Part-time adult students’ satisfaction with online learning during the COVID-19 pandemic

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Abstract
Introduction: The COVID-19 pandemic resulted in many tertiary institutions switching overnight from taught to online lectures without much preparation. Studies suggest that the sudden change has impacted on students’ satisfaction with online learning in differing ways. Yet, little is known about how this change impacted specifically on adult part-time students, which is the focus of this study. Methods: Part-time adult undergraduate students responded to a mixed methods online questionnaire. Close-ended questions were analysed quantitatively in order to determine levels of satisfaction with online learning during COVID-19 as well as its correlates. Open-ended questions were analysed qualitatively in order to explore the perceived benefits and challenges associated with online learning during this period. Results: Levels of satisfaction with online learning were found to be high, especially among students who were female, those who did not have young children, had partners who worked in excess of 40 hours, were able to follow lectures from locations other than the home, and those following non-technical courses. Several benefits of online learning were identified, including time saved on commuting, the ability to study from the comfort of home and the fact that lectures could now be recorded. Challenges included those related to technology, a lack of interaction amongst students and part-time lecturers who struggled with the sudden switch to online learning. Despite this, most students indicated they would like online lectures to continue to various degrees even after it was safe to return to class. Conclusion and implications: Online lectures were generally rated positively by adult part-time students. In view of the benefits and some of the challenges associated with online learning, it is recommended that future academic programmes adopt a blended approach whilst more support is provided to those who find it challenging to follow lectures from home.

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Introduction
On Thursday 12th March 2020, the University of Malta staff and students received an email from the Rector informing them that lectures would stop being delivered at all campuses as from the following day, and that the University would continue supporting students via online teaching and learning. Similar forced and abrupt transitions to online learning were experienced by educational institutions across the world, resulting in an unprecedented global disruption of formal education. UNESCO (2021) estimates that school and university closures due to the pandemic affected more than 1.5 billion students and youth. The abrupt changes within education that were initially viewed ’as a temporary solution for an extraordinary situation’ (Maier et al., 2020), in time, started to look like a longer term reality, necessitating a better understanding of the factors that facilitate or inhibit online teaching. During the first half of 2020, it became apparent that education was one of the social institutions experiencing a forced paradigm shift in how it operated. This study investigates the level of satisfaction and perceptions among part-time adult university students in relation to the shift to online classes due to the pandemic.

The pandemic’s push to online learning
The phenomenon of distance learning is not new. Tracing its roots in the 1700s (Thompson, 2018), it has developed from correspondence, to radio and television, CD-ROMs, asynchronus and most recently real-time online lectures (Ratnasingam, et al., 2021). Online learning lowered the cost of education and increased access in terms of not only time and place of learning, but also the speed of the learning process (Baczek et al., 2021; Ratnasingam et al., 2021). But the pandemic-induced educational experiences of both students and teachers ‘contrast sharply with the best practices and research on online learning’ (Stewart & Lowenthal, 2021, p.2). It has been argued that the ‘emergency remote learning’ taking place at the beginning of the pandemic may lack important qualities that make up high quality online learning stemming from a carefully considered design process, which may result in ‘meaningfully different’ learning experiences (Hodges et al., 2020).

The COVID-19 crisis disrupted both traditional education and the gradual move of higher education towards distance learning. Investment in education technology increased exponentially during the pandemic (Lei & So, 2021). ‘Novelties in higher education that would typically take many years because of differing managerial regulations were presented quickly within limited number of days’ (Strielkowski, 2020 in Adedoyin & Soykan, 2020, p.2). However, the amount of disruption experienced varied as did the outcomes of the educational changes brought about by the pandemic. Indeed, considerable research carried out since 2020 yielded a complex picture of the educational outcomes of the abrupt transition to online learning. It has become obvious that the level
of success of this transition depended on a myriad of factors relating to different types of ‘preparedness’, such as the preparedness of the country’s infrastructure, the educational institution’s infrastructure, the teachers/lecturers and the curricula, the students and their home environment. For example, research indicates that postgraduate students with stronger self-regulation outperformed undergraduates during the pandemic (Yu, 2021). Teachers’ skills such as pedagogical skills, design skills, technical skills and communication skills (Almusharraf & Khahro, 2020), are a vital aspect of preparedness and may be more essential in courses which are more technically oriented.

One should also note that irrespective of the above-mentioned preparedness, the types of teaching methodologies adopted may also lead to varying challenges and outcomes. For example, synchronous and asynchronous teaching processes offer different challenges to institutions, lecturers and students, and may be more suitable to certain types of learning than others. Online teaching may be more suited for non-technical and non-skill based courses (Baczek et al., 2021; Ratnasingam et al., 2021). Online assessments (such as exams and presentations) inevitably offer different experiences and challenges when compared to physical assessments. Different groups of students also appear to have been affected to varying degrees by the pandemic due to their particular circumstances. For example, some research indicates that international and exchange students were among the worst affected (Stewart & Lowenthal, 2021).

Influences on students’ attitudes

While the challenges experienced in terms of the education provider’s readiness to an abrupt shift to online education may be immediately apparent (for example, if an online system is not available, the service stops), the challenges faced by students are an equally important aspect of the equation. Student satisfaction is commonly used as a measure of the quality of education (Alquarashi, 2019; Garnjost & Lawter, 2019). Indeed, research indicates that the success of an online education system may be contingent on students’ attitudes towards it, in particular their level of satisfaction (Jiang et al., 2021; Jung, 2014). Student satisfaction is positively related to higher performance and lower dropout rates from online learning courses (Kuo & Belland, 2016; Levy, 2007).

At the same time, research has shown links between the transition to online learning during the pandemic and negative psychological outcomes among students, such as insecurity, anxiety and stress (Barrot et al., 2021; Jaradat & Ajlouni, 2021; Maier et al., 2020; Moawad, 2020). So, while positive attitudes may foster the educational experience, these are not always present. Research carried out among university students during the pandemic shows widely varying levels of support towards online learning (e.g Baczek et al., 2021; Gupta et al., 2020; Hanafy et al., 2021; Jaradat & Ajlouni, 2021; Khalil et al., 2020; Maier et al., 2020; Wardani & Saputro, 2021).

A myriad of factors may affect students’ attitudes towards online learning. Researchers have attempted to categorise these factors in order to shed light on the type and extent of influence that they may have (e.g. Asoodar et al., 2016; Razami & Ibrahim, 2021). Limited research appears to have been conducted amongst groups of adult part-time students, however, some factors may be common with younger full-time students and will
be discussed in the next sections. Recent research suggests three overlapping categories of factors that impact on the students’ attitudes towards online learning, namely: (a) students’ characteristics and domestic issues; (b) technology and access and (c) lecturers and course design.

**Students’ characteristics and domestic issues.** Students’ characteristics may facilitate or hamper online education rendering it more appropriate for some than others (Kauffman, 2015). Research indicates that students with particular personality traits such as agreeableness, conscientiousness and openness to experience may have better learning outcomes in online courses than extraverts and those high on neuroticism (Yu, 2021).

The success of online learning appears to be related to the students’ adaptability. Biwer et al. (2021) identified four adaptation profiles of university students to online learning during the pandemic, namely: the overwhelmed, the surrenderers, the maintainers and the adapters. The latter group had the most positive attitudes to the new situation. They ‘reported to be more motivated and better able to regulate their attention, effort and time than before’ (Biwer et al., 2021, p.9).

Ferdiansyah and Angin (2020) derived three important themes in relation to university students’ experiences of online learning during the pandemic. These are: ‘the agility of the student participants to adapt online learning to suit their learning needs, the participants’ strategies to build learning autonomy, and the participants’ ability to sustain their learning motivation’ (p.58). Interestingly enough, while intrinsic student motivation might influence learning outcomes, it might not be directly related to satisfaction in online education (Eom & Ashill, 2016). However, Rahman et al. (2021) found that online learning motivation plays a mediating role between learning satisfaction and independent variables such as internet self-efficacy and interactions during online learning. Computer self-efficacy and confidence about their ability to communicate and learn online, which may help adaptability, were found to affect satisfaction with online learning (Jiang et al., 2021; Palmer & Holt, 2009).

The home environment also appears to affect the students’ attitudes towards online learning. Learning from home has been described as both the ‘greatest challenge’ but also an advantage of online learning (e.g. Barrot et al., 2021; Baczek et al., 2021). The home learning surroundings may be either conducive to learning or may offer distractions. Studies of remote learning during the pandemic have emphasised the relevance of the home environment (Barrot et al., 2021; Baczek et al., 2021) and studies of adult students that predated the pandemic highlighted the importance of being able to escape distractions and responsibilities at home, with those lacking support finding this more difficult (Kahu et al., 2014). Related to the home environment and family situations, research conducted during the pandemic highlighted that gender too may influence adult students’ satisfaction with online learning (Kwapong, 2021). For example, due to a disproportionate burden of family responsibilities, women can find remote learning difficult to manage (Stone & O’Shea, 2019). However, online education can also give a level of flexibility that allows students of all genders to better balance such work-life commitments in some cases (Berry & Hughes, 2020).
Technology and access issues. Technical obstacles and accessibility to online learning are a known challenge in adult digital education (Bernhard-Skala, 2019) and have often been mentioned by participants in online learning during the pandemic (e.g. Almomani et al., 2021; Baczek et al., 2021; Coman et al., 2020; Hanafy et al., 2021). Apart from the skills of both students and lecturers, technological issues may include aspects such as the adequacy of personal hardware (e.g. computers), the type of online platforms used and the infrastructure that connects students with their university. Obstacles relating to hardware and infrastructure (e.g. unstable internet connection, limited internet quota, slow access to services) are particularly prevalent in developing countries (e.g. Jaradat & Ajlouni, 2021; Razami & Ibrahim, 2021; Wardani & Saputro, 2021).

On the other hand, research also indicates that the use of adequate and accessible technology may enhance satisfaction with online learning (Jiang et al., 2021). Students have mentioned easy and continuous access to online materials, and the opportunity to learn at one’s own pace, as positive aspects of online learning during the pandemic (Agarwal & Kaushik, 2020; Baczek et al., 2021). Other research has shown that when online learning platforms are effective, students may not only perform their tasks quicker and better, but may also enjoy the experience (Maier et al., 2020).

Lecturers and course design. Research highlights the link between student satisfaction and the way online courses are designed and carried out (e.g. Alqurashi, 2019; Chu et al., 2021; Eom & Ashill, 2016; Kauffman, 2015). Teachers’ insufficient technical skills and their inability to adapt their teaching to the online environment have been revealed as significant problems in some studies carried out during the pandemic (e.g. Coman et al., 2020; Wardani & Saputro, 2021). In the same vein, students’ lack of satisfaction with the quality and amount of material they were given and assignments they had to complete have been identified in other studies (Almomani et al., 2021; Motz et al., 2021; Wardani & Saputro, 2021). Motz et al. (2021) argued that in the pandemic, ‘instructors, under pressure to rapidly put their course materials online, modified their courses to include online busywork that did not constitute meaningful learning activities, which had a detrimental effect on student outcomes’ (p.70). Online exams and the evaluation processes are also potential causes of student dissatisfaction (Almomani et al., 2021). Among others, students’ negative attitudes towards online courses may rise if they sense that there is more fraud and cheating during assessments (Hanafy et al., 2021).

There are conflicting findings on the links between interaction (or dialogue) with instructors and amongst peers and student satisfaction. Some studies indicate the significant effect of students’ dialogue with instructors (Eom & Ashill, 2016; Kuo & Belland, 2016) and with their peers (Chu et al., 2021; Eom & Ashill, 2016; Sugino, 2021) on their satisfaction. Sugino (2021) found that students’ positive interdependence whilst learning resulted in their enjoyment and increased participation in synchronous class discussion. Interestingly, Kuo and Belland (2016) conclude that the interaction between learners and instructor predicts student satisfaction in online courses which do not include group activities. However, according to Chu et al. (2021), interactions with instructors do not affect students’ attitudes, and likewise, Alqurashi (2019) found that the interaction among learners was not predictive of student satisfaction.
The context of this study

Since the effectiveness of the transition to online learning is greatly dependent on the context in which it takes place, this section will outline the level of preparedness to online learning in Malta in general and at the Centre for Labour Studies at the University of Malta in particular.

Malta, with a population of about half a million inhabitants, is the smallest EU member state. The country’s ICT infrastructure was strengthened over the last two decades, a process that facilitated the growth of tertiary economic sectors such as financial services, online gaming and IT. Considerable government services were made available online. Malta has been described as a leader among EU countries with regards to the accessibility of fixed broadband and coverage of ultrafast networks (Malta Communications Authority, 2018). About nine out of ten persons between 16 and 74 used the internet in 2020 (National Statistics Office, NSO, 2021). 64% of internet users made use of e-Government services, 63% engaged in e-commerce activities, while 54% made use of cloud computing services. About seven out of ten internet users were rated as having ‘basic’ or ‘above basic’ overall digital skills, with younger persons having the highest skills levels (NSO, 2021).

The University of Malta is the main tertiary education institution in the country. Arguably, in the beginning of 2020, it had an intermediate level of preparedness to online instruction. The University had a web-based virtual learning environment (VLE) (based on Moodle) in place for several years. While the system incorporates a range of tools, it was often used by tutors to upload teaching materials and resources to support students with their studies. It was also commonplace for students to submit their coursework online on the VLE (University of Malta, 2021a). The University has some teleconferencing facilities and internet access on all its campuses. Besides, several computer labs across the University provide students with access to specialised software programmes. The university library offers a wide range of support services, including access to electronic scholarly collections, and trains students in the use of such resources (University of Malta, 2021b). The University administration has also increasingly been relying on online platforms to carry out financial and student-related administrative work. For example, an online admissions system has been in place for a several years. Despite the readiness of the infrastructure, by the beginning of 2020, almost all teaching was carried out face-to-face on its campuses using traditional methodologies.

The courses of the Centre for Labour Studies (CLS) of interest in this study take place within such University context. The CLS courses are oriented towards lifelong learning and mostly attract secondary educated workers in their thirties or forties. The staff of the CLS consists of three full-time academics, three full-time administrative staff and a host of some 60 visiting lecturers. In March 2020, all the courses of the Centre for Labour Studies (CLS) were abruptly transferred online, and started to be offered synchronously through the Zoom platform. A few lectures were offered asynchronously via the Virtual Learning Environment (VLE). In line with the situation across the University of Malta and in other universities (Maier et al., 2020; Chu et al., 2021), most CLS lecturers had never taught online classes before and had little if any experience in the use of technical tools to deliver
online lectures, apart from the VLE. Besides, students were not familiar with a full-online environment. During the pandemic, the University provided online help in the form of documentation and personal assistance to use Zoom (a teleconferencing software programme) and other tools, while the full-time staff of the Centre informally assisted the visiting staff and students to get used to the system. Educational continuity was top priority, irrespective of the flaws in the system due to the abrupt transition. For example, there was not much time to revise the curriculum according to the new teaching media and lecturers were not formally taught about managing challenges that might occur during online classes.

**Aims**

In view of the limited studies that have been conducted amongst adult part-time students affected by the sudden switch to online learning during the COVID-19 pandemic, the current study aims to investigate the effectiveness of online teaching as perceived by adult undergraduate students at the CLS, University of Malta. More specifically, its two objectives are to:

1. Determine part-time mature students’ satisfaction with online learning during COVID-19 and to explore its correlates;
2. Explore mature students’ perceptions of the challenges and benefits of online learning during COVID-19.

**Methods**

An electronic survey was distributed amongst 94 part-time adult undergraduate students. In view of the study’s exploratory nature, a study which included both qualitative and quantitative elements was favoured (Fiorini et al., 2016). Consequently, a questionnaire that included both closed and open-ended questions was developed.

82 (87% return rate) questionnaires were returned and analysed. All participants were part-time CLS students and were following one of three undergraduate courses: a Diploma in Gender, Work and Society; a Bachelor in Occupational Health and Safety (OHS) (Hons); or a Bachelor in Work and Human Resources (WHR) (Hons).

Individuals were notified of the study via an informative email. Consenting participants were asked to click on a link which redirected them to an anonymous questionnaire. In order to boost participation, a follow-up email was sent 2 weeks after the initial email. Data collection was concluded in August 2020 and reflected students’ views between March and May 2020.

**Measures**

**Satisfaction with online learning:** Satisfaction was measured by two single-item closed-ended questions: ‘How satisfied are you with the quality of the online lectures that you had between March and May 2020?’, measured on a scale ranging from very unsatisfied,
unsatisfied, neutral, satisfied and very satisfied. For the purpose of inferential analysis, the scale was converted to unsatisfied/neutral, satisfied and very satisfied. A second question asked, ‘In general, when compared to face-to-face lectures, are you more, less or equally satisfied with online lectures?’, measured on a scale ranging from more satisfied, equally satisfied and less satisfied.

**Preference regarding future instruction:** Participants were asked to rate the following question on a five-point rating scale consisting of completely face-to-face, mostly face-to-face, equally online and face-to-face, mostly online and completely online: ‘If COVID-19 was not a concern, how would you prefer to balance the online and face-to-face component of your course?’ For the purpose of analysis, data was categorised as mostly face-to-face, equally face-to-face and online, mostly online.

**Demographics:** Single-item closed-ended questions were used to collect information on gender, age and the type of course being followed. Students were also asked to indicate their living arrangements to assess if they were living alone or with a partner or parents. Participants were also asked to indicate whether they were responsible for dependants, if they had children, and their children’s ages. For inferential analysis, all variables which were not already dichotomous were converted into dichotomous variables: age was split into up till 44 versus above 45, dummy variables (yes vs. no) were created for the different courses, living arrangements and age of children, whilst number of children was converted to one child versus more than one child.

**Paid work:** participants were asked to specify the average hours of paid work per week between March and May. If applicable, participants were also asked to specify the average hours of paid work performed by their partner. For inferential analysis, answers were categorised as 40 hours or less, versus more than 40 hours.

**Percentage work carried out by teleworking:** Single-item closed-ended questions queried participants’ and if applicable, their partners’ percentage of paid work between March and May 2020 carried by teleworking (No teleworking; some teleworking (less than 50%); about half done by teleworking (50%); mostly done by teleworking (more than 50%); all work by teleworking). For inferential analysis, answers were converted to: less than 50% telework versus 50% or more.

**Location:** participants were asked where they followed most online lectures from. Three replies were possible: home, work and other. For analysis purpose, answers were categorised as home versus not home.

**Benefits and challenges of online lectures:** open-ended questions asked participants to describe up to three of the greatest benefits and three of the greatest challenges they experienced through online lectures.

**Analysis**

The dependent and independent variables’ scales were compressed for the purpose of inferential analysis. Analysis was conducted to determine differences between levels of satisfaction and other independent variables. In view of the ordinal nature of the outcome variables and the dichotomous nature of the independent variables, Mann Whitney’s U
test was conducted to determine significant differences between variables (Morgan et al., 2013). Analysis was conducted with SPSS 26.

Open-ended questions regarding the benefits and challenges encountered during online learning were analysed through Nvivo using Thematic Analysis (Braun & Clarke, 2006).

**Ethics**

The study proposal was submitted to the Faculty Research Ethics Committee (FREC) at the Faculty of Economics, Management and Accounting (FEMA), University of Malta. Participants were informed of the study by an informative email. Consenting participants were asked to fill in an anonymous questionnaire hosted on Google Forms.

**Results**

**Demographics and living situation**

The majority of participants were male (58.5%) and aged between 26 and 34 (34.1%). Most individuals were reading for a Bachelor in Occupational Health and Safety (Hons) (52.4%) and lived with a partner (70.7%). 32.9% lived with children, whilst most of those who had children reported that they were 18 years or older (30.5%). Most participants (63.4%) were not responsible for the care of other dependants (e.g. elderly relatives). Further details can be found in Table 1.

**Work arrangements during COVID-19**

Most participants were employed and reported working for 40 hours a week (53.7%). The majority of the sample reported some degree of teleworking (59.8%). Most of participants’ partners were also in employment, with 24.4% of the sample reporting that their partners worked 40 hours per week. 30.5% of the sample reported living with a partner who could telework, whereas 24.4% lived with a partner who could not. Further information can be found in Table 2.

**Satisfaction with online learning and future preferences**

88.9% of students followed online learning from their homes, whilst 8.6% followed from work. A further 2.2% followed from both work and home.

The vast majority of students were found to be satisfied with online learning during COVID-19. 56.8% reported being satisfied whilst a further 32.1% were very satisfied. 7.4% were neutral, 2.5% were unsatisfied and 1.2% was very unsatisfied. When compared to face-to-face teaching, 46.3% were equally satisfied, 30.5% were less satisfied and 23.2% were more satisfied.

Finally, with regards to participants’ preferences for future lessons if COVID-19 was not a concern, the largest group (39.5%) favoured an equally online and face-to-face mix of lectures, 28.4% preferred a mostly online approach, whilst 18.5% preferred a mostly face-to-
face approach. 11.1% favoured a completely online approach, whilst 2.5% preferred a completely face-to-face approach.

**Table 1.** Demographic information and living situation.

| Variable                      | Number (%) |
|-------------------------------|------------|
| **Gender**                    |            |
| Male                          | 48 (58.5)  |
| Female                        | 33 (40.2)  |
| Other                         | 1 (1.2)    |
| **Age**                       |            |
| ≤25                           | 3 (3.7)    |
| 26–34                         | 28 (34.1)  |
| 35 and 44                     | 22 (26.8)  |
| 45 and 54                     | 20 (24.4)  |
| ≥55                           | 9 (11)     |
| **Course**                    |            |
| Gender, work and society      | 11 (13.4)  |
| Occupational health and safety| 43 (52.4)  |
| Work and human resources      | 27 (32.9)  |
| **Living arrangements**       |            |
| With partner                  | 58 (70.7)  |
| With children                 | 27 (32.5)  |
| With parents                  | 14 (17.1)  |
| Alone                         | 8 (9.8)    |
| **Children**                  |            |
| 0                             | 37 (45.1)  |
| 1                             | 17 (20.7)  |
| 2                             | 20 (24.4)  |
| ≥3                            | 8 (9.8)    |
| **Age of children**           |            |
| 0–3                           | 6 (7.3)    |
| 4–8                           | 10 (12.2)  |
| 9–13                          | 5 (6.1)    |
| 14–17                         | 10 (12.2)  |
| ≥18                           | 25 (30.5)  |
| **Responsible for dependants**|            |
| Yes                           | 29 (35.4)  |
| No                            | 52 (63.4)  |

**Associations between satisfaction and other studied factors**

Inferential analysis between the studied factors and satisfaction with online learning (Table 3) highlighted that greater satisfaction was significantly associated with not
having children between the ages of 4 and 8, and following online lectures from work (or a combination of home and work). No other significant differences were identified.

As can be seen in Table 4, male participants were significantly less satisfied with online learning than with traditional face-to-face learning. Conversely, those in the WHR course were more likely to be more satisfied with online learning, whereas OHS students were less likely to be as satisfied. Those with children between 0 and 3 years and 4 and 6 years were also less likely to be as satisfied with online learning when compared to traditional face-to-face learning. Finally, those with partners who worked in excess of 40 hours were more satisfied with online learning than traditional learning.

Finally, the interaction between future preference of learning and the studied factors were analysed (Table 5). Male participants were significantly less likely to prefer future lectures to take place remotely. Those with children between 0 and 3 were less likely to want future remote sessions.

**Challenges encountered during online learning**

The following two sections present results emerging from the collected qualitative data. When probed about the challenges that the mature students experienced when they switched from face-to-face to online lectures, various issues were mentioned. The top three issues identified in descending order were: 1) technical problems; 2) limited interaction with fellow students and 3) lecturer related problems. Some experienced a combination of these factors.

Technical problems topped the list of problems encountered by students when they shifted to online lectures. For example, logging into Zoom presented students with some challenges, especially at the beginning. A female student reading for the Diploma in Gender Work and Society commented that:

| Variable                  | Participants (%) | Partners (%) |
|---------------------------|------------------|--------------|
| Working situation         |                  |              |
| Not in employment         | 6 (7.3)          | 11 (13.4)    |
| <40 hours                 | 9 (11.0)         | 12 (14.6)    |
| 40 hours                  | 44 (53.7)        | 20 (24.4)    |
| >40 hours                 | 22 (26.8)        | 13 (15.9)    |
| Teleworking               |                  |              |
| No teleworking            | 27 (32.9)        | 20 (24.4)    |
| Some teleworking          | 6 (7.3)          | 4 (4.9)      |
| Half teleworking          | 10 (12.2)        | 4 (4.9)      |
| Mostly teleworking        | 14 (17.1)        | 4 (4.9)      |
| Only teleworking          | 19 (23.2)        | 13 (15.9)    |

All percentages are based on the total number of respondents (N = 82).
Table 3. Associations between satisfaction with online learning and studied factors.

| Factor                  | N   | Mean rank | U     | Sig  |
|-------------------------|-----|-----------|-------|------|
| Sex                     |     |           |       |      |
| Male                    | 47  | 39.13     | 711.00| 0.34 |
| Female/other            | 34  | 43.59     |       |      |
| Age                     |     |           |       |      |
| <44                     | 53  | 40.58     | 719.50| 0.80 |
| >45                     | 28  | 41.80     |       |      |
| HR course               |     |           |       |      |
| Not HR                  | 54  | 38.94     | 617.50| 0.21 |
| HR                      | 27  | 45.13     |       |      |
| OHS course              |     |           |       |      |
| Not OHS                 | 38  | 43.37     | 727.00| 0.34 |
| OHS                     | 43  | 38.91     |       |      |
| Gender course           |     |           |       |      |
| Not gender              | 70  | 41.31     | 363.50| 0.74 |
| Gender                  | 11  | 39.05     |       |      |
| Lives with partner      |     |           |       |      |
| No                      | 25  | 39.28     | 657.00| 0.62 |
| Yes                     | 56  | 41.77     |       |      |
| Lives with children     |     |           |       |      |
| No                      | 54  | 42.11     | 669.00| 0.50 |
| Yes                     | 27  | 38.78     |       |      |
| Lives with parents      |     |           |       |      |
| No                      | 67  | 40.63     | 444.00| 0.72 |
| Yes                     | 14  | 42.79     |       |      |
| Lives alone             |     |           |       |      |
| No                      | 73  | 42.19     | 205.00| 0.12 |
| Yes                     | 8   | 30.13     |       |      |
| No of children          |     |           |       |      |
| I                       | 16  | 22.25     | 220.00| 0.912|
| >1                      | 28  | 22.64     |       |      |
| Children aged 0–3      |     |           |       |      |
| No                      | 75  | 41.82     | 163.50| 0.201|
| Yes                     | 6   | 30.75     |       |      |
| Children aged 4–8      |     |           |       |      |
| No                      | 71  | 44.13     | 132.50| 0.000***|
| Yes                     | 10  | 18.75     |       |      |
| Children aged 9–13     |     |           |       |      |
| No                      | 76  | 40.61     | 160.50| 0.573|
| Yes                     | 5   | 46.90     |       |      |
| Children aged 14–18    |     |           |       |      |
| No                      | 71  | 40.56     | 323.50| 0.61 |
| Yes                     | 10  | 44.15     |       |      |
| Children aged 18+      |     |           |       |      |
| No                      | 57  | 39.53     | 600.00| 0.33 |
| Yes                     | 24  | 44.50     |       |      |
| Other dependants       |     |           |       |      |
| No                      | 52  | 39.64     | 683.50| 0.62 |
| Yes                     | 28  | 42.09     |       |      |
| Hours worked           |     |           |       |      |
| 40 hours or less       | 54  | 36.69     | 496.00| 0.21 |
| More than 40 hours     | 22  | 42.95     |       |      |
| % Teleworking          |     |           |       |      |
| <50%                    | 33  | 36.79     | 653.00| 0.63 |
| 50% or more            | 42  | 38.95     |       |      |
| Partner hours worked   |     |           |       |      |
| 40 hours or less       | 43  | 28.42     | 276.00| 0.94 |
| More than 40 hours     | 13  | 28.77     |       |      |
| Partner % teleworking  |     |           |       |      |
| <50%                    | 23  | 20.59     | 197.50| 0.26 |
| 50% or more            | 21  | 24.60     |       |      |
| Location               |     |           |       |      |
| Home                   | 72  | 38.50     | 144.00| 0.009**|
| Not home               | 8   | 58.50     |       |      |

N: Number; U: Mann–Whitney U; Sig: significance; OHS: Occupational Health and Safety; HR: Human Resources.

*** < 0.001; ** < 0.01
In some cases, logging in was not smooth in the beginning. Also, not being techy presented a problem, if it were not for help from my husband.

In due course and with more practice, these technical problems seem to have been largely resolved by the vast majority of students, including some older ones who may have experienced more problems at the beginning.

The second most identified problem due to the exclusive online lectures was the limited interaction between the students. In some cases, students noted that this hampered the possibility that they discuss their difficulties with their colleagues. A male student following the Bachelor in OHS remarked that he missed the ability to ask questions and to discuss issues with his colleagues. He missed most the:

Face-to-face questions. Discussing experiences and difficulties with colleagues.

The lack of interaction with other students combined with having to sit for long hours in front of a computer made it especially challenging for those who were also working all day alone from home through ICT.

Issues related to the lecturers, especially those not well versed with using an online platform like Zoom and the Virtual Learning Environment (VLE) for teaching, were the third most identified problem by the CLS mature students. Whilst the majority of lecturers did not seem to encounter problems and transitioned to online teaching without many issues, others, especially some of the practitioners who occasionally teach at university, had to cancel and postpone their lectures due to their lack of familiarity with the system. Some also encountered difficulties when uploading their slides on the Virtual Learning Environment (VLE).

Initiating a lecture took some time as lecturers were unfamiliar. Familiarity with tools varied.

Some students specifically mentioned problems with receiving their Zoom links for the lecture in good time. A male, Bachelor of OHS student noted that some lecturers had to be prompted before they actually did so:

Some of the lecturers were not knowledgeable on how to use such online platform, resulting in delayed lectures or cancelled lectures and links available only after being prompted, since most of the times were not available the day beforehand.

Apart from the above top three concerns discussed above, other problems, sometime multiple were also raised by some of the students. For example, some students struggled to find a quiet room in the household during the lecture and this affected their ability to stay focused for a long time. Others had to endure distractions from internal sources, like other family members especially when there were young children involved. This became even more challenging when the partner was at work during the lecture. For example, a student reading for the Bachelor in OHS course remarked:
Table 4. Associations between satisfaction with online learning when compared with traditional face-to-face learning and studied factors.

| Factor                      | N   | Mean rank | U    | Sig   |
|-----------------------------|-----|-----------|------|-------|
| Sex                         |     |           |      |       |
| Male                        | 47  | 34.94     | 501.00 | 0.001** |
| Female/other                | 34  | 50.76     |       |       |
| Age                         |     |           |      |       |
| <44                         | 53  | 41.92     | 746.00 | 0.82  |
| >45                         | 29  | 40.72     |       |       |
| HR course                   |     |           |      |       |
| Not HR                      | 54  | 36.81     | 503.00 | 0.015* |
| HR                          | 27  | 49.37     |       |       |
| OHS course                  |     |           |      |       |
| Not OHS                     | 38  | 47.61     | 566.00 | 0.010* |
| OHS                         | 43  | 35.16     |       |       |
| Gender course               |     |           |      |       |
| Not gender                  | 70  | 40.64     | 360.00 | 0.71  |
| Gender                      | 11  | 43.27     |       |       |
| Lives with partner          |     |           |      |       |
| No                          | 25  | 36.46     | 586.50 | 0.17  |
| Yes                         | 57  | 43.71     |       |       |
| Lives with children         |     |           |      |       |
| No                          | 55  | 44.20     | 594.00 | 0.11  |
| Yes                         | 27  | 36.00     |       |       |
| Lives with parents          |     |           |      |       |
| No                          | 68  | 41.48     | 474.50 | 0.98  |
| Yes                         | 14  | 41.61     |       |       |
| Lives alone                 |     |           |      |       |
| No                          | 74  | 41.68     | 282.50 | 0.82  |
| Yes                         | 8   | 39.81     |       |       |
| No of children              |     |           |      |       |
| 1                           | 17  | 19.47     | 178.00 | 0.12  |
| >1                          | 28  | 25.14     |       |       |
| Children aged 0–3           |     |           |      |       |
| No                          | 76  | 42.92     | 120.00 | 0.038* |
| Yes                         | 6   | 23.50     |       |       |
| Children aged 4–8           |     |           |      |       |
| No                          | 72  | 43.71     | 201.00 | 0.015* |
| Yes                         | 10  | 25.60     |       |       |
| Children aged 9–13          |     |           |      |       |
| No                          | 77  | 42.16     | 141.50 | 0.33  |
| Yes                         | 5   | 31.30     |       |       |
| Children aged 14–18         |     |           |      |       |
| No                          | 72  | 42.88     | 261.00 | 0.13  |
| Yes                         | 10  | 31.60     |       |       |
| Children aged 18+           |     |           |      |       |
| No                          | 57  | 41.00     | 684.00 | 0.76  |
| Yes                         | 25  | 42.64     |       |       |
| Other dependants            |     |           |      |       |
| No                          | 52  | 41.09     | 749.50 | 0.96  |
| Yes                         | 29  | 40.08     |       |       |
| Hours worked                |     |           |      |       |
| 40 hours or less            | 54  | 36.50     | 486.00 | 0.182 |
| More than 40 hours          | 22  | 43.41     |       |       |
| % Teleworking               |     |           |      |       |
| <50%                        | 33  | 35.70     | 617.00 | 0.298 |
| 50% or more                 | 43  | 40.65     |       |       |
| Partner hours worked        |     |           |      |       |
| 40 hours or less            | 43  | 26.19     | 180.00 | 0.037* |
| More than 40 hours          | 13  | 36.15     |       |       |
| Partner % teleworking       |     |           |      |       |
| <50%                        | 24  | 25.00     | 204.00 | 0.24  |
| 50% or more                 | 21  | 20.71     |       |       |

(continued)
Most of the times, my wife was at work and having young kids was difficult for myself to control them not to make any noise during such lectures.

Distractions and noise problems also emanated from external sources and some specifically mentioned the sound of diggers on construction sites near their home.

Benefits of online learning

The benefits of online learning listed by the students were various and by far superseded the challenges encountered through online teaching. The three top benefits of online learning listed by the part-time adult students were: 1) Time saved on commuting to and from university and solving the parking issues, 2) following lectures from the comfort of their home and 3) the fact that lectures were recorded and students could refer to the recorded lecture at a later date.

On the issue of commuting, many students also spoke about the benefits of avoiding getting stuck in traffic which generally exacerbated their parking problems. Many argued that having their lectures online at home reduced their stress and the chance of arriving late for the lecture. Additionally, at the end of their evening lectures at 20.30, students were already at home and could continue with their personal life.

Apart from saving time on commuting, the mature students who frequent the CLS courses also spoke about the convenience of being able to follow the lecture from home. For example, a female student following the WHR course remarked that she appreciated the fact that not having to travel to and from university meant that she could:

Easily balance life, and for example, eat at decent hours.

Some students commented that even if they were unwell, they could still follow the lecture from home. Others remarked that if they were accidently delayed at work, they could follow the lecture from their place of work without having to stress and finish work 30 minutes earlier to make it on time to get to university.

Some students mentioned the ability of multitasking when following their lectures online from home, for example, checking on the cooking and looking up information on the internet if something was not clear enough during the lecture. A student mentioned that she was living in another country and could still follow the course. Others found it

Table 4. (continued)

| Factor      | N  | Mean rank | U      | Sig |
|-------------|----|-----------|--------|-----|
| Location    |    |           |        |     |
| Home        | 72 | 39.60     | 223.50 | 0.10|
| Not home    | 9  | 52.17     |        |     |

N: Number; U: Mann–Whitney U; Sig: significance; OHS: Occupational Health and Safety; HR: Human Resources.

*** < 0.001; ** <0.01.
**Table 5.** Interaction between future preference of face-to-face versus online learning and studied factors.

| Factor                  | N  | Mean rank | U    | Sig   |
|-------------------------|----|-----------|------|-------|
| Sex                     |    |           |      |       |
| Male                    | 47 | 36.41     | 583.50 | 0.027* |
| Female/other            | 34 | 47.34     |       |       |
| Age                     |    |           |      |       |
| <44                     | 52 | 41.24     | 741.50 | 0.90  |
| >45                     | 29 | 40.57     |       |       |
| HR course               |    |           |      |       |
| Not HR                  | 53 | 38.24     | 585.50 | 0.19  |
| HR                      | 27 | 44.94     |       |       |
| OHS course              |    |           |      |       |
| Not OHS                 | 38 | 44.92     | 630.00 | 0.08  |
| OHS                     | 42 | 36.50     |       |       |
| Gender course           |    |           |      |       |
| Not gender              | 69 | 39.80     | 331.50 | 0.47  |
| Gender                  | 11 | 44.86     |       |       |
| Lives with partner      |    |           |      |       |
| No                      | 25 | 34.32     | 533.00 | 0.07  |
| Yes                     | 56 | 43.98     |       |       |
| Lives with children     |    |           |      |       |
| No                      | 54 | 43.19     | 611.00 | 0.20  |
| Yes                     | 27 | 36.63     |       |       |
| Lives with parents      |    |           |      |       |
| No                      | 67 | 40.91     | 463.00 | 0.94  |
| Yes                     | 14 | 41.43     |       |       |
| Lives alone             |    |           |      |       |
| No                      | 73 | 41.28     | 271.50 | 0.73  |
| Yes                     | 8  | 38.44     |       |       |
| No of children          |    |           |      |       |
| 1                       | 16 | 19.94     | 183.00 | 0.29  |
| >1                      | 28 | 23.96     |       |       |
| Children aged 0–3       |    |           |      |       |
| No                      | 75 | 42.91     | 82.00  | 0.006** |
| Yes                     | 6  | 17.17     |       |       |
| Children aged 4–8       |    |           |      |       |
| No                      | 72 | 42.41     | 222.50 | 0.10  |
| Yes                     | 9  | 29.72     |       |       |
| Children aged 9–13      |    |           |      |       |
| No                      | 76 | 41.82     | 128.00 | 0.19  |
| Yes                     | 5  | 28.60     |       |       |
| Children aged 14–18     |    |           |      |       |
| No                      | 71 | 41.29     | 334.50 | 0.75  |
| Yes                     | 10 | 38.95     |       |       |
| Children aged 18+       |    |           |      |       |
| No                      | 56 | 39.38     | 609.00 | 0.32  |
| Yes                     | 25 | 44.64     |       |       |
| Other dependants        |    |           |      |       |
| No                      | 51 | 40.97     | 715.50 | 0.80  |
| Yes                     | 29 | 39.67     |       |       |
| Hours worked            |    |           |      |       |
| 40 hours or less        | 53 | 38.58     | 552.00 | 0.70  |
| More than 40 hours      | 22 | 36.59     |       |       |
| % Teleworking           |    |           |      |       |
| <50%                    | 33 | 36.18     | 644.00 | 0.49  |
| 50% or more             | 42 | 39.43     |       |       |
| Partner hours worked    |    |           |      |       |
| 40 hours or less        | 42 | 27.49     | 251.50 | 0.64  |
| More than 40 hours      | 13 | 29.65     |       |       |
| Partner % teleworking   |    |           |      |       |
| <50%                    | 24 | 23.54     | 215.00 | 0.51  |
| 50% or more             | 20 | 21.25     |       |       |

(continued)
useful in that they were able to ask questions through the chat and whilst others appreciated the fact that they did not have to endure other students talking around them and distracting them as may happen in class.

Finally, the fact that the lectures were recorded and students could revisit the lecture afterwards was appreciated by many students. A male student following the Bachelor in OHS course noted that:

Most lectures were recorded. The fact that you can access the lecture from the comfort of your house whilst ensuring social distancing meant it was more relaxing from home.

Discussion

Despite the sudden transition to remote learning during the COVID-19 pandemic, the study found that the majority of part-time adult participants were satisfied with online lectures. Furthermore, when compared to traditional face-to-face teaching, most students were equally satisfied, with only around 30% reporting being less satisfied with online learning than physical lectures. These findings seem to be in line with studies of younger cohorts of students conducted during the COVID-19 pandemic (Baczek et al., 2021; Jaradat & Ajlouni, 2021) and similar studies of adult learners which were conducted prior to the pandemic (Herrador-Alcaide et al., 2019; Padilla-Carmona et al., 2016).

Higher levels of satisfaction with online learning were linked to several factors which are likely more relevant to adult learners. When compared with younger students, adult students are more likely to have to juggle a full-time job, relationships and take the responsibility for dependants such as children and elderly parents. As women often have to cope with a greater share of such added responsibilities, they could have found it more challenging to follow lessons from their household, and thus be less satisfied with remote learning (Stone & O’Shea, 2019). However, in line with Berry and Hughes (2020) as well as Stone and O’Shea, (2019) in the current study, female students were more likely to be satisfied with online than face-to-face learning. They also showed a preference for future lessons to take place remotely. This finding could be due to several reasons. Firstly, participants stated that remote learning allowed them to save the time usually spent on commuting and parking, whilst providing them with flexibility, all of which would aid individuals to cope with various competing responsibilities. Secondly, most of the adult female students in this study lived with their partners and did not have young children in

| Factor  | N  | Mean rank | U       | Sig |
|---------|----|-----------|---------|-----|
| Location |    |           |         |     |
| Home    | 71 | 39.15     | 223,50  | 0.17|
| Not home| 9  | 51.17     |         |     |

N: Number; U: Mann–Whitney U; Sig, significance; OHS: Occupational Health and Safety; HR: Human Resources.

*** < 0.001; ** < 0.01.
their households, which could prove to be more challenging to deal with when they are present. In fact, the study revealed that adult learners with young children reported less satisfaction with online lessons and were less likely to show a preference for remote learning in the future. The finding is not novel (Stone & O’Shea, 2019), with Kahu et al. (2014) highlighting that parents with young children found remote learning particularly challenging. Individuals who could follow lectures from locations other than their home were more satisfied with online learning, possibly because they could avoid distractions at home. Studies conducted before the pandemic (Kahu et al., 2014) had shown similar findings on the importance of being able to escape distractions and responsibilities at home. Furthermore, the relevance of the home environment has been emphasised in studies on remote learning during the pandemic (Barrot et al., 2021; Baczek et al., 2021).

Those whose partner worked in excess of 40 hours per week were also more satisfied with online lectures. It could be postulated that remote learning impinged upon their limited time with their partner less than traditional physical lectures at university. It is also possible that such individuals had less support with domestic responsibilities, and online learning allowed them more time to multitask whilst learning remotely. Time saved from commuting and the ability to multitask both emerged as benefits of remote learning during qualitative analysis. The adult students in this study also highlighted how they benefitted from being able to follow the online lectures when unwell from home. Known as presenteeism, situations where students attend lectures whilst unwell have previously been described, including during the pandemic (Der Feltz-Cornelis et al., 2020). The current paper, however, suggests a form of virtual academic presenteeism, which could potentially benefit ill students who may otherwise have missed out on lectures had these been offered physically.

Differences in satisfaction were also recorded between those following certain courses. Those following a degree in human resources were more satisfied with online learning than those studying health and safety. Several reasons may have contributed to this finding. As the two courses were often taught by different lecturers, skills such as those related to pedagogy, communication and technical skills may have influenced the findings (Almusharraf & Kahro, 2020; Bourdeaux & Schoenack, 2016). Qualitative findings supported the relevance of lectures’ technical skills, with students highlighting that this was a relevant challenge. It is however also notable that the health and safety course also included a higher percentage of males, which as previously discussed were less satisfied with remote learning. Furthermore, the content of the health and safety course is more technical and remote learning impacted upon some practical elements of this course. It has been previously described that remote learning may be more suited to non-technical and non-skill based courses (Baczek et al., 2021; Ratnasingam et al., 2021).

Students also highlighted how they encountered technical issues at home and it is possible that those who could follow lectures from workplaces did not have such issues. Technical challenges have hampered online education during the pandemic (Coman et al., 2020; Hanafy et al., 2021). Furthermore, IT-related technical skills can sometimes be lacking in adult students (Padilla-Carmona et al., 2016), and such technical skills (Stone & O’Shea, 2019) as well as the availability of appropriate technical hardware (Kahu et al., 2014) are known to impact upon remote adult student satisfaction. Technical issues are
likely to have been exacerbated by the sudden switch to remote learning, but as indicated by qualitative findings, their impact decreased with time as students became more technically competent and possibly obtained the necessary hardware.

Despite high levels of satisfaction, very few adult students in this study favoured the possibility of entirely online lessons in the future. One key challenge related to online learning was the lack of social interaction between students. The importance of such interaction between students during the pandemic has been previously described in younger cohorts of students (Sugino, 2021). Social isolation is also a known issue for adults following remote learning (Spellman, 2007) and could have pushed the students in this study to disregard the possibility of their courses being offered completely online in the future. It is however notable that only a very small percentage of students wanted to return to the entirely face-to-face model of instruction that prevailed prior to the pandemic, suggesting that any disadvantages brought about by the sudden conversion to online learning were largely outweighed by its advantages.

**Practical Implications**

As previously described, (e.g. Moawad, 2020) the study was conducted at a time of great change as well as of great stress for students. In view of its benefits, most participants reported wanting to retain remote elements within their respective courses in the future. However, very few sought to remain entirely online and thus a blended approach which maximises the benefits whilst limiting the disadvantages of remote learning appears ideal. Such an approach would allow part-time adult students to better balance their work, life and studies whilst also avoiding situations where students feel alone and isolated from their classmates and institution.

Adult students tend to expect educational institutions to be understanding of their unique challenges and to provide them with flexibility and support (Bourdeaux & Schoenack, 2016). Tackling the technical issues that students encounter at home as well as their need for an environment free of distraction is complicated. Thus, the university could aim to provide some quiet spaces with IT-infrastructure and support on campus or elsewhere for students who cannot learn from home. This could prove especially useful for female students, for students living in households with young children and for those with limited private space. Along with the combination of flexibility and support that a blended programme can provide, such measures should aid students to cope and enhance student retention (Liu et al., 2007). Finally, this study suggests that part-time lecturers may struggle more with online teaching and hence more technical and pedagogical skills related to online learning may improve the online learning experience of adult students.

**Limitations**

In terms of the quantitative portion of this study, the sample size was rather small and might have impacted the strength of association between the studied independent and dependent variables. Furthermore, the analysis conducted was bivariate and thus could
not account for any shared variance between independent variables and the dependent variables.

Whilst qualitative research often allows for participants’ responses to be explored, such probing was not possible with the chosen method of data collection, where information was instead solicited by means of an online survey. However, the method chosen provided a strong response rate, coupled with the ability to compare quantitative and qualitative findings.

Although this study suggests that courses which are more technical in nature and which have more practical components face more challenges, more research is needed to ascertain why levels of satisfaction vary between different courses.

It is also acknowledged that whilst the findings are representative of students at the studied institution, the findings may not be generalisable to other adult student populations.

Conclusion

Adult part-time students were generally positive about online lectures and wanted them to continue post–COVID-19. The vast majority of students adapted quickly, and many more benefits than problems were elicited in relation to online learning. Female students appeared to benefit more from online learning, possibly due to their greater likelihood of having to balance work and home responsibilities; this however did not apply to those with the youngest of children. Students would benefit from lecturers who are familiar with the online platforms and thus training may sometimes be warranted. A lack of interaction between students during online lectures may be improved by moving towards a blended approach that maximises the benefits of online learning whilst limiting its disadvantages.

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