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ARTICLE

Perceptions and Experiences of Adult Learners of Online Learning in the Era of COVID-19 in Ghana

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Abstract: The COVID-19 Pandemic has undoubtedly affected learners, and as such, adjustments need to be made for successful teaching and learning through online learning. However, in Ghana, the effects of the COVID-19 Pandemic did not spare adult learners who are compelled by educational reforms to upgrade themselves academically using online learning platforms. Using a descriptive design, the study explored the perceptions and experiences of 166 (online data collection) adult learners as they pursue their academic programs through online learning. An adapted questionnaire on perceptions and online learning experiences developed by Khan, Nabi, Khojah, and Tahir (2021) was used for the data collection. The Confirmatory Factor Analysis technique was used to analyse the data. The study revealed that respondents felt confident while using online learning content but refuted that those technologies permit them to take tests and submit assignments electronically. Furthermore, the study revealed that online learning service was making the learning process very simplified. The revelation means that adult learners possess positive experiences and perceptions about online learning. Therefore, online teaching and learning in higher education institutions should be made a routine activity in Ghana even after the COVID-19 Pandemic because the world is approaching a technological world.

Keywords: Perception; Experiences; Pandemic; Adult learners; COVID-19; Self-efficacy; Ghana

1. Introduction

Knightley [1] notes that education for all members of society is a topic under examination by governments worldwide, and the promotion, expansion, and enrichment of educational experiences is one of the issues under study. This puts a strong emphasis on lifelong learning and learning throughout one's life [2]. In education, there are currently some heated debates over how to make education more open and significant throughout one's life [3], a nd there is also an emphasis on how to include less advantaged or socially excluded individuals in educational opportunities. Successive governments appear mainly attentive to the personal, individual benefits that people can derive from up-skilling, retraining, and the broader socio-economic benefits of these activities. In this 21st

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century, adults are encouraged to return to school and earn academic qualifications that would put them in shape to benefit from the growing world of opportunities [4,5]. The features of adult learners are dissimilar from those of conventional students. Adult learners know why they are being taught and what they need to learn [6]. It is also well-recognised that adult learners, who come from various educational backgrounds and have various educational goals, desire to reflect on their educational experiences during their education [7]. In addition, the fact that they have duties in their everyday lives that differ from those of other learners impacts their educational experience [8]. As a result, a learning platform where adult learners can define their scholastic processes, share their beliefs in a comfortable environment, and continue with their educational process while maintaining their personal lives is required. The flexibility that online learning environments allow for adult learners, who are conscious of their learning requirements and expected to control their scholarship processes, makes it ideal for them to pursue relevant educational opportunities.

There has been an increase in adult students enrolling in distance education online, although the number of scholarly works about adult students is substantially fewer than conventional students [9]. Young adults and older adults are two categories of adult learners, based on their age. Adults above 22 who continue their education while caring for their families and working can be considered adult learners [10]. As a result of these differences, adult learners are distinct from other students. Adult learners may benefit from these features, but they can also provide several challenges. Therefore, they demonstrate the significance of customising educational environments and processes based on student characteristics. The learner-centred nature of all instructional design frameworks necessitates developing and implementing online learning programs that cater to a broad spectrum of all learners. To achieve this goal, a complete appreciation of the relationship between adult learners' characteristics and online platforms' suitability for their online experiences is required. Using online learning platforms, learners can control their learning processes from any location and time. There are additional ways for adult learners to communicate with one another using online learning environments' capabilities (such as discussion forums and chat rooms) [11]. Working in virtual teams and directing one's learning are two advantages of this strategy. According to Kim et al., interaction is an integral part of online distance education, and it has a strong correlation with student learning results [12]. The authors also claimed that online distance education allows students to participate in personalised training, allowing learning processes to be tailored to meet their specific needs. Likewise, Means, Toyama, Murphy, Bakia, and Jones [13] noted that distance education by online for adults has a significant benefit because it allows them to continue learning throughout their lives and as well cater to other socially-important tasks. Apart from the previously mentioned merits of distance learning online, it is generally recognised that adult learners face several problems including their self-efficacy while pursuing their education online. It is important to note that the self-efficacy of adult learners with computers and the Internet is crucial for online learning [14]. In this instance, those learners who have low self-efficacy in specific areas of the online platforms may find it challenging to succeed using this strategy.

It has been suggested by Kara, Erdogdu, Kokoç, and Cagiltay [6] that the difficulties associated with learner assistance may also be faced in online distance education. It is possible that adult learners do not have the same access to resources and orientation programs as college students, leading to a lack of available assistance. Because of this, individuals may feel alienated from the rest of their peers during their educational journey. When they do not receive appropriate help from their family and employers, their difficulties in school may worsen. On top of all that, individuals often have many duties and workloads such as husband, parent, coworker, and student, which adds to the overall burden and workload [15]. According to Park and Choi [16], these difficulties may hurt their learning success and may even result in their dropping out of online distance education programs or courses. Dropout rates in remote adult education are increasing, which is considered a significant problem. In a study, essential factors that influence adult learners' decisions to drop out or remain in an online distance education program were ascertained, and it was found that primary physical constraints from work, scholastic aptitude, family/personal concerns, and passion for learning influenced the decisions of adult learners to continue or drop out of online degree programs [17].

According to Deschacht and Goeman [18], adult online learners risk dropping out of online distance education if they have poor academic locus of control and metacognitive self-regulation skills. Researchers such as De Paepe, Zhu and DePryck [19] found that people's external and internal issues raised their chances of dropping out of college or university. A critical success criterion in online learning programs is student retention because dropout rates are high, particularly among adult learners [19]. Previous studies have focused on what can be done to improve the quality of online distance education and the performance of adult learners [14,15]. After conducting a study of the relevant literature, it has been discovered that most of

the research focuses on a specific component of remote adult education. Therefore, it becomes necessary to develop a framework and examine the current environment regarding the challenges mentioned earlier to develop future studies in adult distance education. According to recent research, a comprehensive understanding of the problems and obstacles faced by adults enrolled in online distance education is critical to developing compelling online learning experiences for them [20].

Whether to accept or not to accept online distance education by adult learners depends on the usefulness of technology. Usoro, Echeng, and Majewski [21] defined the perceived usefulness of online learning as a person's belief that technology would increase their capacity to do their work. Therefore, adult learners' perception of the usefulness of online distance education is determined by how much they believe that using technology would help their academic achievement [22]. İn several instances, researchers such as Masele and Rwehikiza [23], Mollel and Mwantimwa [24], and Mohammad [25] found that perceived usefulness is an essential determinant in students' adoption, integration, and long-term usage of technology in education and learning.

Online learning platform users who have used online learning activities must provide feedback on the success or failure of implementing those activities. In this regard, higher educational institutions (HEIs) need to know whether implementing blended learning results in better student learning outcomes, cheaper costs, and satisfaction from all stakeholders [26,27]. According to Al-Adwan, Al-Adwan, and Smedley [28], there have been numerous educational institutions throughout the world that have implemented online learning platforms, but the success of their implementation requires deep knowledge and awareness of user acceptability and the utility of online learning platforms. Saade, He, and Kira [29] state that the acceptability and use of online learning platforms by users are essential indicators of success in the long run. Thereby, it is vital to consider the user's perspective as much as possible when creating and evaluating an online learning platform [30]. One of the essential tenets to consider in creating and maintaining a thriving online learning environment is the learners' attitudes toward it. According to Hrastinski [31], who reviewed the existing literature on online learner participation, participation and application are inextricably linked. As a result, for learners to get the most out of participation, they must see it as applicable in the overall participation experience. According to a study by Aristovnik, Keric, Tomasevic, and Umek [32], students' opinions on the usefulness of an online learning approach varied widely. They found that the overall impression is critical in determining greater perceived usefulness for most learners surveyed.

Most people believe that online learning will give possible applications for students' learning activities [33]. However, Lee [34] notes that, the intention of users to continue with online learning is likely to be low. That is to say; it is not rare for learners in online learning situations to withdraw from the program [35]. In the opinion of Tsai, Chuang, Liang, and Tsai [33], there are a variety of probable factors for which students stop participating in online learning. For example, research has revealed that learners may be reluctant to participate in online learning due to a lack of trust in their ability to operate the online learning platform [36]. A similar line of thinking has led some academics to believe that student's participation in online learning may be connected with their perceptions of their talents in terms of specific skills and knowledge. They contend that this idea, known as self-efficacy, may significantly influence learners' learning processes and learning outcomes when they are enrolled in online educational environments [33]. Learners with high self-efficacy perform better than those with low self-efficacy in online learning situations [37].

Another factor to consider in designing an online learning platform is its ease of use. According to Rogers and Wang [38], the degree to which technological advancement in teaching and learning is seen to be simple to be understood and utilised is referred to as "perceived ease of use". When people are exposed to or familiar with technology, they can perceive how easy it is to use it [39]. When people perceive a technology's ease of use, it is apparent that they will be more likely to begin utilizing the technology. As an alternative, Bridge, Jackson, and Robinson [40] believe that adopters of new ideas and inventions who find them simple to understand are more likely to do so than those who must learn a significant amount of new knowledge and abilities. According to Konstantinids and Grafton [41], simple technologies to integrate into the classroom environment encourage the use of online learning aids in HEIs. Another factor that influences usage is the low level of skill complexity required for use [42], the ease-of-use opportunity provided by interfaces [43], and the ability to quickly and easily access all types of information and materials [44]. Among the other considerations, the ease with which instructional materials and processes may be created [45] are a significant factor in determining whether or not instructors and learners will use online learning platforms in the future. Hartshorne and Ajjan [46] conducted a study on learners' decisions to utilize online learning resources and discovered that ease of use had a favorable impact on online learning. In other words, ease of use is a

key predictor of instructors' attitudes regarding adopting online learning applications in learning and their desire to use them for teaching and learning. In support of this, the findings of a study by Dalvi-Esfahani et al. [47] showed that perceived ease of use was associated with learners' intention to continue using online learning platforms. Ajjan and Hartshorne [48] and Dearstyne [49] indicated that online learning tools enable users to share content in a far more convenient way than in the past. Furthermore, the ease with which content can be created, shared, published, and distributed expands the potential of learning technologies [48-50].

Furthermore, learners' quest to use online learning platforms rests on their behavioural intention. Behavioural Intention (BI) is a cognitive process that measures an individual's preparedness to carry out specified behaviours. It is a direct cause of usage behaviour. There are a variety of attitudes people show toward using online learning platforms that have a direct impact on their behavioural intentions to use those platforms [51-57]. The attitude of learners is crucial in determining their overall readiness in adopting online learning [58]. Behavioural intention to adopt online learning was studied by Jere [59] among university students to determine the influence it had on their decision to do so. The study found that BI directly and indirectly predicted students' desire to use online learning.

In ameliorating the challenges faced in online learning by adult learners, it is important that instructors and learners themselves understand diversity. According to Cornelius [60], adult learners in any program of study are diverse and bring different educational, cultural, professional, and personal stories and experiences to their learning. As such, they come with varying levels of self-esteem as learners and confidence in their own abilities. They may as well come from a range of vocational areas, each with distinctive professional identities and practices. Therefore, acknowledging these differences is one thing, responding to them as online course designers is another, and taking them through the online learning process successfully is yet another. With these efforts, it is impossible to accommodate every learner's needs and preferences, address all possible cultural contexts, and respond to differing motivation and interest levels in any online learning environment [60]. In other cases, adult learners cope with the difficulties of online learning by reflecting on the fruits of their labor. For example, adult learners come to terms with themselves regardless of the challenges when they think about personal enrichment, improving pay for their current job, a desire to change careers, preparing for a new job within their field, earning a required credential, interacting with other students and networking, returning to complete a degree, the availability of tuition assistance, and renewing a certification [61,62].

The surge of COVID-19 in Ghana compelled higher educational institutions (HEIs) to blend the traditional teaching mode and learn with internet-based lesson delivery [63]. To minimise human physical contact, it was prudent for every learner in HEIs to accept and adopt the emerging medium of teaching and learning. In most of these HEIs, there is a blend of young learners and adult learners, where each category of learner was mandated to be accustomed to online learning platforms mediated by respective faculty members. Regarding the acceptance and use of online learning platforms, it is fascinating to note that young learners appeared to have a better understanding and control over the processes than their adult counterparts. It is casually stated that adult learners in Ghana are born before the computer age. This simple statement corroborates anecdotal records of the Ghanaian online learning space, portraying that adult learners in Ghana possess less ability in navigating online learning platforms because online learning was not part of their earlier training years back. Even before COVID-19 strikes, efforts have been made by the successive government of Ghana in adopting Information and Communication Technology (ICT) in the educational landscape [64,65], but these efforts appear to be fraught with challenges such as unavailability of ICT facilities and intermittent internet connectivity, hence the inability of many learners to use ICT-based learning platforms [63,66-68].

Despite the various problems (e.g., connectivity issues and technological barriers), there was also an increasing trend towards a "crisis of connection" and a "loneliness epidemic" [69] associated with online learning. Mbukusa, Kibuule, and Lates [70] described loneliness in terms of time, space, social, intellectual/experience, profession, ICT knowledge, sensory, cultural, and subject experiences resulting from being alone. According to Mizani et al. [71], the long periods without face-to-face classroom interactions have led to concerns about students' long-term psychological development in terms of loneliness and self-restraint. While information technology allows people to connect from all over the world, it also creates an illusion of friendship without ideal friendship, which leads to feelings of loneliness, particularly among adult learners [71,72]. Many adult learners experience fewer physical interactions as a result of online learning modes, which further erodes interpersonal connections [73]. In fact, loneliness has a profound effect on adult learners.

For instance, the feeling of loneliness among adult learners could lead to negative psychological health (mental health and well-being) [74,75]. In some instances, the feeling of loneliness among adult learners could translate

into reduced academic engagement and performance [76,78] and a lack of a sense of community [79]. In conjunction with the above, Nunez [80] alleged in a study that most adult learners who pursue their programs online might stop along the way because of loneliness. Through online learning, many adult learners may lose their sense of belonging or networking that is fostered in a traditional learning situation. To support this view, Burns [81] found in a study that 40% of the learners felt disconnected and lonely through online learning and eventually dropped out of the mode. Aside from the feeling of loneliness in online learning mode, some adult learners may experience anxiety, being out of their comfort zone, inequity in assessment, particularly in "group" assignments, and the perceived inability or difficulty in peer interaction, particularly in presentations [82].

The preceding literature connotes that online learning indeed, is a challenge in Ghana and this challenge peaks in the academic lives of adult learners amid COVID-19. As a custom, most adult learners in Ghana have other social responsibilities aside from their academic responsibility. These social responsibilities appear to impede adult learners' ability to avail themselves of any imminent change in their academic lives, including their engagement in online learning. Therefore, the current study sought to investigate adult learners' perceptions and experiences about online learning as they combine learning situations with other family responsibilities. Specifically, the study answered the following research question:

What are the perceptions and experiences of adult learners about online learning in the era of COVID-19 in Ghana?

2. Theoretical Model

The current study is driven by the Technology Acceptance Model [TAM] as shown in Figure 1 (Davis, 1989).

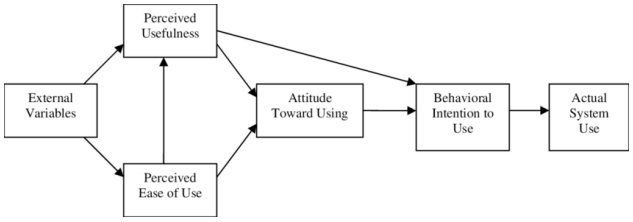

Figure 1. TAM.

The model is governed by diverse variables regarding technology in teaching and learning. According to TAM, an individual learner's perception of the usefulness of technology in teaching and learning is dependent on how the individual learner perceives technology to be accessible to users. In TAM, an individual learner's opinion on the usefulness and ease of using technology in teaching and learning depends on external factors (social, cultural, and political factors). These external factors provide the basis for developing an appropriate attitude toward using technology. Once an appropriate attitude is established for the use of technology in teaching and learning, the individual learner might make behavioural intentions to apply technology in teaching and learning, which will influence the actual usage of technology in teaching and learning. Relating to the current study, adult learners' perceived ease of the use of technology in learning will influence how they perceive technology to be useful as they anticipate no challenges and obstacles, their zeal to engage in learning through online platforms in the COVID-19 Pandemic increased. However, the interest in using online learning platforms becomes impossible without the influence of environmental events such as the availability of technologies, the possession of the required skills, the availability of competent online instructors that can mediate and guide the process of online learning. The appropriation and effectiveness of environmental events interacting with perceived ease of use and perceived usefulness of online learning platforms could influence the development of positive attitudes in adult learners towards the development of appropriate behavioural intentions to use online learning platforms and their actual usage and navigation of the online learning platforms.

3. Materials and Methods

The study was quantitative. Specifically, a descriptive design was employed. The design was chosen because it catered to various respondents from different geographical locations, pursuing postgraduate programs in Ghana. The quantitative descriptive design allows researchers to gather data from varied individuals at a particular time. According to Alexander, Lopes, Ricchetti-Masterson, and Yeatts (2015), the quantitative descriptive design simply characterizes the extent to which a phenomenon is evident in a specified population. In the current study, perceptions and experiences of the adult learners' population served as the phenomena that have made it appropriate for the use of a quantitative cross-sectional survey design.

The study sought to profile adult learners' perceptions and experiences about online learning, who by virtue of job and family demands might have issues with the 21st-century learning process. Based on this, the researchers surveyed 166 out of 3,155 adult learners pursuing postgraduate programs at the University of Cape Coast and the University of Education, Winneba. The respondents included both male (n = 91; 54.8%) and female (n = 75; 45.2%) adult learners but gender (biological differ-

ences) was not paramount in the data analysis. No specific sampling procedure was employed as all adult learners in these two universities were eligible to partake in the study, where the data were collected using Google Forms. The form was placed on the social media platforms of the adult learners for a period between 17th May 2021 to 22nd October 2022.

The data were gathered with an adopted perception scale with 14 items ($\alpha = 0.929$), which was scored on a 4-point Likert-type scale [83]. The responses were scored according to strongly agree = 4, agree = 3, disagree = 2, and strongly disagree = 1. The scale was a standardised one, but pilot testing was conducted to ascertain the internal consistency, and as well, validity was satisfied. In terms of validity, convergent (where variables within a single factor are highly correlated), discriminant (where factors within a construct are distinct and uncorrelated) and construct validities were considered. For convergent validity, the Average Variance Extracted with a cut-off point of 0.25 and above with composite reliability of 0.6 and above were used as a basis [84]. According to Fornell and Larcker [84], in situations where AVE is less than 0.5, while composite reliability (CR) is higher than 0.6, the convergent validity of the construct is satisfied. The discriminant validity was established by finding the square root of the average variance extracted (AVE) value. Thus, $\sqrt{0.40}=0.632$, which is less than the composite reliability (CR) of 0.929, which implies that there are no problems of discriminant validity in the study [85]. Based on convergent and discriminant outputs, it is evident that construct validity was satisfied.

The data collected were screened and cleaned using descriptive statistics to make sure all outliers were deleted so that they do not cause difficulty in model production. The analysis was performed using Structural Equation Modelling (SEM) enabled by SPSS-AMOS software 23. The use of SEM was not to ascertain and validate the construct or items but to establish the variance contribution of each item under the adopted scale. Therefore, a coefficient value of 0.250 and above was used as the minimum criterion [86]. This implies that any value less than 0.250 is not accorded by the respondents but by the values above which align with their perceptions and experiences. In this study, the researchers followed all the protocols established by higher education institutions in Ghana. Specifically, the Institutional Review Board of the University of Education, Winneba gave clearance for the study to be conducted on 15th June, 2021.

4. Results

The study investigated perceptions and experiences of adult learners concerning online distance learning in the advent of the COVID-19 Pandemic. First, adult learners' perceptions and experiences were ascertained using a 14 items online learning scale through CFA. The CFA provided results on fit indices such as Chi-Squared test, RMSEA, GFI, AGFI, RMR and CFI. With Chi-Square, it produced a significant value less than 0.05, which implies 'badness of fit', thus, χ^2 (265) = 454.7; p = 0.000 for the scale. The goodness of fit significant value for Chi Square was supposed to be greater than or equal to 0.05 [87]. Literature indicates that this particular index is sensitive to issues of sample size that could lead to the rejection of the model, where in this study; less sample size was used. Again, the significant chi-square results might be the reason this particular test assumes multivariate normality, as severe deviations from normality could lead to the rejection of the model even when the model is properly specified [88]. Therefore, the results might not be exact based on the issues raised. The Root Mean Square Error of Approximation (RMSEA) was checked, which revealed that the model was moderate with a p-value of 0.065, which fell between 0.05 and 0.10 for continuous data and this indicated appropriate model fit [87]. Furthermore, Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI) were checked. The study revealed that GFI produced a value of 0.93, which is permissible according to Hair, Ringle, and Sarstedt [87] and Tabachnick and Fidell [89]. The AGFI produced a value of 0.89 greater than the cut-off points of 0.80 [90], which implies that the data produced a good model fit. Also, the Root Mean Residual (RMR) was checked, where it produced a value of 0.019, less than the cut-off point of 0.09, which implies a good model fit for the data [91,87]. With the Comparative Fit Index (CFI), it produced a value of 0.90, which is a traditional value as it fell within the cut-off point of ≥ 0.80 and this implies the data had good model fits for most of the indices [87]. Then after, the perceptions and experiences of adult learners were presented using coefficient values established with Confirmatory Factor Analysis (CFA). Table 1 presents the results:

Table 1 presents perceptions and experiences about online learning among adults who are compelled to upgrade themselves academically due to the immanent educational changes in Ghana. Based on perceived usefulness, respondents felt confident while using online learning content ($B = 0.272$, $p < 0.000$) and also accepted the fact that the online learning model provides them with the flexibility to study at a time convenient for theirs ($B = 0.266$, $p < 0.000$). However, respondents refuted those technologies are available to enable test taking and submission of assignments electronically and disagreed that online

Table 1. Perceptions and experiences of adult learners regarding online learning.

SN	*Statements*	*B*	*SE*	*P*
D1	Perceived Usefulness of Online Learning Platforms	α=0.685		
1	Studying through an online learning model provides the flexibility to the study at the time convenient to me.	0.266	0.100	0.000
2	Online learning can enable me to study irrespective of where they are located.	0.240	0.082	0.000
3	There are technologies available to enable me to take tests and submit assignments electronically.	0.235	0.078	0.000
4	I feel confident while using online learning content.	0.272	0.115	0.000
D2	Perceived Self-Efficacy in Usage of Online Learning Platforms	α=0.886		
5	I feel confident while operating online learning functions.	0.284	0.107	0.000
6	I feel confident while using online learning system.	0.274	0.115	0.000
7	There are electronic tools available to enable interactive communication between lecturers and myself without meeting face-to-face.	0.285	0.105	0.000
D3	Perceived Ease of Use of Online Learning Platforms	α=0.838		
8	I believe online learning platforms are user friendly.	0.271	0.090	0.000
9	It would be easy for me to find necessary information when using an online learning platform.	0.267	0.080	0.000
10	I intend to use online learning to get updated on my subject knowledge with the latest amendments or changes.	0.252	0.114	0.000
11	I believe that using an online learning service can simplify the online learning process.	0.282	0.113	0.000
D4	Behavioural Intention of Using Online Learning Platforms	α=0.823		
12	I intend to use online learning to assist my learning.	0.237	0.101	0.000
13	The set-up of the online learning service is compatible with the way I learn.	0.283	0.104	0.000
14	I intend to use online learning as an autonomous (free) learning tool.	0.286	0.116	0.000

**B*= Factor Loadings, *SE*= Standard Error, *P*=significant level

learning could enable them to study irrespective of their location.

Based on perceived self-efficacy in usage, it is overwhelming to report that respondents possessed the ability to engage themselves in learning situations using online platforms. For instance, electronic tools were available to enable interactive communication between lecturers and adult learners without meeting face-to-face ($B = 0.285$, $p < 0.000$), adult learners were confident while operating online learning functions ($B = 0.284$, $p < 0.000$), and as well, adult learners felt confident while using online learning system ($B = 0.274$, $p < 0.000$).

Based on perceived ease of use, it is worth noting that respondents felt the use of online learning platforms was easy. For example, it is reported that online learning service was believed to simplify the learning process ($B = 0.282$, $p < 0.000$), online learning platforms were perceived to be user-friendly ($B = 0.271$, $p < 0.000$), online learning is perceived to be easy for adult learners as it aids them in finding the necessary information ($B = 0.267$, $p < 0.000$) and adult learners accepted that the use of online learning get them updated their subject knowledge with the latest amendments or changes ($B = 0.252$, $p < 0.000$).

Based on the behavioural intentions of using online learning platforms, respondents indicated their intention to use online learning as an autonomous (free) learning tool and as well ($B = 0.286$, $p < 0.000$), accepted that the set-up of the online learning services was compatible with their ways of learning ($B = 0.283$, $p < 0.000$) but refuted the fact that they intend using online learning platforms to assist their learning ($B = 0.237$, $p < 0.000$).

5. Discussion

Even though respondents indicated the unavailability of some aspects of online learning platforms that could enable them to take and submit an assignment, it is essential to note that they equally accepted the fact that they used online learning. The revelation implies that adult learners of HEIs in Ghana experienced and perceived online learning to be positive. This is corroborated by Aristovnik, Keric, Tomasevic, and Umek [32]. In their study, it was found that learners possessed a higher level of conviction concerning perceived usefulness. With this revelation, adult learners of HEIs in Ghana stand the opportunity to reap the benefits of online learning provided the LMS are adequately and effectively offered to them. This is affirmed by Hrastinski's [31] assertion that participation and application are intricately intertwined and that, for learners to reap the maximum benefit from participation, they must perceive it to be helpful with the overall participation experience.

Again, the study found that adult learners appeared to show self-efficacy in using online learning platforms. The findings imply that adult learners could use online learn-

ing platforms. In this sense, it is further training offered so that adult learners would appreciate and fully accept online learning at any time. The findings allude that adult learners had a good experience with online learning and had a positive perception of it. Above all, they possess high levels of perceived efficacy of online learning platforms. The perceived high levels of online learning efficacy could lead to the acceptance and use of online learning by adult learners in HEIs. Hoffman and Spatariu [37] indicated that learners with stronger self-efficacy outperform those with lower self-efficacy in online learning situations. Therefore, adult learners in HEIs surveyed in this study could better navigate online learning platforms when given the necessary guidance and resources.

Furthermore, adult learners who experienced and perceived online learning to be good believed that online learning platforms are easy to be used. The findings imply that adult learners in HEIs perceived online learning platforms as easy to use because they demand no physical presence of both instructors and learners, allowing learners to adjust and adopt learner-friendly changes. Furthermore, the findings imply that adult learners are likely to accept and use online learning platforms because they possess positive experiences and perceptions regarding ease of usage. The current study's findings re-echoed the study finding of Hortshorne and Ajjan (2009), which showed that the ease of use of online learning platforms had a favourable impact on their acceptance and participation. Furthermore, the positive perception and experience of the ease of using online learning platforms could influence learners' intention to continue using online learning platforms even after the COVID-19 Pandemic (Dalvi-Esfahani et al., 2018).

Finally, adult learners were behaviourally committed to using online learning platforms as they serve as free opportunities to navigate their learning situations. The findings show that adult learners are invigorated to use online learning platforms as free learning tools because they are compatible with how and how they learn. The findings imply that adult learners possess a positive attitude towards online learning platforms amid COVID-19; therefore, their attitude could influence their behavioural intentions to use online learning platforms. The findings support the assertions that a person's attitude regarding the use of online learning platforms directly impacts their behavioural intent to utilise online learning platforms Teo, 2011) [58].

6. Conclusions

They investigated adult learners' perceptions and experiences concerning online learning amid the COVID-19 Pandemic. The study found that adult learners had a good perception of online as they perceived online learning to be beneficial to their academic growth and progress. The findings imply that the respondents shared varied perceptions and experiences because they see online as useful in some situations, but some aspects of the process are untenable. Based on the conclusion, the researchers recommended that higher education institutions in Ghana should prioritise online learning among their students as this mode of learning goes beyond the period of COVID-19. Through online learning, the quality of education could be improved, and at the same time, the institutional market share of student numbers could increase. Again, higher educational institutions in Ghana should make it a mandate to provide the necessary equipment and access to their students to use the various online learning platforms provided fruitfully. This is important because the study found that some of the necessary technological equipment was unavailable for students' work, such as tests and examinations. It is important to note that the success of every online learning situation depends on the availability of equipment and its accessibility; hence their equipment availability and easy access will go a long way to help champion the course of every competitive higher educational institution in 21st-century education.

Limitation

The study is limited in scope and sample size because only adult learners were recruited for the survey. Therefore, generalizability and the drawing of implications from the study findings should be executed with caution.

Conflict of Interest

The authors have no interest to declare.

Data Availability

The data used for this study is available and sharable when a formal request is made to the authors.

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References

[1] Knightley, W.M., 2007. Adult learners online: Stu-

dents' experiences of learning online. Australian Journal of Adult Learning. 47(2), 264-288.

[2] Cavanaugh, C.S., Barbour, M.K., Clark, T., 2009. Research and practice in K-12 online learning: A review of open access literature. The International Review of Research in Open and Distributed Learning. 10(1), 33-46.

[3] Houghton, A.M., 2006. Disability effective inclusive policies: student and staff perspectives on experiences throughout the student lifecycle. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Houghton%2C+A.+M.+%282006%29.+Disability+effective+inclusive+policies%3A+student+and+staff+perspectives+on+experiences+throughout+the+student+lifecycle.&btnG= (18/10/2021).

[4] Appleby, Y., Bathmaker, A.M., 2006. The new skills agenda: Increased lifelong learning or new sites of inequality? British Educational Research Journal. 32(5), 703-717.

[5] Brine, J., 2006. Lifelong learning and the knowledge economy: Those that know and those that do not-the discourse of the European Union. British Educational Research Journal. 32(5), 649-665.

[6] Kara, M., Erdogdu, F., Kokoç, M., et al., 2019. Challenges faced by adult learners in online distance education: A literature review. Open Praxis. 11(1), 5-22.

[7] Lindeman, B.M., Sacks, B.C., Lipsett, P.A., 2015. Graduating students' and surgery program directors' views of the Association of American Medical Colleges core entrustable professional activities for entering residency: where are the gaps? Journal of Surgical Education. 72(6), e184-e192.

[8] Cercone, K., 2008. Characteristics of adult learners with implications for online learning design. AACE Journal. 16(2), 137-159.

[9] Richardson, J.T., Remedios, R., 2013. Achievement goals, approaches to studying and academic attainment. Learning Patterns in Higher Education. Routledge. pp. 141-156.

[10] Kahu, E.R., Stephens, C., Leach, L., et al., 2013. The engagement of mature distance students. Higher Education Research & Development. 32(5), 791-804.

[11] Kim, K.J., Liu, S., Bonk, C.J., 2005. Online MBA students' perceptions of online learning: Benefits, challenges, and suggestions. The Internet and Higher Education. 8(4), 335-344.

[12] Picciano, A.G., 2002. Beyond student perceptions: Issues of interaction, presence, and performance in an online course. Journal of Asynchronous Learning Networks. 6(1), 21-40.

[13] Means, B., Toyama, Y., Murphy, R., et al., 2009. Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. U.S Department of Education.

[14] Johnson, E., Morwane, R., Dada, S., et al., 2018. Adult learners' perspectives on their engagement in a hybrid learning postgraduate programme. The Journal of Continuing Higher Education. 66(2), 88-105.

[15] Thompson, J.J., Porto, S.C., 2014. Supporting wellness in adult online education. Open Praxis. 6(1), 17-28.

[16] Park, J.H., Choi, H.J., 2009. Factors influencing adult learners' decision to drop out or persist in online learning. Journal of Educational Technology & Society. 12(4), 207-217.

[17] Choi, H.J., Kim, B.U., 2018. Factors affecting adult student dropout rates in the Korean cyber-university degree programs. The Journal of Continuing Higher Education. 66(1), 1-12.

[18] Deschacht, N., Goeman, K., 2015. The effect of blended learning on course persistence and performance of adult learners: A difference-in-differences analysis. Computers & Education. 87, 83-89.

[19] De Paepe, L., Zhu, C., Depryck, K., 2018. Online Dutch L2 learning in adult education: educators' and providers' viewpoints on needs, advantages and disadvantages. Open Learning: The Journal of Open, Distance and e-Learning. 33(1), 18-33.

[20] Wang, V.C., Kania-Gosche, B., 2011. Assessing adult learners using web 2.0 technologies. International Journal of Technology in Teaching & Learning. 7(1), 22-36.

[21] Usoro, A., Echeng, R., Majewski, G., 2014. A model of acceptance of web 2.0 in learning in higher education: a case study of two cultures. E-Learning and Digital Media. 11(6), 644-653.

[22] Lwoga, E., 2014. Critical success factors for adoption of web-based learning management systems in Tanzania. International Journal of Education and Development using ICT. 10(1), 4-21.

[23] Masele, J.J., Rwehikiza, D.P., 2021. Applications of social media for promoting higher learning institutions' activities in Tanzania. International Journal of Education and Development using Information and Communication Technology. 17(2), 37-54.

[24] Mollel, M.M., Mwantimwa, K., 2019. Users' Acceptance of E-Resources Usage at the Institute of Finance Management, Tanzania. International Journal of Education and Development using Information and Communication Technology. 15(4), 5-21.

[25] Mohammad, A.S., 2014. Gameducation: Using gamification techniques to engage learners in online learning. European Summit on Immersive Education.

Springer, Cham. pp. 85-97.
[26] Upadhyaya, K.T., Mallik, D., 2013. E-learning as a socio-technical system: An insight into factors influencing its effectiveness. Business Perspectives and Research. 2(1), 1-12.
[27] Yukselturk, E., Bulut, S., 2009. Gender differences in self-regulated online learning environment. Journal of Educational Technology & Society. 12(3), 12-22.
[28] Al-Adwan, A., Al-Adwan, A., Smedley, J., 2013. Exploring students' acceptance of e-learning using Technology Acceptance Model in Jordanian universities. International Journal of Education and Development Using ICT. 9(2), 4-18.
[29] Saadé, R.G., He, X., Kira, D., 2007. Exploring dimensions to online learning. Computers in Human Behaviour. 23(4), 1721-1739.
[30] Kerr, M.S., Rynearson, K., Kerr, M.C., 2006. Student characteristics for online learning success. The Internet and Higher Education. 9(2), 91-105.
[31] Hrastinski, S., 2009. A theory of online learning as online participation. Computers & Education. 52(1), 78-82.
DOI: https://doi.org/10.3402/meo.v14i.4506
[32] Aristovnik, A., Keržic, D., Tomaževic, N., et al., 2016. Determining Factors of Students' Perceived Usefulness of E-Learning in Higher Education. International Association for Development of the Information Society. 7(1), 3-10.
[33] Tsai, C.C., Chuang, S.C., Liang, J.C., et al., 2011. Self-efficacy in Internet-based learning environments: A literature review. Journal of Educational Technology & Society. 14(4), 222-240.
[34] Lee, J.W., 2010. Online support service quality, online learning acceptance, and student satisfaction. The Internet and Higher Education. 13(4), 277-283.
[35] Roca, J.C., Chiu, C.M., Martínez, F.J., 2006. Understanding e-learning continuance intention: An extension of the Technology Acceptance Model. International Journal of Human-Computer Studies. 64(8), 683-696.
[36] Eastin, M.S., LaRose, R., 2000. Internet self-efficacy and the psychology of the digital divide. Journal of Computer-Mediated Communication. 6(1), 6-11.
DOI: https://doi.org/10.1111/j.1083-6101.2000.tb00110.x
[37] Hoffman, B., Spatariu, A., 2008. The influence of self-efficacy and metacognitive prompting on math problem-solving efficiency. Contemporary Educational Psychology. 33(4), 875-893.
[38] Rogers, P.C., Wang, M., 2009. Cross-cultural issues in online learning. Encyclopedia of Distance Learning, Second Edition. IGI Global. pp. 527-536.
[39] Kazoka, J.E., 2021. Users' Attitudes and Usage Intentions towards Integration of Web 2.0 in Teaching and Learning Processes from Selected Universities in Tanzania. Papers in Education and Development. 38(2), 21-31.
[40] Bridge, P.D., Jackson, M., Robinson, L., 2009. The effectiveness of streaming video on medical student learning: a case study. Medical Education Online. 14(1), 1-5.
[41] Konstantinidis, A., Grafton, C., 2013. Using excel macros to analyse moodle logs. 2nd Moodle Research Conference in Tunisia. pp. 33-39.
[42] Grosseck, G., 2009. To use or not to use web 2.0 in higher education? Procedia-Social and Behavioural Sciences. 1(1), 478-482.
[43] Adcock, L., Bolick, C., 2011. Web 2.0 tools and the evolving pedagogy of teacher education. Contemporary Issues in Technology and Teacher Education. 11(2), 223-236.
[44] Liu, Z., Zhang, W., Sun, J., et al., 2016. Emotion and associated topic detection for course comments in a MOOC platform. 2016 International Conference on Educational Innovation through Technology (EITT). IEEE. pp. 15-19.
[45] Tatli, Z., Akbulut, H.İ., Altinisik, D., 2019. Changing attitudes towards educational technology usage in classroom: Web 2.0 tools. Malaysian Online Journal of Educational Technology. 7(2), 1-19.
[46] Hartshorne, R., Ajjan, H., 2009. Examining student decisions to adopt Web 2.0 technologies: theory and empirical tests. Journal of Computing in Higher Education. 21(3), 170-183.
[47] Dalvi-Esfahani, M., Alaedini, Z., Nilashi, M., et al., 2020. Students' green information technology behavior: Beliefs and personality traits. Journal of Cleaner Production. 257(5), 120-133.
[48] Ajjan, H., Hartshorne, R., 2008. Investigating faculty decisions to adopt Web 2.0 technologies: Theory and empirical tests. The Internet and Higher Education. 11(2), 71-80.
[49] Dearstyne, B.W., 2007. Blogs, mashups, & wikis: Oh, my!. Information Management. 41(4), 25-28.
[50] Kazoka, J.E., Mwantimwa, K., 2019. Perceived usefulness and ease of use of Web 2.0 tools in university teaching and learning in Tanzania. University of Dar es Salaam Library Journal. 14(2), 19-37.
[51] Abbasi, M.N., Malik, A., Chaudhry, I.S., et al., 2011. A study on student satisfaction in Pakistani universities: The case of Bahauddin Zakariya University, Pakistan. Asian Social Science. 7(7), 209-228.
[52] Abdullah, F., Ward, R., 2016. Developing a general

extended technology acceptance model for e-learning (GETAMEL) by analysing commonly used external factors. Computers in Human Behaviour. 56, 238-256.

[53] Armenteros, M., Liaw, S.S., Fernández, M., et al., 2013. Surveying FIFA instructors' behavioral intention toward the multimedia teaching materials. Computers & Education. 61(1), 91-104.

[54] Chang, B., 2019. Reflection in learning. Online Learning. 23(1), 95-110.

[55] De Smet, C., Bourgonjon, J., De Wever, B., et al., 2012. Researching instructional use and the technology acceptance of learning management systems by secondary school teachers. Computers & Education. 58(2), 688-696.

[56] Lee, S.J., Srinivasan, S., Trail, T., et al., 2011. Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. The Internet and Higher Education. 14(3), 158-163.

[57] Tarhini, A., Hone, K., Liu, X., 2015. A cross-cultural examination of the impact of social, organisational and individual factors on educational technology acceptance between B ritish and L Lebanese university students. British Journal of Educational Technology. 46(4), 739-755.

[58] Ali, M.A., Mohd., N.B.M., Roslina, I., 2016. Technological aspects of e-learning readiness in higher education: A review of the literature. Computer Information Science. 9(1), 113-127.

[59] Jere, J.N., 2020. Investigating university academics behavioural intention in the adoption of e-learning in a time of COVID-19. South African Journal of Information Management. 22(1), 1-9.

[60] Cornelius, S., Gordon, C., Ackland, A., 2011. Towards flexible learning for adult learners in professional contexts: An activity-focused course design. Interactive Learning Environments. 19(4), 381-393.
DOI: https://doi.org/10.1080/10494820903298258

[61] Dolet, N., MacDonald, M.L., 2016. Personal growth, social change or human capital: A document analysis of an online education program for adult learners. Adult Education Research Conference. Paper 16. Available from: http://newprairiepress.org/aerc/2016/papers/16.

[62] Mahlangu, V.P., 2017. Professional Development of Adult Learners through Open and Distance Learning. (Ed.), Global Voices in Higher Education. IntechOpen.
DOI: https://doi.org/10.5772/intechopen.68818

[63] Adarkwah, M.A., 2021. I am not against online teaching, but what about us?: ICT in Ghana post Covid-19. Education and Information Technologies. 26(2), 1665-1685.
DOI: https://doi.org/10.1007/s10639-020-10331-z

[64] Education Sector Performance Report, 2012. Accra: Ghana Ministry of Education.

[65] Ministry of Education, 2015. ICT in education policy. Accra.

[66] Amanortsu, G., Dzandu, M.D., Asabere, N.Y., 2013. Towards the access to and usage of information and communication technology (ICT) in polytechnic education. International Journal of Computer Applications. 66(1), 23-33.

[67] Arthur-Nyarko, E., Kariuki, M.G., 2019. Learner access to resources for eLearning and preference for eLearning delivery mode in distance education programmes in Ghana. International Journal of Educational Technology. 6(2), 1-8.

[68] Boni, R.K., 2018. The use of ICT for teaching and learning in senior high schools in Ghana: A study of Nungua and Presbyterian, Teshie. Ghana: University of Ghana, Legon.

[69] Kaufmann, R., Vallade, J.I., 2020. Exploring connections in the online learning environment: student perceptions of rapport, climate, and loneliness. Interaction Learning Environment. 1-15.
DOI: https://doi.org/10.1080/10494820.2020.1749670

[70] Mbukusa, N.R., Kibuule, D., Lates, J., 2017. Overcoming barriers of isolation in distance learning: Building a collaborative community in learning. Advances in Social Sciences Research Journal. 4(17), 34-42.
DOI: https://doi.org/10.14738/assrj.417.3478

[71] Mizani, H., Cahyadi, A., Hendryadi, H., et al., 2022. Loneliness, student engagement, and academic achievement during emergency remote teaching during COVID-19: The role of the God locus of control. Humanities & Social Sciences Communications. 9(1), 305.
DOI: https://doi.org/10.1057/s41599-022-01328-9

[72] Wood, D.M., 2012. Alone together, why we expect more from technology and less from each other. Growth: The Journal of the Association for Christians in Student Development. 11(11), 10.

[73] Driver, H., 2018. How to alleviate loneliness when you study online. [cited January 12 2023]. Available from: https://onlinelearningtips.com. https://onlinelearningtips.com/2018/12/alleviate-loneliness/.

[74] Diehl, E., Rieger, S., Letzel, S., et al., 2021. Burdens, resources, health and wellbeing of nurses working in general and specialised palliative care in Germany–

results of a nationwide cross-sectional survey study. BMC Nursing. 20(1), 1-16.
DOI: https://doi.org/10.1186/s12912-021-00687-z

[75] Dinu, L.M., Byrom, N.C., Mehta, K.J., et al., 2022. Predicting student mental wellbeing and loneliness and the importance of digital skills. Journal of Further and Higher Education. 1(14), 1040-1053.
DOI: https://doi.org/10.1080/0309877X.2022.2038780

[76] Fan, P., Shang, Y., Zhu, B., et al., 2021. The Effect of "Internet+ Peer Group Counseling" Intervention on Medical Students' Loneliness, Learning Burnout and Resilience Under the Normalization of Novel Coronavirus Pneumonia: A Pilot Study in China. International Journal of Social Science and Education Research. 4(6), 76-93.

[77] Singh, L.B., Kumar, A., Srivastava, S., 2020. Academic burnout and student engagement: a moderated mediation model of internal locus of control and loneliness. Journal of International Education in Business. 14(2), 219-239.
DOI: https://doi.org/10.1108/JIEB-03-2020-0020

[78] Stoliker, B.E., Lafreniere, K.D., 2015. The influence of perceived stress, loneliness, and learning burnout on university students' educational experience. College Student Journal. 49(1), 146-160.

[79] Reedy, A.K., 2019. Rethinking online learning design to enhance the experiences of Indigenous higher education students. Australasian Journal of Educational Technology. 35(6), 132-149.
DOI: https://doi.org/10.14742/ajet.5561

[80] Núñez, J.L., 2020. Lived experience of overcoming the feeling of isolation in distance learning: A phenomenological study. Pakistan Journal of Distance and Online Learning. 7(2), 55-68.

[81] Burns, M., 2016. The loneliness of the long-distance learner. [cited January 12 2023]. Available from: https://www.globalpartnership.org/blog/loneliness-long-distancelearner.

[82] Gillett-Swan, J., 2017. The challenges of online learning: Supporting and engaging the isolated learner. Journal of Learning Design. 10(1), 20-30.

[83] Khan, M.A., Nabi, M.K., Khojah, M., et al., 2021. Students' perception towards e-learning during COVID-19 Pandemic in India: An empirical study. Sustainability. 13(57), 2-14.

[84] Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research. 18(1), 39-50.

[85] Malhotra, N.K., Dash, S., 2011. Marketing research: An applied orientation (6th ed.). New Jersey, NJ: Pearson Education.

[86] Pallant, J., 2005. SPSS survival manual: A step-by-step guide to using SPSS for windows (version 12). New South Wales, Australia: Allen & Unwin.

[87] Hair, J.F., Ringle, C.M., Sarstedt, M., 2013. Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. Long Range Planning. 46(1-2), 1-12.

[88] McIntosh, C.N., 2007. Rethinking fit assessment in structural equation modelling: A commentary and elaboration on Barrett. Personality and Individual Differences. 42(5), 859-867.

[89] Tabachnick, B.G., Fidell, L.S., Ullman, J.B., 2007. Using multivariate statistics. 5, 481-498. Boston, MA: Pearson.

[90] Hair, J.F., Gabriel, M., Patel, V., 2014. AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. Brazilian Journal of Marketing. 13(2), 1-12.

[91] Diamantopoulos, A., Siguaw, J.A., Siguaw, J.A., 2000. Introducing LISREL: A guide for the uninitiated. Sage.