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TEACHERS' PROFILE, MOTIVATION, APTITUDE, AND SATISFACTION IN A VIRTUAL UPSKILLING ENVIRONMENT

Abstract. The COVID-19 pandemic brought about significant challenges for educators, particularly in ensuring the uninterrupted flow of education. In response, various upskilling initiatives were launched to help teachers adapt. However, these initiatives shifted to a virtual format due to lockdown measures. This shift presented new hurdles for teachers who needed to acquire the knowledge and skills essential for effective online teaching. This paper aims to provide an overview of an open online course attended by teachers in the Philippines to enhance their online teaching capabilities. Specifically, this study assesses the teachers' motivation for participating in the training, aptitude for online learning, and satisfaction with the training program. This online upskilling course ran for nine weeks. The core objective of this training program was to equip these educators with literacy and knowledge-deepening skills in online distance teaching. The participants comprised educators from primary and higher education institutions in the Philippines. To gather data, we administered online survey questionnaires. Two hundred fifty-nine teacher-respondents actively participated and enrolled in this open online course. The results of the study yield a noteworthy finding. The overall mean training motivation score of 1.31 suggests that teachers are highly motivated to improve their online teaching skills. However, when their aptitude was assessed using the Test for Online Learning Success Self-assessment by Kerr Rynearson, the respondents achieved an average score of 167.75, indicating a deficiency in online learning skills. Despite this skill gap, the respondents expressed high satisfaction with the online upskilling they received. These findings highlight the urgent need to equip teachers with the essential skills and knowledge required for effective online teaching, especially as online learning remains a pivotal platform for continuous professional development. Addressing the deficit in online learning skills while sustaining high motivation and satisfaction among teachers should be a top priority in future education initiatives.

Keywords: Upskilling Teachers; Teacher Professional Development; Open Online Course; Online Learning Aptitude; Online Learning Motivation; Online Learning Satisfaction

1. INTRODUCTION

Education is a paramount pathway for learners to equip themselves for future requirements. In the 21st century, educational opportunities have become more accessible. However, 2020 witnessed a global pandemic that disrupted various education and government

sectors. The impact of this pandemic was unprecedented, causing concern for both the health and educational prospects of people worldwide. The coronavirus pandemic compelled a reevaluation of education, leading to a surge in online learning and teaching initiatives.

According to UNESCO's latest statistics, as of March 23, 2020, approximately 1.3 billion learners worldwide could not attend school or university. This encompassed learners across all levels of education, from pre-primary to tertiary. In the context of the Philippines, from March 2020 to September 2021, UNICEF reported that 131 million pre-tertiary students across 11 countries had to adapt to remote learning for a significant portion of their academic year. Notably, 66 million of these students were from just two countries, Bangladesh and the Philippines, where traditional face-to-face classes were almost entirely disrupted. In March 2020, amid the initial COVID-19 surge, the Philippines suspended in-person classes for its entire cohort of public education students, totaling approximately 24.9 million students, according to UNESCO [1]. The education sector sought alternative methods to ensure continued learning and teaching in response to these challenges, primarily through Online Distance Learning and Teaching.

The problem statement. Distance learning, also known as distance education, e-learning, and online learning, is an educational approach characterized by physical separation between teachers and students during instruction. It relies on various technologies to facilitate communication between students and teachers. Traditionally, distance learning targeted nontraditional students such as full-time workers, military personnel, and individuals in remote regions unable to attend in-person and on-campus classes. This mode of education significantly widens access to education, making it more inclusive and flexible. However, the shift to online distance learning has presented teachers with new challenges, including developing technological skills and navigating digital applications for classroom instruction [2]. The study [2] emphasized two critical challenges in their study. First, technological and digital infrastructure access challenges for effective participation in the educational process. This challenge highlighted disparities in technological infrastructure and access to digital resources among students and teachers. Second, the development of digital competencies among teachers, students, and parents. One significant challenge for teachers was adapting to using software and online platforms for educational purposes. Teacher training programs aimed to create an open learning environment addressing the specific needs of teachers, including learning how to utilize digital platforms effectively. The underdevelopment of digital competencies among teachers and students posed significant obstacles to adapting to online teaching and learning. Additionally, parents' digital competencies played a crucial role in facilitating access to the educational process.

Analysis of recent studies and publications. Institutions have adopted various instructional modes for online training, including blended learning, which combines live and online components. This shift in training methods aligns with organizations' growing reliance on learning and development to attract, develop, and retain top talent, as highlighted in LinkedIn's 2019 Workplace Learning Report. The choice of training delivery method is crucial, given the many options available today, including Instructor-led Training, Virtual Classrooms, E-Learning, Mobile Learning, and Blended Learning [3].

Teachers display intrinsic motivation when attending training for both personal and professional development. Training motivation refers to the internal drive, desire, or incentive that individuals have to participate in and engage with training activities [4]. It encompasses factors such as enthusiasm, interest, commitment, and determination to learn and develop new skills or knowledge. Motivation plays a pivotal role in training and can be conceptualized using a three-stage model: motivation for training, motivation during the learning process, and motivation for transfer. As [4] proposed, this dynamic model recognizes the motivational processes relevant to learning and training activities. It underscores the importance of

motivation in driving engagement and success in training endeavors. Accordingly, training motivation can be influenced by various factors, including personal goals, perceived relevance of the training content, expectations of rewards or recognition, and the perceived value of the skills or knowledge being acquired.
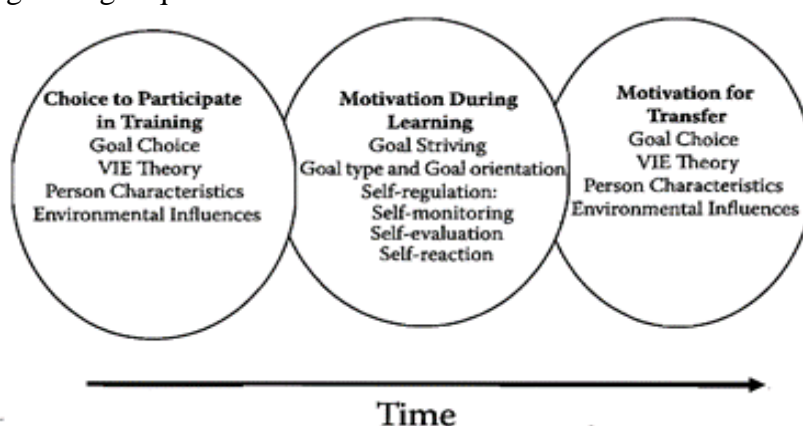

Figure 1. The Stage Model of Motivation in Training and Learning Activities [4]

In this study, we define online learning aptitude as a learner's capacity to adapt to online environments, primarily encompassing two key aspects: (a) perceived technical skills relevant to online learning and (b) comfort level within online learning environments. Technical skill pertains to students' proficiency in using technical tools in an online learning setting. It also encompasses students' perceived abilities to effectively utilize online communication tools and other technologies related to online collaboration. Previous research has shown that learners' technology efficacy influences their collaborative activities in computer-supported collaborative learning settings, including collaborative gaming behaviors [5], intentions to use e-collaboration systems [6], and the frequency of participation in online collaborative discussions [7]. The study of technology-related teaching skills and attitudes: validation of a scenario-based self-assessment instrument for teachers [8], aimed to assess teachers' aptitude (computer and app skills) and attitudes. It found that teachers possessed commendable computer and app skills and demonstrated a positive attitude toward conducting online classes. Notably, a significant difference was observed between the overall skills and attitudes of the teachers.

Training satisfaction is described as the extent to which individuals feel content, fulfilled, or pleased with their training experience. It encompasses their overall perception of the training program, including aspects such as the quality of instruction, relevance of content, effectiveness of delivery methods, level of engagement, and support received from trainers or facilitators. Training satisfaction reflects participants' subjective evaluations of the training's impact on their learning, skill development, and personal or professional growth. High levels of training satisfaction indicate that participants perceive the training positively, are satisfied with the outcomes, and feel that their needs and expectations were met or exceeded. The study [16] identified elements contributing to teachers' training satisfaction, including positive feedback for well-executed work, respect for employees, provision of coffee and tea breaks, and rewards in the form of praise. Moreover, factors such as achievement, personal growth, recognition, job responsibility, and the nature of the work itself are vital measures of teacher training satisfaction. The findings about job satisfaction and teacher commitment highlight a strong connection between teachers' happiness and their level of engagement in their work. More content teachers exhibit greater engagement, while dissatisfaction with factors such as the lack of educational tools, poor teacher performance, transportation issues in rural high schools, inadequate access to teacher transfers, housing, and lack of supportive relationships with school principals can lead to reduced satisfaction. Consequently, teachers' satisfaction and

commitment levels can significantly impact a school's goals and objectives. Work satisfaction and teacher engagement demonstrate a positive and significant correlation within this field. As [9] described, training satisfaction encompasses employees' sentiments regarding training activities, from identifying training needs and designing training programs to delivering training content, facilitating learning, and evaluating training effectiveness. It is suggested that trainee teachers may require adequate educational policies and administrative support, including fair compensation and benefits commensurate with the demands of their profession. Such support is crucial for meeting teachers' basic needs, such as food, clothing, and healthcare, promoting their psychological well-being, and enhancing their overall performance [10] [11].

The research goal. This paper explores the aptitude, motivation, and satisfaction of teachers undergoing upskilling in a virtual setting. In this paper, upskilling refers to the process of acquiring additional or advanced skills and competencies to enhance one's capabilities in technology-enhanced teaching. The goal is to identify the challenges and opportunities presented by online distance learning, the strategies employed to enhance teacher competencies, and the motivational factors that influence their engagement and effectiveness in this evolving educational landscape. This study is essential for unraveling valuable insights into the evolving roles of educators in the digital era.

2. RESEARCH METHODS

The datasets utilized in this study were sourced from a segment of an open online course for teachers on "Literacy to Knowledge Deepening Towards Digitally Resilient Preferred Futures" [17]. This online course ran nine weeks from August 9, 2021, to October 16, 2021. The participants comprised educators from the Philippine Basic Education and Higher Education Institutions from the Association of Christian Schools, Colleges, and Universities member schools in the Philippines. The core objective of this training program was to equip these educators with literacy and knowledge-deepening skills in online distance teaching. In this open online course, teachers were immersed in "bi-chronous" learning, flipped, and microlearning that they can replicate in their online teaching delivery. Online survey questionnaires were utilized in this study, and 259 teacher-respondents actively participated and enrolled in this open online course.

In this paper, teachers' profiles encompass: a) demographic information (gender, civil status, teaching category, highest educational attainment), b) Internet and Social Media Profile details (internet experience, ownership of Facebook and Twitter accounts), and c) social technographic profile as outlined by Forrester Research (https://www.forrester.com).

For assessing training motivation levels, respondents were asked about their agreement with statements regarding the relevance of the topic, perceived usefulness of acquired skills for their teaching career, reasons for seeking credentials, school prestige, anticipated enjoyment, and curiosity about attending online courses [18] [19]. Moreover, participants' prior experience and attendance in the subject matter were evaluated to assess their familiarity with online learning, while their preferred participation mode was examined to gauge their interest in the training.

Teacher's aptitude to online learning is measured using the Test for Online Learning Success Self-assessment [20]. The respondents were asked about their agreement level regarding statements in relation to computer skills, independent learning, dependent learning, need for online delivery, and academic skills.

Training satisfaction was evaluated using The New Kirkpatrick Model, which emphasizes measuring the effectiveness of training [21]. Respondents were asked about their agreement with statements related to reaction, learning, behavior, and results. To supplement satisfaction

levels, respondents were also asked to rate the skills they acquired. These skills correspond to the eight components outlined in the training program.

3. THE RESULTS AND DISCUSSION

3.1. Teachers' Profile

Table 1 provides a concise overview of the demographic composition of the study's participants. Regarding gender, 87 respondents (33.59%) were male, while 172 (66.41%) were female. Regarding civil status, a significant proportion were single (52.12%), followed by those married (44.02%), with a smaller percentage of widowed and others. The participants represented diverse teaching categories, with the highest concentration in the College/Graduate School category (43.80%) and the lowest in the Pre-School category (3.10%). In terms of their highest educational attainment, the majority held a bachelor's degree (53.28%), followed by those with a Master's degree (33.20%), and a smaller group with a Doctorate (13.51%).

Table 1

Demographic Profile

Demographic Profile	f	%
Gender		
Male	87	33.59%
Female	172	66.41%
Total	259	100.00%
Civil Status		
Single	135	52.12%
Married	114	44.02%
Widowed	5	1.93%
Others	5	1.93%
Total	259	100.00%
Teaching Category		
Pre-School	8	3.10%
Elementary	33	12.79%
Junior High School	62	24.03%
Senior High School	42	16.28%
College/Graduate School	113	43.80%
Total	258	100.00%
Highest Educational Attainment		
Bachelor	138	53.28%
Master	86	33.20%
Doctorate	35	13.51%
Total	259	100.00%

Table 2 shows the teachers' Internet and Social Media profiles. Among the respondents, one individual (0.39%) reported experiencing significant difficulty connecting to the Internet, either at school or at home. Sixteen respondents (6.18%) encountered experiences ranging from almost difficult to very difficult. Additionally, 71 respondents (27.41%) reported moderately difficult experiences, while 123 (47.49%) found connecting nearly not difficult. Furthermore, 48 respondents (18.53%) reported no difficulty in connecting. Among them, all 259 (100.00%) have Facebook accounts. Regarding Twitter Accounts, 31 respondents (11.97%) confirmed using it, while 228 (88.03%) did not.

Table 2

Internet and Social Media Profile

Internet and Social Media Profile	f	%
What is your experience connecting to the Internet in school or at home?		
1 – very difficult	1	0.39%
2	16	6.18%
3 – moderately difficult	71	27.41%
4 -	123	47.49%
5 – not difficult	48	18.53%
Total	259	100.00%
Facebook Account		
Yes	259	100.00%
No	0	
Total		
	259	100.00%
Twitter Account		
Yes	31	11.97%
No	228	88.03%
Total	259	100.00%

Table 3 provides an overview of the Social Technographic Profile of the study participants, categorizing them into distinct online user types based on their digital behaviors. Among the key findings, a significant portion of participants fall into the "Spectators" category, with 88 (33.98%) indicating engagement with online content by reading blogs, watching videos, and participating in online forums. This underscores the importance of providing engaging and informative course materials tailored to their consumption-oriented behavior. Additionally, 60 participants (23.17%) belong to the "Joiners" category, suggesting active involvement in social networking sites, highlighting the need for online education platforms to prioritize interactive learning experiences. Furthermore, the presence of "Conversationalists" (20.08%) indicates proficiency in online discussions and social interactions, offering opportunities for collaborative learning. While the "Creators" group is relatively small (7.72%), their involvement in content creation presents innovation opportunities. The "Critics" (3.09%) and "Collectors" (2.32%) categories, although fewer, offer valuable feedback and resource management skills. Notably, 9.65% of participants (25) are classified as "Inactive," emphasizing the importance of accessible learning environments and support to encourage engagement. The diverse Social Technographic Profile emphasizes the importance of designing flexible online education programs that accommodate learners' preferences and behaviors [22].

Table 3

Social Technographic Profile

Social Technographic Profile	f	%
CREATORS (monthly publish blogs and websites, upload videos they created, upload audio/music they created, write articles or stories, and post them online	20	7.72%
CONVERSATIONALISTS (weekly update status on a social networking site, post updates on Twitter)	52	20.08%
CRITICS (monthly post ratings/reviews of products or services, comment on someone else's blogs, contribute to online forums, and edit articles on a wiki)	8	3.09%
COLLECTORS (monthly use RSS feeds, vote for websites online, add "tags" to web pages or photos)	6	2.32%
JOINERS (monthly maintain a profile on a social networking site and visit social networking sites	60	23.17%

SPECTATORS (monthly read blogs, listen to podcasts, watch videos from other users, read online forums, consumer ratings/reviews, and tweets)	88	33.98%
INACTIVE (none of the above)	25	9.65%
Total	259	100.00%

3.2. Training Motivation

Table 4 shows the teachers' previous experience in the subject matter, which provides insights into the participants' prior experience and motivations in the subject topic or area under consideration. Among the 259 respondents, the majority (44.02%) indicate that they have completed some coursework or possess work experience in this field. This group likely brings a foundational understanding of the subject through formal education or practical exposure. Consequently, educators and trainers should recognize and leverage this knowledge to create more advanced and targeted training experiences. 36.29% of the participants describe themselves as new to the subject, suggesting limited prior exposure or experience. For this segment, training programs should be thoughtfully designed to provide fundamental knowledge and ensure engagement and support for beginners. Integrating introductory modules and resources becomes essential to effectively engage and assist these learners in their journey. A smaller yet notable portion (19.69%) prefers self-directed exploration of the subject. These individuals enjoy independent learning and self-discovery. Training programs should offer structured modules, additional resources, references, and supplementary materials to cater for their curiosity and self-driven style. Balancing structured training with self-directed learning opportunities accommodates the participant group's diverse motivations.

Table 5 displays the participants' history of attending online courses during previous training sessions. Specifically, 122 respondents (47.10%) had prior experience with online courses, while 137 respondents (52.90%) had no previous experience with online courses. The results suggest that teachers are familiar with and possess a basic understanding of online training, particularly regarding the topic discussed. This suggests that they may be able to readily adapt to the upskilling process provided.

Table 6 illustrates that 190 respondents (73.36%) intended to complete the weekly assignments to obtain the certificate of completion. Meanwhile, 42 respondents (16.22%) planned to complete the weekly tasks even without aiming for the certificate, and 27 respondents (10.42%) intended to solely read and watch the course materials. The results indicate that the majority of participants are motivated and committed to actively engaging in and completing the course.

The distribution of the participants' previous experience and their intended mode of participation underscore the importance of their motivation to acquire new skills and competencies. The results suggest that the self-directed learning preferences of some participants can enhance overall engagement, leading to more successful learning outcomes[23]. High levels of training motivation are often associated with increased engagement and participation.

Table 4

Previous Experience in the Subject Matter

What best describes your previous experience in this subject topic?	f	%
I have completed some coursework and have some work experience in this field.	114	44.02
I am mostly new to the subject	94	36.29
I like to explore this subject on my own	51	19.69
Total	259	100.00

Table 5

Attendance at online courses in the past

Have you attended online courses in the past?		f	%
	Yes	122	47.10%
	No	137	52.90%
Total		259	100%

Table 6

Participation mode in the online course

How do you plan to participate in this online course?	f	%
read/write (completing the weekly assignments + final for a certificate)	190	73.36%
read/write (completing the weekly tasks)	42	16.22%
read-only (reading and watching only)	27	10.42%
Total	259	100%

These findings bolster the motivation level as depicted in Table 7, offering insights into participants' agreement levels regarding various aspects of the online course. Table 7 includes data on the frequency of the participants (f) who "Strongly Agree," "Moderately Agree," or "Disagree" with specific statements, along with the mean values representing the overall agreement. The findings reveal that many participants "Strongly Agree" with various motivations for the online course. 80.69% of the participants strongly agree that the subject is relevant to their academic field. In comparison, 85.33% believe that the course teaches skills beneficial to their job or career. Additionally, 66.02% strongly agree that they want to earn a credential to enhance their CV/resume/rank, and 61.00% strongly agree that the course's prestige plays a role in their motivation. Furthermore, 76.83% find taking the course enjoyable, while 64.48% express curiosity about experiencing an online course.

These results suggest several implications. Firstly, a strong alignment between the course content and the participants' academic and career goals is evident. This alignment is crucial for maintaining high levels of engagement and motivation [24]. Secondly, the participants seem motivated by the potential for professional development, credentialing, and personal growth, which can contribute to their job satisfaction and career advancement. Thirdly, the perceived prestige of the offering institution plays a significant role in motivating learners, highlighting the importance of reputable course providers in attracting participants. Lastly, a high percentage of the participants finding the course fun and expressing curiosity about online learning suggests that the course design and format may contribute positively to the overall learning experience. These motivations should be considered when designing and delivering online courses to maximize participant engagement and success.

Table 7

Training Motivation Level

Motivation Level	Agreement Level			Mean	
	Strongly Agree f (%)	Moderately Agree f (%)	Disagree f (%)	Value	Description
This subject is relevant to my academic field of study.	209 (80.69%)	46 (17.76%)	4 (1.54%)	1.21	Strongly Agree
This course teaches skills that will help my job/career.	221 (85.33)	34 (13.13%)	4 (1.54%)	1.16	Strongly Agree
I want to earn some credentials that I can use to enhance my CV/resume/rank.	171 (66.02%)	76 (29.34%)	12 (4.63%)	1.39	Strongly Agree
Because a prestigious university offers this course	158 (61.00%)	85 (32.82%)	16 (6.18%)	1.45	Strongly Agree

I think taking this course will be enjoyable.	199 (76.83%)	54 (20.85%)	6 (2.32%)	1.25	Strongly Agree
I am curious about what it is like to take an online course.	167 (64.48%)	75 (28.96%)	17 (6.56%)	1.42	Strongly Agree
Total	**187.5 (72.39%)**	**61.67 (23.81%)**	**9.83 (3.30%)**	**1.31**	**Strongly Agree**

Table 8 presents the results of statistical tests investigating the correlation between the participants' demographic profiles and their motivation levels, as well as the relationship between their Internet and Social Media profiles and motivation levels. The table includes the Chi-squared ($\chi2$) test statistic, the p-value, degrees of freedom (df), and remarks on the significance of these relationships. Regarding demographic profiles, the results indicate a significant relationship between the participants' sex and their motivation level ($\chi2 = 6.491$, p-value = 0.03894908). This suggests that gender plays a role in influencing motivation levels, and further investigation may be warranted to explore the nature of this relationship. However, civil status, teaching category, and highest educational attainment do not significantly correlate with motivation level (p-values > 0.05). In contrast, when examining Internet and Social Media profiles, none of the factors—such as Facebook usage, Twitter usage, Internet satisfaction, or Social Technologic profile—demonstrate a significant relationship with motivation level (p-values > 0.05).

These results suggest that gender may be a relevant factor when designing and tailoring online courses to enhance motivation, as it appears to influence motivation levels among participants. However, other demographic factors and Internet and Social Media profiles do not significantly correlate with motivation level. This underscores the complexity of motivation and indicates that a combination of factors beyond the scope of this study may influence it [25]. Therefore, a comprehensive understanding of participant motivations in online learning should consider various variables to inform instructional design and support strategies [26].

Table 8

Test of Relationships between the Profiles and Motivation Level

Demographic profile	$\chi2$	p-value	df	Remarks
Gender	6.491	0.03894908	2	Significant
Civil status	4.829	0.56592498	6	Not Significant
Teaching category	10.35	0.24131458	8	Not Significant
Highest educational attainment	2.479	0.64840008	4	Not Significant
Internet and Social Media profile	$\chi2$	p-value	df	Remarks
FB	0	1	2	Not Significant
Twitter	0.655	0.72072329	2	Not Significant
Internet Satisfaction	5.443	0.7093466	8	Not Significant
Social Technologic	11.036	0.52583602	12	Not Significant

3.3. Online Learning Aptitude

Table 9 provides an overview of the participants' scores and the mean values of various online learning predictors. These predictors include "Computer Skills," "Independent Learning," "Dependent Learning," "Need for Online Delivery," and "Academic Skills." The table also presents the overall mean of all means.

The mean scores reflect the participants' attitudes and perceptions regarding their online learning aptitude in each category. "Computer Skills" and "Independent Learning" show relatively high mean scores of 4.23 and 4.09, respectively, indicating that the participants neither strongly agree nor disagree with their competency in these areas. This suggests a moderate confidence in their computer skills and independent learning abilities. Conversely,

"Dependent Learning" exhibits a lower mean score of 2.14, indicating that the participants strongly disagree with being dependent on others for online learning. This suggests a preference for self-reliance and autonomy in the online learning environment. "Need for Online Delivery" receives a mean score of 3.39, indicating that the participants generally disagree with requiring online delivery for their educational needs. This suggests that while the participants may find online learning valuable, they may not perceive it as an exclusive or necessary mode of delivery. Lastly, "Academic Skills" reflects a mean score of 3.82, indicating a neutral stance. The overall mean of all means is calculated at 3.53, indicating that the participants generally have a moderate stance, neither strongly agreeing nor disagreeing, regarding their overall online learning aptitude.

These results suggest that the participants have a relatively balanced perception of their online learning aptitude, with moderate confidence in their computer skills and independent learning capabilities. The strong disagreement with dependent learning signifies a desire for self-reliance [27]. Furthermore, the participants generally view online learning as a valuable but not exclusive mode of delivery, emphasizing the importance of flexibility in education. The neutral stance on academic skills suggests that the participants perceive their academic abilities in the online context as neither a significant strength nor a significant weakness. These insights can guide the design of online courses to cater for the participants' moderate confidence and their preference for self-reliance while fostering an adaptable and flexible learning environment.

Table 9

Online Learning Aptitude

Online Learning Predictors	Mean	Description
Computer Skills	4.23	Neither Disagree nor Agree
Independent learning	4.09	Neither Disagree nor Agree
Dependent learning	2.14	Strongly Disagree
Need for Online Delivery	3.39	Disagree
Academic Skills	3.82	Neither Disagree nor Agree
Mean of all Means	**3.53**	**Neither Disagree nor Agree**

Table 10 shows the results of statistical tests examining the relationship between the participants' demographic profiles and their online learning aptitude and the relationship between their Internet and Social Media profiles and online learning aptitude. The table includes the Chi-squared ($\chi 2$) test statistic, the p-value, degrees of freedom (df), and remarks on the significance of these relationships. Regarding demographic profiles, the results indicate that sex, civil status, teaching category, and highest educational attainment do not show significant relationships with online learning aptitude (p-values > 0.05). These findings suggest that the participants' demographic characteristics, such as gender, marital status, teaching category, and educational attainment, are not significant predictors of their online learning aptitude. However, when examining Internet and Social Media profiles, factors such as Facebook (FB) usage, Twitter usage, and Internet Satisfaction do not exhibit significant relationships with online learning aptitude (p-values > 0.05). In contrast, the Social Technologic profile demonstrates a significant relationship with online learning aptitude (p-value = 0.019). This implies that the participants' engagement with technology and social media, as indicated by their Social Technologic profile, is associated with their online learning aptitude.

These results suggest that the participants' demographic characteristics do not significantly determine their online learning aptitude. Instead, as measured by the Social Technologic profile, their engagement with technology emerges as a significant factor. Therefore, when designing and delivering online courses, educators and course designers should focus on promoting and supporting participants' technological engagement, potentially by incorporating interactive and technology-enhanced elements into the course design.

Additionally, further research may be needed to understand better the specific nature of the relationship between participants' technological engagement and their online learning aptitude, allowing for more targeted interventions and improvements in online learning experiences.

Table 10

Test of Relationships between the Profiles and Online Learning Aptitude

Demographic profile	χ^2	p-value	df	Remarks
Sex	7.794	0.168	5	Not Significant
Civil status	12.304	0.656	15	Not Significant
Teaching category	24.757	0.211	20	Not Significant
Highest educational attainment	12.611	0.246	10	Not Significant
Internet and Social Media profile	**χ^2**	**p-value**	**df**	**Remarks**
FB	0	1	5	Not Significant
Twitter	2.628	0.757	5	Not Significant
Internet Satisfaction	16.355	0.694	20	Not Significant
Social Technologic	48.12	0.019	30	Significant

3.4. Training Satisfaction

Table 11 provides an overview of the participants' mean satisfaction ratings for various aspects of the open online course (OOC). Each row represents a statement related to satisfaction, and the corresponding mean score ($\bar{x}$) is provided along with a description of the agreement level, ranging from "Strongly Agree" to "Agree."

The results indicate that the participants generally expressed high satisfaction with the OOC. The mean scores for statements such as "I am satisfied with the OOC," "I am satisfied with the open online course (OOC)," and "I have the opportunity to use or apply what I learned in training on my teaching job," and "I can upskill my online teaching" all fall within the "Strongly Agree" category, with mean scores ranging from 3.43 to 3.55. These findings suggest that the participants positively perceive the quality, relevance, and the potential of the course for upskilling in online teaching. They also believe that the targeted outcomes of the OOC have been achieved.

Furthermore, the mean scores for statements related to the participants' confidence in their ability to apply what they learned during the OOC and their intention to upskill their online teaching also fall within the "Strongly Agree" category, indicating a solid commitment to implementing the knowledge and skills acquired from the course.

The implications of these results are promising. High levels of participant satisfaction suggest that the OOC has met their expectations and needs, contributing positively to their professional development and teaching capabilities. The strong agreement with statements about upskilling in online teaching underscores the effectiveness of the course in enhancing the participants' competence in the digital classroom. Educators and course designers should continue building upon this success by offering similar courses and ensuring they remain relevant and engaging to further empower educators in the digital learning landscape. Additionally, ongoing assessment and feedback collection can help maintain and enhance the quality of OOCs, ensuring their continued impact on educators' teaching practices.

Table 11

Satisfaction Level

Satisfaction Level	Mean ($\bar{x}$)	Description
I am satisfied with the open online course (OOC).	3.48	Strongly Agree
I am satisfied with the OOC.	3.43	Strongly Agree
I contributed to the learning experience of the OOC.	3.18	Agree
I can use or apply what I learned in the training in my teaching job.	3.50	Strongly Agree

I know how to upskill my online teaching	3.48	Strongly Agree
I can upskill my online teaching.	3.52	Strongly Agree
I believe upskilling in online teaching will be worthwhile to do with my job	3.52	Strongly Agree
I think I can upskill my online teaching.	3.52	Strongly Agree
I intend to upskill my online teaching.	3.55	Strongly Agree
I can apply what I learned during the OOC.	3.45	Strongly Agree
The targeted outcomes of the OOC have been achieved.	3.48	Strongly Agree
Mean of all Means	**3.46**	**Strongly Agree**

Table 12 indicates that the participants have reported high learning levels across all the course topics. The mean ratings for topics such as "Flexible Learning, Online Learning, Blended Learning," "Online Instructional Designing," "Managing Online Teaching Resources," "Bi-chronous Delivery Strategies," and "Gamifying Virtual Classroom" all fall within the "I learned a lot" category, with mean scores ranging from 3.64 to 3.73. This suggests that the participants have gained substantial knowledge and skills in these areas. Additionally, topics related to "Learner-to-Assessment Engagement in an Online Learning Environment," "Digital Tools for Research," and "Emerging Innovations in Teaching and Learning" also received high mean ratings of 3.48 to 3.59, indicating significant learning achievements.

The implications of these results are pretty positive. The participants' high levels of learning across diverse topics suggest that the course has effectively equipped them with valuable skills and knowledge relevant to online teaching and learning. This implies that the course content and instructional design have successfully met the participants' learning objectives and needs. As a result, educators and course designers should continue to offer similar courses that address the evolving demands of online education and leverage innovative teaching and learning strategies. Furthermore, the positive feedback underscores the importance of ongoing professional development opportunities to support educators in adapting to the ever-changing digital learning landscape and enhancing their teaching practices.

Table 12

Skills Acquired

Please rate the skills you have acquired from the following topics:	Mean (x̄)	Description
Flexible Learning, Online Learning, Blended Learning	3.73	I learned a lot
Online Instructional Designing	3.73	I learned a lot
Managing Online Teaching Resources	3.73	I learned a lot
Bi-chronous Delivery Strategies	3.64	I learned a lot
Gamifying Virtual Classroom	3.64	I learned a lot
Learner-to-Assessment Engagement in an Online Learning Environment	3.59	I learned a lot
Digital Tools for Research	3.48	I learned a lot
Emerging Innovations in Teaching and Learning	3.50	I learned a lot
Mean of all Means	**3.50**	**I learned a lot**

In Table 13, which examines the relationships between experiences and satisfaction levels, we observe several significant findings. "Overall Experience" emerges as a significant factor (p-value = 0.01199088), indicating that the participants' overall course experience has a meaningful impact on their satisfaction levels. "Understanding After" also shows significance (p-value = 0.05489672), suggesting that the participants' improved understanding of the course content contributes to their satisfaction. While other factors such as "Workload," "Course

Difficulty," "Course Pacing," and "Understanding Before" do not exhibit statistical significance, it is essential to consider their potential influence on satisfaction.

Table 13

Test of Relationships between the Experiences and Satisfaction Level

Experience	χ2	p-value	df	Remarks
Overall Experience	12.858	0.01199088	4	Significant
Workload	2.494	0.2873656	2	Not Significant
Course Difficulty	1.458	0.48239114	2	Not Significant
Course pacing	3.936	0.13973605	2	Not Significant
Understanding Before	5.006	0.5430438	6	Not Significant
Understanding After	9.261	0.05489672	4	Significant

4. CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

The results of this study reveal the successful completion of the open online course by participating teachers, highlighting their commitment to upskilling in online teaching. Motivation is pivotal in shaping teachers' satisfaction levels, underscoring the importance of fostering and sustaining educators' motivation as a critical aspect of effective professional development initiatives. While the study did not find a statistically significant correlation between aptitude and satisfaction levels, it is crucial to recognize the need to enhance teachers' online learning competencies continuously. This suggests that educational institutions and policymakers should prioritize providing targeted training and resources to improve teachers' technical and pedagogical skills for online instruction [28]. Furthermore, the findings emphasize the importance of incentivizing teachers' participation in professional development programs. Schools and educational authorities should consider enhancing rewards and incentive mechanisms to recognize and appreciate educators' commitment to ongoing learning and development. By doing so, they can further motivate teachers to engage in such initiatives, ultimately leading to improved teaching practices and better educational outcomes in the digital age. This study sheds light on the critical interplay between motivation, aptitude, and satisfaction among teachers engaged in professional development. It serves as a valuable foundation for refining and tailoring future professional development programs to better meet the evolving needs of educators in the online learning landscape.

It is crucial to prioritize enhancing teachers' motivation, which was identified as a significant factor affecting their satisfaction levels. Educational institutions should establish a supportive and motivating environment by recognizing and celebrating teachers' accomplishments, fostering peer appreciation, and nurturing a positive learning community. Maintaining educators' enthusiasm and commitment to professional development is essential for ongoing growth. Furthermore, while the study did not establish a statistical correlation between aptitude and satisfaction, developing teachers' online learning competencies should remain a top priority. Training programs should comprehensively address both technical and pedagogical aspects of online teaching, ensuring educators have the necessary skills and confidence to excel in digital learning environments [29].

Customization of professional development initiatives [30] is another key recommendation. Recognizing that teachers come from diverse backgrounds and possess varying experience levels, courses should offer content delivery and pacing flexibility. This approach allows educators to engage with the material at a pace that suits their individual needs and effectively supports their learning journey. Continuous assessment of teachers' understanding and progress is crucial before and after participating in professional development programs. Beyond simple satisfaction surveys, assessments should encompass teaching practices and student outcomes evaluations. These insights can inform course content and delivery methods adjustments, ensuring the training meets educators' needs. Schools and

educational authorities should consider enhancing rewards and incentive mechanisms to motivate teacher participation in professional development further [31]. These incentives could encompass financial rewards, opportunities for career advancement, or recognition programs that acknowledge and appreciate teachers' dedication to ongoing learning. The allocation of necessary resources, such as access to technology and digital tools, is imperative to support teachers in their professional development journeys. Ensuring educators have the essential resources to apply what they learn during training in their daily teaching activities is fundamental. Promoting a culture of collaboration among teachers is another critical aspect. Establishing forums or communities where educators can freely exchange best practices, resources, and experiences related to online teaching can significantly enhance the outcomes of professional development efforts. Peer-to-peer learning and support create a more prosperous learning environment [32]. Professional development should be viewed as an ongoing process rather than a one-time event. Schools and institutions should demonstrate a sustained commitment to the growth and development of their teaching staff by offering continuous learning opportunities, reinforcing the idea that learning is a lifelong journey. Regular research and evaluation are essential to assess the impact of professional development programs on teaching practices and student outcomes. Engaging in research to identify emerging trends and best practices in online education and incorporating these findings into course content keeps professional development efforts relevant and effective. Lastly, professional development programs must be designed with flexibility and adaptability. The educational landscape is continually evolving, and courses should be able to adapt to reflect emerging technologies, pedagogical approaches, and best practices in online education. This ensures that educators remain well-prepared for the changing demands of teaching in the digital age.

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ПРОФІЛЬ, МОТИВАЦІЯ, ЗДІБНОСТІ ТА ЗАДОВОЛЕНІСТЬ УЧИТЕЛІВ ПІД ЧАС ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ У ВІРТУАЛЬНОМУ СЕРЕДОВИЩІ

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Анотація. Пандемія COVID-19 спричинила значні виклики для освітян, зокрема у забезпеченні безперервного освітнього процесу. У відповідь на це було започатковано різні ініціативи з підвищення кваліфікації, щоб допомогти вчителям адаптуватися. Однак через карантинні заходи ці ініціативи перейшли у віртуальний формат. Це створило нові перешкоди для вчителів, яким потрібно було здобути знання та навички, необхідні для ефективного викладання онлайн. Ця стаття має на меті надати огляд відкритого онлайн-курсу, який відвідують учителі на Філіппінах, щоб покращити свої навички викладання онлайн. Зокрема це дослідження оцінює мотивацію вчителів до участі в тренінгу, їхню здатність до онлайн-навчання та задоволеність навчальною програмою. Онлайн-курс підвищення кваліфікації тривав дев'ять тижнів. Основна мета цієї навчальної програми полягала в тому, щоб навчити педагогів грамотності та поглибити їхні знання в галузі дистанційного викладання в Інтернеті. Серед учасників були викладачі початкових та вищих навчальних закладів Філіппін. Для збору даних ми провели онлайн-опитування. Двісті п'ятдесят дев'ять учителів-респондентів взяли активну участь і зареєструвалися на цей відкритий онлайн-курс. Результати дослідження продемонстрували, що загальний середній бал щодо мотивації до навчання - 1,31, що свідчить про значну вмотивованість учителів до вдосконалення своїх навичок з викладання онлайн. Однак, коли їх здібності оцінювали за допомогою Тесту для самооцінки успішності онлайн-навчання Керра Райнеарсона, респонденти отримали середній бал 167,75, що свідчить про недостатній рівень навичок з

онлайн-навчання. Незважаючи на цей пробіл у навичках, респонденти висловили високу задоволеність отриманим підвищенням кваліфікації онлайн. Ці висновки підкреслюють нагальну потребу в забезпеченні вчителів основними навичками та знаннями, необхідними для ефективного викладання онлайн, особливо з огляду на те, що онлайн-навчання залишається ключовою платформою для безперервного професійного розвитку. Подолання дефіциту навичок онлайн-навчання при збереженні високої мотивації та задоволеності вчителів має стати головним пріоритетом у майбутніх освітніх ініціативах.

Ключові слова: підвищення кваліфікації вчителів; професійний розвиток учителів; відкритий онлайн-курс; здатність до онлайн-навчання; мотивація до онлайн-навчання; задоволеність онлайн-навчанням.