ON INSTRUCTOR PRESENCE AND STUDENT ENGAGEMENT IN THE GRADUATE ONLINE CLASSROOM

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ABSTRACT

Online learning has become a common method of course delivery in higher education. Instructor presence and student engagement are critical to quality education but can be difficult to achieve in the asynchronous online learning environment. The use of video has been highlighted as one method to improve instructor presence and student engagement; however, research is limited on the most efficient ways for instructors to incorporate video into their courses. This research study examined the effect of instructor-created video announcements on perceived instructor presence and self-reported student engagement. Students enrolled in two sections of an introductory graduate nutrition course received specifically crafted announcements based on the Community of Inquiry Framework (COI). The control group received text-based announcements and the experimental group received video announcements. Both groups completed surveys to assess student engagement pre- and postintervention and instructor presence postintervention. Overall, the findings showed there was no effect on perception of instructor presence or student engagement between the control and experimental groups. However, insights for improving teaching strategies were gleaned.

Keywords: student engagement, instructor presence, video, announcement, Community of Inquiry Framework, graduate students

INTRODUCTION

Due to innovations in technology, online learning is now a common method of course delivery by institutions of higher education (Garrett et al., 2019; Legon et al., 2020). The use of online learning continues to grow because of its convenience for both the student and faculty, because of its ability to reach students without boundary or time constraints, and because it allows students to engage in a more personalized and tailored learning experience (Cicco, 2011; Collis, 1998; Gray &

DiLoreto, 2016; Legon et al., 2020; O'Shea et al., 2015). In addition, online learning offers financial savings to administrators as there is no need for brick-and-mortar classroom space and to students and faculty because there is little to no commuting (Micheal, 2012; Underdown & Martin, 2016). Recent literature suggests that many institutions are creating new programs using online learning platforms with the goal of growth and revenue generation (Legon et al., 2020).

Though the advantages of the online learning

environments are many, there are also several disadvantages, including lack of instructor presence and student engagement (Draus et al., 2014; Underdown & Martin, 2016), a sense of isolation and decreased performance by students (Martin & Bolliger, 2018; Underdown & Martin, 2018), and decreased learner interaction and increased disconnect (Byrd, 2016; Gray & DiLoreto, 2016). For the purpose of this study, lack of instructor presence and low levels of student engagement were explored (Draus et al., 2014; Underdown & Martin, 2016). As such, the remainder of the introduction focuses on these two key issues as raised in the literature.

Chickering and Gamson (1987) noted that contact between students and their instructor is necessary for students to engage more fully in their courses. Although their research was conducted using face-to-face undergraduate courses, their findings have influenced a wider audience including general research in online education (Oncu & Cakir, 2011) and graduate level online education (Arbaugh & Hornik, 2006). More recent evidence shows that student engagement and student-to-instructor interaction have been linked with student achievement and learning (Kahu, 2013; Scagnoli et al., 2019, Figure 3). Student-toinstructor interaction is needed to set and maintain academic expectations (Martin & Bolliger, 2018), reduce dropout rates and learner isolation, and increase retention and graduation rates (Banna et al., 2015). In addition, the research has found that instructor presence had a significant effect on perceived student learning and student satisfaction (Gray & DiLoreto, 2016).

Even though instructor presence is an important part of quality education, it has been conceptualized in several ways throughout the literature and therefore is difficult to study. Pollard et al. (2014) described instructor presence as a combination of teaching presence, which directs the design, organization, and structure of the course, and social presence, which highlights the need for personal connection through instructor praise and self-disclosure. Research on social presence commonly focuses on student-to-student interactions, such as communicating and being acknowledged by other students via discussion boards, whereas instructor social presence addresses the aspects of instruction that connect the instructor to the

student, such as providing timely, positive feedback (Pollard et al., 2014). Furthermore, instructor social presence has been described as the "humanization of the instructor [that] allows students to develop a deeper connection to the learning community and feel motivated by their interactions with a real individual" (Collins et al., 2019, p. 58). Increasing teaching presence and instructor social presence are two of the many strategies that can be used to create a supportive online learning environment (Kamlaskar & Killedar, 2015), both academically and emotionally (Bernard et al., 2009).

Student perception of instructor presence is often used as a method of evaluating the usefulness and quality of instructor efforts. Strategies to increase instructor presence vary depending on the instructor's level of experience, training, and institutional resources. In addition, it is important to recognize that student responses to instructor efforts are highly dependent upon the student's past experiences, expectations, and personality (Kahu, 2013). The Community of Inquiry (COI) framework is a reliable and validated measure of instructor presence found in the literature (Collins et al., 2019; Pollard et al., 2014). For the purposes of this study, instructor presence extends the work of Pollard et al. (2014) and was measured using the four dimensions of the COI including teaching presence (the design, facilitation, and direct instruction of the course), social presence (peer interactions), instructor social presence (student interactions with the instructor), and community and learning environment (student sense of community and connectedness).

Student engagement is also a complex concept to study due to varying definitions of the term and varying methods of assessment. It has been described as a "psycho-social process affected by both the institution and the student, in the setting of a diverse social environment that combines the socio-cultural perspective with psychological and behavioral views" (Kahu, 2013, p. 768). Student engagement is the level of psychological investment and effort a student puts towards learning. It is also a critical component to fully online education since there is less of an opportunity for students to make connections with the institution, including the instructor, when compared to in-person learning (Martin & Bolliger, 2018). Increasing engagement

requires the instructor to incorporate pedagogical strategies that encourage students to be active participants in the course while also assessing knowledge and student attitude (Gray & DiLoreto, 2016). Engagement in the course is needed to provide students with connections and opportunities that would otherwise be met in-person while in class or when participating in extracurricular activities such as collegiate athletics and clubs. These connections and resulting institutional relationships can prove beneficial to developing into an alumni/donor relationship long after the student has finished their degree program (Council for Advancement and Support of Education, 2019).

There are several types of interaction that promote student engagement: student-to-content, student-to-instructor, student-to-student (Moore, 1989), and student-to-self (Wing et al., 2014). Student-to-self, also called reflective practice (Mann et al., 2009), is often achieved through selfdirected learning using assessment methods that include self-reflection (Wing et al., 2014). Research has found students value student-to-instructor interaction the most (Martin & Bolliger, 2018; Mayne & Wu, 2011), yet the findings indicate that students primarily engage with course materials and content (Garrett et al., 2019). Students, especially those who are new to online learning, appreciate knowing the instructor is present in some tangible way and available to provide support when needed. This is likely due to the student's past educational experiences. From childhood throughout primary school into undergraduate education, many students have direct support from a parent and/or teacher. Even though there is clear evidence that productive student-toinstructor interaction is a necessary component of online education, how it is defined, developed, and achieved at a satisfactory level is an ongoing debate (Gray & DiLoreto, 2016; Korkut et al., 2015).

A variety of validated course questionnaires, each focusing on different aspects of engagement, including student satisfaction, skills, participation/interaction, emotional engagement, and performance, have been used to research student engagement (Gray & DiLoreto, 2016; Handelsman et al., 2005; Martin & Bolliger, 2018). Student engagement has also been measured using the number and length of discussion board posts (Collins et al., 2019; Draus et al., 2014). For the purposes of this

study, student engagement was measured using the works of Handelsman et al. (2005), a validated instrument that measures a wide range of engagement, including skills engagement, emotional engagement, participation/interaction engagement, and performance engagement, that would benefit from increased instructor presence and reduce the drawbacks of online education.

Student-to-instructor interaction and effective online teaching requires the instructor to be socially present within an online course (Bowers & Kumar, 2015; Dixson, 2010). Common, text-based methods of student-to-instructor interaction in online courses include written weekly announcements, instructor participation in discussion boards, and the use of rubrics for grading (Martin & Bolliger, 2018). The problem with these methods is they tend to offer a bland, disengaging communication experience for students (Martin, 2019). Other approaches to student-to-instructor interaction include office hours, individual appointments, and open discussion boards that provide an opportunity for students to post questions and the instructor to respond asynchronously. However, the literature shows that online students prefer the use of email communication (Li et al., 2011) and rarely contact instructors during office hours (Lowenthal et al., 2017).

Technology-based methods of interaction show promise as a means to increase instructor presence, student-to-instructor interaction, and student engagement in the online classroom. Common technology-based methods include the use of instructor-created video content (Underdown & Martin, 2016) and instructor-personalized audio lectures (Steele et al., 2018). Underdown and Martin (2016) recommended a variety of strategies to incorporate instructor-created video content into courses, some of which include creating a Welcome to Class video, an overview of the syllabus, a weekly overview of the course requirements and content, and/or offering embedded feedback videos that address common issues and areas of concern with student assignments. Other technology-based methods of instruction include the use of carefully selected audio-visual tools and interactive course tools that provide the ability for two-way communication and input (Cicco, 2011) and offer live synchronous sessions or use of social media such as Twitter and Facebook (Banna et al., 2015).

Research has indicated that instructor personalized video or audio lectures are an important part of instructional design for both graduate and undergraduate students (Scagnoli et al., 2019; Steele et al., 2018). Instructor-created videos have been shown to increase both engagement and satisfaction as students feel more connected to the instructor, reducing the overall feeling of distance and therefore disconnect (Steele et al., 2018; Underdown & Martin, 2016). Interestingly, when assessing course announcements, Collins et al. (2019) found that text-based announcements improved graduate student engagement, as measured by the number and length of voluntary discussion board posts, when compared to asynchronous video announcements. In addition, Collins et al. (2019) found text-based announcements increased student perception of the instructor's attitude of sharing, based on student responses to the Instructor Social Presence portion of the Community of Inquiry Framework survey instrument. This brings to light that increasing student engagement and interaction may be related to the instructor's use of personalized learning components (Steele et al., 2018) rather than the delivery method.

While there is ample evidence in the literature that instructor presence, student-to- instructor interaction, and student engagement are necessary components for the success of online education, the pedagogical methods to achieve these components need more research. Often, instructors are asked to teach online courses with little to no training or experience (Richardson et al., 2015), and best methods of how instructors should engage with students are unclear. These combined factors explain why students report feeling disconnected from their instructors in the online setting (Gray & DiLoreto, 2016). The preference of instructor-created audio lectures, when compared to standardized lectures, found by Steele et al. (2018) is perhaps due to the increased level of personalization and warrants further investigation to determine if increased personalization leads to increased student engagement. In addition, the findings from Collins et al. (2019) support the use of text-based, instructor-created announcements to increase student engagement. However, the specific messaging provided in the announcements is not clear.

To streamline efforts and make better use of instructor resources, more research is needed to determine which methods of instructor communication and course interaction students find most useful. Perhaps connecting the methods of Steele et al. (2018) and Collins et al. (2019), using a strategy suggested by Underdown and Martin (2016) to provide personalized video announcements that include a weekly overview of the course requirements and content, while also providing student praise and instructor self-disclosure, may achieve the level of instructor presence, student-to-instructor interaction, and student engagement necessary for successful online education.

While this study described in the next section was not designed to examine all facets of student engagement, it focuses on one piece, with the understanding that student response to instructor efforts is highly dependent upon the student's past experiences, expectations, and personality (Kahu, 2013). Therefore, the purpose of this research was to examine the effect of instructor-created video announcements on perceived instructor presence and self-reported student engagement.

The research questions addressed include:

- 1. What effect does the use of specifically designed instructor-created video announcements, coupled with text transcription, have on student engagement in a graduate level online nutrition course when compared to text-based announcements alone?
- 2. What effect does the use of specifically designed instructor-created video announcements, coupled with text transcription, have on student perception of instructor presence in a graduate level online nutrition course when compared to text-based announcements alone?
- 3. What is the relationship between studentperceived instructor presence and student engagement in a graduate level online nutrition course?
- 4. Which type of instructor presence (teaching or instructor social) predicts student engagement in a graduate level online nutrition course?

METHODS

Participant Recruitment

Students enrolled in an introductory graduate nutrition course in the online Master of Science (MS) in Nutrition and Human Performance (NHP) program at Logan University were invited to participate in this study. Invitations were sent via the course announcement function in the Canvas Learning Management System (LMS) on Day 4 of Week 15, after final grades were posted in the grade center but still able to be adjusted by the instructor before the course officially closed. Recruitment was completed via a convenience sampling method prior to the start of the course and limited to students enrolled in two sections of NUTR05201 Lifecycle Nutrition (N = 59). Each section consisted of 15 weeks of instruction and the same instructor taught both courses. All students enrolled in the NHP must take this course in the first trimester following program acceptance.

Study Design

This study was based on a quantitative randomized experimental design. Announcements were developed using the COI framework as a guide. Announcements were created to provide an overview of the content from the previous week, an introduction to the content of the current week, a review of the assignments due in the current week, and a closing statement that included a combination of instructor praise and encouragement, assignment tips to increase likelihood of improved student performance, and/or instructor self-disclosure about field-related experiences. Three of the four constructs from the COI framework were addressed in each announcement (teaching presence, instructor social presence, and community and learning environment). The instructor was careful to provide clear communication, present an attitude of caring, and to provide information to help students feel included. Announcements were sent via the Canvas LMS announcement function on Day 1 (Monday) of Weeks 1 through 15.

The same announcement was used in both the experimental and control groups. The experimental group received the announcement via video with closed captions and the control group received the announcement via text. The independent variable was the use of video-enhanced announcements in the experimental group only. The dependent variables, assessed in both groups, were instructor presence (assessed postintervention only) and student engagement (assessed preintervention and postintervention). The study methodology

was approved by the Logan University Research Advisory Committee and permission to complete the research was granted from the Logan University Institutional Review Board before the study commenced.

Students were randomly assigned into section one or two using a random number generator before they were able to access the course. During Weeks 1 and 14, the students were asked to complete the 25-item Student Engagement Instrument developed by Handelsman et al. (2005). The instrument was determined to be valid and reliable to assess student engagement using a multidimensional approach based on the work of Handelsman et al. (2005). The original coefficient alpha was significant (p < .01) in four areas: skills engagement (.82), emotional engagement (.82), participation/interaction engagement (.79), and performance engagement (.76) (Handelsman et al., 2005).

During Week 14 of the trimester, students were asked to complete the Instructor Presence Survey developed by Pollard et al. (2014), a 52-item Likert-scale instrument created to assess instructor presence across four dimensions: teaching presence, social presence (peers), instructor social presence, and community and learning environment. Based on the regression analysis conducted by Pollard et al. (2014), social presence of peers (p = .000) and the instructor (p = .026) were significant in explaining the classroom environment. Teaching presence (p = .020), social presence of peers (p = .001), and social presence of the instructor (p = .004) were significant in explaining the learning environment. Students were asked to complete each instrument in the Canvas LMS. Permission to use and modify each instrument was received by the original study authors.

The survey tool within the Canvas LMS was used to gather informed consent from the students. Students were offered five bonus points towards their final discussion board grade as an incentive to participate. Links to all the surveys and the consent form were distributed via a course announcement on Day 4 of Week 15. To improve participation rates, the instructor sent an additional reminder to all students on Day 5 of Week 15, then individual email messages to students who had yet to respond on Days 6 and 7 via the university and Canvas email systems. Grades were finalized and the

opportunity to participate in the study closed after Day 7 of Week 15. Student names were replaced with assigned ID numbers; all data were held in strictest confidence and stored on the instructor's password protected personal computer. Data will be kept for five years, then it will be destroyed.

To answer Research Questions 1 and 2, data were analyzed using a *t*-test to determine if student engagement and student perception of instructor presence were increased using video announcements versus text-based announcements. To answer Research Question 3, Pearson's *r* was used to determine the correlation between student perception of instructor presence and student engagement. To answer Research Question 4, multiple regression analysis was used to identify and then compare the extent to which each type of instructor presence (teaching or instructor social) predicts student engagement.

RESULTS

Participant Demographics

At Week 14, the final retention rate of participating students was 86% (N = 51). The final participation rate of students enrolled in the course who completed the surveys and provided consent was 68.6% (N = 35). Participants included in the study were present in the course Weeks 1 through 15, completed all surveys, and signed the consent form. A total of 17 students were in the experimental group and 18 students were in the control group. In the experimental group, participants were predominantly female (76%), 20-30 years old (59%), and had taken 0–3 graduate classes (76%). The majority of students held a GPA between 3.1 and 3.55 (47%) and were employed full time (> 30 hours per week; 59%). In the control group, the demographics were similar: the participants were predominantly female (83%), 20-30 years old (78%), and had taken 0–3 graduate classes (56%). A greater percentage of students in the experimental group held a higher GPA between 3.56 and 4.0 (50%) and a similar amount were employed full time (> 30 hours per week; 56%). See Table 1 for a detailed comparison of participant demographics.

Table 1. Participant Demographics

Demographics	Experimental Group (With video)		Control Group (Without video)		
	n	%	n		%
Gender Male	4	24	3	17	
Female	13	76	15	83	
Age 20–30	10	59		14	78
31–40	4	24		3	17
41–50	2	12		0	0
50+ Number of graduate courses completed in the past	1	0.06		1	0.06
0-3	13	76		10	56
4-6	0	0		1	0.06
7–9	0	0		0	0
10+	4	24		7	39
Current GPA <2.49	0	0		1	0.06
2.50-3.0	2	12		4	22
3.10-3.55	8	47		4	22
3.56-4.0	7	41		9	50
Current employment status Not employed	2	12		2	11
Part Time (< 29 hours per week)	4	24		3	17
Full Time (> 30 hours per week)	10	59		10	56
Seeking Opportunities	1	0.06		0	0

Note. N=35 (n=17 in the experimental group, n=18 in the control group).

Student Engagement and Perception of Instructor Presence

Data from an independent samples t-test were used to analyze Research Questions 1 and 2 and provided evidence that there was no significant difference in student engagement (t = .35, p = .728) or perception of instructor presence (t = -1.97, p = .057) between the experimental and control group (see Table 2).

Table 2. Results of Student Engagement and Perception of Instructor Presence Between the Use of Video Announcements Versus Text-Based Announcements

Logistic parameter Video Announcements Text-Based Announcements t p

	М	SD	М	SD		
Student Engagement	4.02	.39	3.97	.38	.350	.728
Instructor Presence	3.35	.24	3.52	.26	-1.97	.057

Note. The mean parameter values for each of the analyses are shown for the course that received video announcements (n=17) and the course that received text-based announcements (n=18), as well as the results of the t-tests (with equal variances assumed) comparing the parameter estimates between the two groups.

Instructor Presence

Data from a *Pearson's r* correlation analysis to address Research Question 3 provided evidence that while the relationship between instructor presence and student engagement was positive, the strength of the relationship was weak (Experimental group, r = .17, p = .523; Control group, r = -.04. p = .886). Lastly, using a multiple regression analysis to address Research Question 4, data provided evidence that the type of instructor presence did not predict level of student engagement in either the experimental or control sections (see Table 3).

Table 3. Predictive Ability of Types of Instructor
Presence Over Average Student Engagement

Variable Video Announcements Text-Based Announcements

Teaching Presence	.18	.51	.620	.05	.14	.895
Instructor Social Presence	01	04	.966	25	68	.509
Community Learning Environment	335	1.24	.240	185	57	.580

Note. N=35. The correlation between type of instructor presence and average student engagement was assessed in both the experimental (video announcement) and control (text-based announcement) groups. The multiple regression results are shown for the course that received video announcements (n=17) and the course that received text-based announcements (n=18).

DISCUSSION

Research has shown that a productive studentto-instructor interaction is a necessary component of a quality online education because it is related to higher levels of student engagement, improves retention rates, increases graduation rates, and reduces learner isolation (Banna et al., 2015). However, specifically how to best achieve studentto-instructor interaction at a satisfactory level has been an ongoing debate (Gray & DiLoreto, 2016; Korkut et al., 2015). Furthermore, the best methods of how instructors should engage with students remain unclear. Intentionally designed video announcements in online learning environments have the potential to help students see the instructor as a real person and develop a connection with the instructor while also allowing the instructor to guide students. Therefore, the purpose of this research was to examine the effect of specifically designed, instructor-created video announcements on perceived instructor presence and self-reported student engagement.

For this study, videos were created using the instructor's computer and Canvas software. The time spent crafting the announcement script and visual and then recording and embedding the video in the announcement page was about 1 to 2 hours per announcement. Most videos featured only

the instructor's face. Visuals (such as PowerPoint slides) were provided in videos that reviewed lengthy assignments or topics. The length of the videos ranged from 2:05 to 7:11 minutes, most being under 4 minutes. In addition, the students did not know the instructor prior to taking this course as it is one of the first courses students take when entering the program (unless they were retaking the course) and the students were provided with a standard introductory video on the home page of the course.

Despite the potential benefits of using video announcements, the findings from this research show that the use of specifically designed instructor-created video announcements, when compared to text-based announcements, did not significantly increase student engagement. This contrasts with other research findings that show instructor-created videos increase engagement in the online classroom (Steele et al., 2018; Underdown & Martin, 2016). The difference may be in the quality, design, and delivery of the announcements for this study. The announcements were carefully crafted to highlight course requirements and content, while also providing student praise and instructor self-disclosure. In addition, the participants in this study received the same content in each announcement and received the announcement at the same time. When compared to previous research, it is unclear if the content provided was the same (Steele et al., 2018). It is also unclear what type of information was included in the course announcements (Collins et al., 2019), and if the information was provided at the same time in each section.

Furthermore, other types of instructor interaction used in the course could be reducing the impact of the intentionally crafted announcements. For example, the instructor interacted with most students in the discussion board for the first several weeks of the course and then followed a protocol for doing so the remaining weeks. In addition, prompt and substantial feedback was provided in the grading center. Based on past student feedback in course evaluations and in general communication, students appreciate this type of interaction. Students have noted the participation in discussion boards are like "mini lectures" and the prompt, detailed feedback allows them to improve on future assignments and better understand the course

material. Lastly, the course used in the study underwent a major revision and was developed against a quality metric prior to implementing this study. Therefore, the design, organization, navigation, and alignment of the course were of high quality.

Additional findings from the current research showed that the use of specifically designed instructor-created video announcements did not increase student perception of instructor presence when compared to text-based announcements alone. When compared to previous research, the consideration of personalization comes into question. If students are receiving the same information and the same level of attention, just in a different modality, they are receiving the same level of both teaching and social presence of the instructor.

Furthermore, research has shown the connection between instructor presence and student engagement is significant (Arbaugh & Hornik, 2006; Chickering & Gamson, 1987; Kahu, 2013; Oncu & Cakir, 2011; Scagnoli et al., 2019, Figure 3). The current research did not show a significant correlation between student perception of instructor presence and student engagement in either the experimental or control groups; however, due to limitations related to the analytics provided in the LMS, there is no way of knowing if, and to what extent, students read the text-based or viewed the video announcements. Lastly, the Community of Inquiry Framework, used to design each announcement, assesses four components that are considered important to the total educational experience: teaching presence, social presence (peers), instructor social presence, and the community and learning environment. The findings from this research suggest the level of student engagement did not change based on the type of instructor presence (teaching or instructor social).

One area that is important to address is the time investment required to provide quality teaching and student-to-instructor interaction in the online environment, whether via text or multimedia. When instructors become overloaded with job responsibilities beyond teaching (e.g., committee work, organizing and participating in seminars, submitting grant applications, traveling to conferences or other universities to give seminar talks or collaborate on research, etc.), teaching gets pushed to the side, decreasing student-to-instructor

interaction and therefore potentially decreasing student engagement. The time investment of useful student-to-instructor interaction should be taken into consideration when administrators determine teaching load, including class size and total credit hours.

While statistical significance was not achieved between the two groups for any of the study questions, some insights for improving teaching strategies were gleaned. An important component of instructor presence and student engagement in online education is personalization. Instructional strategies, such as weekly announcements crafted using the COI framework, have the potential to increase instructor personalization in an online course without sacrificing time and money when creating multimedia instructional material. Lastly, based on current findings, it is important for instructors and program directors to consider there may not be one specific solution that works across the board to increase student engagement and instructor social presence. A few differences that warrant consideration include the type of program, the level of instruction (undergraduate versus graduate), student preference of read-write versus multimedia, instructor experience, and the available resources (including training) from the institution.

STUDY LIMITATIONS

The primary limitations to this study include its small sample size and the inability to assess how many students truly watched or read the announcements. The technology used for the video portion does have the capability to count the number of students who played the video and note how long they played it, but not if the student was watching and fully engaged with the material as it was playing. In addition, any data related to engagement with the video announcements in the experimental group could not be compared to the text-based announcements in the control group because the LMS does not have the capability to show what specific pages students viewed. In addition, the innate personality and teaching style of the instructor can greatly affect student engagement, regardless of whether the instructor provides a video versus a text-based announcement. As previously mentioned, student personality and desire to learn will also affect the overall outcome. Some students are more engaged than others no matter what the instructor does in the course. Lastly, some students prefer read-write, while others require a multimedia approach. The preference of each student will influence the overall effect video announcements have on increasing instructor presence and student engagement.

FUTURE RESEARCH

Considering the current findings, further research is needed to test the difference between text-based and video communication among different instructors at the graduate level. In addition, research is needed to test if the details and personalization in announcements increase engagement and student perception of instructor presence.

AUTHOR'S NOTE

There are no conflicts of interest to disclose. Instruments and announcements used in this study can be made available by contacting the author.

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