Are Teacher and Principal Candidates Prepared to Address Student Cyberbullying?

Ronald A. Styron Jr., Jessica L. Bonner, Jennifer L. Styron, James Bridgeforth, and Cecelia Martin

Abstract: The purpose of this study was to examine the preparation of teacher and principal candidates to address problems created in K-12 settings as a result of cyberbullying. Participants included teacher and principal preparation students. Findings indicated that respondents were familiar with the most common forms of cyberbullying and its impact on students, but only moderately aware of the extent that students initiated acts of cyberbullying and the appropriate responses. Recommendations for policy and practice included additional training regarding the identification of cyberbullying and its impact on students and the creation of modules pertaining to cyberbullying and digital citizenship inserted into courses that address the use of technology.

Technology has become an everyday part of most adolescents’ lives. Increased access to cell phones, personal computers, Internet, and wireless devices contributes to the growing number of young people exposed to electronic media. In a study conducted by the Kaiser Foundation of more than 2,000 adolescents from ages 8-18, researchers found that young people were actively engaged in media use of some type 7 hrs, 45 mins per day, 7 days per week (Rideout, Foehr, & Roberts, 2010). When multitasking between mediums was considered, the number increased to roughly 10 hrs, 45 mins per day, with 20% of consumption taking place on some type of mobile or handheld device. Students spent much of this time viewing online media such as YouTube and visiting other social media sites (Rideout et al., 2010). While this increased exposure to Internet-based content provided many new educational opportunities for adolescents, it also presented new and complex problems for students, parents, and educators.

Teacher preparation programs have recognized the need for integration of technology-based instruction in classrooms. The National Council for Accreditation of Teacher Education (NCATE; 2008) fostered this movement. This accrediting organization has standards for teacher education programs that require candidates to be able to use and integrate technology effectively with various pedagogies. Standard 1 necessitates that future educators are “able to appropriately and effectively integrate technology and information literacy in instruction to support student learning” (Knowledge, Skills and Professional Dispositions, para. 1g).

Together with NCATE, the International Society for Technology in Education (ISTE) has developed National Educational Technology Standards (NETS) for teachers and students. One of the key standards of NETS for teachers is promotion and modeling of digital citizenship. NETS outline the teacher’s responsibility to instruct students in “digital etiquette and responsible social interactions related to the use of technology” (ISTE, 2008, p.2). Due to these standards, K-12 teacher preparation programs in many colleges and universities have begun to enhance curriculum with technology training for instruction (Stobaugh & Tassell, 2011).

Purpose of Study

The purpose of this study was to examine the perceived preparation of teacher and principal candidates to address problems created in K-12 settings as a result of cyberbullying. Specifically, this study explored the familiarity of teacher and principal preparation students with various types of cyberbullying, knowledge of the appropriate response to incidents of cyberbullying, perceived level of harm to students from cyberbullying, program effectiveness at preparing teachers to manage cyberbullying incidents, and perceived frequency of victimization and perpetration of cyberbullying among students. Data collected from the study will be used to make recommendations for college administrators when considering appropriate course curriculum to address cyberbullying and K-12 school principals when developing teacher mentoring/induction programs.

Relevant Literature

This literature review is indicative of the limited body of research regarding the effectiveness of teacher and principal preparation programs to provide their candidates with strategies to address problems associated with student cyberbullying. The insights provided by this research project will serve to inform others of the perceived ability and awareness levels of teacher and principal preparation students to identify acts of cyberbullying and the effectiveness of programs to prepare them to deal with these acts. As such, it is the intent of the researchers who authored this paper to help fill this void through the research project described in this paper.

Teacher Preparation

Teacher K-12 preparation differs greatly depending upon program design. Traditional programs and alternative certification programs often incorporate subject matter instructional methods courses, subject specific courses, and some form of supervised clinical practice or experience (Wilson, Floden, & Ferrini-Mundy, 2002). Supervised clinical practice involves student teaching opportunities or internships that provide candidates with an intensive and extensive culminating activity. Teacher candidates are
immersed in the learning community and are provided opportunities to develop and demonstrate competence in their professional roles (NCATE, 2008).

According to a 2013 report from the U.S. Department of Education, approximately 728,310 preservice educators were enrolled in state-approved teacher preparation programs with 88% enrolled in traditional track teacher preparation, 6% enrolled in alternative programs at Institutes of Higher Education (IHEs), and another 6% enrolled in alternative programs outside of IHEs. Participation was about the same for traditional and alternative programs based from IHEs (U.S. Department of Education, 2013). However, in the AY 2009-2010, 80% of the individuals who completed all the state-approved requirements for teacher preparation came from traditional programs. A majority of individuals enrolled in teacher preparation programs were White females. Only 11% of candidates were of Hispanic or Latino origin, and African Americans represented 9% of total enrollment (U.S. Department of Education, 2013).

Researchers (Li, 2008; Ryan & Kariuki, 2011; Yilmaz, 2010) have conducted several studies aimed at identifying preservice educators’ perceived awareness of and preparedness for incidences of cyberbullying. Li examined the attitudes and perceptions of preservice educators at a Canadian university. He found that preservice educators did not feel qualified (prepared) in the identification or management of cyberbullying. Over 50% disagreed or strongly disagreed that they were confident in identifying cyberbullying activity, and 60% disagreed or strongly disagreed that they were confident in managing cyberbullying activity. While this study found that most of the recipients agreed that cyberbullying “affects children,” only a third of respondents thought that it was a problem within the schools. Li indicated that respondents were not aware of the seriousness of cyberbullying due to its covert nature and the ambiguous signs that may accompany it. When asked about their preparation through university education programs, over 80% of individuals disagreed or strongly disagreed that the university was preparing them for cyberbullying management, indicating almost all of the respondents did not think they were being prepared to handle cyberbullying. However, most also wanted to learn more about ways to manage and identify cyberbullying behaviors. Li pointed to the relative newness of the cyberbullying phenomenon as an explanation for the lack of training provided to teacher candidates.

Ryan and Kariuki (2011) sought to compare Canadian preservice teacher perceptions regarding the importance of cyberbullying as an issue and how prepared they perceived themselves to be for dealing with cyberbullying. They compared their results to Li’s (2008) research to examine any changes in preservice educator perceptions. They found that while most perceptions remained the same, neutral responses to the questions on perceived preparedness for handling cyberbullying increased. Preparedness would include identifying cyberbullying and knowing how to manage cyberbullying instances. Although more than 50% of respondents thought that their teacher preparation program did not properly prepare them for instances of cyberbullying, almost half of respondents indicated that cyberbullying was an important topic that should be covered in preservice programs. Ryan and Kariuki (2011) noted that this perceived lack of preparation resulted in respondents also indicating that they were reluctant to act on incidents of cyberbullying, especially when the incidents are considered covert or indirect.

In 2010, Yilmaz replicated Li’s (2008) study at seven state universities in Turkey among students in teacher preparation programs. Similar to the Canadian preservice teachers, Turkish students were concerned about the effects of cyberbullying on students. However, unlike Canadian students, Yilmaz found that a majority of recipients strongly agreed that cyberbullying was a problem within schools. Half of the Turkish respondents were confident that they could both identify and manage cyberbullying. This is significantly higher than Li’s study results. However, Yilmaz noted that the disparity between awareness of cyberbullying and confidence in handling cyberbullying remained significant. This disparity may be explained by the respondents’ attitudes regarding their universities’ teacher training programs.

Cyberbullying

For the purpose of this study, cyberbullying was defined as “being cruel to others by sending or posting harmful material or engaging in other forms of social aggression using the Internet or other digital technologies” (Willard, 2007, p. 1). Cyberbullying involves hostile communication, including pictures or text, remitted through the Internet or to personal wireless devices (cell phones, iPods, tablets, etc.). There are varying opinions on categorization of types or means of cyberbullying. Willard identified seven ways in which cyberbullying may occur: flaming, harassment, cyberstalking, denigration, masquerade, trickery, and exclusion. With the exception of “masquerade,” which was termed “impersonation,” this study maintained these categories and corresponding definitions.

Willard (2007) also identified harmful social norms adopted by some students in online settings that have fostered the increased frequency and severity of cyberbullying. Adolescents often view online environments as open forums for free speech. Thus, students feel that they have the right to say anything online, despite consequences to others. Furthermore, adolescents also have a “what happens online stays online” norm in online communities. Victims of cyberbullying often feel reluctant to break this unspoken code fearing further negative attention. In a nationwide study conducted by the National Education Association (NEA) in 2011, a majority of teachers and support staff noted that cyberbullying was the least likely form of bullying to be reported to them (Bradshaw, Waasdorp, O’Brennan, & Gulemetova, 2011). Consequentially, cyberbullying is often problematic to identify and mediate due to the unwillingness of victims to report incidents to authorities.

Prevalence. There is conflicting evidence on the prevalence of bullying among adolescents in the United States. Using a representative sample of students in 6th through 10th grades, Nansel et al. (2001) found that almost 30% of students have been bullied (10.6%), initiated acts of bull-
ing (13%), or both (6.3%). The School Crime Supplement conducted by the National Center for Education Statistics for the school year 2008-2009 found that only 6% of respondents identified being bullied online (DeVoe & Bauer, 2011). The Centers for Disease Control and Prevention’s Youth Risk Behavior Surveillance Survey (2011) found that 16.2% of high school students in grades 9-12 reported being electronically bullied. The discrepancy in statistical data may be due to different age ranges of respondents and varying definitions of cyberbullying or electronic bullying. Rapidly changing technology and increased adolescent presence online may result in increased exposure to cyberbullying incidents (Englander & Muldowney, 2007). Students’ social networks have expanded significantly from face-to-face interaction to participation in a global community (Snakenborg, Van Acker, & Gable, 2011).

Implications. Nansel et al. (2001) also found that bullying affected both the aggressor and the victim psychologically and socially in meaningful ways. Victims of bullying had problems adjusting socially and emotionally, citing loneliness and inadequate relationships with peers. Students who self-identified as bullies demonstrated lower academic achievement, increased involvement in troublesome practices such as alcohol and tobacco use, but less difficulty socially. Results indicated that those involved in bullying as either initiator or target shared these characteristics and indicated social, emotional, and academic problems along with problematic behaviors. According to Nansel et al., the emotional effects of bullying may carry over into adulthood. Some students may continue to perceive themselves as having no value due to their experiences during adolescence. Thus, the emotional well-being of the student is negatively impacted.

Digital citizenship. Student immersion in technology creates the need for instruction on digital citizenship, online safety, and appropriate online behaviors. Ohler (2011) described this need as “character education for the digital age” (p. 26). As participants in a digital or online community, students need to be taught the implications of actions within that community and the responsibilities that accompany digital citizenship. The Massachusetts Aggression Reduction Center (MARC) recommends that Internet safety education should involve teaching students how what happens in their “cyberlife” affects other aspects of their life (Englander & Muldowney, 2007, p.88). Ohler recommended incorporating digital citizenship as an integral part of character education in schools.

Best practices. While research regarding best practices for responding to and prevention of cyberbullying are still needed, many sources agree that cyberbullying initiatives should be schoolwide, involve additional teacher training and development, incorporate student education on appropriate online interactions, and include parents and community members in some way (Englander & Muldowney, 2007; Schroeder et al., 2012; Snakenborg et al., 2011). Englander and Muldowney’s MARC program in Massachusetts identified several key elements of successful faculty training emphasizing the importance of encouraging reporting of incidents, updates on new technologies and how students are using these technologies, and inclusion of cyberbullying in Internet safety education. Creating an environment where students feel comfortable reporting cyberbullying is another cornerstone of many prevention and intervention school programs. However, Snakenborg, Van Acker, and Gable (2011) noted that strategies teaching students simply to report incidents must be coupled with increased parental or guardian involvement in order to be effective.

Methodology
Research Questions
The study examined the attitudes and perceptions of individuals enrolled in undergraduate and graduate teacher preparation courses and principal preparation courses. The research questions guiding the study included:

RQ 1: Were students aware of the most common types of cyberbullying?
RQ 2: Were students aware of the extent that students initiate acts of cyberbullying?
RQ 3: Were students aware of the impact of cyberbullying on the emotional well-being of students?
RQ 4: Were students aware of the appropriate response when incidents of cyberbullying have been reported to them?
RQ 5: What strategies have students been taught to deal with the impact of cyberbullying on K-12 students?

Setting
Researchers conducted this study at an urban, public, regional, 4-year university located in the southeastern region of the United States. The university professes a commitment to the development of human capital through exemplary practices in teaching, research, and service to the community. The current enrollment is 15,425 with 60% female and 40% male; 67% white, 19% African-American, 3% Asian, 2.5% Hispanic, 3.6%, and 8.5% other. Over 90% of students receive some type of financial assistance with 75% of these students receiving grants and 54% receiving loans.

Participants
Researchers sent survey instruments to 859 students enrolled in undergraduate and graduate teacher and principal preparation programs. One hundred and twenty students completed their survey for a return rate of approximately 14%. Of those respondents, 90% were female and 10% were male; 76.2% White, 18.2% African-American, .9% Asian, 1.4% Hispanic, and 3.5% other. Ages of respondents ranged from 17-62, with 20% of respondents between ages 15-19, 47.5% ages 20-24, 15.8% 25-29, 5% 30-34, 6.7% 35-39, and 5% over 40 years old. Respondents were also asked to identify year in college. Freshman accounted for 16.7% of respondents; 15% were sophomores; 25.8% were

THE JOURNAL OF AT-RISK ISSUES
juniors; 20% were seniors; 21.7% were at master’s level; and 0.8% were specialists. Additionally, respondents were asked to specify their preparation program. Traditional program students accounted for 8.5% of respondents, alternative 7.6%, elementary education 47.5%, secondary education 30.5%, and administrative 5.9%.

Instrumentation
Questions from the Cyber Savvy Survey, developed by Nancy Willard (2012) for the Center for Safe and Responsible Internet Use, solicited demographic responses regarding the following types of cyberbullying: flaming, online harassment, cyberstalking, denigration, impersonating, trickery, and excluding. After selection of questions most relevant to teacher and principal preparation issues, they were modified through wordsmithing to assess the familiarity, potential harm and frequency of each type of cyberbullying, the appropriate intervention if reported, and the preparation of their course of study to deliver the intervention. Researchers electronically disseminated the instrument to student email addresses via the university’s electronic online evaluation system. It included both Likert and open-ended questions. Reliability of the instrument was not deemed critical by the author. According to Willard (2013),

It is probable that students will be more inclined to answer the norms and strategies questions in a manner that is more “socially desirable.” Because the responses to these questions are being used in a manner that intends to encourage abiding by these positive norms, issues related to reliability are not as salient. (p. 12)

Data Collection and Analysis
Data were entered into the statistical analysis program, SPSS. For research question one, frequencies reported for items associated with the question “Are you familiar with this form [insert type of cyberbullying] of cyberbullying?” were reported. Similarly, frequencies reported for items associated with the question “How often do you think students initiate acts of [insert type of cyberbullying]?” were associated with research question two. To answer research question three, frequencies reported for items associated with the question “How harmful is [insert type of cyberbullying]?” were reported. For research question four, frequencies reported for items associated with the question “Are you aware of the appropriate action to take if [insert type of cyberbullying] is reported to you?” were reported. To answer research question five, frequencies reported for items associated with the question “Has your program of study helped prepare you to deal with [insert form of cyberbullying]?” were reported. Since there are seven types of cyberbullying, seven frequencies will be reported for each question.

Findings
Definitions of the terms associated with cyberbullying were provided on the instrument immediately preceding corresponding questions. They were:

• Flaming—sending angry, rude, vulgar messages about a person to an online group or to that person via email or other text messages.
• Online Harassment—repeatedly sending offensive messages via email or other text messaging to a person.
• Cyberstalking—online harassment that includes threats of harm or is excessively intimidating.
• Denigration—sending harmful, untrue, or cruel statements about a person to other people or posting such materials online.
• Impersonating—pretending to be someone else and sending or posting materials that makes that person look bad.
• Trickery—sending or posting materials about a person that contain sensitive, private, or embarrassing information; including forwarding private messages and images.
• Exclusion—cruelly excluding someone from an online group.

As seen in Table 1, results indicated that 99.2% of respondents were familiar with online harassment, 94% with impersonating, 92.5% with cyberstalking, 89.2% with denigration, 84.2% with flaming, 83.2% with trickery, and 73.1% with exclusion.

As indicated by Table 2, respondents were asked how often they thought students initiated each type of cyberbullying using a Likert scale ranging from 1-5 with 1 being “never” and 5 being “often.” Mean responses for perceived initiation of denigration were 4.08, 3.96 for online harassment, 3.79 for trickery, 3.78 for exclusion, 3.63 for flaming, 3.57 for cyberstalking, and 3.46 for impersonation.

Respondents were asked how harmful they thought each type of cyberbullying was using a Likert scale ranging from 1-5 with 1 being “not at all” and 5 being “very.” As indicated in Table 3, mean responses for perceived harmfulness were 4.75 for online harassment, 4.72 for cyberstalking, 4.7 for trickery, 4.66 for denigration, 4.64 for flaming, 4.6 for impersonation, and 4.16 for exclusion.

Respondents were asked to rate their perceived awareness of the appropriate action to take for reported incidents of each type of cyberbullying using a Likert scale ranging from 1-5 with 1 being “not at all” and 5 being “very.” As indicated in Table 4, mean responses for perceived awareness of appropriate actions were 3.41 for cyberstalking, 3.29 for denigration, 3.32 for online harassment, 3.23 for trickery, 3.28 for exclusion, 3.21 for impersonation, and 3.06 for flaming.
Table 1

Familiarity With Forms of Cyberbullying

<table>
<thead>
<tr>
<th>Are you familiar with this form of bullying?</th>
<th>n</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 3.7 Online Harassment</td>
<td>119</td>
<td>99.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Item 3.25 Impersonating</td>
<td>117</td>
<td>94.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Item 3.13 Cyberstalking</td>
<td>120</td>
<td>92.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Item 3.19 Denigration</td>
<td>120</td>
<td>89.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Item 3.1 Flaming</td>
<td>119</td>
<td>84.2%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Item 3.31 Trickery</td>
<td>119</td>
<td>83.2%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Item 3.37 Exclusion</td>
<td>119</td>
<td>73.1%</td>
<td>26.9%</td>
</tr>
</tbody>
</table>

Table 2

Perceived Initiation of Cyberbullying

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 3.24</td>
<td>How often do you think students initiate acts of denigration?</td>
<td>120</td>
<td>4.08</td>
<td>1.05</td>
</tr>
<tr>
<td>Item 3.12</td>
<td>How often do you think students initiate acts of online harassment?</td>
<td>119</td>
<td>3.79</td>
<td>1.01</td>
</tr>
<tr>
<td>Item 3.36</td>
<td>How often do you think students initiate acts of trickery?</td>
<td>117</td>
<td>3.79</td>
<td>1.07</td>
</tr>
<tr>
<td>Item 3.42</td>
<td>How often do you think students initiate acts of exclusion?</td>
<td>118</td>
<td>3.78</td>
<td>1.09</td>
</tr>
<tr>
<td>Item 3.6</td>
<td>How often do you think students initiate acts of flaming?</td>
<td>119</td>
<td>3.63</td>
<td>.95</td>
</tr>
<tr>
<td>Item 3.18</td>
<td>How often do you think students initiate acts of cyberstalking?</td>
<td>120</td>
<td>3.57</td>
<td>1.11</td>
</tr>
<tr>
<td>Item 3.30</td>
<td>How often do you think students initiate acts of impersonating?</td>
<td>117</td>
<td>3.46</td>
<td>1.18</td>
</tr>
</tbody>
</table>
### Table 3

**Perceived Harmfulness of Cyberbullying**

<table>
<thead>
<tr>
<th>How harmful is . . .?</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 3.9 Online Harassment</td>
<td>119</td>
<td>4.75</td>
<td>0.56</td>
</tr>
<tr>
<td>Item 3.15 Cyberstalking</td>
<td>111</td>
<td>4.72</td>
<td>0.54</td>
</tr>
<tr>
<td>Item 3.33 Trickery</td>
<td>99</td>
<td>4.70</td>
<td>0.52</td>
</tr>
<tr>
<td>Item 3.21 Denigration</td>
<td>107</td>
<td>4.66</td>
<td>0.57</td>
</tr>
<tr>
<td>Item 3.3 Flaming</td>
<td>101</td>
<td>4.64</td>
<td>0.64</td>
</tr>
<tr>
<td>Item 3.27 Impersonating</td>
<td>111</td>
<td>4.60</td>
<td>0.65</td>
</tr>
<tr>
<td>Item 3.30 Exclusion</td>
<td>87</td>
<td>4.16</td>
<td>1.00</td>
</tr>
</tbody>
</table>

### Table 4

**Perceived Awareness of Appropriate Action**

<table>
<thead>
<tr>
<th>Are you aware of the appropriate action to take if ____________ is reported to you?</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 3.14 Cyberstalking</td>
<td>111</td>
<td>3.41</td>
<td>1.27</td>
</tr>
<tr>
<td>Item 3.8 Online Harassment</td>
<td>119</td>
<td>3.32</td>
<td>1.33</td>
</tr>
<tr>
<td>Item 3.20 Denigration</td>
<td>107</td>
<td>3.29</td>
<td>1.27</td>
</tr>
<tr>
<td>Item 3.38 Exclusion</td>
<td>86</td>
<td>3.28</td>
<td>1.33</td>
</tr>
<tr>
<td>Item 3.32 Trickery</td>
<td>99</td>
<td>3.23</td>
<td>1.34</td>
</tr>
<tr>
<td>Item 3.26 Impersonating</td>
<td>112</td>
<td>3.21</td>
<td>1.33</td>
</tr>
<tr>
<td>Item 3.2 Flaming</td>
<td>101</td>
<td>3.06</td>
<td>1.36</td>
</tr>
</tbody>
</table>
As indicated in Table 5, respondents were asked how their program of study has helped them prepare to deal with each type of cyberbullying using a Likert scale ranging from 1-5 with 1 being “not at all” and 5 being “very.” Mean responses for program preparedness were 2.67 for denigration, 2.64 for exclusion, 2.61 for online harassment, 2.56 for cyberstalking, 2.53 for trickery, 2.52 for flaming, and 2.49 for impersonation.

Table 6 indicates that when asked if they needed additional training to adequately identify and address cyberbullying, 68.1% of respondents indicated that they needed further training.

Respondents were asked in which ways they thought issues with cyberbullying should be addressed. As indicated in Table 7, 40.8% of respondents thought cyberbullying should be addressed through zero-tolerance policies, 24.2% through cyberbullying specific policies, 20% through bullying policies, and only 15% thought it should be addressed on a situation-by-situation circumstance.

Discussion

Respondents were familiar with the most common forms of cyberbullying (73.1%-99.2%) and aware of the impact of cyberbullying on students (mean scores: 4.16-4.75 /5.0). But respondents were only moderately aware of the extent that students initiated acts of cyberbullying (mean scores: 3.46-4.08 /5.0), and the appropriate responses to cyberbullying (mean scores: 3.06-3.41 /5.0). This indicated that familiarity did not mean respondents were confident intervening or managing cyberbullying situations. This conclusion is similar to those of related studies conducted by Li (2008), Ryan and Kariuki (2011), and Yilmaz (2010).

Li found that although preservice teachers were aware of cyberbullying and concerned about its impact on students, most did not feel convinced of their ability to handle incidents of cyberbullying. They did not know how to manage the problem when it occurred. Ryan and Kariuki found that preservice teachers were concerned about cyberbullying and aware of the impact it had on students. Nonetheless, even though they considered cyberbullying as important as any topic addressed in their preparation program, they did not feel as prepared to cope with it as with other disciplinary matters. Likewise, Yilmaz found preservice teachers aware of cyberbullying and cognizant of its effects, and found they felt insecure about their ability to manage these behaviors in a classroom setting or respond appropriately to the situation.

Furthermore, respondents indicated additional preservice training was necessary to deal with the impact of cyberbullying (mean scores: 2.49-2.67 /5.0), and the identification of cyberbullying (68.1%). These findings were consistent with those of Li (2008) who discovered that only 13.1% of preservice teachers believed they could identify cyberbullying with merely 11.1% reporting that they would be able to manage a cyberbullying incident. Later studies conducted by Ryan and Kariuki (2011) and (2010) indicated that preservice teachers thought their programs of study did not prepare them to manage these behaviors.

Craig, Bell, and Leschield (2011) also discovered that teachers who had received violence prevention training, including addressing cyberbullying, were more confident in their ability to identify and manage cyberbullying than those without the training.

Conclusions

Low levels of perceived preparedness to manage incidences of cyberbullying indicated the need for modules pertaining to cyberbullying to be developed and added to required courses found within teacher and principal preparation programs, possibly those connected to technology. These modules could include information regarding the most common types of cyberbullying and their impact, as well as applicable school district policies and laws. Content from these modules could be drawn from digital citizenship programs found in most K-12 schools. Strategies for teachers and principals to deal with the impact and identification of cyberbullying should also be included in these modules along with techniques aimed at correcting the dispositions of students who often feel cyberbullying is nothing more than an unfriendly exchange between peers. Students must be helped to understand that it is an often violent and cruel phenomenon that can lead to life changing events, even death.

It should be noted that respondents felt the most effective way to deal with incidents of cyberbullying was through the use of zero-tolerance policies. This response signals a potential lack of understanding of methods proven to be effective as Martinez (2009) and Roberge (2012) found zero-tolerance policies to be ineffective in addressing cyberbullying behaviors. Modules should include research-based strategies for dealing with the impact of cyberbullying found to be effective. For instance, Kraft and Wang (2009) found the restriction of Internet, cell phone, and computer an effective way to discourage cyberbullying behaviors. Parents, schools, and social networks also have to work together if cyberbullying is to be prevented (Ybarra & Mitchell, 2007).

As found in the National Center for Education Statistics’ (NCES) report (2011), teacher preparation and support could be crucial factors in teacher attrition, especially within the first year of teaching. NCES also reported that 10% of all first-year teachers who began teaching in 2007 or 2008 were no longer teaching just one year later in 2008-09. That number rose to 12% by the next AY 2009-2010. Likewise, during the 2008-09 school year, 17% of public school principals and 14% of private school principals left the principalship (Institute of Education Sciences, 2010). Working under a negative school climate resulting from inappropriate student behavior, such as cyberbullying, is a major factor in low morale and resulting retention (Balkacci, 2006; Ilakkuvan, 2012; Kopkowski, 2008; Randall, 2010). As a result, better preparation to deal with cyberbullying may result in extending the careers of many teachers and principals.
Table 5

**Perceived Program of Study Preparation**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.22</td>
<td>Denigration</td>
<td>107</td>
<td>2.67</td>
<td>1.34</td>
</tr>
<tr>
<td>3.40</td>
<td>Exclusion</td>
<td>87</td>
<td>2.64</td>
<td>1.28</td>
</tr>
<tr>
<td>3.10</td>
<td>Online Harassment</td>
<td>119</td>
<td>2.61</td>
<td>1.27</td>
</tr>
<tr>
<td>3.16</td>
<td>Cyberstalking</td>
<td>110</td>
<td>2.56</td>
<td>1.25</td>
</tr>
<tr>
<td>3.34</td>
<td>Trickery</td>
<td>99</td>
<td>2.53</td>
<td>1.30</td>
</tr>
<tr>
<td>3.4</td>
<td>Flaming</td>
<td>101</td>
<td>2.52</td>
<td>1.24</td>
</tr>
<tr>
<td>3.28</td>
<td>Impersonating</td>
<td>112</td>
<td>2.49</td>
<td>1.30</td>
</tr>
</tbody>
</table>

Table 6

**Need for Additional Training**

<table>
<thead>
<tr>
<th>Item 4.1</th>
<th>Question</th>
<th>n</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do you think you need additional training to adequately identify and address cyberbullying?</td>
<td>119</td>
<td>68.1%</td>
<td>31.9%</td>
</tr>
</tbody>
</table>

Table 7

**Addressing Cyberbullying**

<table>
<thead>
<tr>
<th>Item 4.2</th>
<th>Question</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Do you believe this issue should be addressed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Through zero tolerance policies</td>
<td>120</td>
<td>40.8%</td>
</tr>
<tr>
<td></td>
<td>Through cyberbullying specific policies</td>
<td>120</td>
<td>24.2%</td>
</tr>
<tr>
<td></td>
<td>Through bullying policies</td>
<td>120</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>On a situation-by-situation circumstance</td>
<td>120</td>
<td>15.0%</td>
</tr>
</tbody>
</table>
Limitations of the Study

This study had certain limitations, including a small sample size. While disappointing, low return rates for electronic surveys are not all that uncommon. In a study of undergraduate students from 2004 to 2010, Perkins (2011) reported that the average response rate was 14% and without private institutions, the response rate fell to 11.3%. In a meta-analysis of 199 electronic studies, Hamilton (2009), an online survey analyst, found the total response rate to be only 13.35%. Also, in Yilmaz’s (2010) electronic study of preservice teachers’ perception of cyberbullying, only 19% of the 840 solicited for the study participated. Today’s youth may be turning away from email and less likely to return electronic surveys delivered in that medium in favor of new technologies such as texting, chatting, and instant messaging (Richtel, 2010).

Ninety percent of respondents were female, but 42% of secondary school teachers are male (MenTeach, 2011). As well, the majority of respondents, 47.5%, were in elementary preservice teacher education programs. Because cyberbullying’s prevalence may peak in grades 6-10 (Nansel et al., 2001), a sample of more secondary education majors and male teacher candidates may be beneficial to extending the findings of this study.

Recommendations for Future Research

Due to the increased incidences of cyberbullying among students and the rapid increase of technology usage, further studies may need to be conducted regarding teacher preparation in managing these behaviors. The administration of the questionnaire, including appropriate modifications, to first-year teachers in other regions is recommended. Moreover, further research into how changing technologies affect teacher preparation to handle cyberbullying could be conducted by creating a survey instrument to include questions pertaining to the awareness of various technologies utilized by students (social media, Internet, etc.).

References


Authors
Ronald A. Styron, Jr., EdD is currently the Director of the University of South Alabama Quality Enhancement Plan. His research interests include administrative and instructional technologies, cyberbullying, teaching and learning strategies and organizational leadership.
Jessica L. Bonner, MEd, is a graduate research assistant in Academic Affairs at the University of South Alabama. Her research interests include K-12 cyberbullying and secondary education, and instructional strategies.
Jennifer L. Styron, PhD, is Director of Special Projects and Evaluation for the College of Nursing at the University of South Alabama and works in the College of Nursing’s Research and Development Office. Her research interests include instructional technology and design, cyberbullying, interprofessional education, team-based learning, and electronic health record adoption and use.
James Bridgeforth, PhD, is a Director at the University of South Alabama. His research investigates pathways to improve faculty advancement for women and people of color within the American professoriate.
Cecelia G. Martin, MS, is the Director of Assessment at the University of South Alabama. Her research interests include cyberbullying, student success and institutional effectiveness, and in particular, assessment of student learning.