Impact of ethical information resources on counselor education students

Stephanie Burns

Abstract: A convenience sample of 263 counselor education students from six CACREP-accredited programs evaluated 16 boundary crossing scenarios in the context of four ethical information interventions. Reviewing the ACA Code of Ethics, Gottlieb’s model, and Kitchener’s model did not change students’ reactions to the 16 boundary crossing scenarios. Students already appear committed to making boundary crossing decisions based on personal characteristics and consulting with peers and supervisors. When comparing these students with an earlier study of independently licensed counselors, the ratings of the boundary crossing scenarios as well as strategies cited for working through boundary crossings with clients were surprisingly equivalent.

Keywords: student; counselor education; ethics; boundary crossing; CACREP

The Council for Accreditation of Counseling and Related Educational Programs 2016 Standards (CACREP, 2015) Section 2.F.1. and Standard 2 within Sections 5A-5 H necessitate that all counselor education students receive ethics training. This training begins with the orientation of new students through their practicum and internship placements. Learning how to maintain appropriate professional boundaries with clients is a vital component of ethics training. Professional

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PUBLIC INTEREST STATEMENT

Per the code of ethics, counselors do no harm, benefit others, are fair, respect autonomy, and act faithfully towards clients. However, client boundary crossing complaints accounted for half of counselor professional liability claims between 2013 and 2017. The number of boundary crossing complaints by clients has risen sharply over the years. It has been suggested by the code of ethics and ethicists that counselors make better boundary crossing decisions with clients if they use ethical information resources. In 2017, research with independently licensed counselors reported that none of the three ethical information resources used in the study impacted boundary crossing decision making. As students in training are developmentally in a very different place than independently licensed counselors, that same research was replicated with students. Just as in the study with independently licensed counselors, none of the three ethical information resources used in the study impacted students’ boundary crossing decision making.
boundaries mitigate harm to clients by distinguishing appropriate counselor behaviors from those that are inappropriate and should be avoided (Gutheil & Gabbard, 1998). Gutheil and Gabbard defined boundary crossings as occurring when a professional departs from the strictest definition of their professional role but is not acting unethically. Despite all boundary crossings straying from typical counseling practice, those that are brief and short-lived are more likely to be helpful to the client. Boundary crossings involve the counselor engaging in behaviors with a client that they do not perform with all their other clients. For example, allowing a federal employee who has been furloughed to delay payment for counseling services until they have received a paycheck could be an appropriate boundary crossing. However, clients can potentially experience harm from any boundary crossing. Some examples include bartering with clients for payment of services or counselors discussing their marriage difficulties with clients. Boundary crossings accounted for half of counselor professional liability claims between 2013 and 2017 (CNA & HPSO, 2019b).

Gutheil and Gabbard (1998) defined boundary violations as inappropriate professional behaviors that challenge professional ethics, are not in the client’s best interest, or will likely result in harm. Boundary violations often involve the counselor taking on multiple roles in a client’s life. Boundary violations can include purchasing a service or product provided by the client, visiting a client’s illness family member, giving the client a gift, and becoming a business partner with a client (CNA & HPSO, 2019b). Most often, there is a slow evolution of several minor boundary crossings, which can lead to boundary violations (Cruikshanks & Burns, 2016). Between 2013 and 2017, professional liability claims increased in number and severity for allegations of dual relationships with clients (CNA & HPSO, 2019a).

1. Ethical Information resources used to successfully negotiate boundary crossings

Even in 1984, Kitchener warned counselors that basing their ethical decision-making on personal characteristics could not guarantee making appropriate ethical decisions. Since then, experts suggest that counselors consider both ethical codes, such as the American Counseling Association (ACA) Code of Ethics (ACA, 2014) as well as ethical decision-making models, such as Kitchener’s five moral principles (Kitchener, 1984) and Gottlieb’s decision-making model (Gottlieb, 1993) when resolving boundary crossing issues with clients. They state that ethical decision-making models encourage better decision-making through reflection and engagement (Gottlieb, 1993; Jungers & Gregoire, 2016; Kennedy, 2008). Recent research in ethical decision-making processes confirms the need for reflection and engagement when making ethical decisions. Drumwright et al. (2015) found that ethical decision-making begins automatically in the subconscious before conscious reasoning in the brain gives the matter full consideration. Later research found “cognitive shortcuts” overwhelmingly fast-track ethical decision-making processes during the conscious reasoning process (McMahon & Good, 2016). Ultimately, humans formulate ethical decisions primarily in the subconscious and then hastily make decisions when the matter reaches consciousness. Additionally, current research finds that personal characteristics can take precedence over ethical codes, laws, and ethical decision-making models for counselors (Birrell & Bruns, 2016; Fialkov et al., 2014).

Ethicists create ethical information resources to use when negotiating boundary crossings with clients, and the counseling profession encourages the use of these resources by counselors. Kitchener’s five moral principles (1984), the ACA Code of Ethics (2014), and Gottlieb’s decision-making model (1993) are ethical information resources that help counselors navigating boundary crossing concerns with clients. Kitchener’s (1984) five moral principles state counselors do no harm, benefit others, are fair, respect autonomy, and act faithfully to all impacted by the professional relationship. Maintaining these five moral principles helps to ensure that boundary crossings with clients are productive. Counselor education textbooks help students navigate ethical boundary crossing concerns through the lens of Kitchener’s five moral principles (Granello & Young, 2012; Sangganjanavanich & Reynolds, 2015; Sheperis & Sheperis, 2015). Additionally, Kitchener’s five moral principles have served as the foundation for the continual development of the ACA Code of Ethics (Birrell & Bruns, 2016; Forester-Miller & Davis, 1996).
Counselors engage in principle-based ethics when they understand their professional obligations through the profession's code of ethics (Knapp & VandeCreek, 2006). The ACA Code of Ethics (ACA, 2014) establishes the counselor’s professional conduct and guides counselors towards protecting the welfare of clients when considering boundary crossings (Jungers & Gregoire, 2016). The American Counseling Association (ACA, 2014) Code of Ethics guides counselor behaviors to increase client welfare, not harm clients or society, treat clients fairly, encourage client autonomy, and uphold their obligations to clients. Further, Section I of the ACA Code of Ethics outlines that counselors resolving ethical issues should use consultation, review ethical standards and laws, brainstorm possible actions, determine the risk to benefit ratio, and consider the unique situation.

Gottlieb (1993) created a boundary crossing ethical decision-making model founded on Kitchener’s five moral principles (Barnett et al., 2007; Kitchener & Anderson, 2010). Gottlieb’s model added a new element for consideration: power differentials. When using Gottlieb’s model, the counselor first considers power issues by evaluating (a) the current role, (b) the contemplated role, and (c) how power issues could make current and contemplated roles unproductive. Lastly, counselors reflect on the duration of the counseling relationship as well as the ability to terminate the relationship completely. The concepts of power, duration, and termination are important considerations for counselors contemplating boundary crossings with clients. Whereas Gottlieb’s model focuses on boundary crossings between counselors and clients, Burian and Slijm (2000) Social Dual-Role Relationship Model focuses on boundary crossings between counselor educators and students. The model incorporates motivation as an essential consideration of boundary crossings within the profession of counseling. Burian and Slimp ranked boundary crossing motivations to reflect (a) the highest priority, the professional needs of students; (b) the second highest priority, the professional needs of counselor educators; (c) the third highest priority, the personal needs of students; and (d) the last priority, the personal needs of counselor educators. The risk of potential harm to the student increases as a counselor educator moves from the second-highest priority to the last priority on the scale. Prioritizing and categorizing the professional and personal needs that exist within a counselor and client relationship is also very important to consider.

1.1. Impact of ethical information resources on counselors negotiating boundary crossings

As previously explained, counselors can use several different ethical information resources when contemplating boundary crossings with clients. However, the effectiveness of these ethical information resources in assisting counselors to make better boundary crossing decisions with clients has not been proven. Researchers report one instance where an ethical information resource appeared more effective than another in studies with independently licensed counselors, counselor educators, and counselor education students (Burns, 2019; Burns & Cruikshanks, 2017b, 2019). Burns (2019) and Burns and Cruikshanks (2019) researched the use of three ethical information resources and a placebo with counselor educators and counselor education students by having each group separately rate 16 boundary crossings that could occur between the two groups. The researchers found that for counselor education students Burian and Slijm’s model was minimally more effective than the ACA Code of Ethics, and both were more effective than Gottlieb’s model and a placebo magazine article. The researchers found that for counselor educators, Burian and Slijm’s model was more effective than the ACA Code of Ethics and Gottlieb’s model, and the three were more effective than a placebo magazine article. For counselor educators, reviewing Burian and Slijm’s model outperformed the other ethical information resources in terms of potentially mitigating harm to students. However, 58% of counselor educators reviewing Burian and Slijm’s model stated that they would not use it in the future because they do not agree with the model’s interpretations, and it classified boundary crossings as black and white. Specifically, counselor educators stated “there is little room for context to come into the model,” “not sure I agree with some of the determinations of this model,” and “so much of ethics is specific to a situation, so the black and white model isn’t as helpful.”

Burns and Cruikshanks (2017b) used Kitchener’s five moral principles (1984), the ACA Code of Ethics (2014), Gottlieb’s decision-making model (1993), and a placebo magazine article to research
the influence of these resources on independently licensed counselors when navigating client boundary crossings. None of the ethical information resources used in the study outperformed the other. Because counselors’ post-test result ratings shifted to more ethical for six client boundary crossings, it did not appear that evaluating ethical information resources mitigated the potential for harm to clients.

2. Purpose
The study by Burns and Cruikshanks (2017b) provides some understanding of how some ethical information resources influenced independently licensed counselors and the resources they use when faced with client boundary crossing concerns. However, there is currently no understanding of how ethical information resources influence counselor education students and the resources they would use when faced with client boundary crossing concerns. As counselor educators train students in the profession’s ethical information resources, it is important for counselor educators and the counseling profession to understand how these resources impact counselor education students’ ethical decision-making processes. This information seems especially timely as professional liability claims against independently licensed counselors have increased in number and severity for allegations of boundary crossings and dual relationships with clients between 2013 and 2017 (CNA & HPSO, 2019a). It is also important to understand developmental differences between counselor education students and independently licensed counselors regarding the impact of ethical information resources.

An independent measures experimental design tested the influence that Kitchener’s five moral principles (1984), the ACA Code of Ethics (2014), Gottlieb’s decision-making model (1993), and a placebo magazine article had on counselor education students when contemplating 16 client boundary crossings. Students were also asked about the resources they typically used when faced with client boundary crossings, and the perceptions of the helpfulness and future use of the four ethical information resources. First, the researcher sought to determine if any of the ethical information resources offered would impact participant ratings of the boundary crossings compared to a placebo intervention. Experts suggest that counselors use both ethical codes and ethical decision-making models to resolve boundary crossing issues as they encourage better decision-making through reflection and engagement (Gottlieb, 1993; Jungers & Gregoire, 2016; Kennedy, 2008). The research hypothesis was that the ACA Code of Ethics, Kitchener’s model, and Gottlieb’s model would significantly impact students to rate boundary crossing issues as less ethical compared to the magazine article. The researcher believed that the ethical resources presented in the study would make a noticeable impact on counselor education students’ consideration of boundary crossings with clients because they have less professional experience.

Second, the researcher examined if the three ethical information resources motivated counselor education students to rate boundary crossing issues as less ethical upon the second review of the boundary crossings scenarios. The associated research hypothesis was that reviewing any one of the three ethical information resources would significantly impact students to view the boundary crossing scenarios as less ethical compared to the magazine article. The researcher believed that the ethical resources presented in the study would make a noticeable impact on counselor education students’ consideration of boundary crossings with clients because they have less professional experience.

Third, the researcher wanted to compare the impact of ethical information resources between counselor education students and independently licensed counselors. The associated research hypothesis was that students would be more influenced by the Code of Ethics, Kitchener’s model, and Gottlieb’s model than independently licensed counselors. This would occur because developmentally, students had less exposure to ethical information resources as well as fewer chances to be confronted by boundary crossing concerns with clients.
Fourth, the researcher examined if there was a difference between counselor education students and independently licensed counselors in terms of reliance on ethical information resources. The associated hypothesis was that students’ ethical decision-making strategies would rely more heavily on the Code of Ethics and ethical decision-making models as compared to independently licensed counselors because students are in a training program.

Burns and Cruikshanks (2017b) found that independently licensed counselors dropped out of the Gottlieb group significantly more than the other three groups. Lastly, the researcher examined if participant drop-out rates would be equal among the four ethical information resources. Students were hypothesized to drop out at equal rates among the four interventions. As counselor education students had less experience with clinical practice and ethical information resources, it was expected that they would be more likely to give every ethical information resource an equal chance of consideration.

3. Method

3.1. Participants
In the mirroring study with independently licensed counselors, Burns and Cruikshanks (2017b) defined independently licensed counselors as counselors who have graduated with at least a master’s degree and obtained post-graduate clinical supervision and currently have a license to practice as a counselor without supervision in their state. For this study, counselor education students were defined as individuals currently enrolled in courses in a CACREP-accredited master’s graduate program. A power analysis was performed with G*Power using a medium effect size of .25, power level of .80, and alpha of .05 (Faul et al., 2007), which required a minimum sample size of 136. A medium effect size was chosen because average variance existed among groups and legitimate, practical concerns for the counseling field should be obtained (Healey & Hays, 2012).

Two-hundred sixty-three counselor education students completed all sections of the study. At the time of their involvement in the study, participants were currently enrolled in a CACREP-accredited program and had a mean age of 31 (Range = 22–66, SD = 7.84). On average, participants had been taking classes in their master’s program for 2.3 years (Range = 1–6, SD = 1.2), and had already taken an ethics class (n = 256, 97%). Please review Table 1 for additional participant demographic information. In the mirroring study with independently licensed counselors, four hundred thirty participants completed the study and were recruited from eight different states (Burns & Cruikshanks, 2017b). A majority of these independently licensed counselors identified as female (n = 353, 82%), European American (n = 382, 89%), and having graduated from a CACREP accredited program (n = 285, 66%).

3.2. Data collection procedures
A convenience sample of students was recruited from six different CACREP-accredited programs. The CACREP-accredited programs were identified via a listing of currently accredited programs on the CACREP website. Students were intentionally recruited from one public college with only a master’s program, one public college with a masters and doctoral program, one private college with only a master’s program, one private college with a masters and doctoral program, one for-profit college with only a master’s program, and one for-profit college with a masters and doctoral program. The six CACREP-accredited programs averaged 287 actively enrolled master’s students. Approximately 1,722 master’s students were invited to participate in the study. Twenty-four participants were eliminated who consented to participate in the study but only rated the 16 boundary crossing scenarios the first time and then did not complete the rest of the study. No statistically significant differences between non-completers and completers on the initial ratings of the 16 boundary crossing scenarios were found: scenario 1 t(285) = −0.22, p = .82; 2 t(285) = −1.08, p = .28; 3 t(285) = −0.98, p = .33; 4 t(285) = −0.65, p = .52; 5 t(285) = −0.26, p = .79; 6 t(285) = −0.63, p = .53; 7 t(285) = 0.04, p = .97; 8 t(19) = 0.28, p = .79; 9 t(285) = 1.15, p = .25; 10 t(18) = 0.87,
p = .39; 11 t(285) = 0.57, p = .57; 12 t(285) = −0.91, p = .36; 13 t(285) = −0.38, p = .71; 14 t (285) = −0.77, p = .45; 15 t(285) = −0.75, p = .46; and 16 t(285) = −0.26, p = .79.

Two hundred sixty-three participants completed the study, which resulted in a 15% response rate. For comparison, four different studies that included independently licensed counselors, counselor educators, or counselor education students achieved response rates between 12-24% (Burns, 2019; Burns & Cruikshanks, 2017b, 2017a, 2018, 2019). Erford (2014) stated, “usually, response rates for mailed or electronic surveys are less than 20 percent” (p. 192). Each participant received an email that included a link to a webpage that contained the informed consent form, a demographic questionnaire, and all study materials. When study participants accessed the webpage, they were randomly assigned to one of the four interventions. Participants first reviewed and consented to the informed consent form, answered demographic questions, and rated 16 boundary crossing scenarios with no ethical information support. Next, they re-rated the initial 16 boundary crossing scenarios with support from one of the four interventions. Lastly, they listed their current ethical information strategies when confronted with client boundary crossing concerns, rated the intervention, and had the option of anonymously providing their name and email address to receive a 5 USD e-gift card. Study participants spent a median time of 25 minutes completing the study. This time does not include filling out gift card information.
3.3. Measure
The measures used in this study with counselor education students were exactly the same as those used in the study with independently licensed counselors (Burns & Cruikshanks, 2017b). The 16 boundary crossing scenarios used reflected the four areas outlined by Burian and Slimp in conjunction with two ethical behavior scales, the ACA Code of Ethics, and common ethical complaints and violations (Burns & Cruikshanks, 2017b). Burian and Slimp (2000) suggested that relationship motives are important when evaluating boundary crossings. They ranked motivations from the highest to the lowest priority: (a) the professional needs of clients, (b) the professional needs of counselors, (c) the personal needs of clients, and (d) the personal needs of counselors. As a counselor moves from the highest to the lowest priority, it increases the risk of potential harm for the client. For each of the four relationship motives, four client boundary crossing scenarios were written that ranged in four stages from being likely ethical given certain contexts to being unethical in all contexts. Burns and Cruikshanks (2017b) intentionally kept the scenarios short, capturing the general opinion of each proposed boundary crossing. Table 2 displays all 16 boundary crossing scenarios. A Likert type scale allowed participants to rate the 16 boundary crossing scenarios. Participants answering “Highly Unethical” received a value of 1, and participants answering “Highly Ethical” received a value of 6.

3.3.1. Ethical information resources
Burns and Cruikshanks (2017b) previously defined ethical information resources as resources an independently licensed counselor could use to make ethical decisions. This same definition was used in the current study with counselor education students. As in the study with independently licensed counselors, the four interventions used in this study were the ACA Code of Ethics (2014), Gottlieb’s decision-making model (1993), Kitchener’s five moral principles (1984), and an article from the Psychotherapy Networker (as a placebo intervention). Several standards from the ACA Code of Ethics with their full title and narrative description were provided to participants in the ACA group as they were directly or indirectly related to the 16 scenarios presented: A.1.a., A.1.b., A.4.a., A.4.b., A.5.a., A.5.b., A.5.c., A.5.d., A.5.e., A.6.a., A.6.b., A.6.c., A.6.d., A.6.e., A.10.e., A.10.f., B.1.b., B.1.c., B.2.e., C.3.b. C.6.a., C.6.b, C.6.d., and C.7.c. For Gottlieb’s model, the text and two figures from the 1993 article were used verbatim beginning with the heading “Assumptions” on page 43 inclusive of “Step 5” on page 46. For Kitchener’s five moral principles a portion of the text from A Practitioner’s Guide to Ethical Decision Making (Forester-Miller & Davis, 1996) was used verbatim beginning with the heading “Moral Principles” on page 1 and ending with the text just before the heading “Ethical Decision Making Model” on page 2. In addition, a figure of a decision tree based on Kitchener’s model was placed below the Kitchener text (Burns & Cruikshanks, 2017b). For the control group, the text from the article Remembering Our Heritage: Historically, Therapists Have Stood Up for the Underdog (Madanes, 2004) was used verbatim. The article allowed participants in the placebo group to spend the same amount of time reviewing a resource. However, the article selected provided no information on ethical decision-making.

Just as in the study with independently licensed counselors, participants used a Likert scale to provide their impressions of the helpfulness and usefulness of the ethical information resource presented. First, participants rated the helpfulness of the presented intervention. Participants responding “Highly Helpful” received a value of 1 and those responding “Highly Unhelpful” received a value of 6. Afterward, participants rated the likelihood that they would use the intervention in the future. Participants responding Highly Likely” received a value of 1 and those responding “Highly Unlikely” received a value of 6.

3.4. Data analysis procedures
To check the data for outliers, the researcher created a frequency report for each study variable and found no evidence of miscoded data or univariate outliers. Descriptive statistics were used to explore participant demographics and the pre-test 16 boundary crossing scenario responses. For the first analysis comparing ethical information resources to the placebo, paired samples T-tests were run to determine pre-test and post-test differences within the four interventions on the
ratings of the 16 boundary crossing scenarios. For the second analysis comparing changes within groups, the Holm’s Sequential Bonferroni Procedure was used with the paired samples T-tests. Kruskal-Wallis tests were used to determine if there were statistically significant differences among the four interventions for the pre- and post-intervention ratings of the 16 boundary crossing scenarios. Kruskal-Wallis tests were used instead of a repeated measures ANOVA because the dependent variable is ordinal and deviates from the normality assumption. Mann-Whitney U tests as post-hoc analyses determined which conditions were significantly different on the Kruskal-Wallis tests.

To run the third analysis comparing students to independently licensed counselors, paired samples T-tests were run to determine pre-test differences between the counselor education students and independently licensed counselors on the ratings of the 16 boundary crossing scenarios. Paired samples T-tests were run to determine post-test differences between the students and independently licensed counselors within the four interventions on the ratings of the 16 boundary crossing scenarios. The Holm’s Sequential Bonferroni Procedure was used with the paired samples T-tests. To run the fourth analysis, descriptive coding (Wolcott, 1994) was used to determine the ethical information strategies counselor education students use when confronted with a boundary crossing issue. Descriptive coding created categories that summarized the strategies used by participants when confronted with a boundary crossing issue (Saldaña, 2013). After

| Item | M₁ | SD₁ | M₂ | SD₂ |
|------|----|-----|----|-----|
| 1. The counselor tells the client that they also have an Autistic child and then discusses the community resources available for Autistic children | 4.52 | 1.32 | 4.43 | 1.36 |
| 2. The counselor accepts a small gift from the client that is not a financial burden for the client | 3.78 | 1.48 | 3.76 | 1.34 |
| 3. The counselor attends the client’s big event (wedding, funeral, etc) | 2.82 | 1.34 | 2.80 | 1.34 |
| 4. The counselor and client go to a movie | 1.19 | 0.49 | 1.35 | 0.67 |
| 5. The counselor performs counseling services in the client’s home | 3.60 | 1.57 | 3.51 | 1.55 |
| 6. The counselor sees a client out to dinner with a large group of family and friends and asks the client in front of everyone how well the client thinks counseling is progressing | 1.07 | 0.49 | 1.10 | 0.37 |
| 7. The counselor takes lawn mowing, pet grooming or other service as payment for counseling services | 2.32 | 1.40 | 2.56 | 1.50 |
| 8. The counselor hugs the client | 3.46 | 1.15 | 3.43 | 1.23 |
| 9. The counselor and client open a business providing errand services for senior citizens | 1.20 | 0.64 | 1.34 | 0.77 |
| 10. The counselor asks the client to write a positive review of the counselor’s services on Yelp.com | 1.55 | 0.94 | 1.61 | 0.98 |
| 11. The counselor accompanies the client during a feared medical procedure | 2.98 | 1.34 | 3.17 | 1.41 |
| 12. The counselor discusses their own marriage difficulties with a client processing their divorce | 1.79 | 1.09 | 1.90 | 1.19 |
| 13. The counselor hires the client to work in the counselor’s office | 1.34 | 0.66 | 1.38 | 0.79 |
| 14. The counselor bills insurance for counseling sessions that were never scheduled with the client | 1.06 | 0.32 | 1.05 | 0.32 |
| 15. The counselor lets the client stay at the counselor’s home | 1.15 | 0.52 | 1.18 | 0.54 |
| 16. The counselor and client have sex | 1.01 | 0.19 | 1.02 | 0.15 |

M₁ is the mean and SD₁ is the standard deviation for all participants rating the 16 scenarios the first time. M₂ is the mean and SD₂ is the standard deviation for all participants rating the 16 scenarios the second time after reviewing one of the four interventions.
the data were analyzed using descriptive coding, the data was then re-analyzed to generate frequency counts. The last analysis testing drop-out rates was run using a two-way contingency table analysis. This follow-up test determined if there were significant differences in participant drop-out rates among the four groups. Independent samples T-tests were used to determine if differences existed between initial ratings of the 16 boundary crossing scenarios for drop-outs and completers of the study. The Holm’s Sequential Bonferroni Procedure was used with the paired samples T-tests.

4. Results
All 263 participants initially rated the 16 boundary crossing scenarios with no ethical information resource. Participants rated scenario 1 (Autistic child) between moderately and slightly ethical; scenario 2 (small gift) as slightly ethical; scenarios 5 (counseling in the client’s home) and 8 (hug) between slightly ethical and slightly unethical; scenarios 3 (big event) and 11 (medical procedure) as moderately unethical; scenario 7 (bartering) between slightly and moderately unethical; scenario 12 (marriage difficulties) as moderately unethical; scenarios 10 (Yelp.com) and 13 (hires client) between moderately and highly unethical; and scenarios 4 (movie), 6 (dinner), 9 (open business together), 14 (billing), 15 (client staying in counselor’s home), and 16 (sex) as highly unethical.

Table 2 displays means and standard deviations for the pre-test and post-test ratings of all 16 boundary crossing scenarios for all study participants.

Paired samples T-tests resulted in no significant differences between the four groups on the pre-test ratings of the 16 boundary crossing scenarios. Paired samples T-tests were run to evaluate changes within the students’ first impression of the 16 boundary crossing scenarios and the students’ impression of the 16 boundary crossing scenarios following each of the four interventions. The Holm’s Sequential Bonferroni Procedure resulted in no significant differences for all four groups (Table 3).

Analyses determined if significant differences occurred among the four interventions on the pre-test and post-test ratings of the 16 boundary crossing scenarios. Kruskal-Wallis tests were conducted to evaluate differences in medians among the four interventions for all 16 boundary crossing scenarios (Table 4). Mann-Whitney U tests were run as a follow-up for significant Kruskal-Wallis tests. The Kruskal-Wallis tests were set at the LSD adjusted .008 level. There was a significant difference that met the cutoff on the post-test for scenario 2. Mann-Whitney U tests for accepting a small gift (scenario 2) resulted in a significant difference at a moderate magnitude between the ACA and Gottlieb groups with the ACA group rating the scenario as more ethical (ACA-Magazine, $p = .02$, A > C; ACA-Gottlieb, $p = <.001$, A > G; ACA-Kitchener, $p = .20$, A > K; Magazine-Gottlieb, $p = .24$, C > G; Magazine-Kitchener, $p = .26$, K > C; Gottlieb-Kitchener, $p = .02$, K > G).

All 263 participants rated the current helpfulness of the four interventions and future use of the four interventions. Participants rated the ACA Code of Ethics as moderately helpful ($n = 66$, $M = 2.05$, $SD = 0.85$), Kitchener’s five moral principles as moderately helpful ($n = 65$, $M = 2.23$, $SD = 1.00$), Gottlieb’s model between moderately and slightly helpful ($n = 64$, $M = 2.39$, $SD = 1.09$), and the magazine intervention as slightly helpful ($n = 68$, $M = 2.94$, $SD = 1.31$). They rated future use of the Code of Ethics as moderately likely ($M = 1.91$, $SD = 0.82$), Kitchener’s five moral principles as moderately likely ($M = 2.06$, $SD = 0.88$), Gottlieb’s model as slightly likely ($M = 2.77$, $SD = 1.54$), and the magazine intervention between slightly likely and slightly unlikely ($M = 3.44$, $SD = 1.45$).

Participants’ narrative comments help to explain the future use ratings. For participants reviewing the ACA Code of Ethics, three quarters ($n = 51$, 75%) stated that they would definitely use it in the future, a few ($n = 8$, 12%) stated that they would use it in conjunction with other ethical information resources, and a few said that they would not use it in the future ($n = 7$, 11%). For participants reviewing Kitchener, nearly two thirds ($n = 42$, 65%) stated that they would definitely use Kitchener as an ethical information resource in the future. Half stated that they downloaded
| Item                                                   | Magazine M1   | Magazine SD1 | Magazine M2   | Magazine SD2 | t     | df  | p  | Δ   | d  |
|--------------------------------------------------------|---------------|--------------|---------------|--------------|-------|-----|----|-----|----|
| Autistic child                                         | 4.47          | 1.33         | 4.43          | 1.35         | 0.19  | 134 | .85| .04| .03|
| Small gift                                             | 3.81          | 1.57         | 3.60          | 1.41         | 0.81  | 134 | .42| .21| .14|
| Attend big event                                       | 3.13          | 1.43         | 3.03          | 1.39         | 0.43  | 134 | .67| .10| .07|
| Go to movie                                            | 1.24          | 0.52         | 1.38          | 0.62         | -1.49 | 130 | .14| -1.4| .24|
| Counseling in client’s home                            | 3.38          | 1.61         | 3.46          | 1.58         | -0.27 | 134 | .79| -0.08| .05|
| Ask client in front of family                          | 1.10          | 0.63         | 1.10          | 0.46         | 0.00  | 134 | 1.0 | .00| .00|
| Service for payment                                    | 2.31          | 1.48         | 2.37          | 1.49         | -0.23 | 134 | .82| -0.06| .04|
| Hug clients                                            | 3.35          | 1.09         | 3.54          | 1.23         | -0.96 | 134 | .34| -0.19| .16|
| Business partnership                                   | 1.21          | 0.66         | 1.38          | 0.75         | -1.45 | 132 | .15| -0.17| .24|
| Yelp.com rating                                        | 1.53          | 0.92         | 1.62          | 0.95         | -0.55 | 134 | .58| -0.09| .10|
| Attend medical procedure                               | 3.09          | 1.39         | 3.32          | 1.44         | -0.97 | 134 | .03| -0.23| .16|
| Discuss marriage difficulties                          | 1.91          | 1.21         | 2.09          | 1.24         | -0.84 | 134 | .40| -0.18| .15|
| Client becomes employee                                | 1.44          | 0.82         | 1.40          | 0.83         | 0.31  | 134 | .76| .34| .05|
| Bill insurance not scheduled                           | 1.06          | 0.29         | 1.10          | 0.55         | -0.58 | 134 | .56| -0.04| .09|
| Stays in counselor’s home                              | 1.15          | 0.58         | 1.13          | 0.42         | 0.17  | 134 | .87| .02| .04|
| Sex with client                                        | 1.04          | 0.36         | 1.04          | 0.27         | 0.00  | 134 | 1.0 | .00| .00|
| ACA                                                    | 4.65          | 1.34         | 4.38          | 1.35         | 1.17  | 130 | .25| .27| .20|
| Small gift                                             | 3.77          | 1.39         | 4.17          | 1.22         | -1.73 | 130 | .09| -0.40| .31|
|   | $M^1$ | $SD^1$ | $M^2$ | $SD^2$ | $t$  | $df$ | $p$  | $\Delta$ | $d$  |
|---|-------|--------|-------|--------|------|------|------|-----------|------|
| 3. Attend big event | 2.77  | 1.32   | 2.82  | 1.24   | -0.20| 130  | .84  | -0.05     | .04  |
| 4. Go to movie      | 1.14  | 0.43   | 1.24  | 0.53   | -1.27| 124  | .21  | -1.00     | .21  |
| 5. Counseling in client's home | 4.02 | 1.57   | 3.67  | 1.49   | 1.31 | 130  | .19  | .35       | .23  |
| 6. Ask client in front of family | 1.03 | 0.17   | 1.08  | 0.27   | -1.16| 111  | .25  | -0.05     | .22  |
| 7. Service for payment | 2.29 | 1.44   | 2.89  | 1.58   | -2.30| 130  | .02  | -0.60     | .40* |
| 8. Hug clients      | 3.65  | 1.16   | 3.41  | 1.32   | 1.12 | 130  | .27  | .24       | .19  |
| 9. Business partnership | 1.21 | 0.67   | 1.17  | 0.45   | 0.46 | 130  | .65  | .04       | .07  |
| 10. Yelp.com rating | 1.65  | 1.05   | 1.74  | 1.13   | -0.48| 130  | .63  | -0.09     | .08  |
| 11. Attend medical procedure | 2.91 | 1.31   | 3.02  | 1.32   | -0.46| 130  | .64  | -1.11     | .08  |
| 12. Discuss marriage difficulties | 1.92 | 1.13   | 1.88  | 1.18   | 0.23 | 130  | .82  | .04       | .03  |
| 13. Client becomes employee | 1.41 | 0.68   | 1.42  | 0.81   | -0.12| 130  | .91  | -0.01     | .01  |
| 14. Bill insurance not scheduled | 1.06 | 0.30   | 1.02  | 0.12   | 1.15 | 87   | .25  | .04       | .18  |
| 15. Stays in counselor's home | 1.15 | 0.50   | 1.12  | 0.41   | 0.38 | 130  | .71  | .03       | .07  |
| 16. Sex with client | 1.00  | 0.00   | 1.00  | 0.00   | 0.00 | -    | -    | -         | -    |

Gottlieb
|   | $M^1$ | $SD^1$ | $M^2$ | $SD^2$ | $t$  | $df$ | $p$  | $\Delta$ | $d$  |
|---|-------|--------|-------|--------|------|------|------|-----------|------|
| 1. Autistic child | 4.44  | 1.25   | 4.20  | 1.47   | 0.97 | 126  | .33  | .24       | .18  |
| 2. Small gift      | 3.53  | 1.41   | 3.34  | 1.30   | 0.78 | 126  | .44  | .19       | .14  |
| 3. Attend big event | 2.25 | 1.30   | 2.58  | 1.31   | -0.27| 126  | .79  | -0.33     | .25  |
| 4. Go to movie      | 1.14  | 0.43   | 1.30  | 0.66   | -1.59| 109  | .12  | -1.16     | .29  |
|   |      |      |      |      |      |      |
|---|------|------|------|------|------|------|
|   | $M^1$ | $SD^1$ | $M^2$ | $SD^2$ | $t$  | $df$ |
| 5. | Counseling in client’s home | 3.44 | 1.56 | 3.28 | 1.62 | 0.56 |
| 6. | Ask client in front of family | 1.00 | 0.00 | 1.08 | 0.32 | -1.93 |
| 7. | Service for payment | 2.13 | 1.27 | 2.20 | 1.28 | -0.35 |
| 8. | Hug clients | 3.20 | 1.09 | 3.20 | 1.09 | 0.00 |
| 9. | Business partnership | 1.17 | 0.58 | 1.31 | 0.87 | -1.08 |
| 10. | Yelp.com rating | 1.45 | 0.85 | 1.50 | 0.82 | -0.32 |
| 11. | Attend medical procedure | 3.00 | 1.33 | 3.31 | 1.41 | -1.29 |
| 12. | Discuss marriage difficulties | 1.66 | 1.01 | 1.77 | 1.18 | -0.56 |
| 13. | Client becomes employee | 1.20 | 0.51 | 1.30 | 0.68 | -0.88 |
| 14. | Bill insurance not scheduled | 1.00 | 0.00 | 1.00 | 0.00 | -0.22 |
| 15. | Stays in counselor's home | 1.11 | 0.44 | 1.13 | 0.38 | -0.22 |
| 16. | Sex with client | 1.00 | 0.00 | 1.02 | 0.13 | -1.00 |

**Kitchener**

|   |      |      |      |      |      |      |
|---|------|------|------|------|------|------|
| 1. | Autistic child | 4.51 | 1.38 | 4.69 | 1.25 | -0.80 |
| 2. | Small gift | 4.02 | 1.54 | 3.91 | 1.31 | 0.43  |
| 3. | Attend big event | 2.85 | 1.24 | 2.75 | 1.40 | 0.40  |
| 4. | Go to movie | 1.23 | 0.55 | 1.46 | 0.83 | -1.87 |
| 5. | Counseling in client’s home | 3.57 | 1.49 | 3.63 | 1.50 | -0.24 |

(Continued)
|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |
| 6. Ask client in front of family | 1.15 | 0.71 | 1.12 | 0.42 | 0.30 | 128 | .76 | .03 | .05 |
| 7. Service for payment | 2.55 | 1.39 | 2.78 | 1.57 | -0.89 | 128 | .38 | -23 | .16 |
| 8. Hug clients | 3.62 | 1.23 | 3.55 | 1.25 | 0.28 | 128 | .78 | 0.07 | .06 |
| 9. Business partnership | 1.22 | 0.67 | 1.49 | 0.90 | -1.98 | 118 | .05 | -27 | .34* |
| 10. Yelp.com rating | 1.55 | 0.94 | 1.58 | 1.01 | -0.18 | 128 | .86 | -23 | .03 |
| 11. Attend medical procedure | 2.92 | 1.33 | 3.02 | 1.45 | -0.38 | 128 | .71 | -1.0 | .07 |
| 12. Discuss marriage difficulties | 1.68 | 1.00 | 1.85 | 1.16 | -0.89 | 128 | .38 | -23 | .16 |
| 13. Client becomes employee | 1.29 | 0.55 | 1.42 | 0.83 | -1.00 | 111 | .32 | -1.3 | .18 |
| 14. Bill insurance not scheduled | 1.11 | 0.47 | 1.06 | 0.30 | 0.67 | 128 | .51 | -0.05 | .13 |
| 15. Stays in counselor’s home | 1.18 | 0.56 | 1.35 | 0.82 | -1.38 | 113 | .17 | -23 | .24 |
| 16. Sex with client | 1.00 | 0.00 | 1.00 | 0.00 | - | - | - | - | - |

*significant with small effect size, but does not meet the Holm’s Sequential Bonferroni Procedure cutoff

$M^1$ is the mean and $SD^1$ is the standard deviation for participants in each treatment group rating the 16 scenarios the first time. $M^2$ is the mean and $SD^2$ is the standard deviation for participants in each treatment group rating the 16 scenarios the second time after reviewing one of the four treatment conditions. $\Delta$ is the change from the pre-test mean to the post-test mean for each item by treatment group.
| Intervention                                      | MdnA | MdnM | MdnG | MdnK | $x^2$ | N   | df | p   | $\eta^2$ |
|--------------------------------------------------|------|------|------|------|------|-----|----|-----|--------|
| 1. Autistic child                                 | 5.0  | 5.0  | 5.0  | 5.0  | 3.89 | 263 | 3  | .27 |        |
| 2. Small gift                                     | 4.0  | 4.0  | 3.5  | 4.0  | 14.11| 263 | 3  | <.01| .05 weak |
| 3. Attend big event                               | 3.0  | 3.0  | 2.0  | 2.0  | 3.44 | 263 | 3  | .33 |        |
| 4. Go to move                                     | 1.0  | 1.0  | 1.0  | 1.0  | 3.63 | 263 | 3  | .31 |        |
| 5. Counseling in client’s home                    | 4.0  | 4.0  | 3.0  | 4.0  | 2.81 | 263 | 3  | .42 |        |
| 6. Ask client in front of family                  | 1.0  | 1.0  | 1.0  | 1.0  | 0.65 | 263 | 3  | .89 |        |
| 7. Service for payment                            | 3.0  | 2.0  | 2.0  | 2.5  | 8.58 | 263 | 3  | .04 | .03 weak |
| 8. Hug clients                                    | 4.0  | 4.0  | 3.0  | 4.0  | 5.07 | 263 | 3  | .17 |        |
| 9. Business partnership                           | 1.0  | 1.0  | 1.0  | 1.0  | 5.82 | 263 | 3  | .12 |        |
| 10. Yelp.com rating                               | 1.0  | 1.0  | 1.0  | 1.0  | 1.12 | 263 | 3  | .77 |        |
| 11. Attend medical procedure                      | 3.0  | 4.0  | 3.0  | 3.0  | 2.88 | 263 | 3  | .41 |        |
| 12. Discuss marriage difficulties                 | 1.0  | 2.0  | 1.0  | 1.0  | 3.00 | 263 | 3  | .39 |        |
| 13. Client becomes employee                       | 1.0  | 1.0  | 1.0  | 1.0  | 0.98 | 263 | 3  | .81 |        |
| 14. Bill insurance not scheduled                  | 1.0  | 1.0  | 1.0  | 1.0  | 3.86 | 263 | 3  | .28 |        |
| 15. Stays in counselor’s home                     | 1.0  | 1.0  | 1.0  | 1.0  | 5.01 | 263 | 3  | .17 |        |
| 16. Sex with client                               | 1.0  | 1.0  | 1.0  | 1.0  | 3.56 | 263 | 3  | .31 |        |
| Helpfulness of Intervention                       | 2.0  | 3.0  | 2.0  | 2.0  | 21.39| 263 | 3  | <.01| .08 moderate |
| Use Intervention in the Future                    | 2.0  | 3.0  | 2.0  | 2.0  | 50.01| 263 | 3  | <.01| .19 strong |

MdnA = Median for ACA Group, MdnM = Median for Magazine Group, MdnG = Median for Gottlieb Group, MdnK = Median for Kitchener Group
the Kitchener decision tree (Burns & Cruikshanks, 2017b) and the other half indicated that they were taught Kitchener's model in their ethics class and planned on using this in the future. A third of participants reviewing Kitchener’s model (n = 22, 34%) stated that although they will use Kitchener's model, they will also use other ethical information resources. One participant said that they would not use it in the future because Kitchener's model was too vague.

For participants reviewing Gottlieb’s model, many participants (n = 25, 39%) stated that they would not use it in the future as they preferred the ACA Code of Ethics or the model was too complicated to use. Others stated that they would use the model in conjunction with other ethical information resources (n = 24, 38%), and nearly a quarter of participants (n = 15, 23%) stated that they would definitely use Gottlieb’s model in the future. For participants in the magazine group, a clear majority (n = 48, 71%) stated that the article was not helpful and did not influence their boundary crossing ratings. This outcome was expected as the magazine article did not provide information to guide ethical decision-making processes. Some participants (n = 7, 10%) noted that the article provided robust boundary crossing decision-making support and changed the way they rated the 16 boundary crossings.

Kruskal-Wallis tests were conducted to evaluate differences in medians among the four interventions for the helpfulness of the intervention and the use of the intervention in the future (Table 3). Mann-Whitney U tests were used for significant Kruskal-Wallis tests. The Kruskal-Wallis tests were set at the LSD adjusted .008 level. When rating the helpfulness of the intervention, significant differences occurred at a moderate magnitude. Follow-up Mann-Whitney U tests revealed significant differences between the magazine group and the ACA, Gottlieb, and Kitchener groups with the magazine group always giving a less helpful rating than the other three groups (ACA-Magazine, p = .001, A < C; ACA-Gottlieb, p = .10, A < G; ACA-Kitchener, p = .43, A < K; Magazine-Gottlieb, p = .008, C > G, Magazine-Kitchener, p = <.001, C > K, Gottlieb-Kitchener, p = .38, G > K).

When rating the likelihood of use of the intervention in the future, significant differences occurred at a strong magnitude (Table 4). Follow-up Mann-Whitney U tests indicated significant differences between the magazine group and the ACA, Gottlieb, and Kitchener groups with the magazine group always giving a more unlikely to be used rating as compared to the other three groups. Additionally, the ACA group rated future use of the resource more likely as compared to the Gottlieb group (ACA-Magazine, p = <.001, A < C; ACA-Gottlieb, p = .002, A < G; ACA-Kitchener, p = .32, A < K; Magazine-Gottlieb, p = .003, C > G, Magazine-Kitchener, p = <.001, C > K, Gottlieb-Kitchener, p = .02, G > K).

Analyses were run to determine if significant differences occurred in drop-out rates among the four study interventions. Two-way contingency table analysis found no statistically significant differences in drop-out rates among the ACA, Gottlieb, Kitchener, and magazine groups (ACA = 6, Kitchener = 6, Magazine = 3, Gottlieb = 9).

Participants listed all of the ethical information strategies they used when confronted with a boundary crossing issue in an open text box. The data were analyzed using descriptive coding and found that all 236 responses could be categorized into 16 different strategies. Once the 16 strategies had been identified through descriptive coding, a frequency count was performed. Most students listed more than one strategy (M = 3.13, SD = 1.25). The top 10 strategies for counselor education students included reviewing a code of ethics (n = 221), using gut feeling/intuition (n = 169), consulting with a colleague (n = 122), reviewing state laws/rules/codes (n = 94), discussing the boundary crossing with a supervisor (n = 74), using past personal experience or knowledge of the experiences of others (n = 62), using an ethical decision-making model (n = 25), recalling ethics class training (n = 21), using their personal moral code or values (n = 13), and using the employer’s code of ethics/policies (n = 7).
Analyses determined if significant differences occurred on the pre-test between counselor education students’ and independently licensed counselors’ ratings of the 16 boundary crossing scenarios. Paired samples T-tests analyses found eight significant differences: Scenario 2 (t = −2.51, df = 691, p = .01, d = .19), Scenario 5 (t = 2.02, df = 593, p = .04, d = .16), Scenario 9 (t = −2.27, df = 438, p = .02, d = .18), Scenario 10 (t = 2.24, df = 595, p = .03, d = .17), Scenario 11 (t = 1.95, df = 597, p = .05, d = .15), and Scenario 15 (t = −2.69, df = 432, p = .01, d = .22). However, only two significant differences met the Holm’s Sequential Bonferroni Procedure at a small effect size: Scenario 3 attending a client’s big event (t = −4.132, df = 691, p < .001, d = .32), and Scenario 7 bartering (t = −3.21, df = 509, p < .001, d = .26). Students rated both scenarios as more ethical than independently licensed counselors.

No significant differences occurred on the post-test between counselor education students’ and independently licensed counselors’ ratings of the 16 boundary crossing scenarios after reviewing the magazine article and the ACA Code of Ethics. Three significant differences occurred on the post-test between counselor education students’ and independently licensed counselors’ ratings of the 16 boundary crossing scenarios after reviewing Gottlieb’s model: Scenario 5 (t = 2.27, df = 175, p = .02, d = .36), and Scenario 8 (t = 2.50, df = 148, p = .01, d = .38). However, only one significant difference met the Holm’s Sequential Bonferroni Procedure at a small effect size: Scenario 10 Yelp.com rating (t = 2.77, df = 169, p < .001, d = .41). Independently licensed counselors rated asking for a positive Yelp.com rating as more ethical than students. Six significant differences occurred on the post-test between counselor education students’ and independently licensed counselors’ ratings of the 16 boundary crossing scenarios after reviewing Kitchener’s model: Scenario 2 (t = −2.54, df = 148, p = .01, d = .40), Scenario 6 (t = −2.16, df = 69, p = .03, d = .36), Scenario 9 (t = −2.38, df = 94, p = .02, d = .39), Scenario 11 (t = 2.25, df = 165, p = .03, d = .36), and Scenario 15 (t = −2.58, df = 78, p = .01, d = .43). However, only one significant difference met the Holm’s Sequential Bonferroni Procedure at a small effect size: Scenario 7 bartering (t = −2.63, df = 165, p < .001, d = .41). Students rated bartering as more ethical than independently licensed counselors.

Analyses determined if significant differences occurred between counselor education students’ and independently licensed counselors’ ratings of the helpfulness and future use of the four interventions. Students rated the magazine article as more helpful (t = 3.04, df = 153, p < .01, d = .47) and more likely to be used in the future (t = 3.01, df = 171, p < .01, d = .47) at a small effect size. Students rated Gottlieb’s model as more helpful (t = 2.55, df = 170, p < .01, d = .40) at a small effect size. Students rated Kitchener’s model as more likely to be used in the future (t = 2.52, df = 164, p < .01, d = .38) at a small effect size. Independently licensed counselors rated the ACA Code of Ethics as more likely to be used in the future (t = −2.12, df = 171, p = .04, d = .33) at a small effect size.

5. Discussion
Over half of counselors’ professional liability claims were counseling relationship boundary crossings (CNA & HPSO, 2019a). It is reassuring that in both studies students and independently licensed counselors rated 12 (75%) of the 16 boundary crossing scenarios between slightly and highly unethical on the pre-test. Further, students and independently licensed counselors performed so similarly on pre-test ratings; it would be difficult to notice any actual differences in behavior between the two groups.

When comparing pre-test to post-test ratings on the 16 boundary crossing scenarios within each of the four groups for students it was noteworthy that no significant differences were found. For independently licensed counselors, the magazine group rated four scenarios as being more ethical at a small effect size, the ACA Code of Ethics group rated three scenarios as more ethical at a medium effect size, and Kitchener’s and Gottlieb’s model groups rated two scenarios as more ethical at a small effect size. Unlike independently licensed counselors, students did not find the boundary crossings to be more ethical upon review of an ethical information resource. At the same time, the Code of Ethics, Kitchener’s model, and Gottlieb’s model offered no potential protection to
mitigate harm to clients. From their developmental perspective, it is possible that students’ lack of client experience could account for the lack of pre-test to post-test changes. It is also possible that just having completed their ethics course could account for the lack of pre-test to post-test changes.

Students were less likely than independently licensed counselors to report using the Code of Ethics in the future at a small effect size. Practically speaking, it would be hard to detect differences in behavior between the two groups. However, as students have so much less experience with the Code of Ethics, it seems problematic that students would be rating its use in the future as less likely. More client experience may help a burgeoning counselor to understand how often the ACA Code of Ethics will be used during their introduction to the profession.

Just as with independently licensed counselors, students did not enjoy using Gottlieb’s model as compared to the ACA Code of Ethics and Kitchener’s model. For example, students rated the Code of Ethics to be more likely to be used in the future as compared to Gottlieb’s model at a large effect size. Practically speaking, it would be very easy to see that more students would use the Code of Ethics as compared to Gottlieb’s model in the future. Additionally, 39% of students exposed to Gottlieb’s model stated they would never use it again as it was too complicated. Nearly 66% of independently licensed counselors (64.6%) reported that they would never use Gottlieb’s model in the future. Whereas drop-out rates were not significant for students among the four groups, drop-out rates were significant for the Gottlieb group with independently licensed counselors. Students in this study appeared to have much more patience when using a complicated ethical decision-making model than independently licensed counselors. However, the students in this study found complicated ethical decision-making resources frustrating and planned to avoid them in the future. As reported by Burns and Cruikshanks (2017b) for independently licensed counselors, students also want simple, straightforward, and streamlined ethical information resources.

It was noteworthy that 29% of students (8% of independently licensed counselors) reviewing the placebo magazine article stated they took it seriously as an ethical decision-making resource when contemplating the 16 boundary crossings. The magazine article summarized the profession of counseling, reminded the reader why they entered the profession of counseling, and highlighted the importance of the counselor’s philosophy and worldview on the therapeutic relationship. These students specifically commented that the magazine article “challenged me to trust my own skills and instincts,” “reminded me about why counselors are passionate about the counseling profession,” and “helped confirm a decision that I was already comfortable with.” It appears that some students might view a magazine article as an ethical information resource if it validates their subconscious reasoning (Drumwright et al., 2015) and cognitive shortcuts (McMahon & Good, 2016). Students may look to resources that are not designed to improve ethical boundary crossing decision making with clients if the resource makes them feel more comfortable with their personal characteristics and preferences. This may ultimately lead the student to dismiss reviewing more formal ethical information resources such as codes of ethics and ethical decision-making models, which could increase the risk of the student experiencing an ethical violation.

Students generated 16 strategies that they used when considering boundary crossings with clients. In comparison, independently licensed counselors generated 30 different strategies. As independently licensed counselors work with client boundary crossings daily, it seems developmentally appropriate that independently licensed counselors reported using more varied strategies. However, it was noteworthy that the two groups rated the same top 10 strategies in nearly identically the same order. For example, a majority of students (94%) reported using a code of ethics when considering boundary crossings with clients but only a few reported using an ethical decision-making model (11%). The statistics respectively for independently licensed counselors were 70% and 20%. Just as in the study with independently licensed counselors, not one student mentioned ACA’s Ethical Decision Making Model, which involves seven steps. As ethical decision-making models are supposed to encourage reflection and engagement for making better ethical
decisions (Jungers & Gregoire, 2016; Kennedy, 2008), it is noteworthy that students reported lower use of the models when 97% of them had completed their ethics class.

6. Limitations
Limitations for this study include convenience sampling counselor education students from six CACREP-accredited counselor education programs in the U.S. A larger sample size from more CACREP-accredited programs could generalize better. Voluntary samples may yield biased results, and this study attracted students who had completed their ethics class (97%). Asking ethics questions inspires socially desirable responding, which could have biased the results. Despite a 5 USD e-gift card, the response rate was modest. Different outcomes may occur if the boundary crossing scenarios contained different licensure board complaints. The boundary crossing scenarios presented did not have one correct answer. Finally, cross-sectional studies report opinions at only one point in time.

7. Suggestions for future research
Replicating the study would ensure these findings. Quantitative research could examine how students conceptualize complex ethical information resources and use alternative boundary crossing scenarios and ethical information resources. Qualitative studies could explore students' experiences while using ethical information resources.

8. Implications for practice and training
Experts highly recommend that counselors use ethical codes and ethical decision-making models to mitigate liability (Gottlieb, 1993; Jungers & Gregoire, 2016; Kennedy, 2008). As 97% of students in this study had completed their ethics class, it is noteworthy that approximately 11% of students (17% of independently licensed counselors) mentioned using an ethical decision-making model when contemplating a client boundary crossing issue. It is possible that students did not find ethical decision-making models helpful when taking their CACREP-accredited ethics class. Ultimately, reviewing the ACA Code of Ethics, Gottlieb's model, and Kitchener's model did not change students' reactions to the 16 boundary crossing scenarios. Just as in the study with independently licensed counselors (Burns & Cruikshanks, 2017b), one ethical decision-making model did not outperform the other, and nothing swayed either group to view the 16 boundary crossings as more unethical upon the second review. Review of the results of this study and the study with independently licensed counselors makes it hard to determine how much harm to clients is mitigated by these groups reviewing ethical decision-making resources (Burns & Cruikshanks, 2017b). Ethical decision-making is also heavily influenced by personal characteristics. Kitchener (1984) cautioned that a person's moral compass may not always lead to defensible ethical decisions. Whereas consulting and supervision can be helpful, it is not a guarantee of better ethical behavior as others can equally influence behavior to be more or less ethically defensible (Tenbrunsel & Chugh, 2015). When consulting with others, two compounded sets of self-established ethical principles can lead to distortions and dismissal of published ethical codes (Jungers & Gregoire, 2016).

Conventional guidance suggests that counselors use a code of ethics, ethical decision-making models, consultation, and supervision to mitigate harm to clients. However, the fact remains that between 2013 and 2017 professional liability claims against independently licensed counselors increased in number and severity for allegations of sexual misconduct and dual relationships with clients (CNA & HPSO, 2019a). Resources that are not mentioned in the 2014 ACA Code of Ethics Section I Resolving Ethical Issues that could potentially assist in mitigating harm to clients can be found in the joint publications of the two professional liability insurance companies of the counseling profession. One such publication, Counselor Spotlight: Boundaries (CNA & HPSO, 2019b) includes several helpful resources. The document provides a self-assessment checklist for counselors specific to client-counselor boundary crossing concerns that are routinely a part of misconduct allegations. This same publication also offers concrete client boundary crossing risk-management recommendations. A second publication, Counselor Liability Claim Report: 2nd Edition (CNA & HPSO, 2019a) includes documentation of the number and type of professional liability allegations in each section of the 2014 Code of Ethics. Additionally, the document offers claim guidance, which helps counselors
recognize when an incident of concern has occurred. Lastly, this publication documents the counselor’s role and responsibility in managing a professional liability claim. Resources providing concrete guidance like the two mentioned in this paragraph might better mitigate harm for counseling clients.

9. Conclusion

Counselor education students were asked to rate 16 boundary crossing scenarios that impacted the professional needs of clients and counselors and the personal needs of clients and counselors. Reviewing the ACA Code of Ethics, Gottlieb’s model, and Kitchener’s model did not change students’ reactions to the 16 boundary crossing scenarios. It is notable that 29% of students reviewing the magazine article stated they took it seriously as an ethical decision-making resource when contemplating boundary crossings with clients and would use the resource in the future for making these types of decisions. Inappropriately seeing a magazine article as a legitimate ethical decision-making resource may ultimately lead the student to dismiss reviewing more formal ethical information resources, which could increase the risk of the student experiencing an ethics violation. Despite being in such developmentally different places within the counseling profession, counselor education students and independently licensed counselors very closely mirrored each other regarding pre-test and post-test ratings of the 16 boundary crossing scenarios as well as the strategies cited for contemplating boundary crossings with clients. Given their lack of experience, it is noteworthy that students in this study did not appear to be influenced by ethical information resources and already appeared to be making decisions based on personal characteristics and consultation.

Funding
The research did not receive specific funding, but was performed as part of the employment of the author at Western Michigan University.

Competing Interests
The authors declare that they have no conflicts of interest.

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Citation information
Cite this article as: Impact of ethical information resources on counselor education students, Stephanie Burns, Cogent Education (2020), 7: 1757182.

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