ENGAGEMENT EXPERIENCES OF THE ADULT UNDERGRADUATE ONLINE: AN ANALYSIS OF ACTIONS, ATTITUDES, AND PERCEPTIONS

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ABSTRACT

The aim of this mixed-methods study was to explore the engagement experiences of undergraduate adult students (n = 77) in fully online courses. Results of the study revealed participants spent approximately half of their educational time per week on engagement activities. Participants in this study frequently interacted with peers in activities such as online discussion and group projects, but they did not value this engagement as much as getting to know and feeling connected to their faculty. The findings of this study highlight the importance of faculty, and specifically faculty involvement, to the engagement experiences of adult online students.

Keywords: *adult learning, online learning, online engagement*

INTRODUCTION

In a recent annual data report, the National Council for State Authorization Reciprocity Agreements (NC-SARA) reported a 93% increase in distance education enrollments at NC-SARA participating institutions from 2019 to 2020 (NC-SARA, 2021). Although the COVID-19 pandemic was a significant driver of increased online enrollments, the pivot to online learning necessitated by the pandemic, along with the increased programming and infrastructure developed to handle this pivot, only add to the future growth outlook for online learning. In a report sponsored by McKinsey and Company, Dorn et al. (2020) suggest although there is a projected decline in overall higher education enrollments due to a shrinking pool of high school graduates, distance learning will continue to surge. Adult students seeking fully online and hybrid degree options are driving this surge.

Adult students enrolling in online degree programs is not a new phenomenon, and a growing body of research exists on adult student success in the online space, as well as the role of engagement in adult online student success. Although engagement reduces attrition in online learning (Kizilec & Halawa, 2015) and is a strong predictor of persistence to degree completion (Bigatel & Williams, 2015), few studies provide a comprehensive analysis of the perceptions of engagement experiences of online students (Farrell & Brunton, 2020), including the engagement experiences of adult online students. The central path for adult student engagement is the classroom (Kasworm 2005, 2010; Philibert et al., 2008) and to be meaningfully engaged in the online classroom, adult students must be engaged with others in learning activities that are professionally and/or personally relevant (Kearsley & Shneiderman, 1998). Adult students utilize their limited time strategically to build relationships with the highest potential for professional or personal benefit (Allen & Zhang, 2016). According to Poniatowski (2012), online courses designed with increased interactivity components positively impact student engagement, but participation in interactive components of an online course require a significant time commitment on the part of the adult student.

The aim of this study was to explore the engagement experiences of adult undergraduate students in fully online courses to contribute to a more comprehensive understanding of undergraduate adult student engagement experiences in the online learning environment. Specifically, we sought to answer the following questions:

- How much time do students devote to engagement activities?
- What are students' preferred methods of engagement and do perceptions of engagement activities differ based on demographic differences?
- What is the relationship among participation in engagement activities, perceived importance of engagement activities, and attitudes toward online learning?
- What value, if any, do students place on building relationships with peers and faculty?

Engagement and Online Learning

Students enrolled in online degree programs continue to experience high attrition rates (Boton & Gregory, 2015). According to Hampton and Pearce (2016), engagement is crucial to success for online students. However, finding a standardized definition of student engagement is difficult, and conceptualizations for online engagement are different from those of face-to-face, traditional, on-campus learning environments. Much of the engagement literature in online learning uses social learning theory (Bandura, 1977; Bandura et al., 1961, 1963; Vygotsky, 1978) as a theoretical and conceptual underpinning, with a focus on connections between the learner and peers, learner and faculty, and learner and content. In addition, engagement has behavioral aspects, including the time and energy spent on learning activities (Krause, 2005). For adult students, particularly those in the online space, the primary path to engagement is doing those activities and interactions that take place within the confines of the classroom (Kasworm 2005, 2010; Philibert et al., 2008).

Redmond et al. (2018) identified five key elements of online learner engagement in their Online Engagement Framework for Higher Education. These are social engagement, cognitive engagement, behavioral engagement, collaborative engagement, and emotional engagement. Of particular note for this study are those elements of engagement specific within the online classroom environment: (a) cognitive engagement, (b) behavioral engagement, and (c) collaborative engagement. Cognitive engagement, which is similar to cognitive presence (Garrison et al., 1999), involves the actual learning process and learner engagement with content. From the perspective of adult learning theory, this element could involve deep learning by linking content to experience (Knowles, 1984; Kolb, 1984), or transformative learning (Cranton, 2006; Mezirow, 1978: Mezirow & Associates, 2000), where critical thinking and higher order thinking skills allow the learner to apply content in changing views and/or actions.

Behavioral engagement consists of those actions that lead to learning. One of the most common engagement theories is Astin's (1999) involvement theory. Astin viewed student involvement as the amount of physical and psychological energy the student devotes to the academic experience. The student's involvement is measured by the amount of time they devote to studying for their classes, completing projects, or other academic assignments. Kuh (2003) also conceptualized engagement as time and energy spent on academic activities. Additionally, collaborative engagement, related to aspects of social presence (Garrison, 2009), is the development of relationships with faculty, peers, and others to support learning (Redmond et al., 2018), and can include activities such as group work. Dixson (2012) argued that for effective online engagement, courses need to be collaborative and students need to perceive faculty as actively involved.

In developing the Online Student Engagement Scale (OSE), Dixson (2012) conceptualized engagement as involving the time and energy spent learning, demonstrating learning, interacting in meaningful ways with peers and faculty, and being emotionally involved with learning. Like the Online Engagement Framework (Redmond et al., 2018), engagement has both behavioral and emotional elements. Dixson divided behavior into two distinct elements: observation, or those actions to take in content, and application, or those actions to demonstrate learning. Dixson suggested the number of observation activities was

not as relevant to engagement unless followed by application behaviors.

Adult Undergraduate Student Perceptions of Online Engagement

Adult learners make up the majority of students enrolled in undergraduate, online programs (Friedman, 2017). However, the engagement experience of adult students in online graduate programs is overrepresented in the literature, and there is limited research focused on differences in student experiences for the undergraduate and graduate student (Bolliger & Halupa, 2018). Research specific to adult graduate students in online courses shows that video lectures and other video-based learning tools increase feelings of engagement (Berry, 2019; Scagnoli et al., 2019), and students engage more intensively and frequently with peers through various interactive technologies (Kolar Bryan et al., 2018). Technological competence also plays a role in perceived engagement (Deschaine & Whale, 2017; Johnson et al., 2018). Adult graduate students in online programs rate icebreaker discussion boards, frequent faculty announcements/email reminders, and discussions structured with guiding questions as important strategies to engage students (Martin & Bolliger, 2018).

Few studies on the engagement experiences of online students include participants at both the graduate and undergraduate level. Blakey and Major (2019) found adult students define engagement in both cognitive and emotional terms, and that engagement is an active concept. Additionally, both cognitive and emotional elements had to exist for students to demonstrate engaged behaviors. Adult students enrolled in courses promoting high levels of student-student and student-faculty interaction report high levels of perceived engagement (Tsai et al., 2021). In one comparative study of undergraduate and graduate experiences in online learning, Bolliger and Halupa (2018) found graduate students experience higher levels of engagement than undergraduate.

Farrell and Brunton (2020) identified sense of community, support networks, school/life balance, self-efficacy, and approach to learning as key themes in engagement experiences of adult undergraduate online students. Consistent with most research on adult student experiences, they found balancing school with other important life commitments affected engagement. Community, time management skills, supportive faculty, confidence building, and multiple means of interaction were critical for adult online student engagement. Outside of Farrell and Brunton, few studies focus singularly on the experiences of adult undergraduate student engagement in online learning. This current study will address the lack of knowledge of the adult undergraduate experience in the online learning environment.

METHODS

The purpose of this mixed-methods study was to explore the engagement experiences of adult undergraduate students in fully online courses to contribute to a more comprehensive understanding of undergraduate adult student engagement experiences in the online learning environment. To be included in this study, potential participants had to be enrolled in a fully online course and registered in a fully online, undergraduate degree program. Adult status was determined by age (25 years of age and over) and/or social roles including being employed part or full time and having family responsibilities. The participants for this study (n = 77) were identified using purposeful, nonrandom sampling techniques, which is considered a Type 4 mixed-methods design (Onwuebuzie & Collins, 2015). Specifically, we sought to answer the following questions: (a) How much time do students devote to engagement activities? (b) What are students' preferred methods of engagement and do perceptions of engagement activities differ based on demographic differences? (c) What is the relationship among participation in engagement activities, perceived importance of engagement activities, and attitudes toward online learning? and (d) What value, if any, do students place on building relationships with peers and faculty? This study utilized a convenience, nonrandom sample of adult students in an online program at a single institution. Convenience sampling is a weak sampling technique (Ary et al., 2010) and no statistical inferences can be drawn from this study. In this study, engagement activities were defined as those activities requiring student-student and/or student-faculty interaction based on content that is academically and professionally applicable to the student.

Quantitative Data Analysis Procedures

We used quantitative data to measure time spent on engagement activities, online student

engagement, attitudes toward online learning, and feelings of importance for various types of engagement. The Student Engagement Survey (SES), developed by Bigatel and Williams (2015), and used with permission, quantified student engagement activities and student perception of faculty attitudes and behavior. Two researcher-designed scales on attitudes toward online learning and level of importance for specific types of engagement were also used in this study. We used quantitative data to establish internal consistency (coefficient alpha), calculate overall scores, measure central tendency, standard deviation, and to run various statistical analyses.

Qualitative Data Analysis Procedures

Qualitative data consisted of responses to two open-ended questions: (a) Explain why you do, or do not, think it is important to get to know your professors, and (b) Explain why you do, or do not, think it is important to get to know your classmates. A descriptive qualitative approach (Sandelowski & Barroso, 2002) was used to explore participants' experiences in the online learning environment. We independently analyzed participant responses, then worked collaboratively to identify commonalities in the data. We then used the 10-step method for applying the constant comparative method (Olson et al., 2016) to ensure coding was representative of the data. We organized coding into logical categories and subcategories.

Data Collection

The Institutional Review Board of the host site intitution approved all data collection methods. Data collection took place over a 30-day period at the end of a fall term. Prior to data collection, we sent an informational email detailing the purpose of the research study and the start date of data collection to all eligible participants (N = 197). To begin data collection, we emailed a link to the online survey to all eligible participants using the participants' institution provided email address. The survey was active for a 30-day period with reminders emailed at weekly intervals for three weeks.

Participants

Participants in this study were adult students, as defined by age and/or social role, and designated as an undergraduate, online student by the host site institution. The institution classifies a student as online if the student is enrolled in a fully online program. In addition to enrollment in a fully online program, students had to have completed a minimum of one semester in the online degree program to be eligible to participate in the study. We emailed the survey link to 197 potential study participants. Ninety-five individuals participated, with 77 providing completed questionnaires for a response rate of approximately 40%. The data set of the 77 participants had a small number of missing observations (11) randomly distributed among participants and test items. As the missing data was minimal, we used mean replacement for the missing observations. Using mean replacement did not result in a loss of variation in the data.

The average age of study participants was 34 (SD = 10.4). Respondents identifying as female (77%) made up the majority of study participants; 23% of respondents identified as male. Participants identifying as White made up 77% of respondents, 14% identified as Black/African American, 4% identified as non-white Hispanic, and 1% identified as American Indian/Native American. Individuals employed 40 or more hours per week made up 59% of all respondents, and 25% worked between one and 39 hours per week. The self-reported grade point average for study participants was high (M = 3.4, SD = .5). An overwhelming majority of respondents held either junior (21%) or senior (77%) status at the host institution. Approximately 50% of respondents were first-generation college students. Of all respondents, 95% indicated having a computer at home, and 90% had high-speed internet at home.

Survey Instrument

The survey instrument for this study included nine demographic questions, eight yes/no items regarding access to technology, scale measures of engagement, attitudes toward online learning, and levels of importance for specific types of engagement, and two open-ended questions. Scale measures included a researcher-designed, 15-item instrument to measure attitudes toward online learning (ATOL), a researcher-designed, six-item instrument to measure the perceived importance of engagement (PIES), and a 22-item, revised version of the Student Engagement Scale (SES) (Bigatel & Williams, 2015). Additionally, the questionnaire included two items on preferred methods of communication and one item to rank order of preferred methods of engagement. As original reliability measures might not hold for modified instruments

(Creswell & Creswell, 2018), each revised scale measure was reassessed for any variations in scoring due to modifications (Table 1). All scale measures met adequate internal consistency reliability measures.

Table 1.
Reliability Coefficients of Scale Measures

	Cronbach's Alpha	Cronbach's Alpha on Standardized Items	N of Items
Scale			
ATOL	.78	.78	15
PIES	.81	.81	6
SES	.97	.93	22
Activities Subscale	.87	.87	12
Instructor Subscale	.93	.93	10

The unmodified SES (Bigatel & Williams, 2015) consists of 19 items total, with nine measuring engagement activities and 10 measuring faculty attitudes and behaviors in the online learning environment. The nine engagement activities items used a four-point response scale ranging from one (*never*) to four (*always*). The 10 faculty items used a four-point response scale ranging from one (*not at all*) to four (*very much*). Previous versions of the SES also included items on thinking skills. After communication with the developers of the SES, we determined to utilize only those test items associated with engagement activities and faculty attitudes and behaviors of the SES. Additionally, the developers of the SES suggested additional items to measure engagement activities and faculty attitudes and behaviors.

The modified SES used in this study consisted of 22 items, 12 for assessing engagement activity and 10 assessing faculty attitudes and behaviors. We also modified the response scales. The 12 engagement activity items and 10 faculty attitude and behavior items used a five-point response scale ranging from one (*Never*) to five (*Always*). The unmodified SES Cronbach's alpha is .93 (Bigatel & Williams, 2015), including an alpha of .80 for engagement activity items and .94 for faculty attitudes and behaviors. The modified Cronbach's alpha for the SES in this study was .93, including an alpha of .87 for engagement activity items and .94 for faculty attitudes and behavior, meaning the instrument with modifications demonstrated internal reliability.

DATA ANALYSIS

Time on Task and Preferred Methods of Interaction

We first sought to identify the number of hours per week spent on engagement activities in relation to the total time spent on school-related activities, the preferred methods of interaction outside of the learning management system (LMS), the preferred assigned engagement activities, and how often participants engaged in specific engagement activities. Participants in this study, 83% of whom were employed and attended school part time, reported an average time of 12.3 hours (*SD* = 7.6) spent per week on school-related activities. Of the 12.3 hours spent on school-related activities, participants reported an average of 6.3 (*SD* = 3.5) of those hours being spent on engagement activities. Engagement activities were defined for participants as activities that require student-student or student-faculty interaction based on content that is academically and professionally applicable to the student.

When asked for preferred methods of interaction outside of the LMS (Table 2), 79% of participants identified email as the preferred method for interacting with faculty and 61% identified email as the preferred method for interacting with peers. Approximately 9% of participants selected face-to-face meetings as the preferred method to interact with faculty and 8% selected face-to-face meetings as the preferred method to interact with peers. Texting was the preferred method of interacting with peers for 19% of participants. Participants also rank-ordered assigned engagement activities within the LMS from most to least preferred (Table 3). The traditional discussion forum ranked highest, followed by small-group discussion, asynchronous video chat, blogs, wikis, web conference, and group projects.

Table 2.
Preferred Methods of Interaction Outside of LMS

Method	Peers	Faculty
Email	.61	.78
Telephone	.01	.05
Text	.19	.03
Face-to-Face Meeting	.08	.09
Video Chat	.11	.05

Table 3.
Ranked Order of Preferred Engagement Activities within the LMS

Activity	Rank
Discussion Board	1
Small Group Discussion	2
Asynchronous Video Discussion	3
Blogs	4
Wikis	5
Real-Time Web Conference	6
Group Projects	7

Differences in Participation and Perceptions

We performed independent *t*-tests to compare mean scores on the SES (Bigatel & Williams, 2015), PIES, and ATOL based on the following variables: (a) preferred method to contact faculty, (b) preferred method to contact classmates, (c) employment status, (d) household income, (e) first generation status, (f) race/ethnicity, (g) gender identity, and (h) classification. On average, participants who identified as women (M = 89.3, SD = 12.1) had higher SES scores compared to those who identified as men (M = 78.3, SD = 14.7). The results of an independent *t*-test demonstrated the difference was statistically significant, $t(74) = 3.16$, $p = .002$.

Engagement Activities and Perceived Importance of Engagement

We used correlation and regression analyses to analyze the relationship among participation in engagement activities, perceived importance of engagement activities, and attitudes toward online learning. Variables used to quantify time spent on engagement activities were self-reported time per week spent on engagement activities and the SES (Bigatel & Williams, 2015) subscale of engagement activities. The SES student engagement activities subscale was used as a proxy measure for frequency of engagement activity. The scale consisted of 10 items with a possible score ranging from one (Never) to five (Always). The lowest possible scale score was 10 and the highest possible score was 50. Overall, participants in this study reported participating often in engagement activities (M = 37.0, SD = 7.3). Table 4 includes a summary of individual responses to the SES engagement activities subscale.

Table 4.
SES Engagement Activities Subscale Item Summary

Item	M	SD
Participate in online discussion	4.5	.7
Share your experience with the class	3.9	.9
Participate in group projects	4.3	.8
Grade classmates on group activities	3.4	1.3
Grade classmates on individual assignments	2.7	1.5
Use various methods to interact	3.4	1.1
Use library resources to complete assignments	3.8	.9
Make a presentation to class	3.2	1.2
Learn through meaningful activities	3.8	.9
Explore new ideas	3.9	.9

The Perceived Importance of Engagement scale (PIES) measured student attitudes on the importance of engagement activities in online learning (Table 5). The scale consisted of six items with a possible score ranging from one (*Not at all important*) to five (*Extremely important*). The lowest possible scale score was six and the highest possible score was 30. The mean score for participants was 18.9 (SD = 4.4). Participants placed the greatest importance on getting to know faculty (M = 3.8, SD = .8), feeling connected to faculty (M = 3.5, SD = .9), and educational activities that require interaction with faculty (M = 3.3, SD = .9). Participants placed the least importance on feeling connected to other students (M = 2.5, SD = 1.1).

Table 5.
Perceived Importance of Engagement Scale Summary

Item	M	SD
How important are engagement activities to your success as an online student?	3.2	1.1
How important is it to get to know your classmates in your online program?	2.7	1.1
How important is it to get to know the faculty in your online program?	3.8	.8
How important it is to feel connected to other students in your online program?	2.5	1.1
How important is it to feel connected to faculty in your online program?	3.5	.9
How important are educational activities that require interaction with faculty?	3.3	.9

A Pearson correlation coefficient was computed to assess the linear relationship of self-reported time per week spent on engagement activities and perceived importance of engagement, as well as frequency of engagement activity and perceived importance of engagement. There was not a statistically significant relationship between self-reported time per week spent on engagement activities and perceived importance of engagement. There was a moderate, positive correlation between frequency of engagement activity and perceived importance of engagement as represented by the PIES scale, r(75) = .32, p = .004.

We used simple linear regression to investigate the relationship between frequency of engagement activity and perceived importance of engagement. We used normal P-P plots, scatterplots of the residuals, histograms, and VIF to ensure assumptions of linearity, homoscedasticity, normal distribution, and absence of multicollinearity were met for each analysis. The results of the regression analysis indicated frequency of engagement activity was a significant predictor of perceived importance of engagement activity, R^2 = .07, F(1, 75) = 5.71, p = 019.

The ATOL scale measured participant attitudes toward various aspects of online learning (Table 6). Negative attitudes towards online learning can lead to decreased motivation and negatively affect persistence (Kauffman, 2015). The scale consisted of 15 items with a possible score ranging from one (*Strongly disagree*) to four (*Strongly agree*). The lowest possible scale score was 15 and the highest possible score was 60. Overall, participants in this study scored an average of 41.4 (SD = 7.3), indicating a moderately positive attitude toward online learning. Participants showed more positive attitudes toward the value of interacting with faculty (M = 3.4, SD = .6) and the equality of online programs in comparison to face-to-face (M = 3.3, SD = .7), and the least positive attitudes towards group work (M = 1.9, SD = 1.0) and opportunities to interact with other students (M = 2.1, SD = .8).

A Pearson correlation coefficient was computed to assess the linear relationship of self-reported time per week spent on engagement activities and attitudes toward online learning, as well as frequency of engagement activity and attitudes toward online learning. There was not a statistically significant relationship between self-reported time per week spent on engagement activities and attitudes toward online learning. There was a moderate, positive correlation between the SES subscale of engagement activities and attitudes toward online learning, r(75) = .37, p = .001. We used simple linear regression to investigate the relationship between frequency of engagement activity and attitudes toward online learning. We used normal P-P plots, scatterplots of the residuals, histograms, and VIF to ensure assumptions of linearity, homoscedasticity, normal distribution, and absence of multicollinearity were met for each analysis. The results of the regression analysis indicated frequency of engagement activity was a significant predictor of attitudes toward online learning, R^2 = .12, F(1, 75) = 5.71, p = 001.

Lastly, a Pearson correlation coefficient was computed to assess the linear relationship of

Table 6.
Attitudes toward Online Learning Scale Item Summary

Item	M	SD
I would rather take F2F courses*	2.70	1.01
I prefer to take online courses	3.21	.92
I would take F2F courses over online courses*	2.80	.97
I should not be required to interact with classmates*	2.52	.88
I enjoy online learning activities that require interaction with classmates	2.46	.91
I enjoy online group work	1.99	1.02
I understand the need for online group work	2.95	.76
I get the same level of instruction in online courses as in F2F courses	2.80	.76
I learn more in online courses	2.25	.84
I prefer online courses that do not require interaction with classmates	2.84	.74
I would recommend online courses to others	3.42	.64
I value interacting with other students in my online program	2.70	.89
I value interacting with instructors in my online program	3.41	.61
I would like more opportunities to interact with other students in my online program	2.14	.81
Online degree programs are equal to F2F degree programs	3.26	.70

* Items were reverse coded for analysis.

perceived importance of engagement activities and attitudes toward online learning. There was a strong, positive correlation between perceived importance of engagement activities and attitudes toward online learning, $r(75) = .44$, $p < .001$. We used simple linear regression to investigate the relationship between perceived importance of engagement and attitudes toward online learning. We used normal P-P plots, scatterplots of the residuals, histograms, and VIF to ensure assumptions of linearity, homoscedasticity, normal distribution, and absence of multicollinearity were met for each analysis. The results of the regression analysis indicated perceived importance of engagement was a significant predictor of attitudes toward online learning, $R^2 = .19$, $F(1, 75) = 17.60$, $p < 001$.

Importance of Building Relationships

For the final research question, we used qualitative data to better understand the importance participants placed on building relationships with their classmates and faculty. Specifically, students were asked to explain why it is, or is not, important to get to know their classmates and faculty. When asked to explain why it is important to get to know faculty, 71 of the 77 participants (92%) responded positively (it is important), with responses categorized under the themes of expectations, help, and connection (Table 7). Connection was further divided into connection for engagement and connection for learning. Participants who did not think it was important to get to know faculty expressed that it was unnecessary for their success.

When asked to explain why it is important to get to know their classmates, 44 of the 77 participants (57%) responded positively (it is important), while 33 responded negatively (it is not important). The positive responses fell under the themes of

Table 7.
Why It Is (or Is Not) Important to Get to Know Your Professors.

THEME	
Positive	
Expectations	"Your professor is your leader, your guidance for help, and kind of like your boss. It is important to know what they ask of you in the classroom, what they expect from you."
Help	"Since they are the primary source of your help as a student it is very important to get to know them."
Connection	"I have found that the instructor can set the tone for engagement and interaction for the class in the very beginning. I absolutely enjoy interactions with the instructor. It pulls me into the course and promotes engagement." (engagement) "By getting to know the professors it adds the human element to the class setting when reading and watching the assigned material." (engagement) "Professors are essential to understand the flow of the class and establishing a relationship with the teacher allows individuals to understand the material better." (learning)
Negative	
Unnecessary	"As long as the instructions and assignments are clear, there is not a lot of need to interact with the professor."

Table 8.
Why It Is (or Is Not) Important to Get to Know Your Classmates.

THEME	
Positive	
Help	"I think it important to get to know a few of your online classmates it's a way to have someone other than the professor that you can reach out to for help with the course when you need it."
Connection	"I think it is important because you can feel depressed and or disconnected from your coursework without others." (engagement) "I am a people person. Therefore, I don't mind knowing how someone is day is going or just a simple hello is good." (engagement) "It is important to get to know your classmates and to learn from others. It shows other points and views." (learning) "Because we can feed off each other's opinions on the subjects. It makes sense to have kind of a working relationship with them." (learning)
Negative	
Unnecessary	"I have taken the majority of my college classes online and I don't see a benefit of interacting with classmates." (unnecessary for success) "I have three jobs and two children and just want to get my assignments completed. Again, I am not here to make friends." (limited time)
Conditional	
Utilitarian	"It is only important if you have to work with them in a group." "The only thing I need to know about my classmates is their skills when it comes to working on class projects."

help and connection (Table 8). Connection was further divided into connection for engagement and connection for learning. Negative responses fell under the themes of unnecessary for success and limited time. Additionally, some positive and negative responses also fell into a conditional category, in which the respondent's view of getting to know their classmates was conditional on whether or not knowing their classmates could deliver some of the benefits outlined in the themes.

DISCUSSION

Participants in this study reported spending approximately half of their educational time per week on engagement activities. It is difficult to measure the exact amount of time students devote to specific engagement activities, and we relied on self-reported time estimates for this study. More precise measurements of time-on-task might yield more reliable results on the relationship of time spent on activities to student perceptions of and attitudes toward engagement. Participants' preferred method of interaction outside of the LMS, with both faculty and peers, was email. Few participants selected anything other than email as the preferred way to interact with their faculty. Texting was the preferred method to interact with peers for approximately 20% of participants. Study participants also rank-ordered preferred assigned engagement activities. Traditional online discussion ranked highest, followed by small-group discussion, asynchronous video chat, blogs, wikis, web conference, and group projects. In previous studies, online students found text-based discussions more engaging than video-based discussions (Swartzwelder et al., 2019) although the role of increased familiarity with text-based discussion in both preference and level of engagement is not fully understood. Active participation in asynchronous discussions can promote social engagement (Buck, 2016), and online students tend to have a positive disposition toward the benefits of online discussions (Krasnova & Ananjev, 2015).

Similar to Bolliger and Halupa (2018), we found participants who identified as women had higher rates of participation in and more positive attitudes toward engagement activities than those who identified as men. Martin and Bolliger (2018) also found gender differences in perceptions of the importance of various engagement activities. However, we did not find statistically significant differences based on other demographic measures, including class standing, employment status, first-generation status, or race/ethnicity. Studies analyzing gender differences in the impact of learner-content interaction on engagement also found no statistically significant differences based on gender (Mukuni et al., 2021).

The SES subscale of engagement activities showed participants in this study frequently participated in engagement activities. Participants engaged most frequently in online discussion and group projects, and rarely in peer assessment. When asked how important various types of engagement are in an online course, participants placed the most importance on getting to know and feeling connected to faculty. Although strategies for increasing student engagement have focused on new learning technologies and instructional delivery (Rhodes, 2009), faculty engagement plays a crucial role in the student experience (Gallop, 2020).

Results of both quantitative and qualitative data analyses revealed adult students in this study valued engagement with faculty. For the qualitative responses, 92% expressed a positive importance for getting to know one's faculty. Participants felt it was important to get to know faculty so they could better understand faculty expectations, so they felt comfortable asking for help, and because it made them feel more connected to faculty, course content, and their classmates. Multiple respondents mentioned the human element that getting to know one's faculty brings to the online space. Participants in this study clearly articulated their belief that getting to know their faculty was key to their success. Only 8% of participants did not feel getting to know faculty was important and expressed the sentiment that it did not contribute to their success.

The findings of this study highlight the importance of faculty, and specifically faculty involvement, to the engagement experiences of adult online students. Students in classes with high levels of faculty-student interaction report more favorable perceptions of engagement (Tsai et al., 2021). Faculty can enhance student perceptions of engagement in a variety of ways. The use of video technology (Berry, 2019; Scagnoli et al., 2019), fostering caring learning environments (Parker et al.,

2021), frequent contact (Berry, 2019), virtual office hours (Deschaine & Whale, 2017), and including multiple pathways for interaction (Dixson, 2012) can increase student engagement.

Interestingly, participants in this study placed less importance on engaging with their peers and reported the least positive attitudes toward interacting with peers. The qualitative data revealed that 57% of participants had positive responses on the importance of getting to know their classmates. However, for most the importance was conditional and directly related to the usefulness of those classmates in helping the respondent be successful in class. Some explicitly stated getting to know one's classmates was only important if they had to work with that classmate on a project. Although seven of the 77 participants valued getting to know one's classmates because it reduced feelings of isolation, this sentiment was not the norm.

It is possible this negative perception stems specifically from assigned low-ranked engagement activities, such as wikis and group work, that had a group-grading component. Participants in this study did not have a favorable view of group work. Another explanation could be the value students attribute to interacting with faculty in terms of both course learning and support as opposed to interaction with peers. Adult students value faculty with applied experience in their subject area (Phillips et al., 2017) and can find peer interaction tangential to the learning experience (Rhode, 2009). In previous studies, peer interaction did not influence student satisfaction or perceived learning (Alqurashi, 2019), whereas student-faculty interaction is a primary variable in student satisfaction (Croxton, 2014). In an environment of competing responsibilities and major demands on time, adult students may deem time spent interacting with faculty as more valuable in reaching their educational goals. One participant in this study made clear how competing responsibilities can affect one's perception of engagement by saying, "I have three jobs and two children and just want to get my assignments completed. Again, I am not here to make friends." The results of this study support the findings of Allen and Zhang (2016) that adult students use their time strategically to build relationships they deem beneficial to their success.

We found no statistically significant relationship between time spent on engagement activities and participants' perceptions of the importance of engagement activities or their attitudes toward online learning. However, there was a moderate, positive correlation between frequency of engagement activity and perceived importance of engagement. As the frequency of participation in engagement activities increased, so did the participant's perceived importance of engagement. We also found a moderate, positive correlation between frequency of engagement activity and attitudes toward online learning. The strongest positive relationship was between perceived importance of engagement and attitudes toward online learning. Participants who perceived engagement to be important also had more positive attitudes toward online learning.

CONCLUSION

Participants in this study, most of whom had additional work and family responsibilities, spent half of their educational time per week on engagement activities with peers and faculty. However, they did not see all of these engagement activities as equal. Adult students in this study preferred using text-based discussion as a means to interact with peers, a standard practice in most online courses. Although other studies have found adult students preferred text-based discussion, not much is known as to why. Research into why adult students prefer text-based discussion over other methods (e.g., asynchronous video) is needed to better help practitioners increase the effectiveness of text-based discussion and better incorporate other discussion methods into the online classroom. Online group work was rated as the least preferred engagement activity. As many employment fields are increasingly globalized and remote, experience in completing tasks in teams, sometimes asynchronously, is becoming increasingly important. Research leading to best practices in assigning group work, as well as demonstrating the benefits of group work to adult online students, is needed.

The findings on gender differences in perceived importance of engagement and attitudes toward online learning are interesting and require further investigation. Student engagement is critical to student success and online faculty can play a significant role in shaping student perceptions of engagement. In a study of nontraditional student

persistence, Markle (2015) found most men considered their education from a cost-benefit perspective and decisions on whether or not to persist were based on the question "is it worth it?" Adult students have limited time to devote to educational responsibilities, so each required activity should be presented as adding value to their educational experience. Online faculty must consider ways in which to demonstrate to all students the worth, in both degree attainment and practical application, of being engaged in the online classroom.

Perhaps the most significant finding of this study is the level of perceived importance participants placed on engagement with faculty and peers. Participants in this study perceived engagement with faculty as highly important. Conversely, many study participants did not perceive engagement with peers as important, and the low regard study participants had for engagement with peers is concerning. Much of the research literature on online student success promotes the critical function that community building plays in the online classroom. There are a variety of benefits to engaging with peers, from academic and social support to insights on the practical application of course content. However, many adult students in this study did not perceive such engagement as important. What was not answered in this study is why. More qualitative research is needed to better understand why participants did not perceive engagement with peers as important, and to inform strategies online faculty can use to better promote peer engagement.

Engagement in more collaborative activities positively correlated with the participants' perceived importance of the activities and with the participants' attitude toward online learning. This finding is encouraging as it shows the more experience adult students have in engaging with faculty and peers, the more their perceptions and attitudes toward engagement activities improve. Not all engagement experiences are positive, so it is not fully understood why increased participation for participants in this study led to more positive attitudes. Here as well, more qualitative investigation is needed to determine why increased participation in engagement activities led to more positive attitudes and the role negative experiences might play in overall attitudes.

Adult students in online programs have many competing responsibilities. They prioritize educational activities perceived as integral to their academic success and that have a direct application outside of the classroom. Therefore, engagement activities should not be viewed by students as "busy work" but as essential tasks necessary for academic success and with application outside of the classroom. If the findings of this study hold true in other research settings with adult online students, we can be encouraged that the more adult students engage with faculty and peers, the more their attitudes toward engagement activities improve. We need to continue our focus on implementing effective, engaging, practical activities in our online classrooms. Lastly, but perhaps the most important takeaway, is the key role online faculty play in framing engagement with faculty and peers as worthy of adult students' time and energy. Assigning engagement activities is not enough. We need to be the most passionate cheerleaders for the importance of engagement for adult students in the online classroom.

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