers and the dematerialization of purchases, the co-creation of products and services by customers is a trend in e-commerce. In fact, private labels utilize the Web 2.0 in a co-creation process that extends beyond merely personalizing products. Reebok, for instance, invites customers to design a completely customized shoe as a one-off in order to encourage other customers - via Facebook, Twitter, e-mail, and beyond - to adopt their own restyle. This mass customization provides customers with autonomy, similar to a free zone where they can experience new things. Does the shopping experience remain the same with the increased use of internet shopping facilities and the introduction of new online shopping experiences? What do online consumers experiment with? These new shopping experiences are crucial considerations for e-retailers in the context of the Internet, where trust is necessary to facilitate electronic transactions (Grabner- Krauter and Kaluscha, 2003). Indeed, do online shoppers' experiences differ from those of previous generations? This investigation focuses on online shopping experiences.

This study provides a literature review on online shopping experiences and online trust. The focus group research methodology is presented. The findings shed light on the physical, ideological, and practical aspects of the online shopping experience. The results also indicate that online shopping experiences vary greatly based on certain personal characteristics, social interactions, and situations, and that consumers place a great deal of trust and confidence in recommendation agents.

Experience and consumption

Experience means a test, an attempt, and experimentation, or knowledge based on sense experience as opposed to a priori knowledge. Individual learning facilitates experience. Experience can be revealed (mystical experience), so it's part of subjective insight. Anthropologically, experience is how each person experiments with his culture (Bruner, 1986). Experience differs from behavior, which is visible and different from the situation.

Experience is a personal and subjective moment that can build and transform a person's life (Arnould and Thomson, 2005). The emotional and sensitive dimension is the most important, followed by the cognitive dimension (Addis and Holbrook, 2001). Whole shopping experience (Arnould et al., 2002). Consumers live in many ways, depending on social context, products and services, and personal relationships (Edgell et al., 1997). The environment not only affects the shopping experience, but also the personal experience.

In addition to the functional dimension of consumption items, Heilbrunn (2010) identifies three dimensions of consumption experience that can be analyzed as latent dimensions of consumption (Filser, 2008). In fact, these components incorporate three important aspects of the concept that have been highlighted in other works. A physical dimension associated with the fact that the experience occurs somewhere, in a particular context, and over time.

A dimension relating to the object's capacity to promote values and an imagined universe. This ideological dimension relates to the ways in which consumer attitudes and behaviors are susceptible to change. This aspect of experience refers to marketing research on shopping value and consumer conduct (Holbrook, 2000). While pragmatic dimension, that is, the use of tools, artifacts, and all shopping practices that structure consumption and shopping rituals. Thus, it is a dimension based on practice; depending on the culture, consumption may be defined by a precise set of acts and gestures so that consumers "appropriate" the brand and products (Holt, 1995).

Online shopping experience

A framework for experiential learning based on the notions of flow and cognitive absorption has been designed (Hoffman and Novak, 2009; Novak, et al. 2000; Agarwal). This framework accurately analyzes general online consumer behavior. The central premise of these models is that the online environment is intrinsically interactive, with consumers interacting with websites, other consumers, and the interface itself. Prahalad and Ramaswamy (2004) offer a different viewpoint; they consider a personalized consumer experience and refer to the concept of co-creation. Consideration is given to the unique interactions between consumers and businesses, with new product development serving as an illustration.

Marketing research provides substantial evidence that shopping is a social activity. Thus, consumers can share co-creation experiences with their social network (family, friends, members of the community: all types of companions). Surprisingly, however, previous research on online consumption experiences has only investigated the individual experience and not the global online experience with a companion. In addition, to the best of our knowledge, online group shopping has not yet been the subject of research. According to the literature on shopping behavior (and

online shopping), consumers' online shopping motivations may be hedonistic or utilitarian (Bridges and Florsheim, 2008).

Trust, experience and online shopping

Customers learn from their buying experience and product use. These experiences shape their trust and behavior on the website and generates word-of-mouth communication, through online and off line social networks. Online trust is developed over a process of repeated visits to a site as a user gains experience and believes that his/her expectations are met during the visits, explain Urban et al. (2009). Trust is thus considered as a process, a permanent and continuing consumer experience.

Therefore, this study examines the online shopping experience through the three aforementioned dimensions. The extensive research presented above compels us to consider two broad claims. The first addresses the theoretical foundations of online experiences. Are Heilbrunn's (2010) three dimensions of experience applicable to the online shopping experience? The second research proposal focuses on the varying online shopping behaviors of consumers. Those who have shopped online before are actually more familiar with e-commerce and should have greater confidence when shopping online, particularly the youngest shoppers, the "digital natives" who are accustomed to the internet environment. Their online shopping experience must be distinct: they may be more inquisitive, fond of trying new brands, and hungry for novelty.

METHODOLOGY

The interview guide questions asked about the active experiences of multiple people or a phenomenon affecting a specific group. The researchers based their data regarding the development solely on the participants' accounts. The qualitative method was utilized by the researchers in order to understand the various perspectives and experiences of the participants. Utilizing phenomenological

inquiry, researchers were able to determine and explain the domain of the UDM facultys in relation to their online shopping experiences. To complete the study, the researchers complied with the criteria for data collection by selecting participants who met the specified criteria. Participants must currently be faculty at Universidad de Manila, be a member of any Buy and Sell Facebook Page, and have made at least three (3) purchases via Buy and Sell Facebook Page. Important Informants must have made at least three purchases through Buy and Sell Facebook Page. The researchers communicated with their prospective participants via social media platforms like Facebook and Messenger. They used it to request permission for the interview and to obtain minor information from the participants.

A content analysis was conducted in order to reveal, on the one hand, the use and appropriation of websites and the shopping environment, and, on the other hand, to identify the adaptable strategies employed during online shopping experiences.

RESULTS

Dimensions of online shopping experience

Table 1. Three-dimensional online shopping experience

<i>Dimensions of the online experience and components</i>	
Physical dimension	- “When we are in front of our computer, time passes quickly” (Participant 1). “We have to think it over, because it [the computer he
Time pressure	wants to buy online] costs a lot, so we must spend a lot of time on it” (Participant 2). “

Companions	- « You are going to need some time to look through [every website]. (Participant 4). "I am not a compulsive consumer: I wait and wait until the product is sold at a discount," says the person who does not have this problem. (Participant 5). "If only I had a little bit of time to go shopping downtown, I would probably spend half of the amount of money that I actually spend every month. " (Participant 3)
Visual variables: web design, colours, website ergonomics and ease-of-use	- "My coworker recommended that I take a look at the website, so I did. (Participant 6). When people ask me about my social life, I always tell them, "I have a large number of friends who shop on Manila Marketplace" (Participant 4). "When something has a high price tag, we consult with our circle of friends to find out if there is a way to get it for a lower price. In addition, we ask for their feedback on the item and determine if it is worthwhile to purchase based on what they have to say about it." (Participant 1). For me, it is important that something feels good in my hands, so I never shop for clothes online because it isn't worth the time because the style and even the color won't be the same when I receive the item. (Participant 7). The ergonomics of the front page...many websites display the garments from every conceivable angle (Participant 8). "First and foremost, they have to capture my attention, and then the content has to make sense." (Participant 4). "The vision is reduced [on mobile phones], and it is not as attractive as it is [online]" "The vision is reduced [on mobile phones]" (Participant 9).

Ideological dimension	- « I try to buy useful items, contrary to my husband, who buys for fun on tipidPC, because he is a computer technician” (Participant 3). “I buy a lot online, but contrary to my husband, I don’t buy useless things online. I buy a lot of things... but useful things. I only buy useful stuff. (Participant 1). “it’s some specific stuff that we need to have that we cannot find in other market place so [...] sometimes we need specific stuff for our pub”. (Participant 2). “When you buy something, if you are not too silly, you want the best price for the same quality. So me, I buy a lot of furniture looking for the best quality-price ratio; I start with a benchmark of prices, I browse websites if I need something [...] you know what I mean!” (Participant 2). « Sometimes, you want to read a book, as if you were craving for food. It’s now! and immediate! » (Participant 2). « For me, the internet arouses my desires!” (Participant 3). « I don’t want to buy online... I have to buy a TV set... but I will buy it because some people I know bought one before, as Manu [one of his friends], who is crazy about the internet, and therefore has experience of it, I’m ready to do it now, even though I am not particularly in favour of it...” (Participant 4). « I’ve used online stores for a long time! Well, I don’t like shopping... I shop online, but I really don’t like shopping in stores.» (Participant 4).
Utilitarian and/or hedonic value of shopping	- « When I come across a very interesting product or item on a website that is unfamiliar to me, I look it up on search engines to see what other people have to say about the seller. (Participant 1). "I almost never look at anything on the internet" (Participant 7). "Sometimes, while I am chatting with my friends, I will browse the internet so that I can say to my friends, "Hey, look at this gorgeous t-shirt!" and then send her a link to the website where she can purchase it." (Participant 8). "I bookmarked the website and made a note of the sale dress," you said. (Participant 9). "In most cases, I don't even bother to bookmark the

websites because I'm already familiar with them."
(Participant 1).

(browsing history, bookmarks)	- "You are able to set something aside for a little while, say twenty minutes or half an hour." (Participant 4). "All you have to do is click on it once more, and it will be reactivated within the next twenty minutes," she said.
Shopping tools (shopping cart, online comparison)	"This gives me time to think about it, and then I re-activate..." (Participant 3). "I add [products] to the shopping cart, but then I take them out again! I give up!" (Participant 8). "I also put [products] into the shopping cart, and when I feel strong enough, I move on to something else. However, when I want to indulge myself, I say: "let's go! " and we go shopping. Let's order online" (Participant 3). "I never use the shopping cart because by the time I have saved up enough money to purchase it, it will no longer be available for purchase!" (Participant 4). When I come back to the website in three months, the shopping cart will no longer be there, so there is no point in using it. (Participant 5).

The first dimension is physical and is related to the fact that the 2020 pandemic will begin with an online shopping experience on Facebook's marketplace. Respondents identified the following components of the physical dimension of the shopping experience: the design influence and visual aspects of the websites, the use of customer reviews and opinions shared by customers, and the time pressure.

In addition, respondents indicate that they may converse with friends while shopping online. Indeed, they emphasized that they rely on their friends and family for shopping assistance. They require feedback on the products that interest them. For instance, one of the faculty members explains that when she browses websites for fashion brands or accessories, she sends a link to a

friend with whom she is simultaneously chatting (on Facebook). By engaging in these online social interactions, the shopper places his or her decision-making within the context of a collective process and a social consumption framework. This Facebook-based group process is restricted to a small number of close friends. The analysis also clearly underlines a gender issue in the shopping behavior: the social links that are enabled in shopping patronage, the presence of companions, the nature of shopping trips are highlighted by the female respondents.

The value of shopping can be used to assess the ideological aspect of an online shopping experience. According to the literature, the interviewed consumers may place a hedonistic or utilitarian value on shopping. The shoppers claim that they shop online because they want to indulge themselves, because it is convenient, or because they seek the best price-to-quality ratio.

Regarding the pragmatic aspect of the online shopping experience, various browsing tool applications have been highlighted. Some of them are quite intriguing, such as the virtual shopping cart that is an integral part of certain online procedures. Shoppers may place items in an online shopping cart in order to take advantage of online price promotions, to set aside items they like, or for fun – even if they do not intend to purchase the item. This practice transcends purchase intent and is an integral part of the online shopping experience.

Trust , privacy, and the generation Y

Consumers have indicated that site design and recommendation are variables that can influence online trust. The respondents have faith in the websites based on word-of-mouth, the number of customers, and customer ratings and reviews. However, they argue that they do

not need more specific information about the sellers; the public information is sufficient.

Table 2. Online trust: selection of marketplace account

Online trust	Marketplace accounts
Site design and post	<i>“Because of the design of the website, as a consequence, we either trust it or don't trust it. As for me, whenever I visit the website, I think to myself [...]. After examining the various sections, the website design, and the tab providing information about the services, as well as the number of customers and the location of the site, I make my decision. (Participant 5). "The presentation of the website might play a role in the manner in which I [experience increased self-assurance]."</i> (Participant 6) <i>« Accessibility is another really important factor to consider! When we go to a website for the first time, the ease with which we can sign up for an account can make or break our decision to continue using the site. I appreciate how uncomplicated and welcoming everything is! (Participant 5). " The web page looks great, it's very appealing " (Participant 4). My shopping habits have been altered as a result of the flashiness of this website. There is something about the layout of the site that causes me to behave in a different way. (Participant 2). "The website needs to be appealing to the eye, and then it needs to be simple to navigate." (Participant 4). "it is required that a bag be displayed on the girl's hand." [...] If there wasn't a model of it, I wouldn't be able to purchase it. (Participant 3). "It is of the utmost significance that the product be brought to the forefront." (Participant 8).</i>

Customer ratings and Social interactions	- <i>"I order and buy on major sites, like Lazada Malls, and I don't even give it a second thought [...] I have purchased cosmetics from a website because a friend of mine had recommended it, and I have also purchased clothes from a small Marketplace shops managed by a couple who travel and sell original products, because it had been recommended to me by a friend, so I did not question whether or not it was a legitimate business. (Participant 6). "If something is very expensive, we will ask our friends if they can get it for a lower price or if they have any thoughts on whether or not it is something that is worth purchasing," (Participant 1). "I have viewed this website through the YouTube platform." (Participant 6 - faculty) "A rating is assigned to each internet profile based on the reviews and comments made by customers. There are ratings for that. (Participant 3). « There are testimonies, and there are stars. (Participant 5). "For sellers, for instance, there is the total number of sales; you are free to check both the total number of sales and the satisfaction rate... (Participant 3)..."</i>
Age / generation of web users	<i>"Once you log onto a social networking site, your safety is no longer guaranteed. (Participant 2). "I would rather not shop online because you never know what you're going to get!" (Participant 3). "I do not have faith in the online platform. I prefer to shop in more conventional establishments" (Jessica). "I've never made a purchase through the internet before" (Fiona). "I am not accustomed to shopping online and most importantly purchasing things (Participant 5). "Cash is better [than electronic payment] because we are more aware of how much money we are spending. Perhaps this is because I used to play the game "Monopoly" when I was a kid (Participant 2). "I never visit websites hosted in other countries or that are unknown to me." « Most of the time, I do my shopping on Shopee</i>

websites or I watch live selling. »
(Participant 1)

Participants shop online less frequently, and above all, they are much more followers: they only browse extremely popular products and live sales. This skepticism is revealed by their shopping experiences, specifically their use of personal information. They are all hesitant to provide personal information online, with the youngest respondents being the most reticent to do so. In addition to faculty members who are hesitant to provide their credit card number online (only one female faculty considers the risk-perceived do not check her e-commerce utilization).

DISCUSSION

This study demonstrates that the theoretical framework of consumption is applicable to the online context: the dimensions of the online shopping experience allow us to analyze the global online shopping experience of consumers and their companions. Regarding the physical aspect of online shopping, from the search for information to the final purchase, it is a social and shared experience. Indeed, respondents report that they shop online with friends and that they shop differently with family and peers. First, consumers note that online shopping is not typically a solitary activity: they may be with someone, who can be compared to a companion or not. Indeed, they may converse with their companions or share their experience with a bystander. Peers, as opposed to family members (parents for a faculty member or husband for a woman), may enhance the experience. They express more positive affect and hedonic shopping value when shopping with a friend compared to shopping alone or with a family member, which is consistent with the findings of Borges, Chebat, and Babin's (2010) study on offline companions. In terms of social considerations, it is interesting to note that gender influences

online shopping behavior. As demonstrated in the literature (e.g. Gefen, 2003), men and women have distinct online social presences. The female respondents indicated a greater need to share their experience than their male counterparts.

Concerning the pragmatic aspect of the online experience, our research reveals that, similar to traditional store shopping, consumers declare different online patronage behaviors depending on the context and situation. Shoppers may utilize the websites in a variety of ways: they may open multiple tabs at the beginning of their session, utilize their bookmarks and browsing history, and visit particular websites. Concerning the use and rituals of other Internet tools, such as the shopping cart, this research demonstrates that shoppers may place items in an online shopping cart with or without the intention of purchasing them, in order to secure online price promotions, to set aside items they really like, or for fun. These results align with those of Close and Kukar-Neely (2010).

These distinct activities and uses of the internet define distinct online shopping experiences, not distinct shoppers. Depending on the time of day, the context (at home with a cup of tea or at school during lunch), and the company (friends, parents...), a single online shopper may have different experiences. While extensive literature has emphasized that the online shopping context is unique and may require a new focus on shopping behaviors, Rohm and Swaminathan (2004) note that "there is a dearth of research investigating typologies in an online shopping context." They presented a classification of online customers of a single online retailer within a single industry. Consequently, the clusters may differ in another online context. This study suggests that it would be interesting to develop a typology for online shopping. Regarding the nature and function of trust in online shopping behavior, it is intriguing to note that respondents trust pure players and brick-and-mortar businesses not because of the

guarantees or trustworthy relationships the vendors may offer; consumers report that they do not even seek out this information. They reduce their perceptions of risk by relying on their peers and friends, as well as by observing the number of customers on the websites. This result is consistent with the findings of Bart et al. (2005), who identified a variety of site variables that influence consumers' trust (in addition to the brand and fulfillment variables). They confirmed that privacy and security are crucial when designing a website, but not as crucial as navigation and presentation.

This study demonstrates that despite the fact that it is essential for online vendors to provide insurance to their customers in order to reduce their risk perceptions, as established in the literature (e.g. Kim and Bensabat, 2006), the online shopping experience is also influenced by the shopper's offline and online social network (friends, blogs, online expert groups, etc.).

Regarding online privacy, young consumers are reluctant to reveal personal information. They are hesitant to provide personal information that could be stored by a "Big Brother" company that could monitor and exploit their entire lives. In contrast to the digital native stereotype (Prensky, 2001), the interviewed youth demonstrate hesitation and mistrust toward online shopping. However, neither act as digitally naive (Hargittai, 2010). Their behavior is characterized by skepticism and caution, but is highly rational. In this context, lying on forms or questionnaires is an extremely rational action. A recent national survey conducted in France (Caisse des Dépôts - Acsel in 2010) revealed that a third of Internet users provide false information when completing online registration forms. They do so to avoid advertisements (reported by 64% of respondents), because they do not wish to provide personal information (60%), and because 28% of them wish to remain anonymous. In addition, people are now aware that personal information posted online can be used without their consent in the

future. The proliferation of social networking sites and media discussions about privacy may explain this concern.

CONCLUSION

The faculty have spontaneously described their fear of online shopping, stating that they have never given their credit card number or purchased anything online out of fear of "what may happen." Online shopping was not a novel experience for the 30 to 63-year-old respondents in the focus groups, so they have encountered some issues, but their trust in sellers has increased. If some of them refuse to provide personal information, it is not because they believe information revealed during an e-commerce transaction could be misused, but rather because they fear that personal information could be compiled into a database. They do not want companies to retain their personal information and avoid being considered a marketing target.

The dimensions of online shopping experience allow us to analyze the global online shopping experience of consumers and their companions. Online shopping is social and shared, from information seeking to final purchase. Respondents say they shop online with friends and differently with family. First, online shoppers note that they are often with someone, a companion or not. They may chat with friends or tell someone else about their experience. Peers may enhance the experience, but family (parents for a professor or husband for a woman) does not. Gender moderates online shopping behavior socially. Female respondents said they should share more than men. As in traditional store shopping, consumers' online patronage behaviors vary by context and situation, according to our research. Shoppers visit websites in different ways: they open different tabs at the start of their session, use bookmarks and browsing history, and visit specific websites. Beyond purchase intentions, shoppers may place items in an online shopping cart with

or without buying them to secure online price promotions, to put aside items they like, or to have fun.

RECOMMENDATIONS

Future research may also differentiate between online and offline communities, such as family members, peers, and friends, who play a significant role in the motivations, cultural context, and attitudes. With an approach that permits the examination of group experiences, researchers could delve deeper into the dimensions of online shopping experiences and examine the online shopping experience within a socio-cultural context.

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Research Capability of UDM Teaching Personnel: Its Correlates, Determinants, and Implications for University Research Capacity Building Program

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ABSTRACT

Academics and practitioners have recently shown a remarkable and unprecedented interest in research capabilities. This is relevant, since the Commission on Higher Education (CHED) has institutionalized research and encouraged teachers to participate in it to support evidence-based practice, decision-making, policy creation, and program design. On these grounds, a study was conducted to examine the research capabilities of Universidad De Manila (UDM) faculty and discover its correlations and drivers. The research included descriptive, correlational, and explanatory designs. It administered survey questions to 92 people. Using descriptive and inferential statistics, the data was evaluated. The findings indicated that instructors were marginally competent of performing research and had neutral views about it; they were motivated to write research; they encountered significant challenges throughout the research process; and

they were marginally capable of action planning. They demonstrate mentorship potential as well. In addition, mentorship and action planning abilities, desire to write research, attitudes toward research, and the quantity of studies completed by instructors were, to varying degrees, correlated with their research competence. Notably, the research competence of instructors revealed a weak but substantial negative correlation with their age and years of employment. Therefore, this competence declines as individuals age and accrue years of service. The desire to do research, the quantity of completed studies, and age determined research competence. Conclusion: research competence may be identified and predicted based on how driven instructors are to write research, how prolific they are in research, and how young they are when they embark in this arduous activity. The investigation found and suggested subjects for continued professional development.

Keywords: Research capability, teaching personnel, correlates, determinants, implications, research capacity building program, UDM

INTRODUCTION

Under Republic Act 7722, also known as the CHED Act, higher education institutions are required to respond to the need for social reform. The mission is to aid the poorest of the poor, the disadvantaged, the oppressed, and the disadvantaged (Elman, 1998). Priority number one for any state university or institution is to carry out the necessary responsibilities to ensure sustainability and, ultimately, a high standard of living in the community it serves.

The difficulty posed by globalization necessitates a rigorous focus on research to develop knowledge and uncover innovative techniques for enhancing the quality of human life. Therefore, all faculty and

staff members are encouraged to conduct high-quality research. Those who produce outstanding papers "enjoy the status of scholarly preeminence and academic maturity" (CHED, 2002).

Research competence is the capacity or potential of individuals, institutions, and systems to conduct and disseminate high-quality research in an efficient and effective manner. Institutional considerations encompass the incentives, economic, political, and regulatory contexts, as well as the resource foundation upon which the context rests.

Faculty members in institutions of higher education should be interested in research. It is acknowledged that research awareness is a crucial factor in influencing innovations. Prior to implementation, any changes to the organization of education, school programs, initiatives, and activities, as well as methods and techniques, must be subjected to study, as only research can provide empirical evidence of their effectiveness or ineffectiveness. In other words, all global development education efforts are founded on empirical evidence.

Tourism and hospitality management (Abarquez et al., 2013), nursing (Li et al., 2019), dentistry (Manongsong et al., 2018), business entrepreneurship and accountancy (Narag, et al., 2016), maritime (Formeloza et al., 2013), and higher education in general (Salom, 2013; De la Cruz, 2016; Kho et al., 2017; Salem et al., 2018 (Pati, 2014; Abarro et al., 2016; Wong, 2019; Ulla et al., 2017; Udompong et al., 2014). This indicates that, compared to the past, a greater number of experts and professionals today recognize its relevance for enhancing practice. Consequently, its significance extends beyond evaluating the knowledge and skills of a researcher.

Research capability refers to the ability to conduct high-quality research (Salom, 2013). Ismail et al. (2012) defined it as the "ability to conduct data collection, including planning and selecting appropriate data collection tools or instruments, identifying an

appropriate method for interpreting and manipulating data, and applying an appropriate statistical tool for the test of significance" (p. 245). This competency may change over time due to ongoing and relevant capacity-building efforts (Manongsong et al., 2018). Additionally, it requires the consistent application of acquired knowledge and skills to produce research output and innovation. It requires a great deal of thought on the part of the participants, including their desire to participate, their attitudes toward it, and other skills necessary for carrying out the meticulous and methodical research procedure.

Research competence as a concept may refer to a variety of actions, activities, or training programs designed to equip aspiring or experienced researchers (Mani et al., 2010). On the flip side, it could demonstrate research-related skills, abilities, literacy, or competence. The former is the process of acquiring research-related knowledge, skills, attitudes, scientific literacy, ability, and competence, whereas the latter is the outcome. Holt et al. (2011) theorized that there is a misunderstanding between the concepts of competence and capacity. In contrast, "capability defines an organization's or unit's capabilities" refers to a person's ability to perform a task (Holt et al., 2011, p. 5). However, It was acknowledged that these phrases are quite similar. Consequently, they are frequently used interchangeably in academic writing. In a causal model, scientific literacy and research ability were evaluated separately (Udompong et al., 2014).

Numerous studies on research capability and research skills have been conducted (Abarro et al., 2016; Abarquez et al., 2013; Basilio et al., 2019; De la Cruz, 2016; Formeloza et al., 2013; Gomez et al., 2013; Ismail et al., 2012; Kho et al., 2017; Macabago, 2017). (Basilio et al., 2019). Others have highlighted research competency and research literacy (Manongsong et al., 2018; Gomez et al., 2013; Formeloza et al., 2013; Davidson et al., 2015; Udompong et al., 2014). (Udompong, et al., 2014). It was discovered that teacher-researchers have strong

conceptual and technical and computational skills (De la Cruz, 2016). According to Abarquez et al. (2013), the Tourism and Hospitality Management faculty had a thorough understanding of the technical aspects of conducting research. Teachers in higher education are highly capable of composing a research proposal and a publishable article, but they are only moderately capable of conducting classroom-based research (Abarro et al., 2016). Other aspects of action research, such as statistics, data organization, literature searches, and report writing, were more difficult for instructors (Morales et al., 2016). According to Narag et al. (2016), Business Entrepreneurship and Accountancy faculty were well-versed in research knowledge and methodology. Master educators are adept at planning experimental studies, selecting and creating research instruments, selecting the appropriate statistical tools, and composing scholarly papers (Basilio et al., 2019). Macabago (2017) discovered that public school teachers lacked confidence in their capacity to conduct research.

Previous correlational studies have found significant relationships between research time, teamwork, leadership support, and training opportunities and the research competence of nurses (Li et al., 2019); between the employment status and research competence of Business Entrepreneurship and Accountancy faculty (Narag et al., 2016); and between attitudes toward research, particularly its motivational factor, and the research competence of Dentistry faculty (Baker et al., 2004). (Macabago, 2017).

In explanatory studies, the perception of Indonesian foreign teachers was influenced by their capability to conduct action and classroom research, accounting for 7.45 percent of the variance of the former (Pati, 2014); the training attended related to research, attitudes toward research, and knowledge about research can predict Master Teachers' research capability, accounting for 66 percent of the variance of their research capability (Pati, 2014); (Wong, 2019). This is the only study to quantify these factors' effects on research

competence. Consequently, it is necessary to broaden this line of inquiry.

Section 8 of Republic Act (RA) No. 7722 stipulates that the Commission on Higher Education (CHED) is responsible for the development of the research functions of Philippine HEIs. CHED is also tasked with facilitating collaboration and sharing of expertise between and among higher education institutions (HEIs), research agencies/organizations, and individual scientists and researchers, which are regarded as essential mechanisms for promoting and developing research capability and increasing research productivity. Lacanaria's (2008) study on Faculty Research in Higher Education Institutions: Extent and Hindering Factors concluded that faculty engagement in research activities fell short of institution expectations and CHED regulations. Elements pertaining to the nature of research capacity and attitude, as well as the research climate of the workplace, significantly hindered faculty participation in the review of research.

To provide research outcomes, however, instructors must learn and improve their research skills. However, they cannot do so on their own, so the agency and its partners will collaborate to enable instructors to acquire and cultivate the knowledge, abilities, values, and positive attitudes that can improve the work of every researcher. Then they may fully accept the policies. On the basis of this premise, a study was conducted to evaluate teachers' research skills and identify their correlates and antecedents. It would also identify opportunities for teachers' professional development. The outcomes of this evaluation can then be used to inform the design of an intervention.

METHODOLOGY

Ninety-two (92) instructors were given descriptive-correlational and predictive analysis techniques using survey questions created and

adapted by researchers. Based on the literature, these questionnaires contained the 12-item capability to conduct research, the 9-item attitudes toward research, the 14-item motivation to write research adapted from Macabago, (2017), the 11-item on difficulty and non-difficulty in the research processes by Morales et al. (2016), the 9-item action planning skills, and the 5-item mentoring skills. Both the modified and original questionnaires were submitted to two experts for face-to-face and content validation. The physical instrument includes fundamental instructor profile information. The collection of data was made possible by adhering to the guidelines, requesting authorization from authorities, and obtaining participant consent. Regarding research capability, respondents provided ratings ranging from extremely competent (5) to completely incapable (1). Respondents can choose between strongly agree (5) and strongly disagree (5) regarding attitudes toward research and desire to write (5). (1). For the various study procedures, they chose a degree of difficulty ranging from extremely high (5) to none (1). These are the modified questionnaires for the survey. The content and face validity of the questionnaire designed for research purposes were assessed. We discuss abilities in action planning and mentoring. Participants responded between very capable of planning (5) and not capable at all (1) for the first question, and very true to me (5) and not true to me at all (1) for the second question (1). Using the mean and standard deviation, descriptive data were generated. Factors were correlated using Pearson product-moment correlation to determine their research capability's correlations. Using multiple regression and the stepwise technique, the factors of teachers' research skills were identified.

RESULTS AND DISCUSSION

Capability to Conduct Research

As has been asserted, research expertise is essential to the production of a research product. Teachers must be equipped to engage in rigorous inquiry (Salom, 2013). Overall, the 92 participants'

responses indicated a moderate capacity for conducting research. These findings suggest that there is a need to enhance the abilities of these instructors, particularly in terms of the conceptualization and methods of action research, as well as time management. If training is provided for free, the issue of financial resources may be resolved. They must have access to writing resources, such as Internet connections, books, journals, and action research examples that can assist them. In addition, instructors demonstrated a moderate level of expertise in conducting research (Alumbro et al., 2015), organizing an experimental study, selecting and constructing research instruments, selecting pertinent statistical tools, and preparing articles for publication (Basilio et al., 2019).

Table 1. Capability of Teachers to Conduct Research

	Indicators	Mean	SD	Qualitative Description
1	My school head and my co-teachers support and encourage me to conduct research.	3.82	1.02	Capable
2	My workload is not that constricted.	3.08	1.20	Undecided
3	I have access to internet, books, and sample research.	3.10	1.15	Undecided
4	Research requires me little physical effort	2.89	1.24	Undecided
5	We have a culture of action research in our school.	3.01	1.15	Undecided
6	I have resource persons to refer to and will provide me professional assistance to conduct research.	2.75	1.31	Undecided
7	I have training/s with the concept and process of research.	2.28	1.13	Slightly Capable
8	I have sufficient time to conduct research.	2.20	1.09	Slightly Capable
9	I have enough resources to finance research undertaking.	2.08	1.00	Slightly Capable
10	I can easily finish a study.	1.97	.90	Slightly Capable
11	I have completed research.	1.63	.93	Not capable
12	I am conducting research every year.	1.55	.92	Not capable
	Overall Mean	2.53	.79	Slightly Capable

In contrast, empirical data revealed that teacher-researchers are proficient in both the conceptual and technical aspects of conducting research (De la Cruz, 2016). (Abarquez et al., 2013). Positively, faculty was well-equipped with the knowledge and technical aspects of research capability (Narag et al., 2016), competent to conduct research (Tan, 2012), and has a high level of research capability (Enero et al., 2017) and a high level of competence in various research tasks (Enero et al., 2017). (Enero et al., 2017). (Cuntapay et al., 2014). As anticipated, Dapiawen (2017) discovered that graduate school professors have an expert-level comprehension of the components of research papers and a solid capacity for conducting a variety of research activities.

Indicators 2, 3, 4, 5, and 6 were unsure, whereas indicators 6, 7, 8, 9, and 10 indicated that instructors possessed a moderate level of competence. They acknowledged their research abilities in one sign. This is due to the encouragement and support of their school administrators and peers. In part, the results of these indicators support earlier findings that public secondary and elementary school teachers were moderately capable in writing a research proposal and publishable paper (Cagaanan et al., 2018; Abarro et al., 2016) and computational and technical skills (Cagaanan et al., 2018; Abarro et al., 2016). (Cagaanan et al., 2018; Abarro et al., 2016). (De la Cruz, 2016).

Two indicators reveal that UIDM instructors admitted they were incapable of conducting research. These are the annual requirements for conducting research and completing a study. Results partially corroborated earlier findings that teachers lack the skills to conduct classroom research (Abarro et al., 2016). Specifically, the results confirm a previous finding that public elementary school teachers lacked confidence in their ability to produce research papers (Macabago, 2017).

Attitudes toward Research

Table 2 displays the views of UDM educators regarding research. Evidently, they agreed on the first three signs. These are about the importance of action research to the teaching profession, its advantages, and the reasons for believing it necessary. Negative attitudes are evidenced by a denial that action research is tough and demanding. However, they are unsure about four more signs. These pertain to their curiosity, anxiousness, and whether they adore and appreciate action research. Regarding their views toward research, they are unsure. This may suggest apathy or neutrality. Consequently, people may have misunderstandings about the usefulness and significance of doing research. The findings imply that it is necessary to offer instructors with training that informs them accurately about research and ultimately improves their attitudes about it, so eliminating these misunderstandings.

Table 2. Attitudes toward Research

Indicators	Mean	SD	Qualitative Description
1 Action research is useful for my teaching.	3.85	1.18	Agree
2 I will benefit from conducting action research.	3.82	1.15	Agree
3 Action research is indispensable in my professional training.	3.70	1.07	Agree
4 To conduct action research is stressful.	2.42	1.16	Disagree
5 Action research is difficult to conduct.	2.46	1.09	Disagree
6 I have an interest to conducting action research.	3.29	1.20	Undecided
7 Action research makes me anxious.	2.73	1.09	Undecided
8 I love to conduct action research.	2.82	1.16	Undecided
9 I enjoy [conducting an] action research.	2.68	1.06	Undecided
Overall Mean	3.08	.69	Undecided

In contrast, Morales et al. (2016) discovered that instructors view action research favorably because it can aid them in promoting student learning and lifelong learning. Younger instructors are more sensitive to educational research than those with five or more years

of experience (Akcoltekin et al., 2017), and teaching professionals' attitudes toward research are highly developed and long-lasting (Pamatmat, 2016). Responding teachers viewed research and its benefits to their teaching favorably (Ulla et al., 2017). Kho et al. (2017) demonstrated that lecturers can distinguish between various facets of action research and correctly cite the authors. Pati (2014) found that instructors had a favorable perception of research in terms of its image, but a negative perception of its time, expense, complexity, and effort. Additionally, Basilio et al. (2019) discovered that master instructors place a high value on conducting research to become more effective educators. As stated further, it is crucial to invest time, effort, and resources in learning about research results in order to develop a positive attitude toward research. *Motivation to Write Research*

The third table displays the motivation of UDM educators. In general, they agreed on the majority of motivational indicators for research writing. These include what research can do for their advancement, teaching efficacy, socialization, outranking other candidates for promotion, devotion to it, publication output, a desire to discover new information, and their empowerment. Internal and external factors make up these indicators. They concurred that these factors motivated them to study. However, they were uncertain about four indicators that the majority of their colleagues have conducted or intend to conduct research, including participation and recognition during research congress, the financial value of the study, and convincing colleagues that research is not difficult. This suggests that many educators lack a desire to conduct research. Individuals require training to increase their motivation to produce research papers, even if their general motivation appears to be high.

Table 3. Motivations for Writing Research

Indicators	Mean	SD	Qualitative Description
1. Action research enhances my chance for career promotion.	4.11	.82	Agree
2. Action research enhances my teaching efficiency.	3.87	.98	Agree
3. My school head expects me to come up with action research by the end of the year	3.82	.96	Agree
4. I would like to interact with other teacher-researchers.	3.89	.87	Agree
5. [Conducting] action research allows me to outrank other applicants [for promotion].	2.42	1.01	Agree
6. Most of my co-teachers have conducted or planned to conduct action research.	3.23	.99	Undecided
7. My school head will recognize my commitment to [do] action research.	3.77	.92	Agree
8. I would like to publish action research findings to research journals.	3.60	1.10	Agree
9. I find action research as an interesting and meaningful educational practice.	3.58	1.05	Agree
10. I would like to participate and be recognized in the research congress.	3.39	1.06	Undecided
11. Action research allows me to come out financially ahead.	3.27	.97	Undecided
12. I would like to demonstrate to my peers that the conduct of action research is not that difficult.	3.12	.95	Undecided
13. I have a passion for the discovery of new knowledge.	3.73	.91	Agree
14. I feel empowered when I investigate and take actions to classroom problems.	3.55	.95	Agree
Overall Mean	3.61	.69	Agree

Akcoltekin et al. (2017) found that female instructors were more interested in educational research than male instructors. Faculty were highly motivated by benefits and opportunities for career advancement (Tan, 2012). This evidence supports the claim that teachers have a moderately positive attitude toward research, but

this attitude deteriorates in the absence of funding or research assistance (Alumbro et al., 2015). Utilization of research, personal enjoyment, an expanding network, a research capacity program, and administrative support were the top five reasons university professors conducted research (Narbarte et al., 2018). The faculty of the College of Arts and Sciences was deemed motivated by the seminars and workshops on enhancing research capabilities (Cuntapay et al., 2014).

Difficulty and Non-Difficulty in Research Processes

Table 4 depicts the difficulties and non-challenges encountered by UDM instructors utilizing various study methods. Specifically, these instructors viewed research methods as extremely difficult. Assessing qualitative data, organizing and summarizing the results, analyzing quantitative data, delivering a pertinent presentation, and writing a publication are the four most difficult stages. The findings indicate a need for training that could enhance the abilities of instructors in these research writing procedures. These procedures should be the focus and emphasis of ongoing professional development programs. According to the results of a mixed-methods study conducted by Morales et al. (2016), public school teachers experienced moderate difficulty with particular aspects of action research. The problems of research participants require additional consideration and prompt response. This is due to the restricted training opportunities in the region. A study demonstrates that graduate students have great difficulty conceiving research topics and titles, searching for and evaluating relevant literature and studies, identifying appropriate statistical methods, collecting data, analyzing and interpreting findings (Ocbian et al., 2015). A more recent study found that junior high school teachers had trouble conducting action research, specifically in the areas of literature search, presentation of findings, publication of results, and data collection (Tindowen et al., 2019).

Table 4. Difficulty and Non-Difficulty in Research Processes

	Indicators	Mean	SD	Qualitative Description
1.	Identifying issues and problems to be investigated by action research.	3.47	.95	High level of difficulty
2.	Searching for relevant literature on my chosen topic for research.	3.48	.93	High level of difficulty
3.	Developing the processes of how to do research and collective evidence of research.	3.58	.92	High level of difficulty
4.	Analyzing quantitative data.	3.62	.92	High level of difficulty
5.	Analyzing qualitative data.	3.64	.96	High level of difficulty
6.	Organizing and writing the findings	3.63	1.00	High level of difficulty
7.	Making a relevant presentation on my project and write an article for publication.	3.62	.97	High level of difficulty
8.	Using technology in literature search.	3.42	1.04	High level of difficulty
9.	Using technology in data presentation.	3.45	1.08	High level of difficulty
10.	Using technology in statistical analysis.	3.59	1.03	High level of difficulty
11.	Using technology in bibliographical entries.	3.44	1.09	High level of difficulty
	Overall Mean	3.41	.40	High level of difficulty

Action Planning Skills

The table below demonstrates the action planning skills of UDM instructors. They are relatively competent in all aspects of action planning. These findings demonstrate the need for educators to improve their action planning skills. This is due to the fact that this expertise is necessary for conducting action research, where an action plan is an essential component.

Table 5. Action Planning Skills

Indicators	Mean	SD	Qualitative Description
1. Set the overall goal of the intervention plan based on the identified classroom needs/issues/problems/gaps.	3.29	.89	Moderately capable
2. Formulate clear, specific, measurable, doable, and aligned objectives to the goal.	3.21	.94	Moderately capable
3. Create strategies and schedule activities that would achieve the goals and objectives using a Gantt chart.	3.25	1.00	Moderately capable
4. Identify the materials and resources to use.	3.19	.97	Moderately capable
5. Prepare the monitoring tools.	3.03	1.04	Moderately capable
6. Monitor the activities using the data gathering tools and methods.	2.98	1.01	Moderately capable
7. Evaluate the intervention plan based on the gathered information in the implementation and monitoring.	2.97	1.06	Moderately capable
8. Extract new information from the gathered data.	3.09	1.05	Moderately capable
9. Examine/reflect whether the intervention plan improves the practice of your profession.	3.05	1.04	Moderately capable
Overall Mean	2.74	.27	Moderately capable

Mentoring Skills

Table 6 demonstrates the mentoring skills of educators. Based on all observable indicators, their responses to me were largely in line with my anticipations. This merely indicates that they are capable of mentoring other researchers. They are acquiring these abilities. However, these capabilities must be enhanced through the

implementation of programs and activities that build capacity. Tan (2011) observed that mentoring involves synchronization of the processes necessary to complete the mentee's studies, symbiotic nurturing and learning, and synergetic celebration of the outcomes of their partnership. Its success depends on effective time management, the qualities and attitudes of both mentors and mentees, and the appropriate research methodology. Mohan (2010) identified instances of misunderstanding between mentor and mentee; the majority of mentees were not interested in conducting joint research; and some mentees quit. Moreover, Soriano (2018) found that advisees or mentees rated their advisers or mentors as competent in terms of intellectual growth and development, research conduct, professional career and development, academic guidance, skills development, and personal communication, while they were highly competent in research ethics.

Table 6. Mentoring Skills

Indicators		Mean	SD	Qualitative Description
1.	I like to take the lead in improving our productivity in research.	3.21	.92	Somewhat true to me
2.	I like other teachers to learn from my experience, training and knowledge of research.	3.17	1.04	Somewhat true to me
3.	I have the passion to teach, mentor, and guide others to complete a study.	3.16	1.10	Somewhat true to me
4.	I want to help the school and our school head to produce a study every year.	3.29	.96	Somewhat true to me
5.	I am willing to help other teachers acquire the research skills, knowledge,	3.23	.99	Somewhat true to me
Over-all Mean		3.21	.92	Somewhat true to me
Overall Mean		2.74	.27	Moderately capable

Correlates of Research Capability

Table 7 displays the results of the correlation between the research capability of public-school teachers and their attitudes toward research, motivation to write research, difficulty and non-difficulty of different research processes, mentoring and action planning skills, age, years of service, and number of completed studies. There is a moderately positive and statistically significant relationship between teachers' research abilities and their mentoring skills ($r=.542$, $p<.05$) and desire to write research ($r=.569$, $p<.05$). Wong (2019) discovered a significant correlation between research mentoring and the research abilities of master instructors. This study confirms the findings of Macabago (2017), who discovered a positive and significant relationship between primary teachers' research skills and their desire to write research papers.

Table 7. Correlates of Research Capability

Variable	Capability	
	coefficient	sig.
Mentoring skills	.542**	.000
Action planning skills in Research Processes	.291**	.005
Motivation to Write Research	.569**	.000
Age	-.383**	.001
Years of Service	-.377**	.001
Number of studies completed	.350**	.001
Mentoring skills	.542**	.000
Action planning skill in Research Processes	.291**	.005

Notes: **. Correlation is significant at the 0.01 level (2-tailed). Coefficients: .90 to 1.00 (–.90 to –1.00) Very high positive (negative) correlation; .70 to .90 (–.70 to –.90) High positive (negative) correlation; .50 to .70 (–.50 to –.70) Moderate positive (negative) correlation; .30 to .50 (–.30 to –.50) Low positive (negative) correlation; and .00 to .30 (.00 to –.30) negligible correlation.

Separately, there was a weak, positive, and statistically significant relationship between attitudes toward research ($r=.473$, $p<.05$) and the number of completed studies ($r=.350$, $p<.05$). The findings support the earlier conclusion that there is a positive and statistically significant correlation between faculty research expertise and their attitudes (motivation) toward research (Manongsong et al., 2018; Wong, 2019). In addition, there was a weak, significant, negative correlation between age and years of service ($r=-.383$, $p<.05$). Lastly, there was a weak, positive, and statistically significant relationship between their research capacity and their action planning skills ($r=.291$, $p<.05$). The results also indicate that there was no correlation between the research skills of the instructors and the difficulty or lack thereof of the research methods. This contradicts the findings of a previous research study (Wong, 2019).

Determinants of Research Capability

The results of the ANOVA and regression analyses for the three models are presented in Tables 8 and 9. F statistic (model 1) = 23.777, $p = .05$ indicates the first model of research competence is statistically significant. Using stepwise regression, this model identified one determinant variable, instructor incentive to write research. The regression analysis revealed that the incentive to write could account for 28% of the variance in the outcome variable. This suggests that this variation may be attributable to public school instructors' motivation to write research for each unit of improvement in their research skills. In the regression equation, research capacity is not assigned a significant beta weight. This investigation yielded the model equation Y (research ability) = $0.051 + 0.692$ (motivation to write research) + 0.65335 . (Standard error).

Table 8. ANOVA Results

Models	Sources	Sum of Square	df	Mean Square	F	sig.
1	Regression	10.150	1	10.150	23.777	.000
	Residual	26.039	61	.427		
	Total	36.189	62			
2	Regression	14.091	2	7.045	19.129	.000
	Residual	22.098	60	.368		
3	Regression	15.713	3	5.238	15.092	.000
	Residual	20.476	59	.347		
	Total	36.189	62			

F statistic (2) = 19.129, p.05 reveals that the second model of research capability is also statistically significant. This model is determined by two variables: instructors' research motivation and the number of studies they conduct. Both were found to be statistically significant determinants of research capability. They can jointly account for 38.9 percent of the variation in the result variable. This would indicate that this proportion can be attributed to teachers' motivation and the number of completed studies for every unit increase in teachers' research competence. In addition, the number of completed studies is a concrete indication that professors possess the required abilities. This analysis of regression yielded the model equation Y. (Research Capability)

=.335 +.594 +.526 +.60688 (Research Writing Motivation) + Number of Completed Studies (Standard Error).

The third model of research competence was determined to be statistically significant (F=15.092, 3, p.05). This model contains three determinant variables: research writing willingness, the number of completed studies, and the age of professors. This model has the highest determination coefficient at 43,4 percent. This suggests that these three variables may account for 43.4% of the variance in teachers' research skills. Nonetheless, as indicated by the beta coefficient, aging may have a negative impact on the research

skills of instructors. This can be explained in two ways. First, the data indicate that as professors age, they become less capable of conducting research. Numerous participants over the age of 35 were college graduates of the previous curriculum, which did not require research courses. Second, this may be the case because the rigor of study necessitates more time, energy, and effort, which diminishes with the instructors' age. Therefore, participation in research by young instructors is advantageous. This indicates that older instructors lack research skills. Therefore, it is prudent to invest so much in the development of younger instructors' competencies. This study generated the model equation $Y \text{ (Research Capability)} = 1,473 + .475 \text{ (Research Writing Motivation)} + .575 \text{ (Number of Completed Studies)} - .018 \text{ (Age)} + 58911. \text{ (Standard Error)}$. Research competence as a function of desire to write research, age, and number of completed studies is more robust than the other two models.

Table 9. Determinants of Research Capability

Models	Variables	Unstandardized	Standard	Sig.
1	Research Capability	.052	.516	.920
	Motivation to Write Research	.692	.142	.000
2	Research Capability	.335	.487	.495
	Motivation to Write Research	.594	.135	.000
	Number of Studies Completed	.526	.161	.002
3	Research Capability	1.473	.708	.042
	Motivation to Write Research	.475	.142	.001
	Research	.575	.158	.001
	Number of Studies completed Age	-.018	.008	.035

Notes: Model 1: $R=.530$, $R^2=.280(28\%)$; Model 2: $R=.624$, $R^2=.389(38.9\%)$; Model 3: $R=.659$, $R^2=.434(43.4\%)$

According to Wong's (2019) findings, 66 percent of the variation in the research competence of instructors can be explained by research training received, attitudes toward research, and research knowledge. Knowledge of research is the strongest predictor of research competence (.58), followed by attitudes toward research (.20) and training (.58). (.10). In contrast, Pati (2014) discovered that the perceptions of research among Indonesian foreign teachers were influenced by their capacity to conduct classroom and action research. This indicates an increase, improvement, or change in their attitude toward research, with 7.455 percentage points attributable to their ability to conduct action research. In this case, the variable research capacity was independent. A cross-sectional study found that research time, collaboration, leadership support, and retraining opportunities influence nurses' research capacity (Li et al., 2019). Additionally, instructors' desire to conduct research had an effect on the faculty's research proficiency (Tan, 2012). In the past, regression analysis revealed that attitudes and personal interest in research, educational attainment, research administration skills, research facilities, length of service, and research training influenced research competence (Fetalver, 2010). However, neither the determination coefficient nor the nature of the impact of each variable or their interaction, whether positive or negative, were provided.

CONCLUSION

The research competence of UDM instructors was determined by the number of completed studies, their desire to conduct research, and their age. Thus, it is essential to recognize that the research output, also known as research productivity, is the greatest indicator and clearest evidence that instructors can conduct research. This indicates that the greater a teacher's number of studies, the more capable they are of performing this challenging task. Also, instructors' research skills decline with age. Young instructors should be exposed to research and given priority for continuous professional development. Moreover, it is essential to increase

instructors' desire to conduct research. It was determined, based on the descriptive data, that instructors require training in all assessment domains. However, UDM's Continuing Professional Development through Extension Services may emphasize the numerous research procedures, attitudes toward research, motivation to write research, and most importantly, the ability to conduct research. To ensure greater productivity and cost-effectiveness, those in charge of or coordinating research activities must consider these factors. The intervention project they would design, and implement must address the key themes outlined in this report.

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“O-World VR: an e-learning for exploring the universe”

Virtual reality (VR) Technology

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ABSTRACT

In today's world, technologies are capable of everything, including communication, business, medical, academic, and other fields. One of the Technologies is known as Virtual Reality, but what is VR? Virtual reality (VR) is a computer technology that brings an object to life or into the real world at any time or place. It utilizes various technologies. A Rubik's Cube algorithm is a procedure that reorients the puzzle's pieces using front, top, bottom, left, and right movement. The VR Application employs the Rubik's Cube algorithm due to the application-satisfying movement of the character. In relation to this concept, the project application can also provide the following features: (a) The user can view all the components of the universe, such as space, rocks, comets, asteroids, planets, the sun, and the solar system; and (b) the user can interact with these components. b) Brief audio and visual descriptions of the history of the universe's components will be provided. c) The user can view and explore the universe in 360 degrees on VR Box. and The objectives of the project titled "O-World VR: an e-learning for exploring the universe" are as follows: (1) to provide an e-learning application for android devices that will pique the user's interest in exploring the universe; and (2) to facilitate the exploration of the

universe. (2) To develop an e-learning application that can enhance the teaching presentation quality of education. (3) To develop an e-learning application that expands user's imagination and increases their interest in science and technology. (4) To create an e-learning application that incorporates virtual reality. The software was developed using the Scrum methodology, which is suitable for all software development.

Keywords: e-learning application, technology, Virtual Reality,

INTRODUCTION

When people hear the word "technology," they immediately think of computers, cellphones, video games, the Internet, and other electronic devices. In addition, it may bring up terms such as Information Technology or Programs, which include a computer network, security, programming, web design, database, photo and video editing, and more. It is not new, however. Considering the brain to be an information processor, information technology is as old as the brain itself. Information technology as a science date back to the earliest attempts to communicate and store information.

Virtual reality (VR) is a computer technology that brings an object to life or into the real world at any time or place. It employs various methods, including Head-mounted displays with headphones and controllers. Android is the most widely used mobile operating system in the world. The combination of virtual reality and Android is ideal for representing a topic in the real world.

Each application has a corresponding algorithm. Algorithms are used to define the process or set of rules to be followed when performing calculations or other problem-solving operations for a project. This is required for the stated project in order to identify the movement of each character and their AI.

The title of the study "O-World VR: e-learning for exploring the universe" is derived from the words outside (O) and world. The proponents decided to create an e-learning application that allows the user to visualize the universe. This application will enhance the user's understanding of the universe's constituents. Because Virtual Reality (VR) makes the universe more realistic, it will encourage them to utilize the application.

The project is an online learning application about the cosmos that will educate and entertain students. The proposed application is compatible with Android devices running Lollipop or later and can be downloaded for free. A Rubik's Cube algorithm is a procedure that reorients the puzzle's pieces using front, top, bottom, left, and right movement. The VR Application employs the Rubik's Cube algorithm due to the application-satisfying movement of the character. In relation to this concept, the project application can also provide the following features: (a) The user can view all the components of the universe, such as space, rocks, comets, asteroids, planets, the sun, and the solar system; and (b) the user can interact with these components. b) Brief audio and visual descriptions of the history of the universe's components will be provided. c) Using a PS Joystick, the user can view and explore the universe in 360 degrees on VR Box and control the movement.

The main objective of the study is to develop an e-learning application that will provide entertainment, simulation and also deliver more realistic information that will be run on android devices. Specific objectives includes to provide an e-learning application that will catch the user's attention about exploring the universe by using android devices?, To make an e-learning application that can enhance the quality of education in terms of teaching presentation? To build an e-learning application that will expand the user's imagination and boost their interest in science and technology? To develop an e-learning application that will integrate virtual Reality. And to evaluate the application using ISO 9126 Software Quality Characteristics with the efficiency listed below. Functionality. Usability. Reliability and Precision

A foreign researcher named Sahar Ali Aseeri stated in his dissertation titled "Virtual Reality Interaction Using Mobile Devices" that "virtual reality technology creates a realistic environment of a location or subject through computer graphics." Using the application in the same manner that virtual reality places the user in the universe, they will enhance their learning.

In an article dated 13 July 2016 by a local author named Pete Deyto, he stated, "There is an assembly of youth in the Philippines whose goal is to create a community that uses virtual reality, and this goal is not too far-fetched." The same objective as the proponent, which is to educate the community on how to explore the universe using this application and this technology.

METHODOLOGY



Figure 1. Scrum Methodology

The proposed application was developed using the scrum methodology. Scrum is a distinct and ultimately structured management framework for the organization and development of software applications. It is one of the most well-known agile methodologies. Scrum projects are divided into sprints based on the principles of flexibility, productivity, and adaptability. A sprint is a highly productive period during which a predetermined number of tasks take precedence over all others to ensure complete concentration.

The scrum methodology entails planning, daily meetings and status reports, and reviews. Scrum, which focuses primarily on task management in a team environment, acts as a catalyst for the

company by improving the quality of the software produced and boosting team productivity as a whole.

The proponents selected Scrum Methodology because it perfectly matched our proposed virtual reality application. Each member of the team will provide a brief report on the progress of their assigned task. Scrum is about enhancing the process so that the proponents can achieve their precise objective.

To complete this project proposal, the proponents gathered particular data using data collection procedures. The proponents collected data using a variety of research strategies and techniques, including (a) Observation, (b) Internet Research, (c) Survey, (d) Library Research, and (e) Evaluation.

Data Analysis is the process of evaluating data with analytical and statistical tools to determine useful information and aid in business decision-making. This project utilized the Likert Scale, Five-Point Scale Rating, Ranking, Statistical Treatment of Data (Percentage, Distributed Frequency, Weighted Mean), and ISO 9126 Software Quality Characteristics.

RESULTS AND DISCUSSIONS

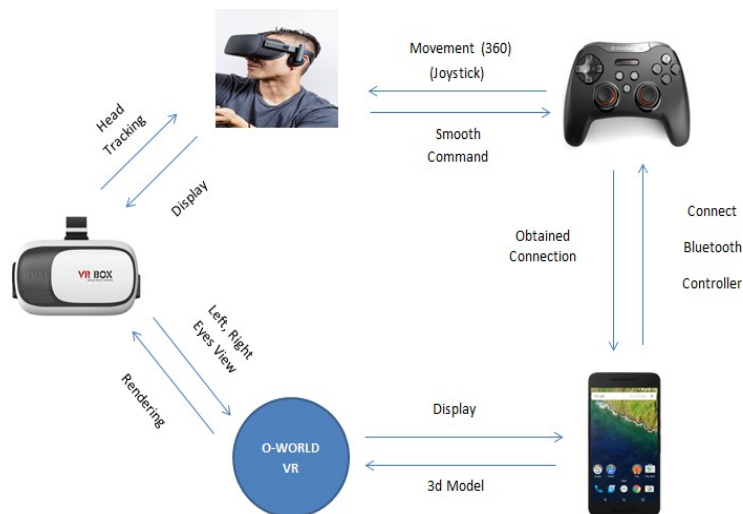


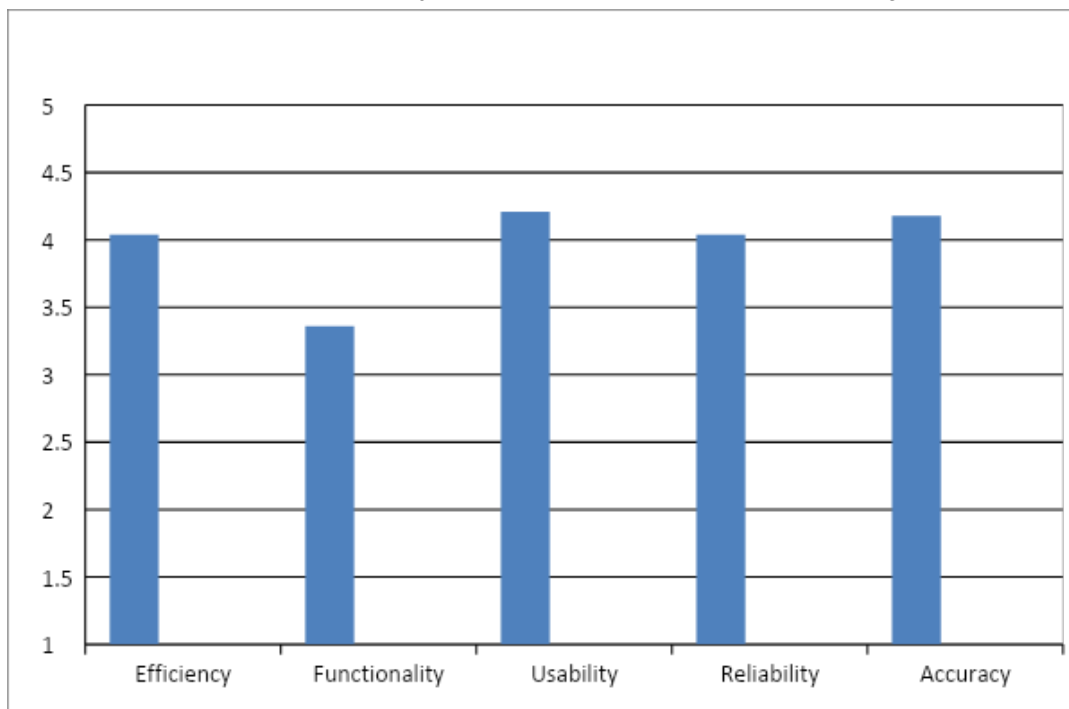
Figure 2
Context Diagram

In the Context Diagram

Detailed instructions on how to use the VR-box and the controller are provided. First, you must enable Bluetooth on both the device and the controller, then connect the controller to the device, plug the VR box headset into the device, and finally place the device within the VR box.

Five teachers and thirty-five students from ACLC College Taguig and thirty-five students from Taguig National High School (TNHS) evaluated the system according to the ISO 9126 Software Quality Characteristics with the following Efficiency. Functionality. Usability. Reliability and Precision

Table 1. Summary of Evaluation of the Project



It demonstrates the overall performance of the proposed application with weighted means of 4.04 for Efficiency, 3.36 for Functionality, 4.21 for Usability, 4.04 for Reliability, and 4.18 for

Accuracy. Positive ratings for the proposed application were received from respondents.

The proponents were successful in developing an e-learning application about the universe that will educate and entertain students. The researchers conclude, based on the results of the evaluation and survey, that our study "O-World VR: e-learning for exploring the universe" would assist students who have difficulty becoming familiar with the universe's components. The proposed application can maximize the quantity of waste and cost of unnecessary effort, the capacity to perform its task and provide a useful function, the ability to provide consistent results and produce accurate data, results, and other features that the application provider offers. Based on the outcome of the evaluation, researcher proposed application was able to accomplish its intended purpose.

Therefore, the proposed application would make a significant difference and could help students become more familiar with the universe's components. The application will provide students with both education and entertainment.

The application for the project titled "O-World VR: e-learning for exploring the universe" was created to develop an application about the universe that will provide students with education and entertainment. The proposed application is compatible with Android devices running Lollipop or later and can be downloaded for free.

On the basis of the evaluation's findings. The majority of respondents agreed that the proposed application has produced the expected results, as discovered by the applicants. The proposed application will be of great assistance to students who have difficulty learning about the universe's components.

RECOMMENDATION

The proponents propose new feature by adding the explorer's name prior to the start of the expedition so that it can be displayed and saved, as well as administering a short quiz after the expedition.

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Motivation in Conducting Research Among Faculty of Arts and Sciences of Local Colleges and University in the Philippines

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ABSTRACT

The primary research platforms are universities. Faculty members are essential in the writing of academic research. For perspective, the Philippines continues to have a huge demand for both quantity and quality research. The parties concerned must be very engaged if this is to be accomplished. This implies that teacher researchers should be driven to complete a study and have a favorable attitude toward the objective. This study evaluated the attitudes and levels of motivation for research of the College of Arts and Science faculty at the Universidad de Manila. The researcher used the descriptive method to achieve the objectives of the study. A Likert scale was used in the survey questionnaire. The algorithm for the weighted mean and frequency percentage was applied to the quantitative data. The findings reveal that the

respondents only have an average positive attitude and motivation towards research. It is highly recommended for the institution to implement actions to improve their faculty members' outlook toward research and to intensify efforts in encouraging them to conduct research.

Keywords: research attitudes; research motivations; research writing; teacher researchers

INTRODUCTION

Academic writing is an essential component of the field. Sultana (2019) asserts that research is the cornerstone of managing the process of innovation and transformation. The conduct of research is one of the most efficient ways to look for effective activities to meet the demands of the various components of the community. This is particularly true for the field of education, and more specifically for higher education.

Universities are centers for research that help more than just schools. Their research aids in determining the general requirements for the development of our nation. The importance of the faculty's and instructors' contributions to academic research writing must also be emphasized. Therefore, in addition to other creative endeavors and professional activities, research is another option for faculty members to stay engaged in their fields of study, according to the University of Georgia (2021). Furthermore, from the perspective of education, active, high-quality research fosters degree-level learning environments, especially for graduate and post-graduate programs; it provides an independent, critical thinking environment that encourages intellectual growth and pushes the boundaries of knowledge and understanding (AACCUP as cited in Pardo et. al., 2018).

According to Salazar-Clemen (2006), despite the Commission on Higher Education (CHED) of the Philippines' extensive efforts, there is still a great need for the quantity, quality, thrusts, and contribution of higher education research. This is based on various studies that have been conducted as well as observations. In light of this, the researcher believes it is critical to evaluate faculty members' motivation for and attitudes toward conducting and producing research. Looking at how higher education faculty members view their research task will provide insight into why the quality and quantity of the studies are not at their best since attitude and motivation are known as power pairs that can act as strong encouraging factors for an individual or a team to achieve a goal (Indeed Editorial Team, 2020).

This study, specifically, will focus on the faculty member of the College of Arts and Sciences. Teaching is science itself. Thus, educators should continuously aim to enhance their skills in both fields. Johnson (2017) stated that the strategies and practices embedded in a research body have been proven to be truly effective in enhancing learning. And successful learning should be the main goal of every teacher researcher.

According to the discussion above and Valisno's (2000) viewpoint, which holds that research is one of the university's most important outputs and that faculty, staff, and students contributions enable discovery to advance throughout students' academic careers at the institution, this study aims to gauge the faculty members' attitude and motivation level at the Universidad de Manila's College of Arts and Sciences (CAS). Specifically, this paper intends to identify the following:

- the profile of the respondents in terms of sex, civil status, academic rank, and highest educational attainment;
- the level of attitude of the respondents towards research; and

- the level of motivation of the respondents towards research writing.

The researcher employed a survey questionnaire to collect data from the selected respondents for this study using the quantitative approach to research. In the methodology portion of this study, the specifics of the procedures will be explained.

The outcomes of this investigation will also be advantageous to numerous academic shareholders. It will be useful to the institution to understand how the professors in the College of Arts and Sciences approach their research tasks. The faculty heads will also be in a position to take initiatives that could further raise the members' spirits, motivation, and attitudes toward research writing. The community will also gain from this study because the effort to enhance research outputs has the potential to lead to a continual stream of new developments.

LITERATURE REVIEW

With a focus on community and extension services, as well as the improvement of education, research outputs were used in the construction and development of devices as well as policy-making (Pardo & Baez, 2018). According to CHED Memorandum Number 56 of 2016, the Philippines is experiencing rapid change on all fronts, including economically, socially, internationally, and technologically. As a result, higher education institutions in the country must provide platforms for research, innovation, and extension.

162 international, 86 national, 48 regional/local, and other presentations made by university researchers as well as the publication of research works in the international, national, and local arenas attest to the respondents' positive evaluations of UNP's research capacity and performance in the 2018 study by Pardo and Baez at the University of Northern Philippines (UNP) with both

their faculty and students about research capability and performance. A sizable number of research outputs, dissemination efforts, and publications helped the UNP achieve Level IV SUC leveling status in 2016. This outcome, according to their reasoning, disproves a number of assertions that the Philippines is still far from the optimal level of knowledge development and creativity.

The persons involved in the research must be heavily involved in high quality and quantity goals to be met. This implies that the researchers need to be motivated to complete a study and have a good attitude toward the objective.

Attitudes may influence how well one feels and reacts to research. Numerous studies highlight negative attitudes that impact the amount and quality of research conduct, including feelings of apathy, pessimism, anxiety, feeling unprepared or unable to perform, and fear of failure (Hussain et al., 2016). Additionally, Fernandez et al. According to al. (2019), there is a conundrum about teachers' acceptable attitudes toward conducting research in the Philippines because it will be challenging for this behavior to take hold if the researcher cannot comprehend his or her own study. This also comprises finishing the article, arranging the information records, and performing data analysis—among other research-related responsibilities.

Pamatmat (2016) stresses that the motivation of the researchers is also a crucial component of effective research. It will be challenging to keep going through the demanding process of a knowledge-based pursuit without both internal and external drive. Landicho (2020) categorized the attitudes in the study he did into six categories: research orientation, rewards impact research, personal interests, university mission, research usage, and research fear. He did, however, point out that he missed out on another element, the research anxiety scale, which may be crucial for future studies. The results of his study suggest a positive

attitude toward academic endeavors. The respondents viewed research as a valuable learning opportunity and a career path that may help them improve their teaching skills. The research was seen as being primarily motivated by incentives and rewards. Intrinsic motivations, such as the opportunity to develop one's professional career and contribute to the corpus of existing knowledge, were also acknowledged. Conducting research can be challenging due to time and financial constraints, lack of exposure to and experience with research, and other factors.

According to the abovementioned, it can be concluded that it is extremely important to encourage faculty members to conduct research at the institutions where they are employed because this will lead to significant and favorable changes in their motivational behaviors. Consequently, it is important to constantly keep a positive outlook and a passion for the subject in order to conduct a future fruitful study.

Ultimately, it is thought that crucial actions that could have a significant impact on faculty-initiated research, both positively and negatively, include understanding the attitudes and motives of researchers toward carrying out their investigations.

METHODOLOGY

To explain the respondents' attitudes and motivations toward research and research writing, the study employed a descriptive methodology. The goal of descriptive research is to outline the specifics of the phenomenon that is occurring at the time of the investigation (Salkind, 1991). This strategy is used in this study to give the researcher the ability to provide multiple replies by utilizing the other data collection strategies that were used, as well as to assist them in evaluating the survey results by transforming quantitative data into qualitative information. Descriptive statistics are also used to statistically analyze the data collected to get the weighted mean of the participants' responses.

To get the weighted mean, the data are computed using the following formula:

$$W = \frac{\sum_{i=1}^n w_i X_i}{\sum_{i=1}^n w_i}$$

W = weighted average

n = number of terms to be averaged

w_i = weights applied to x values

X_i = data values to be averaged

The profiles of the respondents in terms of sex, civil status, academic rank, and highest educational attainment were calculated using frequency and percentage distribution methods.

The participants of the study are the population of 28 faculty members of the Universidad de Manila's College of Arts and Sciences Department. The attitude and motivation of the faculty members toward their own research are evaluated using a survey questionnaire with a Likert scale. A Likert scale often gives respondents five alternatives for responding to a statement or question, allowing them to express their level of agreement or disagreement with the statement or question on a positive-to-negative scale (McLeod, 2008). It is frequently used to gauge attitudes, views, and other things. The responders will be able to rate their level of agreement as precisely as possible through this.

RESULTS AND DISCUSSION

The following are the derived results from the conduct of the data-gathering processes.

Profile of the Respondents

The 28 faculty members of the College of Arts and Sciences at UDM served as the study's respondents. These are their profiles, according to the survey that was taken.

Table 1. Profile of Respondents in Terms of Sex

Sex	requency	Percent
Male	13	46.4
Female	15	53.6
Total	28	100.0

Table 2. Profile of Respondents in Terms of Civil Status

Civil Status	requency	Percent
Single	11	39.3
Married	16	57.1
Widowed	1	3.6
Total	28	100.0

The respondents are almost equally divided in terms of sex or gender, as seen in Table 1, with 13 males and 15 females. Table 2 presented that 57 percent of the 28 respondents are married. Even though it may not seem like a big deal, behavioral and educational studies have shown that men considerably publish more research than women (Besselaar & Sandström, 2016). However, in this study, there is a balanced number of the two sexes. Further, given that personal obligations vary based on one's civil standing, it may be a key determinant of a researcher's attitude and motivation to conduct a study.

Table 3. Profile of Respondents in Terms of Academic Rank

Academic Rank	Frequency	Percent
Instructor	16	57.1
Assistant Professor	6	21.4
Associate Professor	5	17.9
Professor	1	3.6
Total	28	100.0

Table 3 shows that 16 or 57.1 percent of the 28 respondents are instructors; followed by 6 assistant professors; 5 associate professors; and 1 professor. According to a study by Eckhaus and

Davidovitch (2020), there is a real difference in the caliber of research output produced by senior faculty members at Ariel University. It was discovered that those with full professor and associate professor ranks produce more research than those with senior lecturer ranks alone.

Table 4. Profile of Respondents in Terms of Highest Educational Attainment

Highest Educational Attainment	Frequency	Percent
Master's Degree Holder	12	42.9
With Doctorate Units	8	28.6
Doctorate Degree Holder	8	28.6
Total	28	100.0

Finally, for educational attainment, 12 or 42.9 percent are master's degree holders. Those who are with doctorate units and doctorate degree holders both composed 28.6 percent of the total number of respondents. This is related to the findings that affiliations play a key role in producing high-quality research, which may also represent the researchers' own motivation and attitude toward writing research.

Level of Attitude towards Research

An individual's attitude is how they respond to a specific thing, action, person, institution, event, or other particular aspects of their world. While there are several definitions of attitude from diverse theorists, he maintained that they are all in agreement that attitude involves an evaluative component (Ajzen, cited in Abun et. al., 2019). This implies that attitude could be monitored and evaluated extremely well. The researcher utilized a five-point scale for agreement, with strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1).

Table 5. Attitude towards Research: Research as Useful Factor in Teaching

Attitude towards Research	Academic Rank	Weighted Mean	Interpretation
Research is useful for my teaching.	Instructor	4.75	SA
	Assistant Professor	4.33	SA
	Associate Professor	4.60	SA
	Professor	4.00	NAD
	Total	4.61	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.75	SA
	with Doctoral Units	4.38	SA
	Doctoral Degree Holder	4.63	SA
	Total	4.61	SA

The majority of the respondents, as observed in Table 5, strongly agree that research is useful for their teaching with a 4.61 weighted mean. This corroborates Hine's (2013) assertion that research equips teachers and other education professionals with the skills necessary to identify the problem in a school and understand how to methodically resolve it. This demonstrates that the respondents' attitudes on the value of research as a tool for honing their classroom teaching abilities are good.

Table 6. Attitude towards Research: Personal and Professional Benefit of Research

Attitude towards Research	Academic Rank	Weighted Mean	Interpretation
I will benefit from conducting research.	Instructor	4.69	SA
	Assistant Professor	4.50	SA
	Associate Professor	4.60	SA
	Professor	4.00	NAD
	Total	4.61	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.75	SA
	with Doctoral Units	4.25	SA
	Doctoral Degree Holder	4.75	SA
	Total	4.61	SA
Research is indispensable in my professional training.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.56	SA
	Assistant Professor	4.50	SA
	Associate Professor	4.60	SA
	Professor	4.00	NAD
	Total	4.54	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.67	SA
	with Doctoral Units	4.13	A
	Doctoral Degree Holder	4.75	SA
	Total		SA

Similar results are gathered for the attitude factors “I will benefit from conducting research” and “Research is indispensable in my professional teaching.” The respondents generally strongly agree with 4.61 and 4.54 weighted mean independently. This finding demonstrates that respondents had a favorable view of research as something that will benefit them both personally and professionally. Professor Field (2016) maintains that educators are constantly seeking knowledge, learning new things, analyzing information, altering their conduct in light of that information, seeking to improve, and adjusting to contemporary needs. This means that research is in fact typically needed by educators as something helpful to their teaching goals and skills. These findings are consistent with a study by Bukidnon State University professor Caingcoy (2020), which demonstrates that public school instructors concur that research is beneficial to their teaching, valuable for students, and essential to the field.

Table 7. Attitude towards Research: Stress, Difficulty, Anxiety in Research

Attitude towards Research	Academic Rank	Weighted Mean	Interpretation
To conduct research is not stressful.	Instructor	2.94	NAD
	Assistant Professor	2.67	NAD
	Associate Professor	3.40	NAD
	Professor	4.00	A
	Total	3.00	NAD
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.25	NAD
	with Doctoral Units	2.50	D
	Doctoral Degree Holder	3.13	NAD
	Total	3.00	NAD
	Academic Rank	Weighted Mean	Interpretation
Research is not difficult to conduct.	Instructor	3.13	NAD

Research makes me not anxious.	Assistant Professor	2.83	NAD
	Associate Professor	3.40	NAD
	Professor	4.00	A
	Total	3.14	NAD
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.50	A
	with Doctoral Units	2.38	D
	Doctoral Degree Holder	3.38	NAD
	Total	3.14	NAD
	Academic Rank	Weighted Mean	Interpretation
	Instructor	3.56	A
	Assistant Professor	3.17	NAD
	Associate Professor	4.00	A
	Professor	4.00	A
	Total	3.57	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.58	A
	with Doctoral Units	3.38	NAD
	Doctoral Degree Holder	3.75	A
	Total	3.57	A

On the other hand, Table 7 shows that the respondents neither agree nor disagree that research is not stressful and difficult. These attitudes have received a low mean score of 3.00 and 3.14. Although the statement “Research makes me not anxious” receives an agree interpretation, its weighted mean is still close to the other two and is significantly low at 3.57.

These findings completely contradict those of Caingcoy (2020), who reports that his respondents said they did not think that conducting research is stressful and difficult to undertake. Similarly, his respondents are also unsure of whether they experience anxiety as a result of research writing, which is close in

terms of mean score to the faculty members of the College of Arts and Sciences.

Table 8. Attitude towards Research: Interest, Love, and Enjoyment for Conducting Research

Attitude towards Research	Academic Rank	Weighted Mean	Interpretation
I have an interest to conducting research.	Instructor	4.25	SA
	Assistant Professor	4.17	A
	Associate Professor	4.20	A
	Professor	4.00	A
	Total	4.21	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.50	SA
	with Doctoral Units	3.50	A
	Doctoral Degree Holder	4.50	SA
	Total	4.21	SA
I love to conduct research.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.13	A
	Assistant Professor	3.83	A
	Associate Professor	4.00	A
	Professor	4.00	A
	Total	4.04	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.25	A
	with Doctoral Units	3.50	A
	Doctoral Degree Holder	4.25	A
	Total	4.04	A
	Academic Rank	Weighted Mean	Interpretation

I enjoy conducting research.	Instructor	4.19	A
	Assistant Professor	3.83	A
	Associate Professor	4.20	A
	Professor	4.00	A
	Total	4.11	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.33	SA
	with Doctoral Units	3.50	A
	Doctoral Degree Holder	4.38	SA
	Total	4.11	A

With a 4.21 weighted mean, the respondents strongly agree that they have the interest to conduct research. However, shown in the data above is a slight difference when it comes to loving and enjoying research, receiving only 4.04 and 4.11 weighted mean or an interpretation of agree, respectively. It is important to note that in all three attitudes, a low mean score is recorded for the respondents who have doctorate units, averaging 3.50 only.

In contrast, the first two attitudes in Caingcoy's (2020) study received undecided votes from his respondents, except for the satisfaction of the research process. When taken as a whole, these facts can indicate that teachers still need to receive awareness training to become more knowledgeable about the enthusiasm for research. This may also give us insight into any uncertainty that may exist from the respondent's perspective.

Table 9. Attitude towards Research: Overall

Attitude towards Research	Academic Rank	Weighted Mean	Interpretation
Overall	Instructor	4.02	A
	Assistant Professor	3.76	A
	Associate Professor	4.11	A
	Professor	4.00	A
	Total	3.98	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.18	A
	with Doctoral Units	3.50	A
	Doctoral Degree Holder	4.17	A
	Total	3.98	A

Overall, the members of the College of Arts and Sciences only agree with the positive attitudes toward research with a 3.98 weighted mean. As observed also in the majority of the data, it seems that those who are currently studying for their doctorate degree lean more toward the negative scale of attitude to research.

Level of Motivation to Write Research

When one takes into account the knowledge one would be able to gain by performing a study, it affects one's intrinsic motivation (Fernandez et. al., 2019). Once more, it's critical to comprehend what drives teachers or other faculty members to do research because it has a significant impact on both the quantity and quality of the study that is produced.

Table 10. Motivation in Writing Research: Career Promotion and Teaching Efficiency

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
Research enhances my chance for career promotion.	Instructor	4.56	SA
	Assistant Professor	3.67	A
	Associate Professor	4.20	A
	Professor	4.00	A
	Total	4.29	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.58	SA
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.13	A
	Total	4.29	SA
Research enhances my teaching efficiency.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.56	SA
	Assistant Professor	4.33	SA
	Associate Professor	4.40	SA
	Professor	4.00	A
	Total	4.46	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.50	SA
	with Doctoral Units	4.25	SA
	Doctoral Degree Holder	4.63	SA
	Total		

Majority of the respondents, as presented in Table 10, are motivated by research as an enhancing tool for their career promotion and teaching efficiency, having 4.29 and 4.46 weighted mean respectively. It is well known that rewards are excellent stimuli or motivating factors for conducting research; career advancement involves enhanced and additional rewards from the institution. Ulla's (2017) claim that this might be because instructors get to experiment with different teaching pedagogies that work best in their classrooms, assess teaching resources, and develop a new curriculum program for the school may also corroborate this finding. A teacher will be motivated to conduct the necessary research if they believe they will be able to address a persistent issue with their ability to teach effectively. The results of a different study by Ulla done in 2018 showed that teachers had acknowledged the advantages of research, particularly those specialized in classroom instruction, for their career and professional growth.

Table 11. Motivation in Writing Research: School Head Expectation and Recognition

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
My school head expects me to come up with action research by the end of the year.	Instructor	3.88	A
	Assistant Professor	4.00	A
	Associate Professor	4.00	A
	Professor	4.00	A
	Total	3.93	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.92	A

My school head will recognize my commitment to do research.	with Doctoral Units	3.75	A
	Doctoral Degree Holder	4.13	A
	Total	3.93	A
	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.06	A
	Assistant Professor	3.67	A
	Associate Professor	4.20	A
	Professor	4.00	A
	Total	4.00	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.92	A
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.13	A

Furthermore, most of the respondents only agree that their school head expects them to come up with action research by the end of the year with a 3.93 weighted mean; and that their school head will recognize their commitment to do research with a 4.00 weighted mean.

This result is similar to Caingcoy's (2020) study, which found that respondents were motivated by receiving praise and gratitude from their managers or head instructors. Indeed, a number of studies, according to Roberts (2005), have shown that recognition, a low-cost but high-return component of a reward system, is one crucial element that corporations or institutions overlooked in motivating their employees.

Table 12. Motivation in Writing Research: Peer Interaction and Influence

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
I would like to interact with other teacher researchers.	Instructor	4.31	SA
	Assistant Professor	4.33	SA
	Associate Professor	4.40	SA
	Professor	4.00	A
	Total	4.32	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.42	SA
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.50	SA
	Total	4.32	SA
Most of my co-teachers have conducted or planned to conduct research.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.06	A
	Assistant Professor	3.83	A
	Associate Professor	4.00	A
	Professor	5.00	SA
	Total	4.04	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.83	A
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.38	SA
	Total	4.04	

Additionally, Table 12 shows that the respondents strongly agree that interacting with other teacher researchers is a motivating factor for the with 4.32 weighted mean. While they only agree, with 4.04 weighted mean, that it motivates them when their co-teachers

have conducted or have plans to conduct research with 4.04 weighted mean.

The results are not the same as Caingcoy's (2020), with his respondents unsure if they should view their co-teachers' current involvement in writing research as a motivating element for them. Having intrinsic motivation, which involves delight in supporting others and working with others, is widely acknowledged to have beneficial benefits on someone's performance and innovative knowledge sharing, as found in multiple other research (Kato et al., 2021). The replies offered by the faculty members largely corroborate this claim.

Table 13

Motivation in Writing Research: Outranking for Promotion

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
Conducting research allows me to outrank other applicants for promotion.	Instructor	3.77	A
	Assistant Professor	4.00	A
	Associate Professor	4.50	SA
	Professor	2.50	D
	Total	3.74	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.00	A
	with Doctoral Units	3.88	A
	Doctoral Degree Holder	3.75	A
	Total	3.89	A
I would like to demonstrate to my peers that the conduct of research is not that difficult.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.00	A
	Assistant Professor	4.00	A
	Associate Professor	4.50	SA
	Professor	4.00	A
	Total	4.05	A

	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.83	A
	with Doctoral Units	3.50	A
	Doctoral Degree Holder		A
			A

In the same manner, the faculty of the College of Arts and Sciences only agree, with 3.89 and 3.82 weighted mean, that conducting research as a means to outrank other applicants in promotion and them liking to demonstrate to peers that research is not difficult to conduct are both motivations for them to write research. Table 13 shows that for the respondents, competing for rankings or being seen as someone advanced in the endeavor has the potential to be a great motivation for teachers. However, this may need more specific descriptions to be more effective in encouraging them to be highly active with the activity.

Table 14. Motivation in Writing Research: Interest in Practicing, Presenting, and Publishing Research

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
I would like to publish action research findings to research journals.	Instructor	4.31	SA
	Assistant Professor	4.33	SA
	Associate Professor	4.40	SA
	Professor	5.00	SA
	Total	4.36	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.42	SA
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.63	SA
	Total	4.36	SA

I find research as an interesting and meaningful educational practice.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.44	SA
	Assistant Professor	4.33	SA
	Associate Professor	4.80	SA
	Professor	5.00	SA
	Total	4.50	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.67	SA
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.75	SA
	Total	4.50	SA
I would like to participate and be recognized in the research congress.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.38	SA
	Assistant Professor	4.17	A
	Associate Professor	4.40	SA
	Professor	4.00	A
	Total	4.32	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.42	SA
	with Doctoral Units	4.00	A
	Doctoral Degree Holder	4.50	SA

Moreover, Table 14 presents that majority strongly agree that it motivates them to write research with the goal of publishing their findings in research journals; making research an interesting and meaningful educational practice; and participating as well as being recognized in research congress. These three factors received 4.36, 4.50, and 4.32 weighted mean, respectively.

These findings support Caingcoy's (2020) study, which found that teachers find writing and doing research to be a wonderful source of motivation. His participants are unsure about attending research conferences, though. One important aspect of evaluating the success of research is publication and presentation. Since contributions to journals are reviewed before being accepted, high-quality research is required. It is not surprising that individuals who have previously completed their higher graduate courses make up the majority of those who feel it to be a motivating factor.

Table 15

Motivation in Writing Research: Finance and Discovery for Knowledge

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
Research allows me to come out financially ahead.	Instructor	3.75	A
	Assistant Professor	2.83	NAD
	Associate Professor	3.80	A
	Professor	4.00	A
	Total	3.57	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	3.67	A
	with Doctoral Units	3.50	A
	Doctoral Degree Holder	3.50	A
	Total	3.57	A
I have a passion for the discovery of new knowledge.	Academic Rank	Weighted Mean	Interpretation
	Instructor	4.44	SA
	Assistant Professor	4.17	A
	Associate Professor	4.40	SA
	Professor	4.00	A
	Total	4.36	SA
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.50	SA
	with Doctoral Units	4.13	A

Doctoral Degree Holder	4.38
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In terms of research as an agent to be financially ahead, the respondents only agree with a 3.82 weighted mean. Meanwhile, they strongly agree that they have a passion for the discovery of new knowledge with a 4.36 mean score. Although the benefits and opportunities for professional and financial advancement that come with completing the research process are great motivators for faculty members, it is generally recognized that the actual research writing requires funding and assistance.

In the Philippine context, funding for research is a real difficulty. According to a study by Wa-Mbaleka and Gomez (2017), the CHED already has guidelines for financing applications, but it is clear that they are difficult to put into practice because there aren't many research grants that get granted. Consequently, there are some obstacles to truly realizing the passion for research writing, even when teacher researchers are strongly motivated by their desire to acquire new information. These final two elements have more internal motives.

Table 16
Motivation in Writing Research: Overall

Motivation to Write Research	Academic Rank	Weighted Mean	Interpretation
Overall	Instructor	4.19	A
	Assistant Professor	3.94	A
	Associate Professor	4.22	SA
	Professor	4.23	SA
	Total	4.14	A
	Highest Educational Attainment	Weighted Mean	Interpretation
	MA/MS Degree Holder	4.21	SA
	with Doctoral Units	3.92	A
	Doctoral Degree Holder	4.27	SA
	Total	4.14	A

To sum up, the College of Arts and Sciences faculty members only agree with the presented motivators with a total weighted mean of 4.14. As mentioned previously, there is a significant point in the results wherein those who are not yet finished with their doctorate degree are generally less likely motivated to conduct research writing.

CONCLUSION

The findings and analysis support the conclusion that, of all the population's demographics, their academic standing and highest level of education are the ones given more emphasis. Additionally, it can be said that the College of Arts and Sciences faculty at the Universidad de Manila has an averagely positive attitude toward research and is not yet particularly motivated to write research, especially the teachers who are also enrolled in graduate programs. The university should be encouraged by these findings to explore ways to support the faculty members' personal and professional growth as researchers. Furthermore, attempts to motivate them to pursue research should be stepped up. This only serves to demonstrate that current motivational strategies are ineffective and could use improvement. Finally, the findings of this study may serve as a foundation or support for future research of a similar nature by other institutions or departments.

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Fear of Crime: Victimization Risks among Selected University Students of Universidad de Manila

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ABSTRACT

This research was made akin to the increase of crime rate and proliferation of news on crime. The research aimed to determine the respondents' profile, victimization experience, fear of crime, victimization risk, encountered neighborhood problems, and countermeasures employed. The researchers made use of descriptive survey; respondents are selected students of a local university in Manila using convenient sampling. Data are analyzed using percentage method and weighted mean. Majority and/or most of respondents are male, age between 18-23 years, senior students with average built, and often read newspaper. Respondents are not working students and live in Tondo, Manila. They commute and have experienced sexual harassment in public area in the afternoon. They do not know anyone who is victimized of same crime; their perceived neighborhood problems are unsupervised youth, people under influence of drug or alcohol and too much noise. They are afraid of being victimized by certain crimes and perceived that they are somewhat likely to be victimized. They choose passive-defensive approach as countermeasures. Crime prevention through environmental design and police visibility were recommended.

Keywords: Fear of Crime, Victimization Risk, Countermeasures

INTRODUCTION

This study was conducted in relation to the rise in the crime rate and the proliferation of news about crime. The objective of the study was to determine the demographics, victimization history, fear of crime, victimization risk, neighborhood issues encountered, and countermeasures utilized by respondents. The researchers employed a descriptive survey, with respondents consisting of students from a local university in Manila selected via convenient sampling. Utilizing the percentage method and weighted mean, the data are analyzed. The majority of respondents are male, between the ages of 18 and 23, senior students of average build, and avid newspaper readers. Respondents are Tondo, Manila residents who are not working students. They have experienced sexual harassment in a public area during their afternoon commute. They do not know anyone who has been victimized by the same crime; the perceived problems in their neighborhood are unsupervised youth, people under the influence of drugs, and excessive noise. They fear becoming victims of certain crimes and believe it is somewhat likely that they will be victimized. They employ a passively defensive strategy as a countermeasure. Recommendations for crime prevention through environmental design and police visibility.

There is justification for students, parents, and educators to develop a fear of crime, as evidenced by the abundance of global studies on student victimization. Fear of crime was defined by Ferraro and LaGrange (1987, p. 72; see also Ferraro 1995, p. 23) as "a negative emotional reaction to crime or the symbols associated with crime." Fear of crime has been the subject of research for decades, with numerous studies on its extent, nature, and consequences (Lee, Reyns & Kim, 2020). Most studies on fear of crime indicate that it is primarily caused by direct or indirect exposure to a criminal event

(Lewis, 2017). Numerous studies have investigated the predictors of fear of crime. It has been theorized primarily as an affective emotional state associated with fear of victimization or as a cognitive state of apparent risk of victimization (Bolger & Bolger, 2018). In a sample of 523 students from a leading university in Kenya, Pryce, Wilson, and Fuller (2018) discovered that females, older students, and victims with prior victimization experience are more fearful of crime at school, crime in the community, and overall crime. In addition, the research of Bolger and Bolger (2018) demonstrates that women and minorities are more likely to fear crime. As expected, victimization experience plays a substantial role in the rationalization of fear of crime. Victims of crime have a significantly greater fear of crime than those who have never been a victim (Krulichova, 2018). Based on the aforementioned findings, it can be deduced that feelings of vulnerability in the event of a sexual or non-sexual assault exacerbate the emotional fear associated with crime (Bolger & Bolger, 2018). However, real or perceived fear of crime poses challenges for criminal justice officials, the community, and individuals (Bolger & Bolger, 2018).

Even though records from 2019 to 2020 showed a more than 60 percent decrease in the frequency of student victimization in school or on the way to or from school, there was still a record of 11 victimizations per 1000 students in the first year of the pandemic (NCES, 2022). This was when schools restricted or even ceased offering face-to-face classes (US Bureau of Justice Statistics, 2020). Creating a safe school environment and atmosphere promotes social and creative learning. Unfortunately, even on college campuses, heinous crimes occur. In the Philippines, violent crimes have also been reported in schools. In July of 2019, a seventh-grade student was fatally shot in their classroom in Calamba, Laguna (Tawas, Buniel & Estrada, 2021). Also, the murder of a 22-year-old graduating honor student in Albay who was discovered dead in a grassy area and believed to have been raped prior to her murder (dela Fuente, 2022). Contrary to the common belief that students are safe at home during

the hours that criminals are most active, studies indicate that homicides were committed at 6:00 PM, robbery and theft at 4:00 PM, violation of comprehensive law on firearms and ammunition at 5:00 AM, and murder at approximately 7:00 PM. The peak hours for the commission of crimes such as drug trafficking, theft, and robbery are deduced to be during school hours on weekdays. While the result indicates that the majority of homicides occur during times when some teachers remain in school to complete additional paperwork, the majority of teachers remain in school during these times to complete additional paperwork (Tawas, Buniel & Estrada, 2021). Although justice is being served in some cases, such as when six suspects were sentenced to life in prison by the Manila Regional Trial Court in 2018 for kidnapping a college student and making it appear to be part of hazing rituals (Cueto, 2022), we still have a long way to go in addressing this issue. This only demonstrates how vulnerable students are, whether inside or outside of school grounds. As a result, upon the resumption of face-to-face classes in the Philippines, PNP Chief Azurin (2022) emphasized the "greater challenge" for police forces to protect students, stating, "our intention is not to create panic, but we caution students to always be vigilant around their surroundings." The PNP has "sounded the alarm" on crimes against students in response to the 149 crimes committed against students in Metro Manila from 1 July to 31 August 2022, the majority of which were rapes. (Pinlac, 2022).

Motivated by the alarming rate of crime victimization against students, the current study seeks to determine the level of fear and the risks associated with crime victimization among Criminology students at Universidad de Manila.

STATEMENT OF THE PROBLEM

The study aims to determine the level of fear and the risks to crime victimization among students of Universidad de Manila, specifically it aims to answer the following sub-problems:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Gender
 - 1.2 Body type
 - 1.3 Height
 - 1.4 Source of knowledge on criminality
 - 1.5 Year Level
 - 1.6 Age
 - 1.7 Working Student
 - 1.8 District of Residence
 - 1.9 Mode of transportation often used
2. What is the victimization experience of the respondents?
3. What is the fear of crime of the respondents?
4. What is the victimization risk of the respondents?
5. What are the neighborhood problems encountered by the respondents?
6. What countermeasures are used by the respondents?

METHODOLOGY

The study employed a descriptive survey, which is appropriate whenever subjects differ among themselves and the researcher wishes to determine the extent to which different conditions are obtained among subjects (Calmorin, 2010). In addition, this was a victim survey in which respondents were asked about their experiences as victims (Maxfield and Babbie, 2001). Utilization of a convenient sampling method. All of the respondents were Criminology students from the University of Manila. Google forms were used by researchers as instruments distributed to participants. The instrument included questions regarding the demographic profile, fear of crime, risk of victimization, and countermeasures of participants. The researchers employed the following mathematical formulas:

1. Percentage which analyzed the demographic profile, victimization experience and countermeasures; and

2. Weighted Mean which analyzed fear of crime and victimization risk.

RESULTS AND DISCUSSION

The study employed a descriptive survey, which is appropriate whenever subjects differ among themselves and the researcher wishes to determine the extent to which different conditions are obtained among subjects (Calmorin, 2010). In addition, this was a victim survey in which respondents were asked about their experiences as victims (Maxfield and Babbie, 2001). Utilization of a convenient sampling method. All of the respondents were Criminology students from the University of Manila. Google forms were used by researchers as instruments distributed to participants. The instrument included questions regarding the demographic profile, fear of crime, risk of victimization, and countermeasures of participants. The researchers employed the following mathematical formulas:

Table 1

Gender	<i>f</i>	%
Male	373	65.78
Female	166	29.28
LGBTQIA+	28	4.94
Total	567	100.00

According to Table 1, the majority of respondents are male. Since BS Criminology often leads to careers in law enforcement, public safety, and security, the majority of male students enroll in the course.

(R) The research conducted by Logan and Walker (2021) revealed that there are gender differences in factors related to personal safety concerns. Consequently, a significantly higher proportion of women than men reported recent exposure to threatening behavior and victimization. Similarly, Gonultas's (2022) study demonstrated that the level of cyberbullying victimization among university students varied by gender.

Table 2

Body Types	<i>f</i>	%
Thin	81	14.29
Fat	83	14.64
Muscular/Athletic	47	8.29
Regular/Average built	356	62.79
Total	567	100.00

The majority of respondents possess regular or average physiques, as shown in Table 2. In preparation for a future career in the police force or a profession related to law enforcement, students typically maintain their ideal Body Mass Index.

Table 3

Height	<i>f</i>	%
No Answer	1	0.18
Less than 5'(ft)	18	3.17
5' – 5' 5"(ft)	268	47.27
More than 5' 5"(ft)	280	49.38
Total	567	100.00

Table 3 reveals that the majority of respondents are taller than 5'5" Since most law enforcement-related careers require applicants to meet a minimum height requirement, the vast majority of criminology students are relatively tall.

Thakhar et al. (2021) investigate the relationship between Body Mass Index (BMI) and peer victimization. The study demonstrated a correlation between BMI and victimizations among adolescents in India. The results demonstrate a concurrent relationship between BMI and victimization for both boys and girls, as well as a prospective relationship in which a higher BMI corresponded to a decrease in victimization for boys over time.

Table 4

Source of Knowledge on Criminality	Mean	Description
How often do you read a newspaper?	3.04	Often
How often do watch news on television?	2.26	Sometimes
How often do you browse the internet/social media for news?	1.59	Sometimes
Total	2.30	Often

The majority of respondents' sources of knowledge about criminality are newspapers, as shown in Table 4. Due to the prevalence of fake news on social media, criminology students are more likely to rely on newspaper articles for crime and criminality-related information. It concurs that although the Internet is a significant news source, traditional media are still relevant. The television verifies the veracity of social network news (Silva and Guedes, 2022).

(R) Lafa Jha (2020) argued that despite the proliferation and buzz surrounding digital media and the high-pitched debates on television, print remains the most important source of information. She continued by citing the findings of the Center for Voting Opinion and Trends in Election Research (CVOTER) Media Consumption Survey (2020), which indicate that audiences attach greater credibility to print media stories during times of crisis. Especially in this age of fake news, the newspaper's inherent strength is derived from its credibility.

Table 5

Year Level	<i>f</i>	%
Freshman	88	15.52
Sophomore	118	20.81
Junior	149	26.28
Senior	211	37.21
Total	567	100.00

Table 5 demonstrates that the majority of respondents are Seniors. The College of Criminal Justice currently has four (4) sections of 4th year students and one (1) section of 5th year students; all five (5) sections are considered Senior Criminology students.

In his study, Salman (2018) found that the likelihood of becoming a victim of bullying was greater for students in grades 8 to 12 than for those in grade 7. Gonzales (2020) discovered, however, that there is no significant correlation between cyberbullying victimization and the year level of the responding university students. Thus, implying that victimization occurs throughout the year.

Table 6

Age	<i>f</i>	%
18 – 20 years old	276	48.68
21 – 23 years old	275	48.50
24 – 26 years old	13	2.29
Above 26 years old	3	0.53
Total	567	100.00

The majority of respondents in Table 6 are between the ages of 18 and 23, which is typical for college students.

Table 7

Working Student	<i>f</i>	%
No	426	75.13
Yes	141	24.87
Total	567	100.00

The majority of respondents are full-time students because the universities where they are enrolled provide free education, eliminating the need for students to work. Since its founding in 1995, the University has provided free education to needy but meritorious students.

Table 8

District of Residence	<i>f</i>	%
Manila District I	225	39.68
Manila District II	97	17.11
Manila District III	65	11.46
Manila District IV	56	9.88
Manila District V	80	14.11
Manila District VI	43	7.58
Outside Manila	1	0.18
Total	567	100.00

The majority resides in Districts I and 2. Tondo Manila. Tondo is a district on the outskirts of Metro Manila with a population of 630,000, according to Zasso (2018). One of the worst slums in the country, it consists of a collection of temporary housing units constructed on a garbage dump. Due to the fact that the population in this district requires access to free education, the respondents choose to enroll at Universidad de Manila, which offers free education and is the most accessible option.

Table 9

Mode of Transportation Often Used	<i>f</i>	%
Private Vehicle	129	22.75
Public Transport	438	77.25
Total	567	100.00

The majority of respondents utilize public transportation because it is the most affordable and convenient option for students. Additionally, the University is accessible via the majority of land transportation and public transportation routes.

Table 10

Victimization Experience	<i>f</i>	%*	Rank
Raped, sexually assaulted, or attempted to be raped	68	11.99	5
Sexual harassment (ie. whistling, staring, catcalling, stalking etc)	284	50.09	1
Beaten up	92	16.23	4
Something taken away	196	34.57	2
Car, motorcycle, or vehicle stolen	18	3.17	8
Car, motorcycle, or vehicle vandalized	34	6.00	7
Threatened with a weapon? (a knife, a club, or a gun)	105	18.52	3
Kidnapped/abducted/attempted kidnapping/abduction	8	1.41	9
Vandals damage the property	60	10.58	6
Bullied	5	0.88	10.5
Scammed	5	0.88	10.5
Abused	3	0.53	12
Discriminated	1	0.18	13

The majority of respondents' victimization experiences include sexual harassment (e.g., whistling, staring, catcalling, stalking, etc.), having something taken from them, and being threatened with a weapon, as shown in Table 10. (a knife, a club, or a gun). While those with the least victimization experience were bullied, conned, discriminated against, and abused.

Multiple studies supported this conclusion, as Musu et al. stated in 2019:... Educational institutions have become sites for a variety of crimes, including bullying, sexual harassment, school shootings, and acts of hatred. The majority of college campus sexual harassment victims have reported being harassed by other students (Association of American Universities, 2019). Since entering college, some students have been victims of stalking (Cantor,

Fisher, Chibnall, Townsend, et. al. 2020). Students were also experiencing property crimes such as motor vehicle thefts (NCES, 2020; Musu et al., 2019); robbery (Tawas, Buniel & Estrada, 2021; Masys, Izurieta, & Ortiz, 2020; NCES, 2020); vandalism; and property destruction (Masys, Izurieta, & Ortiz, 2020).

Since the majority of students are commuters, it can be inferred that they are more likely to become victims on public transportation, such as bus and jeepney, where these crimes may occur.

Table 11 presents information regarding the location where the majority of respondents' victimization experiences occurred.

Table 11

Where it happened?	Raped, sexually assaulted, or attempted to be raped	Sexual harassment (ie. whistling, staring, catcalling, stalking etc)	Beaten up	Something taken away	Car, motorcycle, or vehicle stolen	Car, motorcycle, or vehicle vandalized	Threatened with a weapon? (a knife, a club, or a gun)	Kidnapped/abducted/attempted kidnapping/abduction	Vandals damage the property	Total	Rank
Public Place/Area	35	275	51	148	11	23	88	7	20	658	1
Workplace	1	3	0	2	3	0	0	0	2	11	4
University Campus	0	2	6	18	0	0	3	1	9	39	3
Home	29	4	31	26	4	12	11	0	27	144	2

The majority of respondents' victimizations occurred in public places, as shown in Table 11.

The majority of public spaces are commonly owned by the government and are accessible to all. The design of these spaces and their arrangement within the urban fabric impact the likelihood of criminal activity. Public locations may attract tens of thousands of people (e.g., stadiums, airports, major central stations) or they may be deserted paths or empty stations. In either case, poor design and maintenance of these places can increase the likelihood of criminal activity or give users the impression that nobody is in charge, making them feel unsafe (Ceccato & Nalla, 2020). Since the majority of respondents are from Tondo, which is well-known for

its impoverished slums, living conditions are substandard (Yulu, 2021). Economic deprivation causes anxiety... These factors contribute to delinquency [crime]: family adjustments, social vices, and bad company (Onyenke and Karam, 2022).

Table 12 presents data on the time of occurrence of victimization experienced by the respondents.

Table 12

When it happened?	Raped, sexually assaulted, or attempted to be raped	Sexual harassment (ie. whistling, staring, catcalling, stalking etc)	Beaten up	Something taken away	Car, motorcycle, or vehicle stolen	Car, motorcycle, or vehicle vandalized	Threatened with a weapon? (a knife, a club, or a gun)	Kidnapped/abducted/attempted kidnapping/abduction	Vandals damage the property	Total	Rank
Dawn (3am – 6am)	6	3	2	5	4	2	5	0	3	30	5
Morning (6am – 12nn)	5	13	2	31	3	3	6	2	4	69	4
Afternoon (12nn – 6pm)	20	121	51	93	4	9	35	3	19	355	1
Nighttime (6pm – 12am)	23	128	29	51	5	10	39	2	14	301	2
Late Night (12am – 3am)	14	11	2	10	4	10	15	1	15	82	3

The majority of respondents' victimization experiences occurred in the afternoon and evening, as shown in Table 12.

According to studies, homicides occurred at 6:00 p.m., theft and robbery at 4:00 p.m., violation of the comprehensive law on firearms and ammunition at 5:00 a.m., and murder at 7:00 p.m. During school hours on weekdays, drugs, theft, and robbery are more likely to be committed than at other times (Tawas, Buniel & Estrada, 2021). This is also consistent with US-Office of Juvenile Justice and Delinquency Prevention statistics from 2022, which indicate that violence peaks in the afternoon on school days and in the evening on non-school days. During these hours, when crimes occur, victims and perpetrators meet; a student becomes a suitable target for a motivated offender, and in some cases, has no capable guardian.

According to Table 12, the majority of respondents' victimization experiences occurred in the afternoon and evening.

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firearms and ammunition at 5:00 a.m., and murder at 7:00 p.m. Drugs, theft, and robbery are more likely to occur during school hours on weekdays than at other times (Tawas, Buniel & Estrada, 2021). In accordance with data from the US-Office of Juvenile Justice and Delinquency Prevention from 2022, violence peaks in the afternoon on school days and in the evening on non-school days. During these hours, when crimes occur, victims and perpetrators meet; a student becomes a suitable target for a motivated offender, and in some cases, has no capable guardian.

The data presented in Table 13 indicate whether the respondent knows a victim of the same crime.

Table 13

Do you know someone who has been a victim of the same crime?	Raped, sexually assaulted, or attempted to be raped	Sexual harassment (ie. whistling, staring, catcalling, stalking etc)	Beaten up	Something taken away	Car, motorcycle, or vehicle stolen	Car, motorcycle, or vehicle vandalized	Threatened with a weapon? (a knife, a club, or a gun)	Kidnapped/abducted/attempted kidnapping/abduction	Vandals damage the property	Total
Yes	327	327	229	270	162	93	182	41	74	1705
No	240	240	338	297	405	474	385	526	493	3398

Inferring from the fact that the majority of respondents do not know anyone who has been a victim of the same crime, it can be concluded that such occurrences are rare. The majority of fear of crime stems from social interaction; less social interaction is associated with reduced fear of crime (Curiel and Bishop, 2018)

The frequency of social interaction influences the level of criminal fear. In contrast, the majority of respondents know someone who has been a victim of the same sexually-related crime they have. This includes rape – either completed or attempted, sexual assault, and sexual harassment.

Table 14 Neighborhood Problems

Neighborhood Problems	Mean	Description
Trash and litter lying around your neighborhood	2.61	Serious Problem
Neighborhood dogs running loose	2.46	Somewhat of a Problem
Inconsiderate and disruptive neighbors	2.76	Serious Problem
Graffiti on sidewalks and walls	2.14	Somewhat of a Problem
Vacant houses and unkempt lots	1.7	Somewhat of a Problem
Unsupervised youths	3.04	Serious Problem
Too much noise	2.97	Serious Problem
People drunk or high on drugs in public	3.07	Serious Problem
Abandoned cars or car parts lying around	2.3	Somewhat of a Problem
Over-all Mean	2.56	Serious Problem

People who are drunk or high on drugs in public; Unsupervised youths; Too much noise; Inconsiderate and disruptive neighbors; and Trash and litter lying around your neighborhood are examples of Serious Neighborhood Problems encountered by respondents. According to Social Disorganization Theory by Clifford Shaw and Henry D. McKay and Broken Window Theory by James Q. Wilson and George L. Kelling, these conditions lead to crime-prone areas.

Table 15 Fear of Crime

Fear of Crime	Mean	Description
Being approached (on the street) by a beggar or panhandler	2.45	Somewhat Afraid
Being cheated, conned or swindled out of your money	3.45	Slightly Afraid
Being raped or sexually assaulted	4.05	Afraid
Being murdered	4.24	Afraid
Being attacked by someone with a weapon	4.1	Afraid
Having your car/motorcycle stolen	3.69	Afraid
Being kidnapped/abducted/attempted kidnapping/abduction	4.25	Afraid
Having your property damaged by vandals	3.27	Slightly Afraid
Over-all Mean	3.69	Afraid

Respondents fear the following crimes: being kidnapped/abducted/attempted kidnapping/abduction; being murdered; being attacked with a weapon; being raped or sexually assaulted; and having their vehicle or motorcycle stolen.

According to the majority of studies, fear of crime is primarily caused by direct or indirect experience with a criminal occurrence (Lewis, 2017). It has been theorized primarily as an affective emotional state associated with fear of victimization or as a cognitive state of apparent risk of victimization (Bolger & Bolger, 2018). Pryce, Wilson, and Fuller (2018) discovered that females, older students, and previous crime victims are more fearful of school crime, community crime, and overall crime. In line with previous research, Bolger & Bolger (2018) found that females and minorities were more likely to be fearful of crime. As expected, victimization experience plays a crucial role in the rationalization of fear of crime (Krulichova, 2018). Based on the aforementioned findings, it can be deduced that feelings of vulnerability in the event of a sexual or non-sexual assault exacerbate the emotional fear associated with crime (Bolger & Bolger, 2018).

Table 16 Victimization Risk

Victimization Risk	Mean	Description
Being approached (on the street) by a beggar or panhandler	2.9	Slightly Likely
Being cheated, conned or swindled out of your money	2.11	Somewhat Likely
Being raped or sexually assaulted	1.87	Somewhat Likely
Being murdered	1.8	Somewhat Likely
Being attacked by someone with a weapon	2.06	Somewhat Likely
Having your car/motorcycle stolen	1.74	Somewhat Likely
Being kidnapped/abducted/attempted kidnapping/abduction	2.09	Somewhat Likely
Having your property damaged by vandals	1.85	Somewhat Likely
Total	2.05	Somewhat Likely

Respondents believed they will be victims of the following crimes: Having your car/motorcycle stolen; Having your property damaged by vandals; Being murdered; Being raped or sexually assaulted; Being attacked with a weapon; Being kidnapped/abducted/attempted kidnapping/abduction; Being cheated, conned or swindled out of your money. This corroborates the study's conclusion that the risk of experiencing a crime is not distributed uniformly across a population. Some groups are immune, while others are chronically victimized (Curiel, Delmar, and Bishop, 2017).

Respondents believe they have a low risk of victimization because few of them own motorcycles or property that can be stolen; or this can be attributed to effective crime control in their neighborhood and a belief in their ability to defend themselves during victimization.

Table 17. Countermeasures results

Countermeasures	f	%*	Rank
Engraved ID numbers on your possession	300	52.91	7
Installed extra locks on windows and doors	423	74.60	3
Learned more about self - defense	519	91.53	2
Started carrying something to defend yourself	388	68.43	6
Avoiding unsafe areas	542	95.59	1
Limiting or changing your daily activities	410	72.31	4
Being accompanied while travelling	397	70.02	5
Avoiding going out late at night	4	0.71	8
Sharing my location or information with loved ones or through social media	3	0.53	9
Changing my travel routes	1	0.18	10

**Based on total number of respondents*

The majority of respondents reduce their risk of victimization by avoiding unsafe areas, learning more about self-defense, and installing additional locks on their windows and doors. This is consistent with the study's conclusion that frequent communication about crime promotes preventive behavior; the effects of media (on fear) are greater for those who believe they are vulnerable to victimization (Sylvia and Guedes, 2022) .

Favor the use of passive countermeasures. When confrontation cannot be avoided, however, they are well-prepared.

CONCLUSION

Majority of the respondents are male with average built with height more than 5'5"; they often read newspaper as source of knowledge on criminality; most are senior students and aged between 18 to 23 years; majority are not working and live at districts of Tondo, Manila. Majority are commuters who ride public transportation vehicles and has experienced sexual harassment in public area/place and it occurred during afternoon. Respondents do not know anyone who is victimized with similar crime. They perceived unsupervised youth, drunk or drugged people in public places and too much noise as

serious problems in their neighborhood. Respondents are afraid of being kidnapped, murdered, attacked by someone with a weapon, being raped/sexually assaulted, and having their car/motorcycle stolen.

Respondents perceive a moderate likelihood of victimization; suggested countermeasures include avoiding unsafe areas, learning self-defense, and installing additional door locks. Researchers advocate for the application of environmental design and police visibility for crime prevention.

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The Effectiveness and Responsiveness of the Universidad de Manila Curriculum: An Illuminating Analysis

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Abstract

As pressure mounts on higher education institutions to evaluate the responsiveness of their curriculum programs, it is difficult to define responsiveness. However, this difficulty is exacerbated by the lack of a tested evaluation model that addresses it. The purpose of this paper was to assess the responsiveness and efficacy of the Bachelor of Science in Information Technology program. The researchers used a standard questionnaire to evaluate the curriculum's responsiveness and effectiveness. The primary method of data analysis employed was thematic analysis. The outcomes demonstrated that the programs are responsive and effective within the curriculum. In light of these findings, this work contributes new knowledge to the tradition of evaluation theory and provides practical evidence for the enhancement of the evaluated curriculum. The study concludes with the provision of recommendations.

INTRODUCTION

Curriculum is the foundation of academic institutions' technical, professional, undergraduate, graduate, and undergraduate programs. It can be viewed as a processing machine that determines the desired output quantity and quality. In the context of a university, all operational activities may be directly or indirectly related to the curriculum.

The Universidad de Manila offers eighteen (18) different degree programs. Recent research conducted by the University Research Center evaluates the responsiveness and efficacy of the university's curriculum revision. This study will strengthen the University's academic performance and quality assurance initiatives.

The Office of the Vice President for Academic Affairs, with the assistance of the University System Curriculum Committee and the University Research Center, has created a tool to evaluate the curriculum's responsiveness and efficacy. The Curriculum Committee deserves a great deal of praise for the effort, time, and skill they put into this guideline. This research will aid the university in evaluating the UDM curriculum and preserving the quality of education at the institution.

Continually, institutions of higher education face pressures from various directions. This condition frequently raises concerns regarding the adaptability of their curriculum programs. It is expected that they will increase their responsiveness to changing contexts by restructuring their curricula to meet the needs and interests of society [1]. Universities and colleges are urged to reconsider the responsiveness of their curriculum programs in light of this expectation.

This objective of responsiveness is reflected in the Philippine demand for higher education institutions. Through Memorandum Order No. 2 Series of 2011, the Commission on Higher Education [2] minimally prescribed curriculum development at the postsecondary level. This approach allowed colleges and universities to determine their curriculum programs based on their individual requirements. This effort to develop a responsive curriculum is also reflected in Universidad de Manila's mission. As a higher education institution situated in a culturally diverse region, it is expected to provide programs that foster the growth of its community. This objective is reinforced at the Bachelor of Science in Information Technology degree level. Its instruction reflects a desire to equip graduate students with a science discipline that is adaptable to a shifting social environment.

These circumstances have turned the attention of most higher education institutions to evaluate if their curriculum programs meet the responsiveness that is being demanded. However, a primary task of first order to this endeavor is the need to define responsiveness. The concept of responsiveness depends on the purpose, place, and time [4], is a complex debate [5] and has multiple facets [6]. For this reason, a myriad of definitions of responsiveness in education abounds [7-18]. Thus, if there is no single discourse nor grand narrative of the concept of responsiveness [9], then curriculum evaluation requires an exhaustive approach that works from the ground. Considering the evaluation needs of the curriculum under study, however, there appears to be an absence of a tested evaluation approach that intends to reach judgments about the responsiveness of a curriculum from the grassroots level.

The traditional and technical approach to evaluation has always centered on the achievement of a program's stated

objective. However, due to its emphasis on the objective, evaluation has also been prone to favoring the most obvious aspect of the program. It does not account for the covert aspects of the program, which may operate in pervasive ways otherwise. As a result of this discontent, academics have adopted a more naturalistic evaluation strategy. This approach recognizes the uniqueness of each program, seeks to comprehend its complexities, and responds to its members on the ground [19-22].

Parlett and Hamilton [22] advocated for a naturalistic evaluation model dubbed "illuminative evaluation." This model consists of two fundamental components: the instructional system or "the formalized plans and statements that pertain to a particular teaching arrangement" [23] and the learning milieu, which is "the social, psychological, and material environment in which students and teachers work" [23]. It focuses on the identification of disparities between the instructional system and the learning environment [24]. Moreover, it holds that there is no absolute reality [25]. This framework appears to address the problem with the currently evaluated curriculum.

A review of previous evaluation studies in the field of education [26-45] reveals that illuminative evaluation has primarily been utilized to examine the implementation of a course, innovation, or program. Following the approach of illuminative evaluation, the educational objectives are derived from the sources that represent the instructional system, and the issues become increasingly centered on the implementation in the learning environment. This conventional application of illuminating evaluation can be reconsidered in this study in order to reveal the concept of responsiveness as desired and realized in the curriculum.

This study will contribute evidence to theory, practice, and research by shedding light on the complexities of responsiveness through the illuminative evaluation method. The outcome will generate theoretical knowledge regarding the applicability of the evaluation model to curricula with obscured characteristics. It will also provide teachers involved in the improvement of the current curriculum under study with useful information. It will also serve as a research benchmark for innovations in the application of the illuminative evaluation model.

The purpose of this paper is to evaluate the effectiveness and responsiveness of the Universidad de Manila Curriculum in light of the circumstances described.

METHODOLOGY

This study employed an evaluation research design aimed at determining a program's merit or value [46]. In addition, a model known as illuminative evaluation [22] was utilized. The analysis of the two components of the instructional system and learning environment guides this model. In addition, it follows the three stages of development: investigation, inquiry, and explanation. These components and stages function within the social anthropological framework [28] and are adopted to guide the process of data collection in this study.

This study's sample was selected using purposeful sampling, a technique in which the researcher carefully selects participants in consideration of the purpose of the study, with the expectation that each participant will be able to provide relevant data [47]. This sampling strategy satisfies the requirements of this study, as curriculum-engaged participants were chosen to provide information for the study.

Students who participate in the effectiveness and responsiveness of the Universidad de Manila Curriculum comprised the sample. They were chosen regardless of their age, gender, grade level, or section.

Data sources

In accordance with the principles of illuminative evaluation [28], this study utilized multiple data sources, including interviews, documents, and surveys. To determine the underlying significance of responsiveness, the researcher primarily conducted interviews and document reviews. The interviews and document reviews centered on fundamental questions designed to elicit responses regarding the meanings of responsive instructional system and learning environment. In addition, survey questionnaires were created for this research. They consisted of statements structured on a responsiveness rating scale. They were employed to validate the accuracy and consistency of the concepts gleaned from interviews and document reviews.

Data analysis

The data extracted from interviews and document reviews were categorized to generate responsiveness themes. The data underwent a thematic analysis procedure. The method of thematic analysis involves the examination of utterances or data and their conceptualization. Then, these constructs and concepts are organized into themes, which simplifies the results while simultaneously organizing the data to address the research questions. [48].

RESULTS AND DISCUSSION

Responsiveness As Desired In The Instructional System

This study gathered a continuous stream of data to determine the desired level of responsiveness for the UDM instructional

system. The perspectives of the college dean, department chair, and faculty members who are continuously involved in the development of the curriculum program were used to assess responsiveness in the first stage. In addition, relevant documents such as the operations manual, memorandum orders, program of study, course catalog, and instructional plans were reviewed to determine how responsiveness is desired in the written intentions of the program. At this point, the collected utterances and data were subjected to thematic analysis. An analysis of constructs and concepts generated the following themes, which define the desired responsiveness of the instructional system.

Table 1. Responsiveness of the Curriculum

Responsiveness of the Curriculum	WM	Verbal Interpretation
The curriculum is responsive to my needs as a professional.	3.78	Highly Responsive
This curriculum is responsive to my need of passing the licensure examination.	3.70	Highly Responsive
The curriculum is responsive to my need of finding a job related to my degree.	3.85	Highly Responsive
The curriculum is responsive to the needs of my work in the industry.	3.66	Highly Responsive
Over-all Mean	3.75	Highly Responsive
Legend: 1.00-1.50 (Not Responsive); 1.51-2.50 (Moderately Responsive); 2.51-3.50 (Responsive); 3.51-4.00 (Highly Responsive)		

Curriculum Review is a collaborative examination of academic programs with the aim of optimizing student learning experiences, conducted by academic staff who teach within the program. For the 21st century, the researchers

advocated aligning the curriculum and learning outcomes with emerging global economic trends such as the Knowledge Economy. Collect all available data on student achievement, grade five completion, school quality, and school census indicators in order to assess curriculum implementation issues through a needs assessment. Collect evidence of actual curriculum implementation at the school level using observation checklists and solicit input from stakeholders through a series of Focus Group Discussions to determine the feasibility and requirements for curriculum improvement. Parents, Instructors, Administrators, and Instructors.

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