Perspectives, Training, and Preparedness of Frequently and Infrequently Addressed Crisis Events in Online Learning Environments

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Online learning environments in K-12 and the university setting continue to grow. These environments are not immune to crisis events. The current research explored a comparison of two large online school systems' educators' perceptions of and preparedness for a variety of crisis events. Across time and schools, the recognition of all crisis events increased. This may be in part due to the increase in training to recognize and intervene with online crisis events. However, less than half of the samples feel prepared or somewhat prepared to address the crisis event. Recommendations were made for educators, administrators, universities, and university trainers.

Keywords: online learning, crisis events, preparedness, K-12, at-risk populations

INTRODUCTION

The United States Department of Education (DOE) added a flag identifying virtual schools in its Common Core of Data (CCD; National Center for Education Statistic, 2015) due to the exponential growth in this educational format. The CCD is a national database of public and private elementary, middle, and high schools across the United States (US). The decision by the DOE to track and flag data from virtual schools lent legitimacy and a sense of permanence to a form of educational delivery that was previously considered to be alternative or even radical by some observers.

According to the most recent data available from the *Snapshot 2019: A review of K-12 online, blended, and digital learning*, 32 states allow statewide fully online schools which are consistently showing enrollment growth of 6% per year. The total enrollment across the fully online schools exceeds 300,000 students. Another 23 states offer blended and part-time enrollments accounting for nearly one million course enrollments across the US. Pennsylvania currently serves the largest percentage of their

overall student population in fully online learning at 2.09%, and Florida offers the largest number of course enrollments at over 485,000. At present, about 80% of virtual course enrollments come from students in grades 9 – 12; however, data from four years prior reflected 84% of enrollment from high school aged learners. Thus, an increasing number of enrollments is represented by the kindergarten through 8th grade student population (Digital Learning Collaborative, 2019).

The significant number of American students being served in K-12 online learning environments alone supports the need for appropriate services and safety protocols. In addition to the volume of students being served, previous research suggests that virtual educational environments may be particularly attractive to some at-risk student populations including those with academic, behavioral, and/or mental health concerns (Archambault, et al, 2010).

At-Risk Population

With regard to academics, students with disabilities represent approximately 10% of student enrollments (National Education Policy Center, 2019) and may experience additional struggles in the online environment (Deshler, et al., 2014). Beyond that unique student population, online learning has become a highly sought-after option for credit recovery (as an alternative to summer school) when students have been unsuccessful in their traditional high school courses. Given that these students have already experienced some degree of academic failure, both their academic base for the content and their academic self-efficacy place them at risk for continued academic success. Additionally, some research has suggested that students find content in some areas such as Algebra to be more challenging when delivered online versus face-to-face (Sorensen, et al., 2017). In 2010, the International Association for K-12 Online Learning found that 46% of the surveyed online learning institutions reported that over half of their student population was at risk, and a quarter of the institutions indicated that their at risk population exceeded 75% of their total student enrollment (Archambault et al., 2010).

In relation to behavioral and mental health concerns, the Centers for Disease Control (CDC) and Prevention (2019) reported the following prevalence rates overall among children aged 3 – 17 in the US: 7.4% have a diagnosed behavior problem, 7.1% have diagnosed anxiety, and 3.2% have diagnosed depression. Also, over 6.1 million American children have been diagnosed with attention deficient hyperactivity disorder (ADHD). Aside from these staggering statistics, emergency room visits related to childhood mental health concerns skyrocketed by 55% between the years 2012 and 2016 (CDC, 2019). While there are certainly a range of educational options for students with behavioral and mental health concerns, and there are no available statistics regarding the actual enrollment of students with behavioral and mental health concerns in K-12 online learning environments, and with over 22% of adult learners in online environments have self-identified as having mental health diagnoses, this is alarming (Leonhard, 2010). In addition to those with diagnosable mental health condition (authors, 2013), students who have been removed from traditional schools for a variety of behavioral challenges and those who are legally restricted to house arrest, often find themselves in the K-12 online learning student population (Ahn, 2011; Dickson, 2005; Huerta, et al., 2006).

Crisis Preparedness

With a rapidly growing student population and an environment that may be attractive to at risk students, K-12 online learning environments are consistently faced with crisis situations that require response and intervention in order to ensure student safety. The geographic distance of online education offers protection against some crises facing traditional schooling settings, but issues related to abuse, neglect, suicidal ideation, homicidal ideation have all been documented in K-12 online learning environments (Authors, 2013; Authors, 2014, Authors, 2020, manuscript submitted for publication). Likewise, online teachers have reported the need to address emotional responses of students to the unexpected death of a peer, the unexpected death of a teacher, natural disasters, and acts of terrorism within their virtual classrooms (Authors, 2016). Authors (2016) found that each of the aforementioned crises were reported by online teachers as occurring at least one to two times per school year despite the fact that 80 – 95% of participants also reported having no preparation for recognizing the warning signs

of these crises in the online classroom. Beyond that, at least 25% of participants reported that they felt somewhat unprepared or very unprepared for effective response to any of the crisis situations from the survey. In contrast, in a survey of traditional school teachers, Steeves et. al (2017) found that 84% – 98.5% reported feeling somewhat prepared or better prepared to respond to a variety of crisis situations.

With any crisis situation, preparedness for response is critical for immediate student safety as well as long-term outcomes. As with traditional school settings, the crisis response by the educational personnel should be driven by a sound school safety plan. To emphasize the importance of crisis planning, the Every Student Succeeds Act of 2015 mandates that schools receiving federal funding must provide crisis response training for their personnel. Failure to adequately prepare for and respond to crises is well-documented in the literature as producing less favorable outcomes for students (Aspiranti et al., 2011; Cornell & Sheras, 1998; Forthun & McCombie, 2011; Low, 2010; Morrison, et al., 2006) Academically, exposure to crisis without appropriate response protocols can lead to impairment in attention, memory, acquisition and retrieval of academic content. From a mental health perspective, poor crisis response may contribute to issues of anxiety, depression, and post-traumatic response (Brock, et al., 2008; Eaves, 2001). Additionally, research suggested that fewer than 2% of teacher education programs in the US are preparing educators for practice in the online environment despite its vastly different needs and delivery (Kennedy & Archambault, 2012), which would naturally include the absence of content related to crisis response in the online classroom. Finally, a review of the present literature reveals no theoretical or empirical publications regarding the development of crisis plans for K-12 online learning environments.

Unique Challenges

The lack of literature on the topic of crisis planning for the K-12 online learning environment may reflect the challenges inherent in responding to crisis within this educational format. While some online learning institutions are district-based, there are many virtual schools that operate on a statewide, national, or even international scale. From a crisis response perspective, the geographic distance between the teacher and student can intensify the complexity of intervention. In crises such as suspected child abuse, suspected child neglect, suicidal ideation, and homicidal ideation, knowledge gaps regarding available resources in the student's local area and the ability to efficiently access those resources may complicate and delay time to response. However, other complications arise in the online environment when teachers are called upon to respond to the emotional aftermath of the unexpected death of a student, the unexpected death of a teacher, natural disasters, or terrorist acts. In these instances, the physical and emotional distance created by the screen may inhibit teachers' ability to accurately assess (and therefore respond to) students' emotional responses to crises (Davis & Rose, 2007). Given these additional challenges in the K-12 online learning environment, it would seem even more imperative to ensure the preparedness of educators to confidently detect and respond to potential crises.

Connection to Higher Education

While the focus of the current research is in the K -12 educational realm, the importance to higher education cannot be understated given that over six million college students in the US are enrolled in greater than 13 million distance education courses in 2017 (National Center for Education Statistics, 2020), and those numbers are likely increasing yearly. Unlike traditional K-12 institutions, universities often have greater resources and dedicated personnel for crisis response; however, many of the individuals employed for this purpose have limited formal preparation for working within an educational environment (Kapucu & Khosa, 2012; Mitroff, et al., 2006). The concerns of child abuse and neglect in K – 12 education would be reflected as issues of domestic violence in higher education. However, the crisis events of suicidal ideation, homicidal ideation and emotional responses to unexpected death of a student, unexpected death of a teacher, natural disasters, and terrorist acts would be identical to the lower education counterpart. In fact, the COVID-19 pandemic of 2020 has demonstrated that reliance on online learning education may increase exponentially in the face of trying times. The greater mass being served, as well as the state of overall insecurity in families and in the nation at large, magnifies the need for

educational institutions at all levels to prepare their educators for recognizing and responding to crisis events reflected in online learning.

Current Study

When considering the Authors (2016) data demonstrating that the measured crisis events are frequently occurring within K-12 online learning environments and the teachers' perceptions of relative unpreparedness to respond along with the challenges and critical need for crisis response protocols in this educational medium, a distinct gap in the literature is revealed. Thus, we sought to compare two large, statewide online schools to determine the status of crisis frequency and the progress of teacher preparedness from 2015 to 2019. As such, the following research questions were explored:

- How do crisis frequency data compare between School A in 2015 to School B in 2019?
- What trends in K-12 online teacher crisis preparedness be surmised by comparing School A in 2015 to School B in 2019?
- What progress has been made in K-12 online teacher crisis preparedness from 2015 to 2019?
- Where do significant needs for K-12 online teacher crisis preparedness still exist in 2019?

METHODS

Design

This quantitative study compared the finding from two state K-12 online schools. Data collected from each K-12 online schools were collected using survey methodology to ascertain educators' perceptions of crisis frequency and preparedness of educators.

Participants

Online School A

Participants were recruited from a statewide public online high school in the western United States. At the time of the study (2015), the school served a student population of approximately 1,958 students, which was comprised of approximately 86% Caucasian, 3% black/African-American, 9% Latino, and 3% American Indian students. The survey was administered to administrators and teachers. A total of 54/72 (75% response rate) teachers and other school personnel returned the online survey. Of the 54 respondents, 75.93% (n = 41) indicated that they were teachers and 24.07% (n = 13) indicated that they were other school personnel. Within those participants, 80.48% were female (n = 33) and 19.51% were male (n = 8) with years of teaching experience ranging from 1–15 years (M = 5.46 years). With regard to educational attainment, 26.83% of participants (n = 11) reported training at the Bachelor's level (Bachelor's of Arts or Bachelor's of Science), 53.70% participants (n = 29) indicated achievement of a graduate education (Master of Arts, Master of Science, or Educational Specialist degrees), and one participant (2.43%) had earned a Doctoral-level degree in education.

Online School B

Participants were recruited from a statewide public online high school in the southeastern United States. At the time of the study (2019), the school served a student population of approximately 11,000 students, which was comprised of approximately 48% Caucasian, 44% black/African-American, 4% Latino, and 3% Asian/Pacific Islander students. A total of 227/457 (49% response rate) teachers and administrators returned the online survey. Of the total surveys returned, 143/227 were completed with both demographic and survey questions, making them viable data points for the purposes of the study with a 63% response rate. Of the 143 participants, 69.20% (n = 89) indicated that they were teachers and 30.80% (n = 54) indicated that they were other school personnel. Within those participants 91.6% (n = 131) were female and 8.4% (n = 12) male educators. Within these roles, 67.1% (n = 96) of the participants have been working for zero to five years in their positions, 30.6% (n = 43) have six to 10 years of experience, and 2.8% (n = 4) have 11 to 13 years of experience. The majority of participants,

68.3% (n = 98) had received a graduate education (Master of Arts, Master of Science, or Educational Specialist degrees), whereas 30.3% (n = 43) had received a Bachelor's degree and 1.4% (n = 2) had received a Doctoral degree.

Instrument

The Crisis Event Perception Survey (CEPS) is a 37-item survey instrument that was created specifically for research in this area. The electronically-delivered CEPS consisted of five demographic items and 32 items addressing online educators' perceptions of the frequency of various crisis situations as well as their preparedness for responding to each type of crisis. The crisis events explored in the survey included suspected child/adolescent neglect, suspected child/ adolescent abuse, suspected student suicidal ideation, suspected student homicidal ideation, unexpected death of a student, unexpected death of a fellow teacher, student emotional responses to natural disasters, and student emotional responses to terrorist incidents. The survey questions inquired about how many times per year the specified crisis area was suspected (never, 1-2, 3-4, 5-6, and greater than 6), if and where the received their varied levels of training (no training, university-based teacher education program, local/district in-service or professional development, teacher professional organization conference, online webinar or training, and other) as well as how well prepared they felt to respond to the suspected area of crisis (very prepared, somewhat prepared, somewhat unprepared, and very unprepared).

To ensure content validity of the CEPS, it was subjected to two stages review prior to use in the studies. It was reviewed by experts in school psychology and school crisis response. Based on their feedback, additional items were created to address the educators' perceived preparedness for responding to the various crisis events based on their school's current policy. The final stage of review was conducted by administrative and counseling staff members from the participating online learning environment. After their review, some demographic items were removed to increase confidentiality ensuring that the respondents could not be identified based on their responses.

Procedures

Institutional Review Board (IRB) approval was attained through the researchers' home institution. After IRB approval, the recruitment email (including study explanation and survey link) was distributed through the participating schools. The CEPS instrument was delivered electronically via Qualtrics™., an online survey Platform (Online School A in the spring of 2015 and Online School B in spring 2019). A reminder email was sent to potential participants after one month. The survey was closed one week after the follow-up email.

Data Clustering

Suspected child/adolescent neglect, suspected child/adolescent abuse, and suspected student suicidal ideation were combined into frequently addressed crisis events. Suspected student homicidal ideation, unexpected death of a student, unexpected death of a fellow teacher, student emotional responses to natural disasters, and student emotional responses to terrorist incidents were clustered into infrequently addressed crisis events

RESULTS

CEPS results from Online School A were clustered into frequently and infrequently addressed crisis events as were Online School B. The two schools were then compared. There is a sharp increase in the number of all crisis events being noted from 2015 to 2019.With regard to frequently addressed crisis events, 36.59% (n =15) of participants from Online School A noted that they had one or more of these crisis events in the past year. In Online School B, over half of the sample (n = 96; 54.86%) noted that they had one or more of these crisis events in the prior year. This is a drastic increase in four years in the recognition of the frequently addressed crisis events. In regard to the infrequent crisis events, 14.63% (n = 6) of participants from Online School noted that they had one or more of these crisis events that year.

Online School B noted 30.13% (n = 47) of these crisis events. This means that in four years the recognition of the infrequent crisis events had more than more than doubled.

Training about how to recognize and deal with these issues in an online environment for both types of crisis events has increased from 2015 to 2019. Training for frequently addressed crisis events Online School A occurred in 12.20% (n =5) of participants. For Online School B training occurred in 81.71% (n = 143) of participants. The survey found that 9.76% (n = 4) of participants noted that they had been trained in recognition and response to infrequently addressed crisis events at Online School A. Additionally, 25.64% percent (n = 40) of participants in Online School B noted that they had been trained in recognition and response to infrequently addressed crisis. Even though there is an increase in training in recognition and response to frequent and infrequently addressed crisis events from 2015 to 2019 we can see a dramatic drop in training for both schools between the frequently and infrequently addressed crisis events, which are being noted to occur by approximately 15% (2015) to 30% (2019) of participants.

There is also an increase in both schools in how well prepared they felt to respond to the suspected area of crisis from 2015 to 2019 in both frequently and infrequently addressed crisis events. In response to the survey, 24.39% (n = 10) of participants from Online School A felt confident to respond to frequently addressed crisis events. In Online School B, that rose to 41.03% (n = 64). That is an increase of almost doubled in four years, but still not quite half of the participants felt confident in their preparation.

CONCLUSION

As online learning continues to proliferate in the US, a greater number of students at all levels are learning, growing, and sharing in a virtual environment. Along with their academic content, issues of physical safety and emotional well-being are also often revealed in this realm. In particular, Authors (2016) and Authors (2019) found that across time and the two different statewide online schools, suspected child/adolescent abuse, suspected child/adolescent neglect, and suspected student suicidal ideation were the most frequently identified crisis situations found by teachers in K-12 online learning environments, and suspected homicidal ideation, along with students emotional responses to the unexpected death of a another student, the unexpected death of a teacher, natural disasters, and terrorist acts were demonstrated to occur less frequently.

In comparing Online School A and Online School B, the present study revealed both challenges and opportunities for crisis response in the virtual learning space. From 2015 to 2019, increases were shown in teachers' perceptions of both the frequent and infrequent crisis events. Commensurately, encouraging increases were also shown in teachers' training in recognizing these events. However, it is not known whether the frequency of events has actually risen or if teachers are simply better able to identify signs of crisis events in their students' online content. Nevertheless, one challenge and area of considerable opportunity continues to exist in that the research supports that very few teachers feel somewhat prepared or very prepared to respond appropriately to any of the potential crisis situations in the online environment. This represents a critical lapse in school safety planning, particularly given that online school enrollments are proportionally higher in at-risk students (Archambault, et al, 2010), students with disabilities (National Education Policy Center, 2019), and students with mental health concerns than their traditional brick-and-mortar counterparts (Leonhard, 2010).

It is important to remember that these perceptions of crisis frequency and preparedness for response are from educators who are experienced in delivery of instruction in the online environment. The COVID-19 crisis of 2020 has demonstrated that in times of crisis that call for social distancing, online learning often becomes the medium of choice to prevent disruption of education in both the K-12 and post-secondary levels. In this type of situation, the online environment is flooded with learners who are under significant emotional duress due to disruption and fear in their daily lives and educators who are unfamiliar and underprepared for immediate adoption of an entirely new educational medium and content delivery. For students, the increase in sheer number of online pupils and the strained daily circumstances are likely to lead to greater potential for crises. For teachers who are suddenly thrust into online instruction, they are naturally much less likely to be prepared and responsive to crisis events than

seasoned online educators, and research has consistently demonstrated that lack of preparedness increases the probability of adverse consequences for students (Aspiranti, et al., 2011; Cornell & Sheras, 1998; Forthun & McCombie, 2011; Low, 2010; Morrison, et al., 2006).

Therefore, it is imperative that schools of all levels (even those who are fully face-to-face) begin preparing for both expected and unexpected periods of online academic delivery. As such, educational administrators seek training for their teachers in not only academic delivery online but crisis recognition and response as well. At the K-12 level, administrators, lead teachers, school support staff, and technological staff should work together to ensure school safety plans include provisions for online learning that are consistent with those contingencies described for the face-to-face setting. At the post-secondary level, as universities have increased their online learning options for students, there have often been commensurate increases in technological and pedagogical support for instructors but few (if any) have offered preparation or direction for crisis response. School safety plans for all academic institutions should include warning signs for identifying potential crises and protocols for responding. It is particularly relevant for institutions serving students across state or national borders to understand the legal, ethical, and logistical issues with crisis response across these boundaries to ensure student safety and success.

The limitations of the current research include those inherent in use with surveys including potential sampling bias. Additionally, the comparison of two different schools across two time periods may not reflect actual trends in the data but differences in the schools themselves. Nonetheless, this is believed to be an important look at crisis frequency and preparedness in K-12 online learning.

Future research must extend into the higher education environment. Despite the extensive use of online learning platforms for college course credit in the US, there is currently no published research in any of the following areas: instructor preparedness for recognizing signs of crisis in students; instructor preparedness for responding to crisis in the online environment, and university protocols for crisis response for online students. As this is a matter of serious and immediate consequence, action and research is of critical importance.

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