Towards an Age-friendly University: An Intergenerational Study among FICS-UPOU Graduates

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Abstract

In this study, the educational experience of graduates under the Faculty of Information and Communication Studies (FICS) for A.Y. 2017-2018 was assessed through an intergenerational lens. Respondents' age range was categorized into three generations: Baby Boomers (1945-1965), Generation X (1966-1985), and the Millennials (1986-2005). A survey questionnaire was used to gather data on the respondents' socio-demographic profile (age, gender, and employment status) and educational experience. Educational experience was assessed through five variables: relevance of curriculum, usefulness of the program, quality of instruction, effectiveness of online delivery, and current employability. Generational disaggregation of data was done before data analysis. Afterward, the collected data were analyzed using both descriptive and inferential statistics. Aside from measures of central tendency, the means test, Kruskal-Wallis test, and Spearman correlation were also used to determine the relationship between the respondents' socio-demographic characteristics and educational experience. On average, the respondents found their UPOU learning experience to be quite positive – indicating an age-friendly curriculum flexible to the needs of different generation cohorts. Results showed that there was no association between gender and learning experience; and age group and learning experience. On the other hand, employment status was found to have a weak inverse correlation with two indicators: effectiveness of online delivery; and current employability. The results of the study presented implications for instructional design and improvement of online delivery to achieve an age-friendly university consistent with its lifelong learning philosophy.

Keywords: *intergenerational learning experience, generational disaggregation, evaluation of student experience, exit interview, age-friendly university*

Introduction

The University of the Philippines Open University (UPOU) seeks to provide education for all, regardless of their socio-economic background, through open and distance e-Learning (ODeL). Republic Act 10650, also known as the Open and Distance Learning Law, has mandated UPOU to promote inclusive

education through effective open and distance e-Learning practices (Republic Act No. 10650, 2014). This involves sharing best practices, offering technical assistance, and conducting capacity building and research, to name a few.

The university's dedication to openness is in line with the Commission on Higher Education's (CHED) mandate to ensure that quality higher education will be accessible to those who wish to pursue it (CHED, n.d.). As part of its commitment to the democratization of education, UPOU has designed many programs and projects to promote inclusivity. This includes the implementation of initiatives such as the development of Massive Open Online Courses (MOOCs) and Open Educational Resources (OERs) – free courses and materials that tackle relevant topics and cater to different audiences.

In its pursuit to provide opportunities for continuing education and in line with lifelong learning principles, the university has made additional efforts to cater to its diverse student body. Taking into consideration the presence of learners from different backgrounds, especially noting the varying age groups, UPOU has joined the Age-Friendly University (AFU) Global Network, an association of universities and higher education institutes (HEIs) committed to principles, programs, and policies that promote an age-friendly university.

At the core of inclusive and lifelong education is the commitment to acknowledge the diverse needs of learners by improving participation and reducing exclusion within and from education. Many scholars have examined the experience of e-Learning students extensively; whether it be the performance of the students with the applied technologies such as learning management systems (LMS) and social networks (Mozhaeva et al., 2014); the effect of e-Learning to the student's motivation (El-Seoud et al., 2014); the impact of e-Learning, the effectiveness of e-Learning in general, and others. Fewer have sought to examine or assess student learning experiences from an intergenerational standpoint. To be able to design an open learning environment within the university, it is necessary to explore on the perceptions of the different age groups with regard to e-Learning.

The initiative to promote an age-friendly university encourages UPOU to employ different methods of teaching and modes of instruction that will accommodate the needs of students of all ages. It also promotes 'intergenerational learning', which allows knowledge exchange between students from different age groups.

This study, a generation-disaggregated exit survey, is in line with UPOU's initiatives to exemplify an age-friendly university. Three generations were examined: Baby Boomers (aged 53-73), who were born from 1945 and 1965; Gen X (aged 33-53), who were born from 1966-1985; and Millennials (aged 13-33), who were born from1986-2005.

Results of the study provided relevant information on students' perception of the university and of online learning, cataloging the university's perceived contribution to their personal and professional development. It gave insights and recommendations for the improvement of the implementation of the university's programs and instructional design, ensuring appropriate policies and practices are in place to cater to and engage with varied age groups.

Objectives

In general, this study aimed to examine the educational experience of the Faculty of Information and Communication Studies (FICS) graduates for the academic year 2017-2018 from an intergenerational perspective.

Specifically, it aimed to:

1. Describe the graduates' sociodemographic profile;
2. Determine the graduates' assessment of their learning experience in UPOU in terms of relevance of curriculum, usefulness of academic program, quality of instruction, effectiveness of online delivery, current employability; and
3. Identify the relationship between the graduates' socio-demographic profile and educational experience.

Review of Related Literature

There is an abundance of literature evaluating the learning experience of open and distance education students. Studies range from describing perception and attitude towards e-learning to assessing academic performance and determining best practices, among others. These factors are examined in relation to the student's unique characteristics, such as socio-demographics, learning styles, emotional intelligence, and communication-related factors. There are noticeably fewer studies focusing on the online learning experience of distance education graduates. According to Millington (n.d.), studies on ODeL graduates' experiences can provide the information needed to reform educational programs and bring about the fit between the requirements of the employment world and study.

Exit surveys aim to gain feedback on study programs (Egesah & Wahome, 2013) or to determine how the students perceive the curriculum, teaching, and assessment (Bahroom et al., 2014). Schomburg (2003) suggests that these studies assess the quality of services delivered by their respective schools. Moreover, it determines the performance of the institution based on the performance of the graduates, and how their education played a role in their career promotions, decisions to pursue higher studies, and in gaining entry to schools that offer post-graduate programs (Bahroom et al., 2014).

There is an increasing trend in the number of graduates in open universities. Many students turn to open universities to ensure a successful academic path without compromising their existing careers, as open universities enable them to do both at the same time (Burnside, 2001).

> "A deep need among workers to ensure that they have the means for a successful career path. To attain this, they first need skills that bring success in their current jobs, that are portable to their next jobs, and that increase market value . . . they need legitimation that degrees such as MBAs can bring but delivered in a way that fits into their daily lives." (Burnside, 2001)

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However, there is a lack of existing exit and tracer studies in open and distance e-Learning universities. Boettcher (2006) suggests that trends in distance education will be on "updating knowledge and skills, building perspectives, contextual problem solving, networking" and a shift to "competency- based outcomes." Thus, to be able to identify and address the problems of an open university, many ODeL universities find the conduct of these studies to be helpful. For example, a study was done for the Nigerian Teachers' Institute (NTI), showing that the performance of ODeL graduates was as effective as graduates from traditional universities. The way of teaching in the classroom, preparation of lessons, motivation of students, record-keeping and communication in English were just as good as the traditional way of learning. The instructional materials were also provided excellently; thus, getting high ratings from their students. However, the study also revealed the students' dissatisfaction with the audio-visual materials. It also showed the need for the teachers to be trained in the techniques of ODeL. These problems shown in the study were addressed, and the Institute itself had improved its management and monitoring systems, and efforts had been made to address these inadequacies (Umar, 2006). This launched the Nigeria Certificate in Education by ODL in 1990 in response to the brought-up need to train more teachers in the ways of open and distance eLearning.

Scanlan (2003) notes that despite the plethora of guidelines issued for evaluation and quality assurance in education, including for distance education, "none provide the actual measurement tools needed to conduct quality assessment. Indeed, in its preliminary review of distance learning, the Institute for Higher Education Policy (1998) emphasized the need for reliable and valid performance measurements."

Millington (n.d.) admits that there is no standardized measurement tool and instrument to conduct exit surveys and tracer studies. Best practices for course evaluation are still under debate, for there are differences in the kinds of questions asked, the utilization and processing of information gathered, the weighing and measurement of the student responses, and the purpose, whether it is being used to improve the educational processes.

Strengthening an institution's commitment to inclusive education in the face of the increasing diversity of online students requires the implementation of policies and practices that support issues such as intergenerational learning.

Generational Satisfaction with e-Learning

Patricio and Osorio (2016) conducted a study that emphasized the importance of intergenerational learning in the promotion of digital literacy and social inclusion. The study employed multiple case studies which examined different participants and situations with regard to their learning satisfaction and motivation. It has been determined that intergenerational studies on ICT use can enhance "lifelong learning, intergenerational solidarity, and active ageing" among adults and seniors. They have also discovered that e-Learning can stimulate creativity and expressiveness among the audience. As they quote:

> "We need a global educational and social policy to emphasize the importance of intergenerational learning for a successful and sustainable economy, promote the active ageing and lifelong learning of all citizens, and foster intergenerational cohesion by addressing social and digital engagement"

Ahmad and Tarmudi (2012) examined the perceived satisfaction for e-Learning of four age groups in a corporate setting. In particular, the study juxtaposed the e-Learning satisfaction of traditionalists and Baby Boomers against those of Generation X and Generation Y. Data obtained was analyzed with ANOVA. Results showed the lack of a statistically significant difference in the age groups' e-learning satisfaction and success.

Williams et al. (2014) conducted a correlational study that sought to determine the generational differences among higher education institution distance learners in terms of learning styles and learning satisfaction. The study's generational age cohorts consisted of three groups – Baby Boomers, Gen X, and Millennials. Data gathered through survey instruments were analyzed using a mix of descriptive and inferential statistics. Specifically, frequency counts, chi-square correlation coefficient, and ANOVA were used. Results showed that the difference among the three generations' learning styles was statistically significant. Mean score comparisons for their online learning satisfaction also showed significant differences.

Smith (2014) determined the significant differences in the learning outcomes of asynchronous mLearning (mobile and asynchronous e-Learning (computer) by identifying the perception and learner satisfaction of Generations X, Y, and Z through a quasi-experimental study. Participants were given online modules and were asked to take pre and post-test. Results of the study showed that the Baby Boomers preferred computer learning and the Millennials preferred mobile learning. The study failed to show the statistical significance of the difference between the two modes of learning but showed an increase in satisfaction and learning across the generations.

De la Hera et al.(2017) examined the differences between the different generations with regard to considerations in designing digital games. The result showed that younger players are motivated to play digital games if they are collaborative, and the older ones require demonstration of the game itself. Though there may be a difference in the motivations of the younger and older generations in learning, these types of activities increase intergenerational interaction and exchange of ideas.

Age-Friendly University Principles

Age-friendly university principles can facilitate intergenerational learning experiences, especially as it relates to "educational programming, accessibility, and inclusivity" (Silverstein et al., 2019). Furthermore, Pstross et al. (2017) note that programs that cater to diverse age groups and follow the principles of the age-friendly university have positive impacts – one of which is having a more collaborative environment for younger and older learners.

Studies have been done extensively on online students' learning experiences . However, there is a dearth of research in the Philippine context that focuses specifically on the perspectives of different generations about their online learning experience. This study aims to address that gap.

Conceptual Framework

This study aimed to evaluate the learning experience of FICS graduates from an intergenerational standpoint. Three independent variables were examined: generation, gender, and employment status. The dependent variable, learning experience, was assessed with five criteria: relevance of curriculum, usefulness of program, quality of instruction, effectiveness of online delivery, and current employability. These were measured using a 7-point Likert scale, with seven (7) being the highest and one (1) being the lowest.

In this study, relevance of curriculum referred to course content that is up to date and applicable to students' interests, personal aspirations, and cultural experiences. It also covered the program's ability to prepare its students for emerging issues and occupations through the development of new skills and qualifications.

Usefulness of the program referred to whether the curriculum equips students with the knowledge to solve problems outside the context of school. It measured their perception of the applicability of the program's curriculum to their current situation and future endeavors.

Quality of instruction encompassed respondents' views on student engagement, course resources, and communication with instructors. It measured students' perception of whether the program met their learning needs and expectations, as well as the extent it adhered to established standards.

Effectiveness of online delivery referred to the degree to which the mode of instruction was conducive to the achievement of clearly articulated learning outcomes. It captured students' assessment of the adequate delivery of instruction online.

Lastly, current employability measured the recent graduates' perception on the program's ability to prepare students for the demands of their current or future job, and to enhance their ability to seek continuous professional improvement.

The study's framework in Figure 1 shows the hypothesized relationships between these variables.

Figure 1

Conceptual Framework of the Study
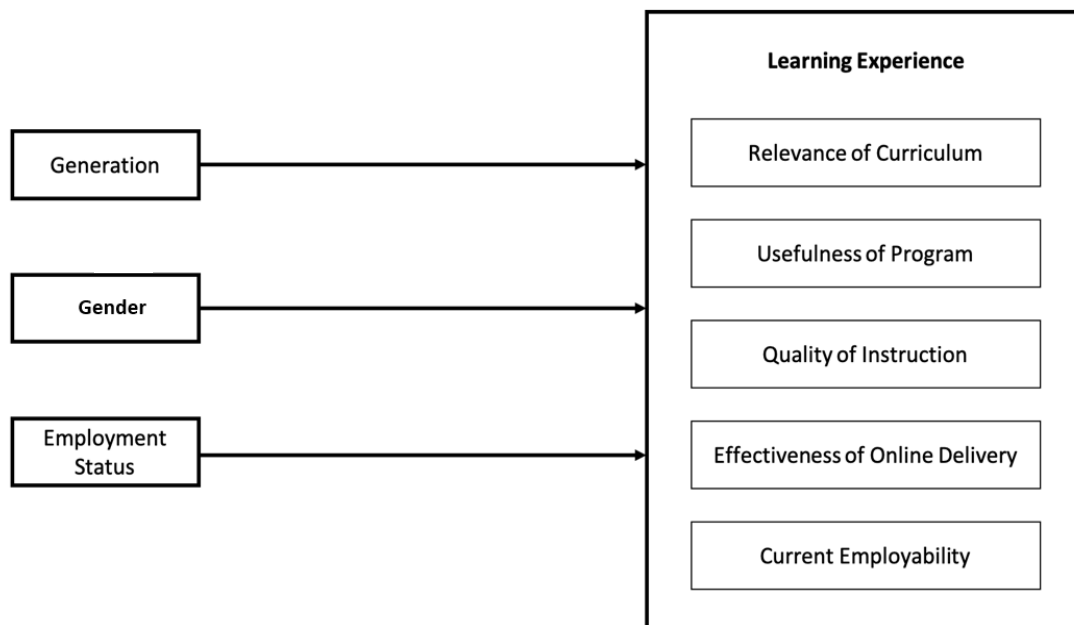
Methodology

With the objective of assessing learning experience, the respondents of this study included all students under the faculty's five programs – Bachelor of Arts in Multimedia Studies (BAMS), Diploma in Computer Science (DCS), Master of Information Systems (MIS), Master of Development Communication (MDC), and Doctor of Communication (DComm) – who completed all their academic requirements in A.Y. 2017-2018.

Data was collected through a survey questionnaire administered both online and face-to-face. The survey questionnaire consisted of questions about the respondents' socio-demographic profile, including their age, gender, and employment status. Their educational experience was assessed in terms of five variables: relevance of curriculum; usefulness of program; quality of instruction; effectiveness of online delivery; and current employability. These variables were evaluated through a 7-point Likert scale with one as the lowest rating and seven as the highest.

Data gathered were disaggregated by age group – Baby Boomer, Gen X, and Millennial. Baby Boomers referred to those who were born from 1945 to 1965; Gen X to those who were born from 1966 to 1985; and lastly, the Millennials referred to those who were born from 1986 to 2005. Both descriptive and inferential statistics were used for data analysis. Specifically, measures of central tendency, means test, Kruskal-Wallis test, and Spearman correlation were employed. The relationships between socio-demographic characteristics and the educational experience were also examined.

The Kruskal-Wallis test was used to determine the association between variables in lieu of Analysis of Variance (ANOVA). The non-parametric test counterpart of ANOVA is ideal for categorical variables such as age group and employment status. Employing ANOVA would have decreased the power to reject a false hypothesis. The following hypothesis was tested:

Ho: There is no difference among the populations
Ha: At least one group is different from the rest

Test Statistic:
$$H = \frac{12}{n(n+1)} \sum_{j=1}^{m} \frac{R_j^2}{n_j} - 3(n+1)$$

Decision Rule: Reject Ho if p-value $< \alpha = 0.05$

Spearman Correlation was used to further test the association between variables. It provided the degree of association, which can either be direct (positive) or inverse (negative). The following statistical hypotheses were tested:

Ho: There is no association between variables
Ha: There is an association between variables

Test Statistic:
$$r_s = 1 - \frac{6D}{n(n^2-1)}, \text{ where } D = \sum d_i^2$$

Decision Rule: Reject Ho if p-value $< \alpha = 0.05$

The direction of an association can be either direct (positive) or inverse (negative). The lack of an association is indicated by a value of 0. On the other hand, a value of 1 indicates a perfect association. The interpretation for other values is as follows:

Table 1

Interpretation of Spearman Correlation Values

Value	Interpretation
0.01 to 0.19	Very weak
0.2 to 0.39	Weak
0.4 to 0.59	Moderate
0.6 to 0.79	Strong
0.8 to 0.99	Very strong

Results and Discussion

This study aimed to determine the relationship between FICS graduates' sociodemographic profile and learning experience, with particular focus on their age group. Results of the statistical analysis are discussed below.

Generational Disaggregation

As shown in Figure 2, majority of the respondents were Millennials (50.72%), followed by Gen X (44.93%), and then Baby Boomers (4.35%). There is a slight disparity with the target population, of which Gen X was the majority (53.4%), followed by Millennials (42.7%), and then by Baby Boomers (3.9%).

A small percentage of Baby Boomers pursuing higher education through e-Learning is consistent with previous generational e-Learning studies. In Bialik and Fry's (2019) study, there was a higher number of Millennials who have attained a bachelor's degree or higher compared to the number of Baby Boomers and Gen X. Baby Boomers also comprised the smallest segment of Williams et al., (2014) generational study on e-Learning styles.

Garcia and Qin (2007) also identified the differences of four groups consisting of students of different ages: under 20 years old (Age Group 1), 21-25 years old (Age Group 2), 26-35 years old (Age Group 3), and 36 years old and over (Age Group 4). They found out that those from Age Group 3 and Age Group 4 were less comfortable using online learning tools and computer networks as opposed to those in the younger age groups.

Figure 2

Generational disaggregation of respondents
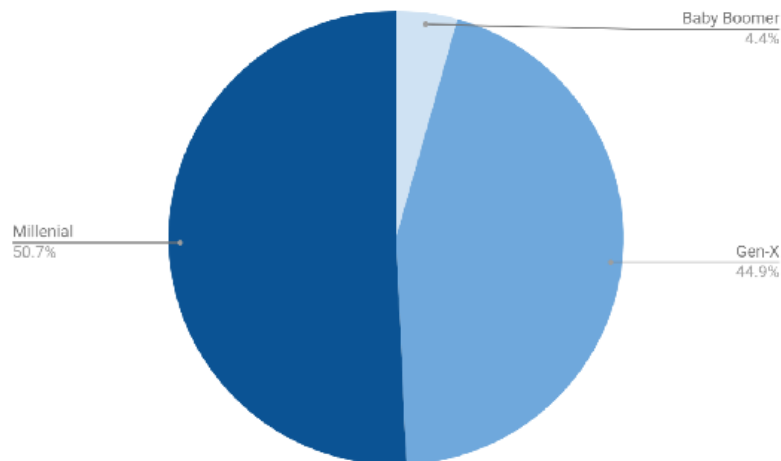
Gender

In terms of gender, there were slightly more males (52.86%) than females (47.14%). This is possibly because most of the courses under the faculty's programs include technology and computer science related fields. The graduate population is mostly comprised of students from MIS, DCS, and BAMS – all of which deal largely with information and communication technology (ICT).

This assumption is supported by Hardin and Longhurst (2016) study on social-cognitive differences of males and females in terms of science, technology, engineering, and mathematics (STEM) courses. They measured the social-cognitive-career-theory variables and found out that women have lower STEM

self-efficacy, coping self-efficacy, and interest in computer science and other related courses than men. It is also noted that gender stereotyping, traditional gender roles, inflexibility toward women with children, alienation and other factors contribute to the decrease in the number of women who pursue STEM programs (Kulturel-Konak et al, 2011).

Some studies suggest the contrary. In a study by Alip (2002) UPOU students showed that there were more women e-Learners. At the time, it was argued that women tended to strive for a college degree more than men. Perhaps the results of this study differ due to the larger scope. Since then, the student population of, and programs offered by UPOU has grown. The number of different nationalities who have chosen to pursue their studies through the university has also grown. This may explain the contrasting results.

Figure 3

*Percentage of Male and Female Respondents*
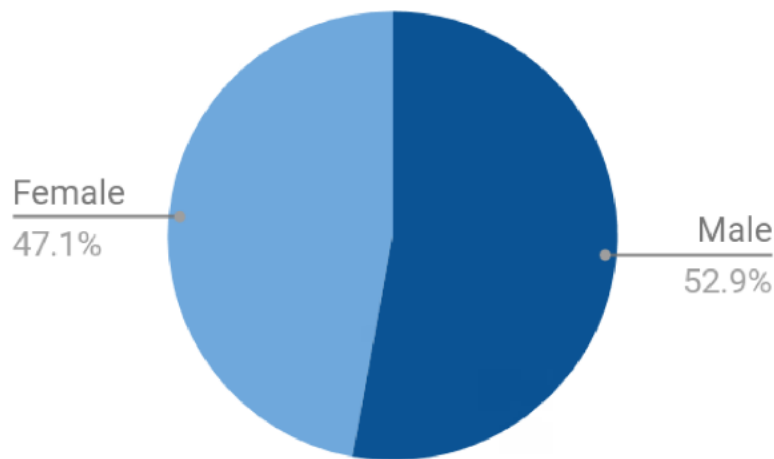
Employment Status

A great majority of the respondents (71.83%) were employed full time. This supports the notion that ODeL is well-suited to support the continuing education of working professionals. It answers the "growing demand of geographically dispersed professional groups seeking access to flexible, lifelong learning opportunities" (Bandalaria, 2007). The respondents' employment status is summarized in Figure 4.

Figure 4

Employment status of UPOU-FICS A.Y. 2017-2018 graduates
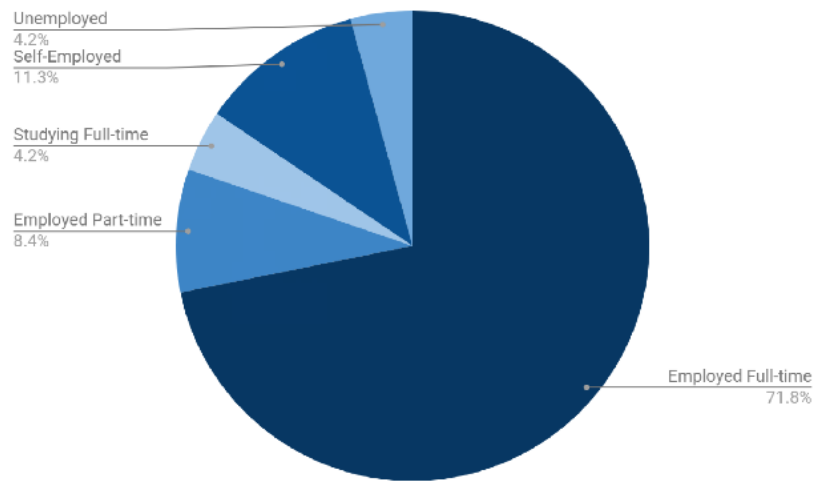
UPOU-FICS Learning Experience

The respondents' learning experience was assessed using five criteria: relevance of curriculum, usefulness of program, quality of instruction, effectiveness of online delivery, and current employability. A seven-point scale was used to record the respondents' answers, with 7 being the highest. On average, respondents had a positive learning experience, with the means ranging from 6.26 to 6.42 across all indicators. The usefulness of the program earned the highest mean score (6.42), followed by relevance of curriculum (6.41), quality of instruction (6.34), current employability (6.31), and then effectiveness of online delivery (6.26).

This implies that the program curriculum and implementation is age-friendly. However, it can be noted that of the five indicators of learning experience, only relevance of curriculum had all respondents in agreement about the programs' currency and applicability to students' personal and professional aspirations. This is indicated by how the responses were clustered in the positive side of the scale - scores ranged from 4-7. On the other hand, responses for the other indicators of learning experience are more scattered. While still mostly positive, these results show that there is more variance in the respondents' learning experience when discussed in terms of utility of program, quality of instruction, effectiveness of delivery, and current employability.

The respondents' learning experience is summarized in Table 2.

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Table 2

UPOU-FICS Learning Experience

Variables	Mean	Standard Deviation	Min	Max
Relevance of Curriculum	6.41	0.85	4	7
Usefulness of Program	6.42	0.94	3	7
Quality of Instruction	6.34	0.97	2	7
Effectiveness of Online Delivery	6.26	1.09	1	7
Current Employability	6.31	1.10	1	7

Gender and Learning Experience

Gender and learning experience were examined using means test and spearman correlation. Means test was used to determine if the indicators of learning experience were independent of gender while spearman correlation was used to further ascertain if there is an association between gender and any of the variables. Results of the means test (Table 3) showed that the learning experience variables are independent of the respondents' gender.

Table 3

Relationship of Learning Experience and Gender

Variables	Test Statistics	p-value	Conclusion
Relevance of Curriculum	0.4629	0.6449	Independent
Usefulness of Program	0.9342	0.3535	Independent
Quality of Instruction	0.3202	0.7498	Independent
Effectiveness of Online Delivery	-0.4108	0.6825	Independent
Current Employability	0.4081	0.6845	Independent

Further analysis with spearman correlation yielded the same results (Table 4). The respondents' gender is not associated with their learning experience. This is in contrast with the results of a previous study (González-Gómez et al., 2012) which showed females having a higher satisfaction rating for e-learning.

Table 4

Correlation of Learning Experience and Gender

Variables	p-value	Conclusion
Relevance of Curriculum	0.4523	Not Associated
Usefulness of Program	0.3079	Not Associated
Quality of Instruction	0.2663	Not Associated

Effectiveness of Online Delivery	0.8332	Not Associated
Current Employability	0.4753	Not Associated

Employment Status and Learning Experience

The association between employment status and learning experience was examined using Kruskal-Wallis Test and Spearman Correlation. Results of Kruskal-Wallis test (Table 5) showed that employment status is associated with effectiveness of online delivery and current employability.

Table 5

Association of Employment Status and Learning Experience

Variables	Test Statistics	p-value	Conclusion
Relevance of Curriculum	5.716	0.2214	Not significant
Usefulness of Program	6.922	0.1401	Not significant
Quality of Instruction	9.015	0.0607	Not significant
Effectiveness of Online Delivery	9.796	0.044	Significant at alpha=5%
Current Employability	14.058	0.0071	Significant

To determine the degree of association between employment status and the significant variables, Spearman correlation was used. Results (Table 6) showed that both variables had a weak inverse association with employment status, meaning as level of employment decreases, scores for effectiveness of delivery and current employability increase. This suggests students with full-time jobs can be hindered from achieving their learning outcomes from online modes of instruction. It also somewhat affects their perception of continuing professional development online.

Table 6

Degree of Association between Employment Status and Learning Experience

Variables	Spearman	Interpretation
Effectiveness of Online Delivery	-0.2835	Weak Inverse
Current Employability	-0.3314	Weak Inverse

Generation Cohort and Learning Experience

Kruskal-Wallis test was used to determine the association between age groups and learning experience. Results of the analysis (Table 7) showed that there is no significant association between these variables. This means there is not much difference between the learning experience of Baby Boomers, Gen X, and Millennials. A previous study by Hill (2017) also found no significant relationship between age group and e-Learning satisfaction.

Perhaps this result could be attributed to similar learning style preferences, computer literacy levels, or other factors such as the small sample size. Kriegel (2013) compared the learning style preferences of different generations and found little variance, challenging the notion of one generation's predisposition to excel in an online learning environment. Since these are outside the study's scope, further research must be done to understand the generational learning differences of UPOU's student body. Additionally, the lack of significant association between learning experience and age group is a testament to the age-friendly curriculum of UPOU-FICS' programs.

Table 7

Comparison of Learning Experience by Age Group

Variables	Test Statistics	p-value	Conclusion
Relevance of Curriculum	3.594	0.1658	Not significant
Usefulness of Program	2.969	0.2266	Not significant
Quality of Instruction	4.309	0.1159	Not significant
Effectiveness of Online Delivery	4.129	0.1269	Not significant
Current Employability	4.779	0.0917	Not significant

Summary and Conclusion

As an educational institution that values openness and inclusivity, it is important for UPOU to ensure its programs cater to its diverse student body. This study aimed to examine UPOU-FICS graduates' learning experience from an intergenerational perspective. This stems from the premise that due to various socio-economic and socio-cultural factors, generational cohorts differ in their optimal learning styles.

The learning experience of ODeL graduates from five different programs were assessed with five criteria – relevance of curriculum, usefulness of program, quality of instruction, effectiveness of online delivery, and current employability – using a 7-point scale, with one being the lowest and seven being the highest rating. In addition to age groups, the relationship of gender and employment status to learning experience was also examined. Data was analyzed using both descriptive and inferential statistics.

A little over half of the respondents were male (52.86%) and majority (47.14) were employed full-time. Most of them were Millennials (50.72%). On average, the respondents had a positive learning experience. Each indicator's mean score ranged from 6.26 to 6.42. However, it can be noted that though minimal, the presence of lower scores indicates possible areas of improvement for program implementation. Means test, Kruskal-Wallis test, and Spearman correlation were used to determine if respondents' sociodemographic profile was associated with their learning experience. Results showed that gender and age group were independent of the respondents' learning experience while

employment status had a weak inverse association with effectiveness of online delivery and current employability.

In conclusion, the respondents' generation was not a significant predictor of their learning experience. However, their employment status can influence their perception of employability and effectiveness of e-Learning. On one hand, these results affirm the university's efforts in open and inclusive education, showing that it is able to cater to different age groups. Still, it presents avenues for improvement, particularly in online delivery and instructional design.

Recommendations

Results showed that an e-Learner being part of the Baby Boomer, Gen X, or Millennial generation does not influence their learning experience. Their status of employment is more likely to influence their ODeL experience. However, these results cannot be generalized because the samples were obtained through non-probability sampling. To get a more thorough picture of the factors that influence online learning experience, more studies may be conducted on the following:

1. Online student engagement may also be examined from an intergenerational standpoint. For instance, in a society like the Philippines, where a hierarchy according to age or seniority is the norm, participation in discussion boards and interaction among different generational cohorts online can be studied.
2. The preferred learning styles of each generational cohort may be examined in juxtaposition with their learning experience. This will allow researchers to determine if indeed learning style varies between generations in an ODeL environment.
3. Instead of conducting a cross-sectional study, future research may explore longitudinal research designs, still focusing on learning experience and generational cohort differences. The addition of Gen Z learners to the respondents may also be explored. Additional demographic information may also be leveraged as it will help explain variance in statistical analysis and allow for a more comprehensive discussion of the topic. A longitudinal study may also serve as a review of programs, to see if they evolve and cater to the changing characteristics of its student body.
4. This study may also be replicated with a different population of e-Learners. For instance, examining the intergenerational learning experience of students from different faculty offices will give instructional designers more insight for course development.
5. A study focusing on technology-related courses could also be done to determine the acceptability of the different generational cohorts of the curriculum design. It could also be done to identify the factors that affect their acceptability of the course itself.
6. Future studies may also be done to compare the learning experience between students of each program. This may offer insights into the university's quality assurance initiatives.

Furthermore, the study only had a 67% response rate. Going forward, future studies may employ the following methods:

1. The results of this study are limited to its respondents and cannot be generalized for the populations. For this reason, future studies may employ probability sampling methods. Stratified sampling is recommended to ensure each subpopulation – generation and program – is represented accurately.
2. Aside from non-probability sampling, this study had a relatively low response rate. For future studies, researchers may explore the Tailored Design Method (Dillman et al, 2009) to improve response rates for online surveys.

Institutionally, this study revealed possible areas of improvement for program and policy implementation. In line with the university's commitment to open and inclusive education, this study may inform age-friendly strategies of guidelines for student interaction. A few recommendations based on this study's results are:

1. In selecting and training instructional designers, understanding the learning needs of the student population should be central. This will allow them to optimize the e-Learning experience for diverse age groups.
2. The results of this study made apparent the need to improve students' perception on effectiveness of online delivery and current employability, specifically for those who are fully employed. For this reason, a more in-depth study should be done to ensure appropriate measures are developed and implemented to enhance the learning experience.

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