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The Effect of Emotive Content on Knowledge Acquisition and Ethical Sense Making Using an Ill-Structured Case Example

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**THE EFFECT OF EMOTIVE CONTENT ON KNOWLEDGE ACQUISITION AND
ETHICAL SENSE MAKING USING AN ILL-STRUCTURED CASE EXAMPLE**

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ABSTRACT

THE EFFECT OF EMOTIVE CONTENT ON KNOWLEDGE ACQUISITION AND ETHICAL SENSE MAKING USING AN ILL-STRUCTURED CASE EXAMPLE

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Old Dominion University, 2018

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Social workers encounter ethics related challenges on a daily basis. These real-world problems are incredibly complex and can produce intense emotional reactions. The use of ill-structured case examples as an instructional strategy to teach ethical lessons is well-supported in the literature, however, case examples often lack an emotional or affective component. Given the importance of crafting cases for learners, more research is needed to better understand how to construct and present case examples to enhance learning outcomes, specifically related to the influence of emotive content. This study was conducted to assess the effect of emotive content on knowledge acquisition and ethical sense making.

The current study employed a posttest only control group design. Emotive content was defined as information related to the character's emotional reactions or feelings, background, beliefs, physical appearance, and/or goal focus of the character. The ethical dilemma involved the use of social media between a teenage client and student intern at a family service agency.

Study materials were placed inside plain packets, each having a unique identification number. The first packet contained the case example and open ended question prompts. The second packet contained the knowledge acquisition questions and demographic related questions.

Participants were not permitted to access the first packet while completing the second packet. All questions were presented in a fixed order.

Participants were graduate level Master of Social Work students at a university on the coastal U.S. In total, 71 students participated in the study. The emotive group ($n = 37$) was comprised of 32 women and five men. The non-emotive group ($n = 34$) was comprised of 30 women and four men. The mean age for student participants was 29.63 ($SD = 8.37$). There were no statistically significant differences between the two groups. An independent samples t-test indicated that scores were significantly higher for the non-emotive group ($M = 4.91$, $SD = .96$) than the emotive group ($M = 4.40$, $SD = .96$), $t(69) = -2.22$, $p = .030$, $d = .53$. An independent samples t-test indicated that scores were significantly higher for students in a field placement ($M = 4.77$), $SD = .96$) than students not in a field placement ($M = 4.23$, $SD = .97$), $t(69) = 2.02$, $p = .047$, $d = 0.56$. No differences were found between the emotive and non-emotive groups in ethical sense making scores or feelings toward the main characters.

Results contribute the growing body of literature regarding the effect of emotion in processing and manipulating complex information. The results suggest that the addition of emotive content to a case example may distract or overwhelm learners. Case examples should be constructed using clear and simple information.

Keywords: case example, emotive content, ethical dilemma, ethical sense making, ill-structured problem, knowledge acquisition, social work

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This thesis is dedicated to all the social work educators, students, and practitioners who fight injustice and strive to make our world a better place for everyone, every single day.

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CHAPTER I

INTRODUCTION

We make countless decisions every day. Some decisions are routine, such as should I have cereal or a muffin for breakfast, while others are more complex, such as which safety features are most important on the new car I wish to buy. The complexity of these decisions can vary based on multiple factors, including the number of issues involved as well as the predictability and interactions between the variables (Jonassen, 2011). Professional social workers make critical decisions that have a significant impact on individuals and families. On any given day, social workers may have to decide whether sufficient evidence of abuse exists such that a child should be removed from the home or whether a teenager who posts a comment on Facebook about harming himself rises to the level of hospitalization. Often, there is not an obvious right or wrong answer to these dilemmas and competing demands may further complicate an acceptable course of action. Doing the right thing, amid competing demands and difficult circumstances, is at the core of ethical practice.

It is vital that social work students, and practitioners alike, identify the presence of ethical issues and successfully resolve these complex problems which exist throughout their professional careers. In fact, ethics education is so fundamental to social work practice that it is regulated by several organizations including the Council on Social Work Education (CSWE), the Association of Social Work Boards (ASWB), state licensing boards, and the National Association of Social Workers (NASW).

The Council on Social Work Education (CSWE) is the accrediting body for all baccalaureate and master's degree programs in social work education in the United States. As of October 2017, there were 518 accredited baccalaureate social work programs and 255 accredited

master's social work programs (Council on Social Work Education [CSWE], 2017a). The CSWE uses Educational Policy and Accreditation Standards (EPAS) to provide professional judgement regarding the quality of social work programs and to encourage continuous improvement (CSWE, 2017b). The EPAS standards are comprised of nine social work competencies.

The first competency is to demonstrate ethical and professional behavior. There are several practice behaviors related to this competency, including (1) making ethical decisions by using the National Association of Social Workers (NASW) Code of Ethics, (2) using reflection and self-regulation to manage personal values in practice situations, (3) demonstrating professional demeanor in behavior and communication, (4) using technology ethically and appropriately to facilitate practice outcomes, and (5) using supervision and consultation to guide professional behavior and judgment (CSWE, 2017b). The remaining eight competencies focus on advancing human rights, engaging in practice informed research, policy practice, diversity in practice, as well as assessing, intervening, and evaluating practice.

Moreover, the ability to engage in social work practice post-graduation is regulated by state boards (Association of Social Work Boards [ASWB], 2016a). The Association of Social Work Boards (ASWB) provides support to each state's regulatory board, owns the social work licensing exams that are used to measure competence to practice ethically, and maintains a model practice act that state regulatory bodies use to develop state laws (ASWB, 2016b). Approximately twenty-five percent of the content contained in the ASWB master's level licensing exam is related to ethics and professional behavior (ASWB, 2016c). The mission of state boards, such as the North Carolina Social Work Certification and Licensure Board (NCSWCLB), is to protect the public by setting qualifications and standards for engaging in professional social work practice (North Carolina Social Work Certification and Licensure Board

[NCSWCLB], n.d.a) Likewise, state boards are vested with legal authority to investigate and discipline social workers who engage in prohibited actions, such gross unprofessional conduct or dishonest practice (NCSWCLB, n.d.b). Disciplinary actions can range from a reprimand to the revocation of the license to practice (NCSWCLB, n.d.c.).

To guide ethical behavior, nearly all professions have a code of ethics to assist practitioners who face ethical dilemmas (Reamer, 2006). The National Association of Social Workers (NASW) is the professional membership organization for social workers in the United States (National Association of Social Workers [NASW], 2017a). NASW publishes and maintains a Code of Ethics that details the profession's core values, ethical principles, and standards of conduct (NASW, 2017b). The 2008 NASW Code of Ethics contained 155 standards related to responsibilities to clients, colleagues, practice settings, and the broader society (Strom-Gottfried, 2015). The Code of Ethics standards are aspirational, such as providing services in public emergencies, while others are enforceable, such as not engaging in sexual activities with current clients (NASW, 2017b). Although the NASW Code of Ethics cannot guarantee ethical behavior in all circumstances, social workers are encouraged to make choices that are consistent with the mission, values, principles, and standards of the profession when faced with an ethical dilemma (NASW, 2017b). Practitioners must be able to critically appraise each unique situation, while evaluating and applying ethical standards, which can conflict with one another, to determine an appropriate course of action.

As is often the case in social work practice, professionals encounter complex situations and must choose between several possible options without knowing, with any certainty, the outcome of those choices. By definition, these types of problems are considered ill-structured, in that no single, correct solution can be arrived at but rather several possible solutions must be

evaluated based on the context of their application (Jonassen, 1997). According to Jonassen (1997), the most complicated and ill-structured type of problem is a dilemma. Dilemmas often have no one solution that is acceptable to everyone, yet many solutions may be possible (Jonassen, 2011). Ethical dilemmas, like those encountered by social workers and other helping professionals, are further complicated by underlying values and beliefs, emotional responses, legal issues, ethical codes, and organizational constraints that may influence the complex situation. Therefore, it is critical that social work students and practitioners learn how to make sense of these complicated situations.

One popular instructional strategy used to stimulate discussion about ethical dilemmas and emphasize ethical lessons is the use of case examples. Case examples (e.g. vignettes, scenarios) are narratives or stories that embed learning in authentic situations (Jonassen, 2011). Case examples are commonly used in the classroom and continuing education as activities to reinforce ethical thinking (Dodd & Jansson, 2004; McCormick et al., 2014; Pawlukewicz & Ondrus, 2013; Ringel & Mishna, 2007). Unfortunately, most research studies describing the use of case examples as an instructional strategy in the social work literature do not evaluate the specific format or content of the cases and the effect on learning. In fact, case examples can be constructed in many ways, with some approaches yielding more effective outcomes than others (Harkrider et al., 2013a). Likewise, ethical dilemmas can be emotionally challenging. Personal values, beliefs, relationships, culture, and moral development affect an individual's emotional reaction to an ethical dilemma and subsequent response. Researchers have long recognized the influence emotion has on addressing ethical dilemmas (Connely, Helton-Fauth, & Mumford, 2004; Gaudine & Thorne, 2001) yet traditional, rational approaches to decision-making often minimize the influence emotions and feelings have on the resolution process.

To resolve ethical dilemmas, individuals must make sense of numerous and distinct pieces of information to form a mental model which guides cognition throughout the complex problem situation (Kligyte et al., 2008). This sense making process provides a framework for gathering information and applying standards to evaluate the information, while constructing and evaluating alternative courses of action (Mumford et al., 2008). In short, sense making strategies form the foundation for interpreting complex and often ambiguous ethical dilemmas (Kligyte et al., 2008).

Taken together, findings from previous research suggests that sense making is a critical process to evaluating and resolving ethical dilemmas, which are often emotionally vexing. Case examples are a common instructional strategy used to explore ethical dilemmas, yet there is a paucity of empirically supported social work research related to the effects that variations to case examples may have on learning outcomes. Therefore, the goal of this study is to add to the empirical research base in social work education by exploring the effect of emotive content within an ethical dilemma case example on knowledge acquisition and ethical sense making.

Conceptual Framework

As noted previously, ill-structured problems closely resemble problems encountered in real life. In general, problems vary in several ways. First, problems vary in the way they are structured. Well-structured problems typically include all elements of the problem and have one solution, while ill-structured problems often present with unknown elements, contain multiple solutions, and may require the exploration of personal beliefs before arriving at a solution (Jonassen, 2000). Second, problems vary based on complexity. Complexity is related to the number of variables or issues represented in the problem, how these issues interact or connect, and how consistent they are over time (Jonassen, 2011). While some well-structured problems

can be difficult to solve, and some ill-structured problems can be fairly simple, most ill-structured problems require advanced cognitive functions due to their complexity (Jonassen, 2000). Third, problems vary based on stability and dynamicity (Jonassen, 2011). Ill-structured problems tend to be less static and more dynamic because the task environment and factors related to the problem change frequently. Investing in the stock market or flying a plane safely through a storm are considered ill-structured because the problem solver must continuously adapt to changing conditions while searching for new solutions. Finally, problems vary in terms of their abstractness (Jonassen, 2000). Generally, well-structured problems are more abstract than ill-structured problems. Most well-structured problems tend to focus on general problem-solving skills and the use of logic to solve the problem (Jonassen, 2000). Ill-structured problems, on the other hand, are often situated in very specific contexts and need advanced domain specific knowledge to generate and evaluate possible solutions (Jonassen, 2000).

Case examples provide learners with opportunities to identify problems, consider possible solutions, and evaluate consequences of potential solutions. Researchers have found that using case examples as an instructional strategy is at least equivalent to and can be more effective than didactic instruction alone (Jonassen, 2011) and should be used as a pedagogical tool for ethics related instruction (Fisher & Kuther, 1997). Case examples require learners to engage in higher-order thinking to solve problems, rather than merely reciting factual knowledge (Jonassen, 2011).

To solve complex problems, multiple cognitive operations are needed and working memory is tasked with processing numerous components of the problem simultaneously (Jonassen, 2000). The cognitive components of problem solving require learners to access domain knowledge and structural knowledge, utilize metacognitive and justification skills to

evaluate problem solving strategies and solutions as well as the ability to persist and exert effort on a task that may be difficult (Jonassen, 1997). Effective resolution of these complex problems requires an ability to analyze and understand the ethical situation from numerous perspectives, including emotional and social perspectives (Kligyte et al., 2008). Making sense of the myriad sources of information to form the mental model that guides the cognitive process requires individuals to first appraise the situation as having ethical implications (Kligyte et al., 2008). Then, alternative actions and consequences can be evaluated before a course of action is selected.

The case example used for this study was developed by incorporating the attributes of ill-structured problems as articulated by Jonassen (2011). Table 1 provides a summary of each attribute along with a description how each attribute was integrated into the case example used in this study.

Table 1

Attributes of Ill-Structured Problems and Case Example In This Research Study

Attribute	Attribute description	Case example for this research study
Structuredness	Contains unknown problem elements, multiple solutions are possible, may require exploration of personal beliefs before arriving at a solution	Specific references to applicable social work ethical codes are not referenced in the case example. Case example requires exploration of feelings about client, potentially disobeying a supervisor's request, and applicability of multiple ethical standards. Several outcomes are possible.
Complexity	Numerous issues represented in the problem, issues interact and connect in unpredictable ways, issues may be inconsistent over time	Several ethical issues are applicable including confidentiality/privacy of personal information, dual or multiple relationships with clients, use of social media/technology, and use of consultation/supervision.
Dynamicity	Task environment less static and more dynamic, problem factors change over time	Social work student shares personal pictures with client. Client fails to show up for group session and whereabouts are unknown. Use of technology/social

		media to find client may violate ethical standards.
Abstractedness	Problem situated in very specific context, requires advanced domain specific knowledge to generate and evaluate possible solutions	Problem context is a family service agency serving troubled youth and their families. Knowledge related to human development, agency policy and practice, and ethical conduct needed.

Statement of the Problem

Empirical research in the social work literature focuses primarily on intervention strategies for working with individuals, families, and communities, rather than instructional strategies. Moreover, social work scholars have only recently begun conducting research related to ethics and ethical decision-making (Reamer, 2014). Thus, the convergence of empirical research related to ethical dilemmas and instructional strategies in the social work literature is extremely limited. Although there is empirical support for the use of case examples as an instructional strategy to teach ill-structured problem solving and ethics related concepts (Antes et al., 2009), there is a paucity of research related to the effects that variations to case content and case presentation may have on learning outcomes.

The social work literature on ethics is replete with descriptive studies outlining various ethical decision-making models or recounting the process used to teach an ethics course, but lacks empirical evidence to support the use of these approaches. This gap in the literature presents an opportunity for further investigation and study.

Literature Review

Ill-structured problem solving is an important cognitive activity that is used in a multitude of everyday and professional contexts. Likewise, a prominent goal of higher education is to equip students with the requisite knowledge and skills to practice in professional settings including the ability to reason, evaluate, problem-solve, and make decisions that contribute to a

responsible citizenry (Bixler & Land, 2010; Choi & Lee, 2009). However, Jonassen (2000) argued “graduates are rarely, if ever, adequately prepared to function in everyday professional contexts following education and training” (p. 63). The crux of Jonassen’s argument is that formal education does not require students to solve meaningful problems, like those encountered in real life. Real world problems are complex and dynamic. Students are often taught to solve well-structured problems in educational settings because these problems typically have one correct solution and the path to the solution is clear (Hung, 2013). Conversely, ill-structured problems more closely resemble problems encountered in real life due to vague or unclear goals, multiple solutions, and unknown problem elements (Jonassen, 2011).

Students are often taught to solve well-structured problems in educational settings because these problems typically have one correct solution and the path to the solution is obvious. Ill-structured problems, on the other hand, are complex, dynamic, and more challenging to teach students to solve but are necessary to prepare professionals for real world dilemmas (Jonassen, 2011). Too often, educators do not have the resources, teaching methods, or research based information needed to facilitate problem solving in the classroom (Choi & Lee, 2009). This literature review will explore the attributes of well-structured and ill-structured problems, with a specific focus on ethical dilemmas, the most ill-structured type of problem. Key attributes of developing case examples and the influence of emotive content on ethical dilemmas will be discussed. A review of the social work literature regarding the use of case examples and ethical dilemmas in ethics education will also be presented.

Typology of Problems

Jonassen (2000) articulated a typology of problems which includes the identification of eleven different problem types. These are: (1) logic problems, (2) algorithms, (3) story problems,

(4) rule-using/rule-induction problems, (5) decision making, (6) troubleshooting, (7) diagnosis-solution problems, (8) strategic performance, (9) policy-analysis problems, (10) design problems, and (11) dilemmas (Jonassen, 2000).

These problem types vary in terms of structure, complexity, and abstractness. The simplest problems are logic problems, such as the Tower of Hanoi, which challenge learners to use a method of reasoning to find the most efficient solution to the problem (Jonassen, 2000). Algorithmic problems, such as those used in math and science classes, are primarily procedural and success is measured by producing a correct answer (Jonassen, 2000). Algorithms embedded in a story are slightly more complex because learners are required to do more than just apply the algorithm, they must also identify the key elements in the story to apply the correct algorithm (Jonassen, 2000). Rule-using problems typically have a clear goal, such as finding the most relevant research to write a literature review on ill-structured problem solving, but there are multiple paths or methods for conducting the search (Jonassen, 2000).

Choosing an option, from a set of alternatives with one or more consequences, are considered decision-making problems. These types of problems are encountered daily and require the exploration and weighting of different options (Jonassen, 2000). Trouble-shooting and diagnosis-solution problems require testing and evaluating possible faults within a system. Both types of problems require procedural, systems, and strategic knowledge to engage in problem evaluation and solution. Strategic performance problems require real-time decision-making and increased cognitive demands, much like those needed by a firefighter entering a burning building. Case-analysis problems contain vague goals and incomplete information (Jonassen, 2000). Case-analysis problems often require learners to argue a position since there may be multiple solutions to the problem. Design problems are incredibly complex problems that

lack distinct standards for assessing solutions and often result in an artifact as evidence of the solution (Jonassen, 2000).

Finally, dilemmas are problems that are considered most unpredictable and ill-structured because one solution may not be agreeable to everyone (Jonassen, 2000). Ethical and social dilemmas are the most complicated types of problems because they are often a combination of several problems, with conflicting perspectives, in which many or no solution may ever be known or acceptable to all (Jonassen, 2011). Teaching students to how to address ethical dilemmas, such as those confronting social work practitioners on a daily basis, require different instructional strategies than those used to teach well-structured problems (Jonassen, 2011). Researchers and scholars agree that designing instruction for ill-structured problem solving is fundamentally different than designing for well-structured problem solving (Hung, 2013; Jonassen, 2012; Marra, Jonassen, Palmer, & Luft, 2014). Although ill-structured problems vary in many ways, key aspects of designing instruction for ill-structured problems includes determining the problem space, deciding how to represent the problem space to learners, and identifying necessary supports that aid learners in solving ill-structured problems (Jonassen, 1997). A variety of instructional strategies can be employed to facilitate ill-structured problem solving such as reflective activities (Sharma & Hannafin, 2004), argumentation (Cho & Jonassen, 2002; Tawfik & Jonassen, 2013) scaffolding techniques including prompting (Chen & Bradshaw, 2007), and case examples (Dabbagh & Dass, 2013; Jonassen, 2012).

Designing Instruction for Ill-Structured Problems and Ethical Dilemmas

Jonassen (1997) proposed six-steps to design instruction that engages learners in solving ill-structured problems. These are: (1) articulate the problem context, (2) introduce problem constraints, (3) locate, select, and develop cases for learners, (4) support knowledge base

construction, (5) support argument construction, and (6) assess problem solutions (Jonassen, 1997). Taken separately, the first step is to articulate the problem context. Ill-structured problems are more context dependent than well-structured problems and require an authentic task environment in which to situate the problem (Voss & Post, 1988). Developing the situational context is essential due to the heavy reliance on domain specific knowledge to solve ill-structured problems. Thus, articulating the problem setting, roles of characters, as well as history and relationships, is necessary to provide learners with the information needed to solve the problem. For this study, the case example was situated in a family service agency and involved a social work student, social work supervisor, and two teenage clients.

The second step is to introduce problem constraints. Ill-structured problems rarely have obvious solutions; therefore, constraints must be provided. Constraints provide boundaries for the problem and inform learners of restrictions that may limit their solution. Constraints may be imposed by the setting, environment, or stakeholders, and could include time, money, policy, or other variables. The case example used in this study introduced problem constraints related to client safety, ethical standards, and urgency of response time.

The third step is to locate, select, and develop cases for learners. The cases must be representative of the problem domain, as well as interesting and challenging (Jonassen, 1997). Good cases must include concrete details yet be open to interpretation, while being based on real-life scenarios (Jonassen, 2011). Typically, cases are represented as stories that include a set of events which lead up to one or more problems that need resolution (Jonassen, 2004). The case example used in this study focused on the use of social media and technology between the social work student and client. This is a realistic and challenging problem because agency policies vary

across settings and ethical standards regarding the use of social media have been evolving over the last few years.

The fourth step is to support knowledge base construction. Designers may need to consult practitioners and other subject matter experts to ensure varying perspectives have been represented and relevant issues are highlighted (Jonassen, 1997). To develop the case example in this study, social work faculty were consulted to ensure the case example reflected actual situations encountered by students and field supervisors in practice settings.

The fifth step is to support argument construction. This step requires learners to conceptualize the problem, consider opposing arguments, identify underlying assumptions, and reflect on known and unknown information. The issues in this case example can be conceptualized in several ways including privacy and confidentiality, dual/multiple relationships, informed consent, and practitioner competence, along with the applicability of several ethical standards from the NASW Code of Ethics.

Finally, the sixth step is to assess problem solutions. In a classroom setting, solutions to ill-structured problems are evaluated in terms of viability (Jonassen, 1997). When evaluating the solution, it is important to consider whether the problem was solved within the identified constraints and whether learners reflected on domain specific knowledge. For this study, a rubric and two raters were used to evaluate the viability of the participant's response. Table 2 summarizes each step of design process and how it was addressed in the case example developed for this study.

Table 2

Steps Used to Design Instruction For Ill-Structured Problems

Step	Jonassen (1997)	Case example for this research study
1	Articulate problem context	Setting is a family service agency. Characters are named: Kayla (student), Ryan (supervisor),

		Hannah (client), Taylor (peer). Information about work and school experience, living situations, and leisure activities provided. Relationships between clients, student, and supervisor noted.
2	Introduce problem constraints	Constraints include client safety, ethical standards, and urgency of response time.
3	Locate, select, and develop cases	The problem (use of social media and technology) is based on an authentic, realistic problem commonly encountered in practice settings. This type of problem is challenging because agency policies vary and ethical standards are evolving. Different solutions to the problem are possible.
4	Support knowledge base construction	The case was constructed by consulting social work faculty for varying perspectives and opinions on the topic as well as examples of issues encountered by students in field placements.
5	Support argument construction	The problem can be conceptualized in several ways including issues related to privacy and confidentiality, practitioner competence, informed consent, and dual/multiple relationships. Multiple ethical standards can be considered to support and oppose arguments.
6	Assess problem solutions	The problem solution will be assessed using a rubric. Learner's ability to reflect on domain specific knowledge related to social work practice and ethical standards is included in the rubric.

Developing Case Examples

Critical among the steps for designing instruction is locating, selecting, and developing cases that resemble ethical dilemmas encountered in real world practice situations. Although case examples are widely used to teach ethics related concepts, there is very little guidance regarding how to formulate an effective case example. To address this issue, Kim et al. (2006)

reviewed 100 studies from multiple disciplines related to constructing case examples. Based on the literature review, the authors proposed a conceptual framework that included five core attributes for case example development. According to Kim et al. (2006), case examples should be: (1) relevant, (2) realistic, (3) engaging, (4) challenging, and (5) instructional.

First, the case example should be relevant to the needs and diversity of the learner while being situated in relevant practice settings. Second, the case example should be realistic. Realism can be added by including both pertinent and unnecessary information which simulates real world scenarios. Case examples should be engaging in that there is sufficient content to allow multiple levels of analysis, varying perspectives, and several decision-making opportunities. Case examples should be challenging, which can be accomplished by adding or withholding information, presenting atypical cases or multiple cases in sequence. Finally, case examples must be instructional so that learners can build on prior knowledge and instructors can assess the learning process.

Using case examples to highlight ethical dilemmas provide learners with an opportunity to identify problems, distinguish their positions from others, assess possible courses of action, and argue different points of view. Good case examples include concrete details and are open to interpretation, while being grounded in real-life scenarios (Jonassen, 2011). Furthermore, ethical dilemma case examples must be presented in a way that different solutions are possible and that the potential solution can be evaluated for effectiveness (Jonassen, 1997). Therefore, it is critical that ethical dilemma case examples are constructed in a manner that addresses each of these qualities.

Taken together, the characteristics of dilemmas as described by Jonassen (1997) and the conceptual framework for developing case examples proposed by Kim et al. (2006) share

common attributes. These attributes provided the structure for developing the ethical dilemma case example used in this study. Table 3 illustrates the key attributes and how they were used to develop the ethical dilemma case example.

Table 3

Key Attributes Used to Develop Ethical Dilemma Case Example

Kim et al. (2006) Case development key attributes	Jonassen (1997 & 2011) Characteristics of ethical dilemmas	Ethical dilemma case example in this research study
Relevant	Real life scenarios	Case example is situated in a family service agency, with teenage clients, an experienced social worker supervisor, and student intern. Ethical dilemma involves use of social media, which is current and relevant to professional practice. Example was drawn from recent experiences from social work faculty and students.
Realistic	Concrete details	Names and background information about characters are included. Common activities that occur in a family service agency (group session, building rapport) are described. Feelings and relationships are explored.
Engaging	Open to interpretation	Multiple ethical issues are presented in the case example including confidentiality, boundaries/multiple relationships, consultation/supervision, and professional competence.
Challenging	Different solutions possible	Due to the variety of ethical issues presented in the case example, different solutions to the dilemma are possible. Short and long term consequences may vary based on solution choices.
Instructional	Solutions evaluated	Ethical dilemma case example will be evaluated using a rubric which reflects learner's ability to identify the ethical issue(s), anticipate consequences, and determine action steps while applying

relevant standards from the NASW Code of Ethics.

Emotion and Case Examples

Researchers have recognized the influence emotion has on addressing ethical dilemmas (Connelly, Helton-Fauth, & Mumford, 2004; Gaudine & Thorne, 2001). Ethical dilemmas can be emotionally vexing, which is no surprise because real world problems are incredibly complex and oftentimes produce intense emotional reactions (Gaudine & Thorne, 2001). A person's underlying values and beliefs can produce an emotional reaction to an ethical dilemma, which can influence the ethical decision-making process (Pugh, 2017). In fact, the first response to an ethical dilemma is often an emotional one (Doyle, Miller, & Mirza, 2009).

Emotions can influence how information is processed and effect the amount of mental effort used in working memory. The effect of emotion on working memory has been investigated, with conflicting results (Lindström & Bohlin, 2011). Negative emotion has been found to impede problem solving and cognitive processing (Shackman et al., 2006), although a more recent study found that negative emotion may boost visual working memory quality (Xie & Zhang, 2016). Similarly, a study exploring working memory capacity found that individuals with higher working memory capacity were better able to infer the emotional state of another person and adjust their response to changing circumstances (Lynn et al., 2016). Emotional arousal has also been shown to promote cognitive energy (Watson & Tellegen, 1985). Another recent study explored the social regulation of emotion on long-term memory, finding that supportive relationships, such as handholding, can reduce negative affect and conserve cognitive resources (Flores & Berenbaum, 2016). Moreover, studies have shown that negative and positive words have a processing advantage over neutral words (Kousta, Vinson, & Vigliocco, 2009).

As these studies demonstrate, emotion affects cognition, yet ethical dilemma case examples regularly lack this important component. Case examples that do not include affect or emotion are less like the problems encountered in real life. Real-world problems are the primary means by which students analyze and apply knowledge (Marra et al., 2014). The use of case examples to pose complex yet real life ethical dilemmas that learners must negotiate and resolve, provide educators with an engaging alternative to didactic instruction in the classroom. In order for case examples to be interesting and reflective of real world problems, case narratives must include sufficient details in order to understand the case. The inclusion of too many seductive details, that is content which is interesting but not relevant to the instructional objectives, may detract from learning (Abercrombie, 2013). Likewise, case examples that contain too many complex causes may overwhelm novice learners (Johnson et al., 2012). Emotional content in case examples enhance attention and interest, which can result in better recall of case details (Thiel et al., 2013). Conversely, specific emotions, such as anger, have been found to inhibit ethical decision making while fear facilitated ethical decisions (Kligyte, Connelly, Thiel, & Devenport, 2013).

Complex, realistic ethical problems place cognitive demands on learners and have the potential to influence how decisions are made (Kligyte et al., 2013). Therefore, careful attention to case example construction and the accompanying narrative must be considered. For example, presenting alternative outcome scenarios reduced knowledge acquisition and resulted in less effective decision-making, likely due to the increased cognitive load imposed by the alternative scenarios (Peacock et al., 2013). The addition of contextual and individual factors, such as a clear description of the social context in a case example, has been shown to improve ethical decision making (Bagdasarov et al., 2013), while case examples that focus on the goals of the

characters resulted in weak learning outcomes (Harkrider et al., 2013b). Presenting cases incrementally, rather than holistically, was cognitively draining for learners and resulted in negative reactions to the learning activity (MacDougall et al., 2014). To promote learning, case examples should be realistic and emotionally evocative, using clear and simple causal information (Johnson et al., 2012). Unfortunately, most published studies describing the use of case examples as an instructional strategy do not evaluate the specific format or content of the cases and the subsequent effect on learning.

Ethical Sense Making

Evaluating and resolving ethical dilemmas requires learners to engage in a complex cognitive process to make sense of the novel or ambiguous situation (Caughron et al., 2011). This sense making process aids the learner in developing an understanding of the problem, while forming a mental model in which new or missing information can be integrated and interpreted. Several common strategies used during the sense making process include thinking about the problem circumstances, anticipating possible outcomes and decision alternatives, and considering the impact of decisions on others (Johnson et al., 2013). Prior experiences may also be used as a basis for understanding the problem and anticipating outcomes (Mumford et al., 2008). The mental model, once formed, aids learners in navigating the complexities of the dilemma and forming a solution that incorporates ethical reasoning (Brock et al., 2008). The efficacy of the sense making process and strategies to address complex ethical dilemmas have been found to increase the identification of key causes of the problem, anticipation of outcomes, and consideration of ethical implications (Johnson et al., 2012; Stenmark et al., 2010; Stenmark et al., 2011).

Many social work scholars have proposed ethical decision-making models to aid novice learners and guide more experienced practitioners facing complex ethical situations. Embedded within each of these models is the ethical sense making process to aid in the decision-making process. For example, Reamer (2006) describes a series of steps to aid in the ethical decision-making process, which includes the identification of ethical issues, an analysis of viable courses of action, the application of relevant ethical standards, and making a decision. Similarly, Dolgoff, Harrington, and Loewenberg (2012) propose a decision-making model that begins with identifying ethical problems and includes assessing alternative intervention strategies along with implementing the most appropriate strategy. Barsky (2010) proposes a framework for managing ethical issues that includes the recognition of ethical questions, considering multiple perspectives and consequences, and implementing decisions. Strom-Gottfried (2015) takes a slightly different approach with a six-question model (who, what, when, where, why, and how) which incorporates prior experiences, the urgency of action, and motives for selecting a course of action. Still others have proposed ethical decision-making models with catchy acronyms such as ETHIC, which stands for Examine, Think, Hypothesize, Identify, and Consult (Congress, 2000) and ETHICS-A which adds Select/Support and Advocate to the ETHIC model (Fossen et al., 2014) as a way to reinforce the ethical sense making strategies. Another model, ACED IT (Assess, Create, Evaluate, Decide, Implement, and Test) guides the ethical decision-making process using a cognitive tool to engage in problem identification, evaluating choices, and implementing the decision (Kreitler, Stenmark, Rodarte, & DuMund, 2014). Taken together, the ethical decision-making models and frameworks proposed by social work scholars support the ethical sense making process needed to address complex problems in practice situations.

Use of Case Examples in Social Work Education

In social work education, case examples are a common activity used to reinforce ethical thinking and behavior. For example, Ringel and Mishna (2007) used case examples focused on giving and receiving gifts, relationships with clients during treatment, and contact with clients after terminating services to review ethical guidelines in a safe, classroom environment. Rather than conducting empirical research on the effectiveness of these case examples, the authors provided practice principles as guidelines for fostering discussion in the classroom and creating a safe space for these difficult conversations to occur. Fossen et al. (2014) used case examples from various settings such as a domestic violence shelter, child protective services investigation, and a community mental health center to illustrate the steps in the ethical decision-making process. The use of case examples was not specifically evaluated in this study, however, the authors reported that one group of students achieved a passing score (80%) on the application of an ethics model to a case example. The authors noted that students needed additional field experience to complete the complex practice case.

In another study, human service students ($n = 166$) participated in a survey that presented 25 ethical scenarios in which participants indicated agreement or disagreement with the worker's decision (Pawlukewicz & Ondrus, 2013). The brief scenarios included common ethical issues such as confidentiality, dual relationships, and duty to warn. Findings were reported as percentages of agreement or disagreement with the human service worker decision. In this study, the highest percentage of agreement was related to the duty to warn and self-awareness scenarios (76%) and the lowest percentage of agreement was related to the gifts/solicitation scenarios (43%). The authors noted the usefulness of scenarios to discuss ethical behaviors and highlighted

the reality of practice-based dilemmas; however, the study did not evaluate the content or construction of the case examples.

Continuing education providers in medical social work used case examples to illustrate ethical concepts, such as patient autonomy and capacity, and to stimulate discussion among training participants (McCormick et al., 2014). In this study, researchers combined short lectures with the case example format. The case examples were used to illustrate ethical issues and stimulate discussion among the participants. The authors noted that this approach was familiar to participants, but was not an effective strategy because the cases did not address broader ethical principles. Dodd and Jansson (2004) used case examples from a hospital setting as a teaching tool to highlight the need for ensuring that patient and client needs were represented in ethical deliberations. The authors proposed that the organizational context of the case example should be included in the ethics discussions so that students were able to practice advocacy strategies, although no empirical data was provided to support this recommendation. Case examples were the primary instructional method used to teach trauma theory and practice classes in a MSW program (Abrams & Shapiro, 2014). The authors noted that social work profession would benefit from the development of standards and guidelines for writing cases and incorporating them into the classroom curriculum.

While case examples are frequently used when teaching social work ethics, very few experimental studies in social work have explored the effectiveness of this approach. One such study, however, was conducted to evaluate child protection social workers decision-making process using case examples (Stokes & Schmidt, 2012). The case examples were developed using a computer generated tool to analyze eight independent variables in decision-making. These variables included harm to the child, income, housing, culture, parental substance use,

family violence, resources and support, and cooperation. In this study, the case example was the unit of analysis. Respondents (n = 118) answered questions related to the case examples (n = 327) and multiple regression analysis was used to examine the effect of the variables on assessment of risk, service provision, and number of contact hours. The researchers concluded that while objective risk assessment tools can inform decision-making, social workers also relied on relationships and experience during the decision-making process.

Ethics Instruction in Social Work Education

A variety of instructional approaches can be found in the social work literature regarding the design and sequencing of ethics education in social work. Fossen et al. (2014) taught ethical decision-making to undergraduate social work students by infusing readings, short lectures, small group case studies, and discussions throughout the curriculum. Conversely, Edwards and Addae (2015) developed a stand-alone, web-based elective course on rural social work practice for undergraduate students that included ethical scenarios and the application of ethical standards using an ethical decision-making model. Similarly, Gray and Gibbons (2007) developed a five-week learning unit on ethical decision-making, with an emphasis on values and ethics, rather than frameworks for logical decision-making. Boland-Prom and Anderson (2005) approached teaching ethics by using dual relationship principles to evaluate complex ethical situations and apply the NASW Code of Ethics. Osmo and Landau (2001) claimed that teaching students the value of explicit argumentation in ethical decision-making would better prepare students to justify ethical decisions in practice. More recently, Groessl (2015) conceptualized a social work course that used problem based learning, reflective thinking, and the application of a decision-making model to teach ethics in a master's level social work program. Still others have proposed conceptual frameworks for teaching ethical behavior such as the Top 5 Ethical Lessons approach

(Castro-Atwater & Hohnbaum, 2015), the application of a common morality focusing on what one should not do (Bryan, 2006), and an ethical genogram that explores family of origin issues that impact ethical decision-making (Peluso, 2003). Each of these models described a structure by which ethical issues may be examined, although the authors did not conduct any research regarding the model's effectiveness. Interestingly, every approach noted above utilized case examples to demonstrate how the model worked or how it could be applied in the classroom, but no empirical research was conducted on the effectiveness of the approach on learning or a critical examination of the specific case examples that were used.

The use of case examples to teach ethical lessons is well-supported in the literature (Antes et al., 2009; Boland-Prom & Anderson, 2005; Dodd & Jansson, 2004; Fossen et al., 2014; McCormick et al., 2014; Pawlukewicz & Ondrus, 2013; Stokes & Schmidt, 2012) and can be found in a variety of disciplines including nursing (Park, 2013), social work (Ringel & Mishna, 2007), and business (Nelson, Smith, & Hunt, 2014). Case examples, if designed properly, can be enjoyable, engaging, and satisfying for learners as they promote critical thinking and require advanced reasoning skills (Harkrider et al., 2013a). Conversely, the use of case examples may also create anxiety or result in poor learning outcomes if the case examples are unnecessarily ambiguous or lack sufficient structure (Harkrider et al., 2013a). Thus, crafting case examples to address ethical dilemmas and other ill-structured problems requires a systematic approach in order to promote learning outcomes.

Purpose of the Study

Given the paucity of empirically supported social work literature related to the effectiveness of case examples to address ethical dilemmas, questions arise whether social work students are adequately prepared to address the complex ethical issues presented in professional

social work practice. More research is needed that focuses on the complexity of ethical issues as well as the process and outcomes of resolving ethical dilemmas (Doyle et al., 2009). The use of case examples is a constructive starting point. This study was designed to examine the effect of emotive content on knowledge acquisition and ethical sense making using an ill-structured case example among graduate social work students. Findings from this study will guide the development and presentation of effective case examples specifically related to ethics education and ill-structured problems.

Significance of the Study

Social workers encounter ethics related challenges on a daily basis. These real-world problems are incredibly complex and can produce intense emotional reactions. The use of case examples as an instructional strategy to teach ethical lessons is well-supported in the literature, however, case examples often lack an emotional or affective component. Given the importance of crafting cases for learners, more research is needed to better understand how to construct and present case examples to enhance learning outcomes specifically related to the influence of emotive content, since most real world ethical dilemmas encountered in social work practice evoke myriad emotional reactions.

This study was conducted to assess the influence of emotive content on knowledge acquisition and ethical sense making. The effect of emotive content on knowledge acquisition and ethical sense making is important because the goal of ethics education is to support ethical behavior in professional practice settings. If the presence of emotive content improves ethical sense making and knowledge acquisition, then the ethical lesson is more likely to be encoded and retrieved later. Likewise, the recognition of the underlying components of ethical sense making, such as the identification of relevant ethical issues and potential courses of action, should

enhance performance on future encounters with ethical dilemmas in practice settings. On the other hand, if the presence of emotive content hinders ethical sense making or knowledge acquisition, then the point of the ethical lesson may be lost. The recognition of ethical issues or action steps to resolve the ethical situation may be insufficient, which could lead to improper or unethical performance in practice settings.

Research Questions

The following research questions guided the study:

1. What effect does the presence of emotive content have on knowledge acquisition?
2. What effect does the presence of emotive content have on ethical sense making?
3. What effect does the presence of emotive content have on feelings toward the main characters in the case example?

CHAPTER II

METHOD

Participants and Setting

The study population was graduate social work students enrolled at a University on the coastal U. S. [hereafter referred to as School of Social Work]. The School of Social Work offers a Master of Social Work degree (MSW). Students can obtain the MSW degree in three ways at the University. Students with a Bachelor of Social Work (BSW) may obtain the MSW degree in one year of full-time study as an advanced standing student by completing 40 credit hours of study. Full-time students can obtain the MSW degree in two years by completing 62 credit hours of study. Distance education students complete the 62 credit hour MSW degree in three years. Regardless of the program type, students must complete a combination of academic coursework and field practicum hours in an agency setting. Coursework includes a combination of required generalist courses and advanced courses in the student's chosen concentration. The generalist courses focus on policy, human behavior, practice, and research methods. The advanced courses include electives as well as advanced topics in evaluation, practice, and policy. Additionally, students must complete two community based field practicums. In order to graduate with a MSW, students cannot earn more than nine credit hours of low pass (79 or lower) or any credit hour below 69 in a social work course.

The School of Social Work does not offer an academic course in ethics; rather ethics content is infused throughout the curriculum and is addressed in each social work course. All full-time and distance education students are required to attend a two-hour lecture on ethics during orientation to the social work program which includes an overview of the NASW Code of Ethics, social work values and principles, and an ethical decision-making model.

To participate in this study, students had to be enrolled in academic coursework at the School of Social Work. Students could be concurrently enrolled in the field practicum; however, this was not a requirement to participate in the study nor did it make a student ineligible to participate. Students who earned a grade of F in any social work course were excluded from the study. There was no minimum GPA required to participate. The study took place in the fall of 2017, thus only students currently enrolled at the School of Social Work in the fall 2017 semester were eligible to participate. Students from the full-time ($n = 22$), advanced standing ($n = 5$), and on-campus distance education program ($n = 14$) participated on three dates, September 18 ($n = 20$), September 19 ($n = 16$), September 22 ($n = 10$). Students from the off-campus distance education program participated on October 6 ($n = 25$).

Research Design

The current study employed a posttest only control group design. The independent variable for this study was the presence or absence of emotive content in the case example. The dependent variables were knowledge acquisition, ethical sense making, and feelings toward the main characters. A random number generator was used to create a list of random numbers from 1 to 100 to distribute the study materials. Participants randomly sat at any seat with a study packet. Study materials were contained within plain, white envelopes, each with a unique identification number between 1 and 100. All study materials were identical, except for the case example. Numbers 1 to 50 were used for the emotive case example (experimental group) and numbers 51 to 100 were used for the non-emotive case example (control group).

Knowledge acquisition was assessed using a seven-item knowledge measure which included context-specific questions (e.g. character names, primary setting for service) and principle-based items (e.g. central ethical issue in the case, most unethical behavior). The

questions were multiple-choice with four possible answers for each question, only one answer was correct. The sum of correct answers was used to produce an overall knowledge acquisition score, with seven being the highest possible score.

Ethical sense making was assessed using three open ended questions and the overall application of ethical standards. The three open ended questions were (1) the identification of relevant ethical issues in the case example, (2) the ability to analyze consequences or outcomes, and (3) the selection behaviors to resolve the dilemma. The overall application of ethical standards was assessed based on responses to the three open ended questions. The open ended questions and application of the ethical standards were evaluated by the researcher and a second rater using a four-point scale rubric. The sum of the scores was used to produce an overall ethical sense making score, with 16 being the highest possible score. A fourth open ended question was used to solicit a description of feelings toward the two main characters. The researcher and a second rater used a four-point scale rubric to evaluate the response to this question. The highest possible score was four.

Instruments and Materials

Case example. A new case example was developed for this study because there were no published social work case examples that were suitable. The case example was related to several common, yet complex ethical issues confronted by social workers in practice settings (Souders & Stefaniak, 2017). For this study, the case example focused on a social work student who was completing a field practicum in an agency setting. The social work student was working with teenage clients under the supervision of a more experienced social worker. Ethical issues related to privacy/confidentiality as well as boundaries/multiple relationships were highlighted as these are frequently encountered in practice settings. Additionally, the use of social media between the

social work student and client was introduced. This is a relevant ethical issue because the NASW Code of Ethics in effect at the time of the study did not address this issue on point and agency policies may be absent or incongruent with practice behaviors.

The case example was altered based on the presence or absence of emotive content. For this study, emotive content was defined as information related to the character's emotional reactions or feelings, background, beliefs, physical appearance, and/or goal focus of the character. Emotive content was used to develop the character's personalities, relationships, and reactions to one another. While this study was not exploring any one dimension of emotive content, the use of positive and negative affective words were used to enhance the case example along with additional descriptive emotive content. Affective words were drawn from the Affective Norms for English Words (ANEW) research, which has been conducted over the last two decades, and provides normative emotional ratings for almost 14,000 words (Bradley & Lang, 1999; Stevenson, Mikels, & James, 2007; Warriner, Kuperman, & Bysbaert, 2013). As an example, the presence of emotive content in one sentence of the case example read like this, "To get to know Hannah, Kayla asked about her family and friends **as she was curious about what Hannah did for fun and what her experiences at home were like."**

[bold indicates additional emotive language and underline indicates affective words]. The absence of emotive content in the same sentence would read like this, "To get to know Hannah, Kayla asked about her family and friends." The full case example without emotive content can be found in Appendix A. The full case example with emotive content can be found in Appendix B, with additional emotive language bolded and affective words underlined for emphasis only. The bolded and underlined language did not appear in the actual case example used in the study. Table 4 provides a summary of key differences between the emotive and non-emotive case example.

Table 4

Examples of Differences Between the Emotive and Non-Emotive Case Example

	Emotive case example	Non-emotive case example
Demographic background of characters	Kayla is a 22 year old, 4.0 graduate student. Hannah is 14 years old and lives with her mother.	No age or GPA provided for Kayla. No age or living situation provided for Hannah.
Personality/demeanor	Kayla is anxious about working with teens and looks younger than her chronological age. Hannah is a shy, quiet girl and keeps to herself.	No information about Kayla's physical appearance or feelings about working with teens. No information provided about Hannah's personality.
Physical appearance	Hannah is thin, wears baggy clothes.	No additional information provided about Hannah's physical appearance.
Goal focus/motivation	Ryan has worked with other students and is eager to work with Kayla.	No additional information about Ryan's motivation to work with Kayla.
Affective Norms for English Words	There were 24 additional affective words in the case example, such as surprising, jealous, anxious, and nervous.	No additional affective words used.

Knowledge acquisition. The instrument used to assess knowledge acquisition was developed by the researcher. The knowledge acquisition measure assessed the extent to which participants remembered and processed basic information about the case example. The knowledge measure contained seven multiple-choice questions, with four possible answer choices in each question (see Appendix C). The knowledge measure included context-specific questions (e.g. character names, primary setting for services services) and principle-based items (e.g. relevant ethical standards, primary ethical dilemma in the case). Participants selected one

answer per question, with each correct answer yielding one point. The sum of correct answers produced an overall knowledge score, with seven being the highest possible score.

Ethical sense making. Assessing performance on ill-structured problems is best accomplished by constructing a response, rather than selecting a response from predefined answers (Jonassen, 2014). Thus, the ethical sense making component of the study required written responses to the open-ended questions. Ethical sense making was based on four constructs: (1) the identification of the relevant ethical issues, (2) an analysis of potential consequences or outcomes, (3) resolution or action steps to address the ethical dilemma, and (4) the application of relevant ethical standards (see Appendix D). The open-ended questions to assess ethical sense making were chosen because of the heavy emphasis in the social work literature regarding these elements (Congress, 2000; Fossen, et al., 2014; Reamer, 2006; Strom-Gottfried, 2015) and several validated instruments used to assess ethical decision-making contain these elements (Carlin et al., 2011; Idhrraratana & Kaemkate, 2012; Miñano, Moreno-Romero, & Pérez-López, 2017; Shuman et al., 2004).

Feelings toward main characters. Another open ended question was used to assess feelings toward the two main characters in the case example. The main purpose of the study was to examine the effective of emotive content, therefore assessing feelings toward the main characters was vital. Research suggests that emotions are associated with ethical choices and decision making (Connelly et al., 2004; Gaudine & Thorne, 2001).

Use of rubrics to evaluate written responses. Likewise, complex, ethical dilemmas, like the one used in this study, do not typically have universally accepted answers, thus the use of rubrics is also recommended (Jonassen, 2014). A scoring rubric was developed to evaluate the

written responses to the open-ended questions. Due to the potential subjective nature of scoring these open-ended questions, a second rater was used to address reliability.

There are no known rubrics that have been specifically designed to assess responses to ethical dilemma case examples among social work professionals, however, several instruments from other disciplines have been developed. The Pittsburgh-Mines Engineering Ethics Assessment Rubric (PMEAR Rubric) measured ethical reasoning for engineering dilemmas using a scale (1 = low to 5 = high) to rate five attributes of ethical decision-making (Shuman et al., 2004). Another instrument, the EDM assessment rubric, measures nursing student's ethical decision-making ability using a four-point scale (0 = low to 3 = high) based on five components of ethical decision making (Indhrratana & Kaemkate, 2012). The Health Professional Ethics Rubric assesses ethical reasoning among health professionals using a three-point scale (1 = insufficient to 3 = proficient) on four ethics learning outcomes (Carlin et al., 2011). More recently, a four-component rubric using a four-point scale was developed to measure the analysis of ethical dilemmas among IT engineering students (Miñano et al., 2017). The key features from these established rubrics was synthesized along with the social work literature on ethics education and decision-making to develop the Social Work Ethical Sense Making Rubric (SWESMR).

Social Work Ethical Sense Making Rubric (SWESMR). The first component of the SWESMR is the identification of ethical issues. The *identify* component is consistent with the first item on the PMEAR rubric, the EDM assessment rubric, the Health Professional Ethics Rubric, and the IT engineering rubric. The *identify* component was assessed based on participant's ability to identify relevant ethical issues in the case example. The extent to which relevant ethical issues were identified was evaluated using a four point scale (1 = poor to 4 =

excellent). The criteria used to judge the identification of ethical issues was the number and accuracy of the ethical issue(s) identified, the use of facts from the case example to support the issue, speculation about how the facts influenced the ethical situation, and recognition of ethical choices (see Appendix E).

The second component of the SWESMR is *analysis*, which includes the ability to consider different points of view and possible consequences, while comparing alternatives and professional responsibilities. This component is consistent with the third attribute (analysis) from the PMEAR Rubric, the third attribute (develop alternatives for analysis) from the EDM assessment rubric, the second outcome (options for addressing the issue) from the Health Professionals Ethics Rubric, and the second item (analysis) from the IT engineering professional's rubric. The *analysis* component was assessed based on participant's ability to analyze the ethical situation by describing possible consequences or outcomes that could result from the case example while comparing and contrasting alternatives. The extent to which the response sufficiently explored various alternatives and consequences was evaluated using a rubric that contained a four point scale (1 = poor to 4 = excellent). The criteria used to judge the analysis of the ethical situation included the consideration of multiple viewpoints or perspectives, comparing and contrasting alternatives, and consideration of short and long-term consequences (see Appendix E).

The third component of the SWESMR is resolution. The *resolve* component of the rubric rated the ability to propose action steps to address or resolve the ethical dilemma. This component is consistent with the fifth attribute (resolution) of the PMEAR Rubric, the fourth component (decision-making by choosing the best alternative) of the EDM assessment rubric, the third outcome (personal action) of the Health Professional Ethics Rubric, and the third

component (decision) of the IT engineering rubric. The *resolve* component was assessed based on participant's ability to describe what action(s) they would take, provide justification for the decision, and discuss how they would plan to implement and evaluate the decision. The resolution behavior or action steps were evaluated using the SWESMR rubric that contained a four point scale (1 = poor to 4 = excellent). The criteria considered in assessing the resolution included the development of a realistic plan, integrity of the plan, how the plan would be implemented and evaluated, and nuances of implementation.

The fourth component of the SWESMR focused on the application of ethical standards from the social work code of ethics. The application of a *professional code* is not explicitly noted in the PMEAR or EDM assessment rubric but is consistent with the fourth component (identify professional values/guidelines) of the Health Professional Ethics and the fourth component (use professional code of ethics) of the IT engineering rubric. In social work practice, students and practitioners are expected to be knowledgeable about the NASW Code of Ethics (CSWE, 2017b; NASW, 2017b) and comply with the standards and values of the profession (NCSWCLB, n.d.b). The fourth component of the SWESMR was not evaluated using a separate open-ended question, but was judged based on the responses to all open ended questions. The application of ethical standards was evaluated using a rubric that contained a four point scale (1 = poor to 4 = excellent). The criteria used to judge this component was the correct identification of ethical standards from the social work code of ethics, description of alternative standards that may result in different outcomes, and the merits of differing options. The open ended questions and application of ethical standards used to measure the construct of ethical sense making had an acceptable level of internal consistency, as determined by a Cronbach's alpha of 0.740.

The final component of the SWESMR is the *description of feelings* toward the two main characters. While the assessment rubrics described above did not specifically address feelings, the purpose of this study was to explore the effect of emotive content in case examples, therefore assessing negative and positive emotions toward the main characters was essential. The final component of the SWESMR focused on the *description of feelings* toward the two main characters. Participants were asked to describe their feelings toward the two main characters in the case example. The description was evaluated using a rubric that contained a four point scale (1 = poor to 4 = excellent). The criteria used to assess the description of feelings included the degree to which feelings toward one or both characters were described, number of affective words used, and influence of feelings on ethical sense making (see Appendix E).

Validity and reliability. To address the validity and reliability of measurement instruments and the case example, a field test was conducted with a small group of recent graduates of the MSW program. The recent graduates read the case example and answered the study questions. This researcher solicited feedback regarding the case example, study questions, general instructions, and time needed to complete the study. Revisions to the case example, measurement instruments, and general instructions were made based on their responses. The amount of time needed to complete the field test was noted to ensure sufficient time was allotted for the actual study. Social work faculty and field instructors engaged in social work practice were used to assess the appropriateness and relevance of the case example to current social work practice situations. Face validity was established by these experts in the social work and counseling field.

Two raters were used to assess the open-ended responses using the SWESMR. The raters were social work faculty with over five years' experience teaching graduate social work students

and currently licensed to practice clinical social work. These requirements were necessary to ensure that the raters had sufficient experience teaching and grading graduate level written responses using rubrics and were familiar with the current NASW Code of Ethics. This researcher reviewed the SWESMR with the second rater, clarified meaning and intent for each item on the SWESMR. Then, the raters independently scored five responses using the SWESMR. The raters met again to review the responses and discuss ratings. The five responses were used to establish consistency of meaning and interpretation of the SWESMR rubric. The raters independently scored the remaining open ended responses using the SWESMR. While the scoring rubric may not eliminate all scoring variations, rubrics can reduce the occurrence of disagreements (Moskal & Leydens, 2000). Only whole numbers (1 = poor to 4 = excellent) were used by the raters when scoring the SWESMR.

Scores for each open ended question and the application of ethical standards were analyzed for each rater to determine how much they differed. The analysis revealed that the ratings for each open ended question were comparable and never differed by more than one point. For example, Rater 1 may have scored a 3 for a response to the *identify* component of the rubric, and Rater 2 may have scored a 2 for the same response. The difference in rater scores for each open ended question were minimal, suggesting no further review or action was needed. The scores used for statistical analysis were the average scores between the raters. Inter-rater reliability was calculated using Cohen's kappa. There was moderate agreement between the two rater's judgments, $k = .583$, 95% CI [.452, .714], $p < .001$.

Procedure

The proposed study was presented to the Institutional Review Board (IRB) at Old Dominion University (ODU) and the IRB at the University on the coastal U. S. for approval

prior to any data collection. The IRB of the University on the coastal U. S. served as the IRB of record. Following IRB approval, a solicitation email was sent to all MSW students at the School of Social Work. The email briefly described the study and requested participation from students during their lunch break on one of four dates. Fliers were posted throughout the School of Social Work building to recruit students in the Full-Time, Advanced Standing, and on-campus Distance Education Programs. Fliers were also posted near the student mailboxes to recruit students in the off-campus Distance Education program. Fliers were placed in student mailboxes in both locations (see Appendix F). Students who were interested in participating in the study indicated their interest by sending an email to the researcher with the date of expected attendance or completing the bottom half of the flier. The researcher confirmed the date of participation via email. The email included a brief outline of how the time (1 hour and 45 minutes) would be used including eating lunch, participating in the study, and entering the drawing for the gift cards. Lunch was provided to study participants (consisting of pizza and soft drinks), since students did not have time to complete the study and eat lunch before the afternoon classes began. Students completed the study in a quiet classroom space during the lunch break. The amount of time allotted for the study was based on the results from the field test. All participants were able to complete the study in less than 1 hour and 45 minutes.

All study materials were contained in two packets. The outside of both packets included a unique identification number and all pages of the study material were labeled with the same unique identification number. The first packet contained the case example, open ended questions, and a copy of relevant sections from the NASW Code of Ethics (see Appendix G). The case example was single-spaced and less than two pages in length. The case example that included emotive content was longer (841 words) than the case example without emotive content (484

words). The second packet contained the knowledge acquisition questions and demographic related questions such as age, gender, ethnicity, MSW program type, field practicum and social work experience.

All study materials were contained within the packet and were photocopied on white paper. Each packet contained a unique identification number, between 1 and 100. Numbers 1 to 50 were used for the emotive case example (experimental group) and numbers 51 to 100 were used for the non-emotive case example (control group). A random number generator was used to generate one list of random numbers from 1 to 100. The packets were placed in the order created by the random number generator and distributed in that order. Prior to participants entering the classroom, the researcher distributed the first packet at each seat, starting from the front of the classroom and proceeded left to right, until all available seats had a packet. Upon entering the classroom, participants sat at any unoccupied seat in which the study materials had been placed.

After selecting a seat, participants reviewed and signed the informed consent (see Appendix H). Participants did not record their name on any of the study materials contained within the packet. Participants opened the first packet and were instructed to read the case example and respond to the question prompts related to the case example. Participants were asked to identify the key ethical issues in the case example, analyze the situation for possible consequences or outcomes, suggest actions/behaviors to resolve the dilemma that were congruent with ethical practice, and describe their feelings toward the two main characters. Participants were encouraged to reference relevant standards from the NASW Code of Ethics in their answers. Relevant standards from the Code of Ethics were contained in the packet.

After reading the case example and responding to the open-ended question prompts, participants returned the first packet to the researcher and received a second packet which had an

identical unique identification number as the first packet. The second packet contained the knowledge acquisition questions and demographic related questions. Participants were not permitted to access the first packet while completing the second packet. All questions were presented in a fixed order. Upon completion of the second packet, participants returned the packet to the researcher. Participants were thanked and given an opportunity to enter a drawing to win one of twelve \$25.00 gift cards to the University bookstore. Additionally, students who completed the study were provided with a certificate of attendance which could be used to satisfy a portion of the field practicum continuing education requirement.

Data Confidentiality and Security

Participant names were included on the informed consent. The signed informed consent document was secured in a locked file box, in a locked file cabinet. The office with the locked file cabinet is accessible only to individuals with an electronic pass card. Participant names were not linked to the unique identification number during the study. The unique identification number was included on the study materials, but no participant names. There were no follow-up visits or meetings required once the study materials had been completed. Participant names were not associated with the study materials nor matched to the unique identification number.

Participants were asked to provide their name, email, address, and telephone number at the conclusion of the study if they wished to enter a drawing for one of twelve \$25.00 gift cards to the University Bookstore. The information contained on the gift card entry was not associated with the unique identification numbers used in the study. This information was kept in a locked file box, in a locked file cabinet, separate from the research data.

The study materials were scanned and uploaded to a secure server that is password protected. Any files that were transmitted electronically were password protected. The password

was communicated to the receiver using a different medium than which the files were transmitted.

All study materials were secured in a locked file cabinet, in a locked office. All electronic files were password-protected and uploaded to a secure server. Access to the participant responses is limited to key personnel only. An electronic backup of the data is being kept on a password-protected external data storage device and stored in a secure, locked file box separate from the study materials. The written and electronically stored data will be maintained for seven years.

Informed Consent

Graduate students enrolled at the School of Social Work were the intended target population. According to the School of Social Work administration, Master of Social Work students are over 18 years of age. Nevertheless, current students must not feel coerced to participate in the study nor fear a penalty for not participating. Because this researcher is a faculty member at the School of Social Work and an instructor for a small portion of the students who were eligible to participate in the study (13 of almost 300 students), extra care was exercised to ensure the voluntary nature of participation for all students. All recruitment materials emphasized the voluntary nature of participation. Likewise, students completed an informed consent document that reiterated the voluntary nature of participation before beginning the study. Participants enrolled in their Generalist Field Practicum (typically 1st year for full-time students and 2nd year for distance education students) are required to obtain continuing education hours during the fall and spring semester of their generalist placement. Participants who completed the study received a certificate of participation that could be used to satisfy a portion of their continuing education hours for the fall 2017 semester. Students have many other

options for easily obtaining their continuing education hours including attendance at the School's Clinical Lecture Series, training at Area Health Education Centers, human service agency sponsored events, as well as NASW Local Program Unit events. Obtaining a certificate of participation for completing the study was the only way in which student's academic career was influenced and, as noted, there were many other options for obtaining the continuing education hours throughout the academic year.

All participants were required to read and sign an informed consent (see Appendix H) Voluntary written consent was obtained because the researcher is currently a clinical faculty member at the School of Social Work. The informed consent document provided names and contact information for the researcher, a description of the study, risks and benefits of participating in the study, duration of the study, costs, payments, and incentives to participating, confidentiality, withdrawal privilege, and contact information for questions. Participants were presented with a copy of the informed consent for their own records.

Data Analysis

Knowledge acquisition was assessed using a seven item multiple-choice posttest, assigning one point for each correct answer. The sum of correct scores was used to produce an overall knowledge score, with seven being the highest. An independent samples *t*-test was used to analyze the difference in scores between the emotive and non-emotive groups. Ethical sense making was assessed based on responses to three open ended questions and the application of ethical standards using a four point scale rubric and two raters. The rubric scores were summed, and an independent samples *t*-test was used to analyze the difference in scores between the emotive and non-emotive groups. Feelings toward the main characters was assessed based on the response to an open ended question, using a four point scale rubric and two raters. The effect of

emotive content on feelings toward the main characters was assessed using the Mann-Whitney U test. This statistical test was appropriate to compare the outcomes between the emotive and non-emotive groups because the dependent variable (feelings toward the main characters) was assessed using a rubric which resulted in ordinal data. Table 5 provides a summary of each research question, independent and dependent variables, data source, and data analysis.

Table 5

Summary of research questions, variables, data source, and data analysis

Research Question	Variables	Data Source	Data Analysis
1. What effect does the presence of emotive content have on knowledge acquisition?	Independent variable-presence or absence of emotive content Dependent variable - knowledge acquisition	7 item multiple choice post-test	<i>t</i> -test
2. What effect does the presence of emotive content have on ethical sense making?	Independent variable-presence or absence of emotive content Dependent variable - ethical sense making	3 open ended questions and application of ethical standards using 4-point rubric and two raters	<i>t</i> -test
3. What effect does the presence of emotive content have on feelings toward main characters?	Independent variable- presence or absence of emotive content Dependent variable - feelings toward characters	Open ended question assessing feelings using 4-point rubric and two raters	Mann-Whitney U test

Summary

This study was conducted to assess the influence of emotive content on knowledge acquisition and ethical sense making. The knowledge acquisition questions were designed to assess whether the inclusion of emotive content influenced participant's ability to remember and

process basic information from the case. Therefore, students who are able to remember the case example and ethical lesson contained in the case are more likely to encode and retrieve the information later.

The effect of emotive case content on ethical sense making is important because the goal of ethics education is to promote competent and ethical practice with clients and the community. Ethical sense making requires students to identify relevant ethical issues, analyze the situation, and take steps to resolve the dilemma, while not violating prevailing ethical standards. Using case examples that accurately represent real life situations provided students with opportunities to engage in ethical sense making activities in a safe learning environment.

CHAPTER III

RESULTS

This chapter presents the results of testing three research questions addressing the effect of emotive content on the dependent variables of 1) knowledge acquisition, 2) ethical sense making, and 3) feelings toward the main characters. As noted previously, knowledge acquisition was assessed using a seven-item knowledge measure consisting of context-specific and principle based multiple choice questions. The sum of correct scores was used to produce an overall knowledge acquisition score. The Social Work Ethical Sense Making Rubric (SWESMR) was used by two raters to assess responses to the open-ended questions regarding ethical sense making and feelings toward the main characters, using a four point rubric. The raters were social work faculty with over five years' experience teaching graduate social work students and licensed to practice clinical social work. This researcher reviewed the SWESMR with the second rater, clarified meaning and intent for each item on the SWESMR. Then, the raters independently scored five participant responses using the SWESMR. The raters met again to review the responses and discuss ratings. The five responses were used to establish consistency of meaning and interpretation of the SWESMR rubric. The raters independently scored the remaining open-ended responses using the SWESMR. Inter-rater reliability was calculated using Cohen's kappa, $k = .583$, 95% CI [.452, .714], $p < .001$, resulting in moderate agreement between the two raters (Viera & Garrett, 2005).

Emotive and Non-Emotive Groups

A total of 71 MSW students took part in the study. The emotive group ($n = 37$) was comprised of 32 women and five men. The non-emotive group ($n = 34$) was comprised of 30 women and four men. To examine gender differences between the groups, a Fisher's exact test

was conducted to determine if there was an association between gender and the participant groups. A Fisher's exact test was used because not all expected cell frequencies were greater than five. There was no statistically significant association between gender and the participant groups, $p = 1.0$.

The mean age for all student participants was 29.63 ($SD = 8.37$). The minimum age was 21 and the maximum age was 55 (range = 34). To examine age differences, an independent samples t -test was run to determine if there were differences in the mean age between the emotive and non-emotive groups. There was no statistically significant difference in mean age between the emotive ($M = 29.70$, $SD = 8.55$) and non-emotive groups ($M = 29.55$, $SD = 8.29$), $t(69) = .072$, $p = .943$.

In terms of students currently in a field placement ($n = 54$), the majority were in their foundation/generalist placement ($n = 40$) as compared to the concentration placement ($n = 14$). The emotive group was comprised of 28 students who were in a field placement and 9 students who were not in field. The non-emotive group was comprised of 26 students who were in a field placement and 8 students who were not in field. A chi-square test of association was conducted to determine if there was an association between students currently in a field placement and the student groups. There was no statistically significant association between being in a field placement and the study groups, $\chi^2(1) = .006$, $p = .938$.

Overall, most students were not currently employed in the social work field ($n = 51$). The emotive group was comprised of 10 students who were employed and 27 students who were not employed. The non-emotive group was comprised of 10 students who were employed and 24 students who were not employed. A chi-square test of association was conducted to determine if there was an association between students currently employed and the study groups. There was

no statistically significant association between being in a field placement and the study groups, $\chi^2(1) = .050, p = .823$.

In response to an open-ended question regarding race/ethnicity, students in the emotive group were: White/Caucasian ($n = 28$), Black/African American ($n = 6$), Hispanic/Latinix ($n = 1$), White/Caucasian and Hispanic/Latinix ($n = 1$), and American Indian ($n = 1$). Students in the non-emotive group were: White/Caucasian ($n = 25$), Black/African American ($n = 3$), Hispanic/Latinix ($n = 2$), White/Caucasian and Hispanic/Latinix ($n = 1$), Black/African American and Indian/Asian ($n = 1$), Black/African American and Puerto Rican ($n = 1$), and Mixed ($n = 1$). Table 6 shows the demographic characteristics of the emotive and non-emotive groups.

Table 6

Demographic Characteristics of the Emotive and Non-Emotive Groups

Treatment Group	Female Gender <i>n (%)</i>	Age <i>M (SD)</i>	In Field Placement <i>n (%)</i>	Employed <i>n (%)</i>	Caucasian Ethnicity <i>n (%)</i>
Emotive ($n = 37$)	32 (86.5%)	29.70 (8.55)	28 (75.7%)	10 (27.0%)	28 (75.7%)
Non-emotive ($n = 34$)	30 (88.2%)	29.55 (8.29)	26 (76.5%)	10 (29.4%)	24 (70.6%)

Knowledge Acquisition

Research Question One explored the effect of emotive content on knowledge acquisition. The knowledge acquisition measure assessed the extent to which participants remembered and processed basic information about the case example. The knowledge measure contained seven multiple-choice questions, with four possible answer choices in each question. The knowledge measure included context-specific questions (e.g. character names, primary setting for services)

and principle-based items (e.g. relevant ethical standards, primary ethical dilemma in the case example). Participants selected one answer per question, with each correct answer yielding one point. The sum of correct answers produced an overall knowledge score, with seven being the highest possible score.

Correct responses to the context specific questions for both groups included: the primary setting in which the case example occurred ($n = 70$), the name of the social work student ($n = 67$), and the main reason client was receiving services ($n = 43$). Correct responses to the principle-based items for both groups included: the central ethical issue ($n = 26$), most relevant ethical standard ($n = 30$), most unethical behavior social worked engaged in ($n = 44$), and minimizing ethical risk ($n = 50$). Table 7 shows the number of correct responses to the knowledge acquisition questions for the emotive and non-emotive groups. All response results for the seven knowledge acquisition questions can be found in Appendix I.

Table 7

Correct Responses to Knowledge Acquisition Questions by Treatment Group

Treatment Group	Context-based Questions			Principle-based Questions			
	Primary Setting	Social Worker Name	Reason for Services	Central Ethical Issue	Relevant Ethical Standard	Most Unethical Behavior	Minimize Ethical Risk
Emotive	36	34	20	13	13	24	23
Non-emotive	34	33	23	13	17	20	27

Knowledge acquisition scores were normally distributed with a skewness of $-.151$ ($SE = .285$) and kurtosis of $-.980$ ($SE = .563$). To examine mean differences between the emotive and non-emotive groups, an independent samples t -test was conducted. There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .688$). There was a statistically significant difference in knowledge acquisition scores between the emotive and non-emotive group, $t(69) = -2.22$, $p = .030$, $d = 0.53$. The non-emotive group mean knowledge

acquisition score ($M = 4.91, SD = .96$) was higher than the emotive group mean knowledge acquisition score ($M = 4.40, SD = .96$).

The extent to which knowledge acquisition scores were associated with respondent characteristics was also assessed. Age was not normally distributed, based on a skewness of 1.360 ($SE = .285$). A Spearman correlation was run to assess the relationship between age and knowledge acquisition scores. Preliminary analysis showed a weak negative correlation between age and knowledge acquisition scores $r_s = -.092, p > .05$.

An independent samples t -test was run to determine if there were differences in knowledge acquisition scores between males and females. There was no significant difference in the mean knowledge acquisition scores between males ($M = 4.55, SD = 1.13$) and females ($M = 4.66, SD = .97$), $t(69) = .298, p = .766$.

An independent samples t -test was run to determine if there were differences in knowledge acquisition scores between students in a field placement and not in a field placement. There was homogeneity of variances, as assessed by Levene's test of equality of variances ($p = .876$). There was a statistically significant difference in the mean scores between students in a field placement or not in a field placement, $t(69) = 2.02, p = .047, d = 0.56$. Students currently in a field placement had higher knowledge acquisition scores ($M = 4.77, SD = .96$) than students not in a field placement ($M = 4.23, SD = .97$).

An independent samples t -test was run to determine if there were differences in knowledge acquisition scores between students currently employed in the social work field or not employed. There was homogeneity of variances, as assessed by Levene's test of equality of variances ($p = .508$). There was no statistically significant difference in the mean scores between students currently employed in the social work field ($M = 4.35, SD = 1.03$) or not currently

employed ($M = 4.76$, $SD = .95$), $t(69) = -1.61$, $p = .112$. Table 8 provides a summary of the two significant differences found for knowledge acquisition scores.

Table 8

Significant Differences in Knowledge Acquisition Scores

Comparison	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
<u>Treatment Group</u>				-2.22	69	0.030	0.53
Emotive	37	4.40	0.96				
Non-emotive	34	4.91	0.97				
<u>In Field Placement</u>				2.02	69	0.047	0.56
Yes	54	4.77	0.96				
No	17	4.23	0.97				

Ethical Sense Making

Research Question Two explored the effect of emotive content on ethical sense making. Ethical sense making was assessed using a four-point rubric and two raters. The raters independently scored responses to three open ended questions (identification of ethical issues, analysis of the ethical situation, resolution of the ethical situation) and assessed responses from all questions for the application of ethical standards. The sum of the scores was used to produce an overall ethical sense making score, with 16 being the highest possible score. Cronbach's alpha was run to determine the internal consistency of the four items to measure the construct of ethical sense making, returning an acceptable level of internal consistency, as determined by a Cronbach's alpha of 0.740.

A summary of scores to measure ethical sense making for each rater using the SWESMR is included in Table 9. The highest possible score for each item on the SWESMR was four, with a possible total score of 16. The total mean score for Rater 1 was 12.15 ($SD = 2.16$) and the total mean score for Rater 2 was 12.35 ($SD = 2.11$).

Table 9

Summary of Ethical Sense Making Scores by Rater 1 and Rater 2

Ethical Sense Making Component	Rater 1		Rater 2	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Identify ethical issues	3.03	.75	3.32	.65
Analyze ethical issue	3.03	.75	3.07	.74
Resolve ethical dilemma	2.96	.87	2.96	.85
Application of ethical standards	2.94	.61	3.00	.61
Total	12.15	2.16	12.35	2.11

Ethical sense making scores were normally distributed a skewness of $-.370$ ($SE = .285$) and a kurtosis of $.416$ ($SE = .536$) An independent t -test was run to determine if there were differences in the ethical sense making scores between the emotive and non-emotive groups. There was no significant difference in the mean ethical sense making scores between the emotive group ($M = 11.93$, $SD = 11.93$) and the non-emotive group ($M = 12.60$, $SD = 2.05$), $t(69) = -1.35$ $p = .180$.

The extent to which ethical sense making scores were associated with respondent characteristics was also assessed. Age was not normally distributed, based on a skewness of 1.360 ($SE = .285$). A Spearman correlation was run to assess the relationship between age and ethical sense making scores. Preliminary analysis showed there was a weak negative correlation between age and ethical sense making scores, $r_s = -.123$. $p > .05$.

An independent samples t -test was run to determine if there were differences in ethical sense making scores between males ($n = 9$) and females ($n = 62$). There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .587$). There was a statistically significant difference in the mean ethical sense making scores between males and

females, $t(69) = 3.12, p = .003, d = -1.11$. Females scored higher on ethical sense making ($M = 12.53, SD = 1.94$) than males ($M = 10.33, SD = 2.22$).

An independent samples t -test was run to determine if there were differences in ethical sense making scores between students currently in a field placement ($n = 54$) and not in a field placement ($n = 17$). There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = 1.063$). There was no statistically significant difference in the mean ethical sense making scores between students currently in a field placement ($M = 12.36, SD = 2.18$) or not in a field placement ($M = 11.91, SD = 1.79$), $t(69) = .768, p = .445$.

An independent samples t -test was run to determine if there were differences in ethical sense making scores between students currently employed in the social work field ($n = 20$) and not employed ($n = 51$). There was homogeneity of variances, as assessed by Levene's test for equality of variances ($p = .882$). There was no statistically significant difference in the mean ethical sense making scores between students who were employed ($M = 12.60, SD = 1.97$) or not employed, ($M = 12.11, SD = 2.14$), $t(69) = .870, p = .387$. Table 10 provides a summary of the significant differences found for ethical sense making scores.

Table 10

Significant Differences in Ethical Sense Making Scores

Comparison	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
<u>Gender</u>				-3.12	69	0.003	-1.11
Male	9	10.33	2.22				
Female	62	12.53	1.94				

Feelings Toward Main Characters

Research Question Three explored the effect of emotive content on feelings toward the main characters. The primary goal of this study was to explore the effect of emotive content, therefore assessing participant's negative and positive emotions toward the main characters was

essential. Participants were asked to describe their feelings toward the main characters in the case example (the social work student and the teenage client). The researcher and a second rater used a four point rubric to evaluate the response to this question. The highest possible score for this question was four.

A summary of the scores measuring feelings toward the main characters for each rater using the SWESMR is included in Table 11. The mean score for Rater 1 was 2.01 ($SD = .87$) and the mean score for Rater 2 was 1.90 ($SD = .89$).

Table 11

Summary of Feelings Scores by Rater 1 and Rater 2

	<i>Rater 1</i>		<i>Rater 2</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Feelings toward main characters	2.01	.87	1.90	.89

The scores for feelings toward the main characters was normally distributed with a skewness of .565 ($SE = .285$) and kurtosis of -.712 ($SE = .563$). A Mann-Whitney U test was run to determine if there were any differences in the feelings toward the main characters between the emotive and non-emotive groups. The Mann-Whitney U test was selected for this analysis because a non-parametric test is used to determine the differences between two groups when using an ordinal dependent variable. Feeling scores for the emotive group (mean rank = 35.03) and non-emotive group (mean rank = 37.06) were not statistically significantly different, $U = 665, p = .600$.

The extent to which feelings scores were associated with respondent characteristics was also assessed. A Mann-Whitney U test was run to determine if there were differences in the feelings scores between males and females. Feelings scores for males (mean rank = 31.61) and females (mean rank = 36.64) were not statistically significantly different, $U = 239.5, p = .468$.

A Mann-Whitney U test was run to determine if there were differences in the feelings scores between students in a field placement and not in a field placement. Feelings scores for students in a field placement (mean rank = 33.53) and students not in a field placement (mean rank = 43.85) were not statistically significantly different, $U = 592.5$, $p = .056$.

A Mann-Whitney U test was run to determine if there were differences in the feelings scores between students currently employed in the social work field and not employed. Feelings scores for students currently employed (mean rank = 39.67) and not employed (mean rank = 34.56) were not statistically significantly different, $U = 436.5$, $p = .318$. Table 12 provides a summary of the feelings scores by the dependent variables.

Table 12

Summary of Feelings Scores by Dependent Variable

Dependent variable	U	p
Treatment groups	665.0	.600
Gender	239.5	.468
In Field Placement	592.5	.056
Employed	436.5	.318

Supplemental Results

Additional data was collected beyond those addressed by the research questions to evaluate whether the case example resulted in an array of responses that would be expected from an ill-structured problem. The additional data collected included specific responses to the open-ended question related to the identification of ethical issues and the open ended question related to actions/behaviors to address the ethical situation. These items were selected because an ill-structured ethical dilemma should result in the identification of multiple ethical issues and a variety of potential solutions.

Identification of ethical issues. In response to the open-ended question asking students to identify the ethical issues present in the case example, data was collected regarding the number of ethical issues identified and the type of issues based on standards from the NASW Code of Ethics. All students were able to identify at least one ethical issue in the case example. Students identified three or more ethical issues ($n = 56$), two ethical issues ($n = 13$), or one ethical issue ($n = 2$). The two most frequently identified ethical issues were conflicts of interest/dual relationships ($n = 65$) and privacy and confidentiality ($n = 65$). Additional issues included commitment to clients ($n = 20$), consultation ($n = 20$), misrepresentation ($n = 13$), commitments to employers ($n = 12$), informed consent ($n = 11$), private conduct ($n = 8$), competence ($n = 5$), and other ($n = 10$).

In total, the number of ethical issues identified by the emotive group ($n = 112$) and non-emotive group ($n = 116$) were similar. In addition to the ethical issues noted above, both groups identified issues related to client commitments (26.7%), informed consent (11%), private conduct (11.3%), and competence (7%). A few differences between the two groups existed. The non-emotive group identified issues related to consultation (32.4%), misrepresentation (26.5%), and commitment to employers (23.5%), more frequently than the emotive group (24.3%, 10.8%, 10.8%, respectively). Table 13 provides a summary of the ethical issues identified in the case example by the emotive and non-emotive groups.

Table 13
Summary of Ethical Issues Identified by Treatment Group

Ethical issue	Emotive <i>Frequency (%)</i>	Non-emotive <i>Frequency (%)</i>
Conflicts of interest/dual relationships	35 (94.5%)	30 (88.2%)
Privacy and confidentiality	33 (89.1%)	32 (94.1%)
Consultation	9 (24.3%)	11 (32.4%)
Commitment to clients	11 (29.7%)	8 (23.5%)

Misrepresentation	4 (10.8%)	9 (26.5%)
Commitments to employers	4 (10.8%)	8 (23.5%)
Informed consent	7 (18.9%)	4 (11.8%)
Private conduct	4 (10.8%)	4 (11.8%)
Competence	2 (5.4%)	3 (8.8%)
Other	3 (8.1%)	7 (20.6%)
Total	112	116

Suggested actions/behaviors to address ethical situation(s). Data was collected in response to the open-ended question asking students to describe the actions or steps to resolve the ethical situation(s). Students were able to identify three or more actions ($n = 63$), two actions ($n = 6$), and one action ($n = 2$). No students failed to identify at least one action to address the ethical situation(s). The types of actions identified included seeking consultation from a supervisor ($n = 50$), refusing the Facebook friend request ($n = 41$), contacting family or mother regarding client's whereabouts ($n = 27$), and reviewing agency policies and NASW Code of Ethics ($n = 27$). Suggested actions categorized as *other* were items noted only one time. For the emotive group these were: reprimand intern, journal, document actions taken, and report red flags. For the non-emotive group these were: end Facebook connection at pre-determined time and continue with treatment plan.

The emotive group suggested 149 actions to resolve the ethical situations presented in the case example and the non-emotive group suggested 151 actions. There were 21 specific actions that were identified by both groups. Some actions were proposed with similar frequencies, such as seeking consultation from a supervisor (emotive = 73%, non-emotive groups = 67.7%), contacting family/mom (emotive = 35.1%, non-emotive groups = 41.1%), and reviewing the Code of Ethics/agency policies (emotive = 40.5%, non-emotive groups = 35.3%). Other actions were proposed with dissimilar frequencies, such as refusing the Facebook friend request (emotive = 43.2%, non-emotive groups = 73.5%), contacting police or social services (emotive =

21.6%, non-emotive groups = 2.9%), and re-assigning the student and/or client (emotive =16.2%, non-emotive groups = 0%). Table 14 provides a complete summary of the suggested actions to resolve the ethical situation(s) by the emotive and non-emotive groups.

Table 14

Summary of Actions to Address Ethical Situation(s) by Treatment Group

Action or behavior	Emotive <i>Frequency (%)</i>	Non-emotive <i>Frequency (%)</i>
Seek consultation from supervisor	27 (73.0%)	23 (67.6%)
Refuse Facebook friend request	16 (43.2%)	25 (73.5%)
Contact family/mom	13 (35.1%)	14 (41.1%)
Review Code of Ethics/agency policies	15 (40.5%)	12 (35.3%)
Establish/re-establish boundaries	11 (29.7%)	12 (35.3%)
Seek consultation other than supervisor	12 (32.4%)	10 (29.4%)
Do not search online for client	9 (24.3%)	11 (32.4%)
Address anonymous online posting	8 (21.6%)	10 (29.4%)
Ask client's peers for information	6 (16.2%)	6 (17.6%)
Contact police/Social Services	8 (21.6%)	1 (2.9%)
Call or email client	2 (5.4%)	6 (17.6%)
Conduct online search- public settings	2 (5.4%)	4 (11.8%)
Address self-disclosure	2 (5.4%)	4 (11.8%)
Re-assign student and/or client	6 (16.2%)	0 (0%)
Report supervisor/disobey instructions	1 (2.7%)	4 (11.8%)
Conduct a home visit	1 (2.7%)	2 (5.9%)
Conduct online search- use peer	1 (2.7%)	2 (5.9%)
Address discussing client in class	1 (2.7%)	1 (2.9%)
Schedule regular supervision	2 (5.4%)	0 (0%)
Address client participation in group	0 (0%)	2 (5.9%)
Investigate boyfriend	2 (5.4%)	0 (0%)
Other	4 (10.8%)	2 (5.9%)
Total	149	151

Note: Emotive group ($n = 37$). Non-emotive group ($n = 34$). Total ($n = 71$)

CHAPTER IV

DISCUSSION

The purpose of this study was to examine the effect of emotive content on knowledge acquisition and ethical sense making using an ill-structured case example. Study materials were randomly distributed to participants. The study materials contained a case example (emotive or non-emotive content), relevant standards from the NASW Code of Ethics, four open-ended questions, and seven multiple-choice questions. Students completed the study materials in a quiet, classroom setting in 90 minutes. The findings from this study suggest that the addition of emotive content did not promote knowledge acquisition and had no effect on ethical sense making or feelings toward the main characters.

Knowledge Acquisition

The knowledge acquisition measure was designed to assess the extent to which students remembered and processed basic information about the case. The knowledge acquisition measure contained seven multiple-choice questions, with four possible answer choices in each question. The correct answer yielded one point. The sum of correct scores produced an overall knowledge score, with seven being the highest possible score. An independent samples *t*-test found a statistically significant difference in the total knowledge acquisition scores between the emotive and non-emotive groups $t(69) = -.2.22, p = .030, d = 0.53$. The non-emotive group ($M = 4.91, SD = .96$) scored higher than the emotive group ($M = 4.40, SD = .96$). There are several possible explanations for this. First, while the added emotive content enhanced the realistic nature of the case example, the extra content may have been extraneous or distracting for students, thus resulting in lower scores for the emotive group (Abercrombie, 2013). Second, the emotive case example, due to its increased length and specific details, may have increased cognitive load and

strained working memory, thereby resulting in fewer correct answers for the emotive group (Peacock et al., 2013). Finally, the addition of emotive content may have cultivated an emotional reaction to the characters and ethical situation presented in the case example. An emotional reaction can influence decision making (Pugh, 2017) and in this instance, resulting in fewer correct responses for the emotive group. Conversely, the lack of emotive content and shorter case example may have allowed the non-emotive group to focus on the facts, which lead to higher scores on the knowledge acquisition measure.

Another statistically significant difference was found in the total knowledge acquisition scores between students in a field placement and not in a field placement. Being in a field placement means that students are actively engaged with clients and other professionals in real life settings and experiencing real life ethical dilemmas. It is possible that these students were better able to incorporate their current and prior learning experiences since the case example was based on a collection of real life examples from field placement settings. Prior experiences can be used to understand a problem, anticipate outcomes, and form a mental model that aids in developing a solution (Brock et al., 2008; Mumford et al., 2008). Likewise, students without sufficient field experience may have experienced the case example as a novel situation and lacked sufficient domain specific knowledge to assess or evaluate possible solutions (Jonassen, 2000). The complex cognitive processes that are required to make sense of new situations may have overwhelmed the students without field experience, thus resulting in lower scores (Caughron et al., 2011). Somewhat puzzling is that no significant differences were found between students currently working in the field versus not working. Theoretically, students working in the field should have similar experiences as the students in a field placement, yet no significant differences were found. It may be that the sample size in this study was too small to

detect any differences between the groups. Future research should include a larger sample size to provide more confidence in the study results.

Ethical Sense Making

Making sense of ill-structured problems, like the one used in the case example, requires multiple cognitive operations and domain specific knowledge (Jonassen, 1997; Jonassen, 2000). The ethical sense making process requires learners to think about the problem circumstances, anticipate outcomes, and consider the impact of decisions on others (Johnson et al., 2013). Performance on ill-structured problems is best accomplished by constructing a response (Jonassen, 2014). Thus, a rubric, the Social Work Ethical Sense Making Rubric (SWESMR), was used to evaluate the open-ended questions. The rubric was comprised of four components, rated on a scale four point scale (1 = poor to 4 = excellent). The highest possible score was 16. There was no statistically significant difference in the ethical sense making scores between the emotive and non-emotive groups. There was, however, a statistically significant difference in the ethical sense making scores between males and females. There are several factors which may have influenced these results.

The SWESMR was constructed using several previously tested rubrics measuring similar ethical constructs (Carlin et al., 2011; Idhraratana & Kaemkate, 2012; Miñano et al., 2017; Shuman et al., 2004). The internal consistency of the four items used to measure the ethical sense making construct on the SWESMR was an acceptable level, as determined by a Cronbach's alpha of 0.740. It is possible, though, that there were too few items on the SWESMR to assess ethical sense making and, thus, return a more robust level of internal consistency (Tavakol & Dennick, 2011). Furthermore, two raters used the SWESMR to independently score the responses to the open-ended questions. Although the rater's scores for each open-ended response

was never greater than one point, there was only moderate agreement between the two rater's judgments ($k = .583$). Moderate agreement is acceptable (Landis & Koch, 1977; Viera & Garrett, 2005), although some argue that conclusions for values below 0.67 should be discounted (Krippendorff, 1980). Overall, a higher level of agreement would suggest more confidence in the study results.

Another potential reason for the lack of statistically significant findings between the emotive and non-emotive groups on the ethical sense making measure may be due to the ill-structured nature of the case example. Two key attributes of ill-structured problems are their structuredness and complexity. Ill-structured problems typically contain multiple issues or variables that can result in several potential solutions (Jonassen, 2000; 2011). Supplemental data collected from this study revealed that 71 study participants identified 228 ethical issues and 300 possible solutions. Taken together, the frequency and variety of ethical issues identified and proposed solutions to the ethical dilemma suggests that the case example was indeed ill-structured because it included sufficient details that were open to interpretation, enabling the identification of multiple ethical issues and numerous solutions. The ill-structured nature of the case example, coupled with only one form of assessment to evaluate ethical sense making (SWESMR), may have been inadequate to determine whether differences in responses existed between the two groups. Jonassen (2011) argued that "nothing worth knowing can be adequately assessed using any single form of assessment" (p. 354). Therefore, additional measures or rubrics that are more sophisticated may be necessary to gauge the quality of the problem identification and proposed solutions, as well as the ability to transfer knowledge and skills to new problems.

In regard to females scoring higher than males, there are several potential explanations and one cautionary note. Three of the four characters in the case example were female and the

mean age of student participants ($M = 29.63$) was only a few years older than the age of the social work student in the case example (22 years old). It is possible that the female participants ($n = 62$) were able to identify with and *see themselves* in the case example, thus relating to the ethical situation. In fact, some research suggests that women and men have different moral inclinations, with women being more concerned with relationships and expressing more compassion than men (Gilligan, 1982). A recent study found gender differences related to moral judgment and moral motivation, with women exhibiting greater moral development than men (Ariail, Abdolmohammadi, & Smith, 2012). Another study found that ethical perceptions between males and females overlap most of the time, but when they do not, women are more likely to have a higher ethical standards than men (Franke, Crown, & Spake, 1997). Whether this explains the differences found between the male and female students in the present study is not conclusive and requires more research.

Relatedly, only nine males participated in the entire study. The social work profession is largely dominated by women, in similar proportions to the student participants in this study. However, the disproportionate number of female participants, as compared to male participants, suggests little confidence in the results related to the ethical sense making measure and, therefore, should be interpreted with extreme caution due to the very low number of male participants.

The literature suggests that ethical dilemma case examples should be realistic, include concrete details, and be open to interpretation (Jonassen, 2011). The inclusion of emotive content, such as relationships between the characters and added affective words, was intended to enrich the case example with details that would increase realism, enhance emotional reactions, and facilitate learning (Thiel et al., 2013). The added features, however, may not be necessary for

social work students to engage in ethical sense making. Social work ethics education places a heavy emphasis on the management of personal values, purpose of ethical standards, application of a Code of Ethics to resolve ethical dilemmas, and the implications of decisions on clients, colleagues, practice settings, the profession, and society (Barsky, 2010; CSWE, 2017b; Reamer, 2006; Strom-Gottfried, 2015). Since the majority of students in this study were in a field placement setting, it is possible the students were currently experiencing real life dilemmas, much like the one used in this study. Therefore, the emotive content may not be necessary to engage in the ethical sense making process.

Feelings Toward Main Characters

Overall, the mean score for the feelings question ($M = 1.96$) was the lowest of all scores on the rubric. To receive a score of one, the response had to be void of any affective words and no description of positive and/or negative feelings towards the main characters. Conversely, to receive a score of four, the response needed to contain numerous affective words, positive and/or negative feelings toward the main characters and describe how feelings may affect the identification/resolution of ethical issues. Only three responses received the highest possible score of four, while 23 responses received the lowest possible score of one. One explanation for the low scores is that the students may have been fatigued by the time they reached the last open-ended question. The students were handwriting their responses to the study, which lasted up to 90 minutes over a lunch break between classes. To ensure the study was completed during the allotted time, it is possible that students did not articulate a complete response to the last question.

Another explanation is that the wording of the feelings question may have confused students. Many responses to this question contained what students *thought* about the characters,

rather than how they *felt* about the characters. The three previous open-ended study questions requested specific examples of ethical issues, analyzing possible outcomes, and describing actions to resolve the ethical situation. The feelings question required a decidedly different response. Perhaps a better question would have been to inquire about the students personal feelings that were being evoked while reading the case example, rather than their feelings toward the main characters. Social workers are taught to develop and convey empathic responses to clients while maintaining objectivity and guarding personal feelings toward the client (Hepworth, Rooney, Rooney, & Strom-Gottfried, 2013). Perhaps the students *felt* something about the characters, but did not convey those feelings in the response in an effort to remain objective and unbiased.

Another explanation is that criteria used to assess the feelings question was flawed. As noted previously, none of the rubrics that were consulted to develop the SWESMR incorporated items to assess feelings. This researcher developed criteria to assess this question based on many years of social work practice experience, the social work literature, and consultation from social work faculty. Because the primary goal of this study was to explore the effect of emotive content, it was necessary to develop some scale to evaluate participant responses. In the future, it may be informative to assess personal values and beliefs related to the ethical situation. The social work literature emphasizes the importance of personal reflection and the role of personal values and beliefs in the ethical sense making process (Barsky, 2010; Dolgoff et al., 2012; Reamer, 2006; Strom-Gottfried, 2015). Additional research should explore this more fully.

Finally, it would be interesting to learn whether non-social work students would respond to the feelings question in a similar manner as found in this study. Social workers embody compassion and concern for others in their daily work. Most, if not all, social workers genuinely

care about their clients and naturally have feelings toward those they work with. Although the responses to the feelings question did not result in significant differences between the groups, it is possible that these findings may be unique to this specific audience. More research is needed to determine whether this finding is consistent with other similar professional disciplines such as counseling, or whether different results are found for professionals in non-helping disciplines.

Implications

Findings from this study provide some practical implications. This study offers evidence of the effect that specific variations to a case example can have on learning. This study found that the presence of emotive content resulted in lower knowledge acquisition scores and had no effect on ethical sense making or feelings toward the main characters. These results provide further insight into the role of emotion in processing and manipulating complex information. Previous research investigated the effect of emotion in ethical sense making, with conflicting results (Kligyte et al., 2013; Lindström & Bohlin, 2011; Thiel et al., 2013). These results suggest that too much emotive content can be distracting, which overwhelms working memory, and results in poor learning outcomes. These findings are consistent with previous research that found too many seductive details detracted from learning (Abercrombie, 2013) and too many complex causes overwhelmed novice learners (Johnson et al., 2012). Based on the results from this study, case examples should be constructed using clear and simple information, without additional emotive content.

This study provides social work educators with empirical support for the use of case examples to reinforce ethical thinking and behavior. The importance of ethical practice is emphasized during the educational process (CSWE, 2017b) and throughout professional practice (ASWB, 2016a; NASW, 2017b; NCSWCLB, n.d.a). Case examples promote critical thinking,

facilitate decision making, and challenge learners to address complex, real world problems in a safe environment (Kim et al., 2006). Using case examples in the classroom challenges learners to analyze problems and make decisions with limited information, which simulates professional practice. The social work literature is replete with the use of case examples as an instructional strategy to stimulate discussion about ethical dilemmas and emphasize ethical lessons (Abrams & Shapiro, 2014; Dodd & Jansson, 2004; Fossen et al., 2014; McCormick et al., 2014; Pawlukewicz & Ondrs, 2013; Ringel & Mishna, 2007), but rarely have researchers explored the effectiveness of this strategy. This study contributes to the social work literature by providing empirical support for the use of case examples as an instructional strategy.

Similarly, the rubric developed for evaluating the open-ended questions serves as another contribution to the literature. Social work educators are always searching for reliable ways to evaluate student responses to complex problems. The SWESMR, while not flawless, adds another tool to the existing literature for evaluating open ended responses to ethical situations. The SWESMR joins rubrics from other disciplines such as engineering (Shuman et al., 2004, nursing (Indhraratana & Kaemkate, 2012), health professionals (Carlin et al., 2011), and IT (Miñano, et al., 2017) as options for evaluating ethical reasoning and decision-making.

The use of authentic and realistic case examples is well-supported in the literature; however, educators must consider several variables when developing case examples that are reflective of real world dilemmas. Developing case examples that enrich the learning experience must include a thorough understanding of learner's prior knowledge and experiences, otherwise the level of difficulty may exceed the learner's current ability. Likewise, for the case example to be realistic, relevant and irrelevant information must be included. However, too many distractors or unimportant features may create unnecessary complexity and result in poorer learning

outcomes. For educators who want to increase the complexity of the case example, varying the structure of the case presentation is a good place to start. This could include altering how the case example unfolds (sequential versus piecemeal), integrating a variety of perspectives or voices into the case example, or incorporating multiple decision points and subsequent consequences (Kim et al., 2006).

Developing realistic and authentic ill-structured cases can take a considerable amount of time. As this study illustrated, too much information or irrelevant details can distract learners from the ethical lesson, whereas insufficient details may diminish the authenticity of the case example. There appears to be a fine line between providing just enough information, as too much information strains working memory and too little information may result in an unrealistic case example. Therefore, educators would benefit from using a tested framework to develop ill-structured case examples. The framework used for this study, (which was synthesized from the work of Kim et al., 2006 and Jonassen, 1997; 2011), provides a practical approach to developing an ill-structured case example. This framework could save educators valuable time and resources and increase the likelihood that the case example will promote positive learning outcomes.

Figure 1 depicts the conceptual framework used to develop the case example for this research study. To begin, educators must assess the prior domain knowledge and experience of the learner group. Learners enter the classroom with a variety of backgrounds and prior experiences, as well as different levels of expertise. It is essential to assess prior domain knowledge and experience so that the case example complements the learner's educational level. Next, educators should establish the instructional goal of the lesson. Case examples can be used for a variety of reasons not limited to reinforcing concepts, stimulating discussion, and enhancing critical thinking and problem solving. Once the goal has been established, educators

should begin gathering details and information that would support the construction of a relevant case example which is situated in a realistic setting. For case examples to be relevant, they must include concrete details related to the characters such as names, relationships, interactions, and history, as well as specific details related to the setting in which the case example occurs and the problem(s) encountered by the characters. The level of detail available enables the educator to construct a case example that is appropriate for the instructional goal and learner level.

Armed with prior domain knowledge and experience, the instructional goal, and concrete details, an educator can begin articulating the problem context for the case example. The content of the case example can vary on several dimensions, based on the prior domain knowledge and experience of the learner. As Figure 1 illustrates, novice learners benefit from a case example that contains a limited number of issues and fewer characters. Too many issues or characters may divert the learner's attention away from important lesson embedded in the case example. Likewise, novice learners benefit from minimal distractors or problem constraints. Distractors may include information related to the characters or setting that is interesting, but not necessary. Examples of problem constraints include restrictions on time, money, or quality. To support knowledge construction, the case example should result in acceptable or correct solutions. If there are too many possible solutions, novice learners may not be able to develop the mental schema to solve similar problems in the future.

On the other hand, learners with more expert domain knowledge and experience should be challenged and benefit from case examples that are more complex and ill-structured. The content of the case example for learners with more advanced domain knowledge and experience should include many issues, more distractors, and several problem constraints. Expert learners

are able to draw upon previous domain knowledge and experience to evaluate multiple solutions and assess the relevance of unknown problem elements.

While constructing the content for the case example, educators must also consider the design and presentation of the case example. For example, several variations can be employed when writing and presenting the case example. Novice learners may benefit from the case example being written from a single point of view whereas multiple points of view may increase the difficulty level for advanced learners. Similarly, the case example can be designed to require a response from only one perspective, such as one of the characters. Alternatively, multiple response perspectives require learners to examine the case and assess potential consequences from different vantage points. As an example, the case example for this study was written using only one point of view but required learners to answer questions from several response perspectives. Moreover, the length of the case example should reflect the simplicity or complexity desired. It would be inefficient and ineffective to construct a lengthy case example to illustrate just one concept. Finally, educators should consider whether more advanced learners would benefit from examining unusual cases or presenting case information incrementally so that the learner can assess and re-assess problems and solutions.

Developing effective and relevant case examples can be difficult and time consuming for educators. The conceptual framework (Figure 1) provides educators with a proven tool for constructing case examples that focuses valuable time and effort on the key variables related to the content and design of the case example. Focusing on these key variables should result in a case example that is relevant, interesting, educational, and appealing to learners at all levels of education, experience, and ability. Variations to the case example can be made based on the unique learning audience and instructional timeframe.

Figure 1. Conceptual framework for constructing case examples

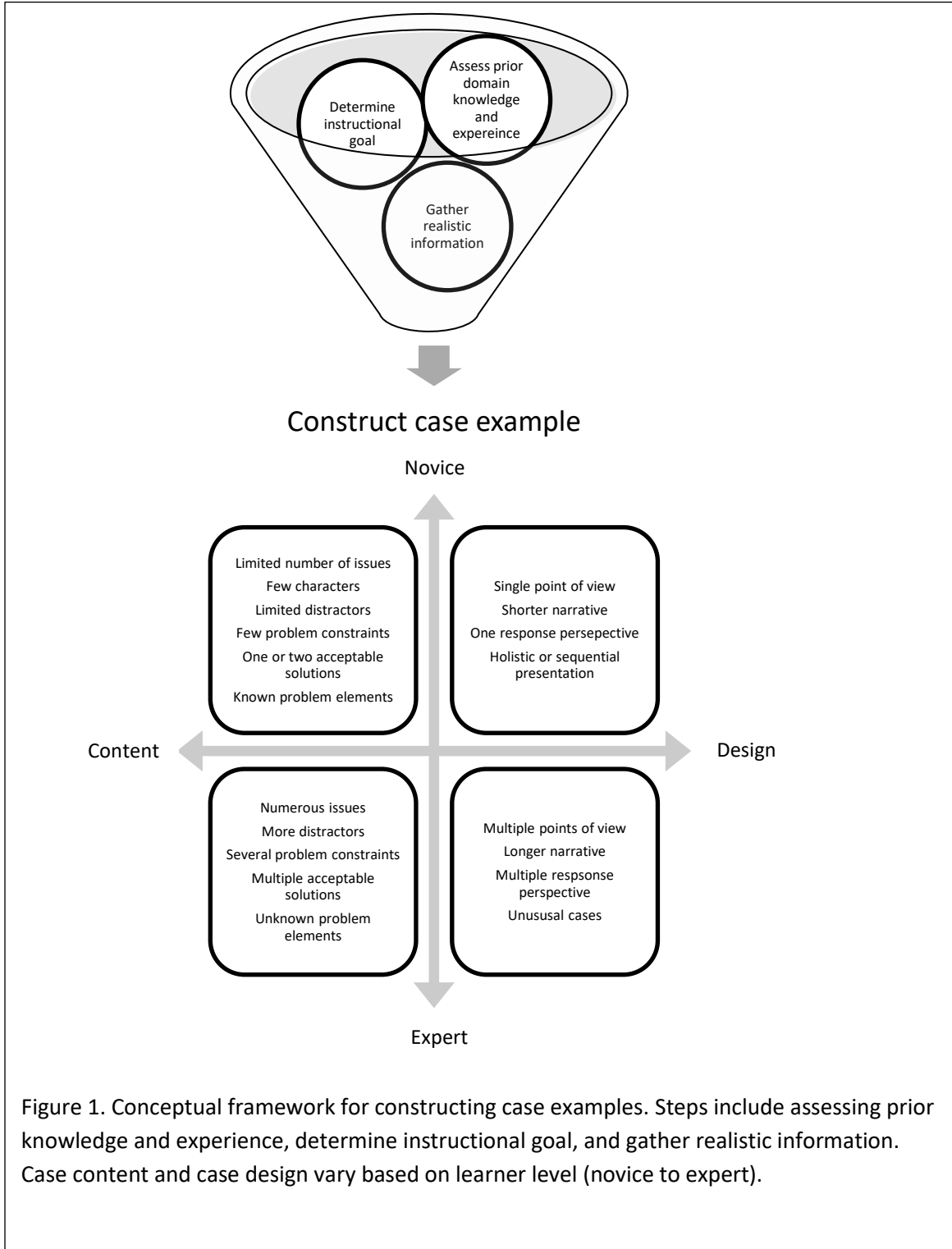


Figure 1. Conceptual framework for constructing case examples. Steps include assessing prior knowledge and experience, determine instructional goal, and gather realistic information. Case content and case design vary based on learner level (novice to expert).

Limitations

The first limitation of the study is related to the sampling method and sample size. In order to obtain participants for the study, students were recruited using emails, announcements in class, and flyers posted near student mailboxes. Students who wanted to participate in the study only needed to show up on one of the four days the study was conducted. This method of recruitment and the volunteer student sample was chosen as a way to readily obtain participants for the study, but may be a threat to external validity and the generalizability of the findings. To moderate this limitation, every student who consented to participate was included in the study. Likewise, the study was conducted over lunch on four different days, in two different locations. This means that students from all program types (Advanced Standing, Full-time, and Distance Education) as well as both program locations were able to participate. Notwithstanding the inclusion of all students who consented to participate, the overall sample size used for this study was small, especially since the data was disaggregated. Ideally, the sample size should be large enough to produce confidence that the selected sample mirrors the population (Sprinthall, 2012).

Similarly, because the study was conducted on four different days and students who participated in the study on one day may have discussed the study with a student who participated on a subsequent day, a confounding variable was introduced. The impact of the confounding variable should be mitigated, however, due to the random distribution of study materials and the finding that there was no statistically significant difference between the emotive and non-emotive groups.

Another limitation is related to the rubric and raters used to score the open-ended questions. Every effort was made to score the open-ended responses as objectively as possible using the SWESMR, however, one of the two raters was this researcher. Although the study

materials did not contain any identifying information, other than the unique identification number, this research knew which unique identification numbers represented the emotive and non-emotive groups. While the second rater did not know which unique identification numbers corresponded to which group, the content of the responses may have differentiated the groups based on specific details or facts from the case example that were contained within the responses.

As noted previously, the rater's scores for each open-ended response never varied by more than one point, resulting in a Cohen's kappa score of .583. Landis and Koch (1977) note that a kappa statistic between 0.41 to 0.60 suggests a moderate strength of agreement, however, Krippendorff (1980) argues that only tentative conclusions can be drawn from data between 0.666 and 0.800, and conclusions for values less than 0.67 should be discounted. Given the weak interrater reliability scores for the ethical sense making construct, these findings should be interpreted with extreme caution. Future research should include methods to increase interrater reliability such as providing substantial training and sufficient practice to ensure the raters are skilled at using the measurement instrument and familiar with the construct being measured. A higher level of inter-rater agreement would suggest more confidence in these study results.

Future research

The current study adds to the literature regarding the design, development, and presentation of ill-structured case examples, however more research is needed. Future research regarding ill-structured problems and emotive content should include an evaluation of working memory and cognitive load. Many studies have explored working memory capacity and emotions (Flores & Berenbaum, 2016; Lynn et al., 2016, Xie & Zhang, 2016) but these studies focused on working memory as it was related emotional closeness and handholding, emotions and facial expressions, and emotion conditions using a color wheel, respectively. More empirical

research is needed to understand the effect of working memory during the sense making process (Martin, Bagdasarov, & Connelly, 2015). The ability to recall important information and apply it to new situations is critical to improving learning outcomes and professional practice.

Likewise, this study was completed in a 90-minute session in which student's hand wrote their responses, without any breaks. Future research should attempt to replicate this study but alter the method by which participants record their responses. The study could be replicated with students in a computer lab or online, with participants using a keyboard or tablet to respond to the open-ended questions. While the handwritten responses to the open-ended questions were all legible and able to be included for study purposes, replication of the study using a computer and keyboard may show different results. Responding by hand may result in more significant learning because it allows for deeper processing of the material, or perhaps typing responses enhances learning because more details are able to be addressed and responses can be more skillfully crafted with the cut and paste features available on a computer. Regardless, much can be learned from replicating this study and altering the method of recording responses.

Research has shown that a person's underlying values and beliefs can influence the ethical decision-making process (Barsky, 2010; Dolgoff, et al., 2012; Pugh, 2017; Reamer, 2006; Strom-Gottfried, 2015). Unfortunately, the present study did not assess this dimension. Additional research should be conducted to examine the effect personal values and beliefs have on the ethical sense making process. Perhaps questionnaires such as the Professional Opinion Scale (Abbott, 2003) or the Ethical Values Assessment (Padilla-Walker & Jensen, 2015) could be used to assess personal values and beliefs as a factor in responding to an ill-structured ethical dilemma.

As this study illustrated, there are several ways to vary the case content and presentation. More research is needed to further explore other variations to content and presentation. For example, most case examples used for teaching ethics illustrate ethical missteps or transgressions, thus focusing on negative or problematic behavior (Antes et al., 2012). It would be interesting to discover if learning outcomes would be significantly different if the case example was constructed focusing on the correct steps to address the ethical dilemma and proper professional behavior.

This study did not include any transfer tasks or application of learning to new problems. One of the primary goals of education is to equip students with the knowledge and skills needed to practice in professional settings (Bixler & Land, 2010; Choi & Lee, 2009). More research is needed to understand whether the use of ill-structured case examples to teach ethics related concepts results in transfer to a new problem or setting. Results from this study suggested that students who were engaged in a field placement performed better on the knowledge acquisition measure than students who were not in a field placement, suggesting what was learned in real-life practice can be applied in the classroom. Ultimately, educators want to know that what is learned in the classroom can be applied in the real world.

Finally, future research should be conducted with different professional disciplines and larger sample sizes. Social workers are taught myriad skills including the importance of conveying empathy and being authentic in their communication with clients. Likewise, social workers are typically compassionate and caring individuals, who are taught to recognize how their personal feelings may influence interactions with clients. The results of this study may be typical for other similarly situated professionals, such as counselors and nurses; however, it would be interesting to learn whether comparable results would be found from other professional

disciplines such as business, accounting, and engineering. Concurrently, larger sample sizes should be sought to better detect differences between groups and increase the overall confidence in the study results.

Conclusion

The results of this study enhance to the current literature related to the development and presentation of effective case examples related to ill-structured problems. More specifically, this study demonstrated that utilizing the key attributes of ill-structured problems to develop a case example (Kim et al., 2006; Jonassen, 1997; Jonassen, 2011) is an effective approach to designing complex yet realistic learning experiences for students. Ethical dilemmas are the most ill-structured type of problem and students need to be taught how to solve these problems in preparation for real life experiences. This study provides educators with a framework to develop meaningful case examples so that students can engage in ill-structured problem analysis.

This study specifically explored the effect of emotive content on knowledge acquisition and ethical sense making. For case examples to be interesting and reflective of real world problems, concrete details and problem constraints must be introduced. However, findings from this study revealed that too much emotive content and/or unnecessary details may be distracting, which weakens the ethical lesson. These findings are consistent with the literature suggesting that case examples should be constructed using clear and simple information to improve knowledge acquisition and ethical sense making (Johnson et al., 2012).

As we know, our world is becoming increasingly complex and contentious, resulting in problems that rarely impart agreement. Teaching all students, not just social work students, how to solve meaningful, ill-structured problems should be a function of formal education. The ability

of students to identify problems, analyze consequences, and assess solutions will benefit society and future generations to come.

REFERENCES

- Abbott, A. (2003). A confirmatory factor analysis of the Professional Opinion Scale: A values assessment instrument. *Research on Social Work Practice, 13*(5), 641-646. doi: 10.1177/1049731503253646
- Abercrombie, S. (2013). Transfer effects of adding seductive details to case-based instruction. *Contemporary Educational Psychology, 38*(2), 149-157. doi: 10.1016/j.cedpsych.2013.01.002
- Abrams, J., & Shapiro, M. (2014). Teaching trauma theory and practice in MSW programs: A clinically focused, case-based method. *Clinical Social Work Journal, 42*(4), 408-418.
- Antes, A. L., Murphy, S. T., Waples, E. P., Mumford, M. D., Brown, R. P., Connelly, S., & Devenport, L. D. (2009). A meta-analysis of ethics instruction effectiveness in the sciences. *Ethics & Behavior, 19*(5), 379-402. doi: 10.1080/10508420903035380
- Antes, A. L., Thiel, C. E., Martin, L. E., Stenmark, C. K., Connelly, S., Devenport, L. D., & Mumford, M. D. (2012). Applying cases to solve ethical problems: The significance of positive and process-oriented reflection. *Ethics & Behavior, 22*(2), 113-130. doi: 10.1080/10508422.2012.655646
- Ariail, D. L., Abdolmohammadi, M. J., & Smith, L. M. (2012). Ethical predisposition of certified public accountants: A study of gender differences. In C. Jeffrey (Ed.), *Research on Professional Responsibility and Ethics in Accounting, 16*, 29-56. doi:10.1108/S1574-0765(2012)0000016005
- Association of Social Work Boards. (2016a). Social work and regulation. Retrieved from <https://www.aswb.org/public/social-work-and-regulation/>
- Association of Social Work Boards. (2016b). About ASWB. Retrieved from <https://www.aswb.org/about/>

- Association of Social Work Boards. (2016c). Exam content outlines. Retrieved from <https://www.aswb.org/exam-candidates/about-the-exams/exam-content-outlines/>
- Bagdasarov, Z., Thiel, C., Johnson, J., Connelly, S., Harkrider, L., Devenport, L., & Mumford, M. (2013). Case-based ethics instruction: The influence of contextual and individual factors in case content on ethical decision-making. *Science & Engineering Ethics, 19*(3), 1305-1322. doi: 10.1007/s11948-012-9414-3
- Barsky, A. E. (2010). *Ethics and Values in Social Work: An Integrated Approach for a Comprehensive Curriculum*. New York, NY: Oxford Univeristy Press.
- Bixler, B. A., & Land, S. M. (2010). Supporting college students' ill-structured problem solving in a web-based Learning environment. *Journal of Educational Technology Systems, 39*(1), 3-15. doi: 10.2190/ET.39.1.b
- Boland-Prom, K., & Anderson, S. C. (2005). Teaching ethical decision making using dual relationship principles as a case example. *Journal of Social Work Education, 41*(3), 495-510.
- Bradley, M. M., & Lang, P. J. (1999). Affective norms for English words (ANEW): Instruction manual and affective ratings. *Technical Report C-1, The Center for Research in Psychophysiology*. University of Florida.
- Brock, M. E., Vert, A., Kligyte, V., Waples, E. P., Sevier, S. T., & Mumford, M. D. (2008). Mental models: An alternative evaluation of asensemaking approach to ethics instruction. *Science and Engineering Ethics 14*(3), 449-472. doi: 10.1007/s11948-008-9076-3
- Bryan, V. (2006). Moving from professionally specific ideals to the common morality: Essential content in social work ethics education. *Journal of Teaching in Social Work, 26*(3/4), 1-17. doi: 10.1300/J067v26n03-01

- Carlin, N., Rozmus, C., Spike, J., Willcockson, I., Seifert, W., Chappell, C., . . . Boutwell, B. (2011). The health professional ethics rubric: Practical assessment in ethics education for health professional schools. *Journal of Academic Ethics, 9*(4), 277-290. doi: 10.1007/s10805-011-9146-z
- Castro-Atwater, S. A., & Hohnbaum, A-L. H. (2015). A conceptual framework of top 5 ethical lessons for the helping professions. *Education, 135*(3), 271-278.
- Caughron, J. J., Antes, A. L., Stenmark, C. K., Thiel, C. E., Wang, X., & Mumford, M. D. (2011). Sensemaking strategies for ethical decision making. *Ethics & Behavior, 21*(5), 351-366. doi: 0.1080/10508422.2011.604293
- Chen, C. H., & Bradshaw, A. C. (2007). The effect of web-based question prompts on scaffolding knowledge integration and ill-structured problem solving. *Journal of Research on Technology in Education, 39*(4), 359-375.
- Cho, K.-L., & Jonassen, D. H. (2002). The effects of argumentation scaffolds on argumentation and problem solving. *Educational Technology Research & Development, 50*(3), 5-22. doi: 10.1007/BF02505022
- Choi, I., & Lee, K. (2009). Designing and implementing a case-based learning Environment for enhancing ill-structured problem solving: Classroom management problems for prospective teachers. *Educational Technology Research and Development, 57*(1), 99-129. doi: 10.2307/25619959
- Congress, E. P. (2000). What social workers should know about ethics: Understanding and resolving practice dilemmas. *Advances in Social Work, 1*(1), 1-25.
- Connelly, S., Helton-Fauth, W., & Mumford, M. D. (2004). A managerial in-basket study of the

- impact of trait emotions on ethical choice. *Journal of Business Ethics*, 51(3), 245-267.
doi: 10.1023/B:BUSI.0000032494.51162.d3
- Council on Social Work Education. (2017a). Accreditation. Retrieved from
<http://www.cswe.org/Accreditation.aspx>
- Council on Social Work Education. (2017b). 2015 Educational Policy and Accreditation
Standards. Retrieved from <https://cswe.org/Accreditation/Standards-and-Policies/2015-EPAS>
- Dabbagh, N., & Dass, S. (2013). Case problems for problem-based pedagogical approaches: A
comparative analysis. *Computers & Education*, 64, 161-174. doi:
<http://dx.doi.org/10.1016/j.compedu.2012.10.007>
- Dodd, S.J., & Jansson, B. (2004). Expanding the boundaries of ethics education: Preparing
social workers for ethical advocacy in an organizational setting. *Journal of Social Work
Education*, 40(3), 455-465.
- Dolgoff, R., Harrington, D., & Loewenberg, F. M. (2012). *Ethical Decisions for Social Work
Practice (9th ed)*. Belmont, CA: Brooks/Cole Cengage Learning.
- Doyle, O. Z., Miller, S. E., & Mirza, F. Y. (2009). Ethical decision-making in social work:
Exploring personal and professional values. *Journal of Social Work Values and Ethics*,
6(1).
- Edwards, B., & Addae, R. (2015). Ethical decision-making models in resolving ethical
dilemmas in rural practice: Implications for social work practice and education. *Journal
of Social Work Values and Ethics*, 12(1), 88-92.
- Fisher, C. B., & Kuther, T. L. (1997). Integrating research ethics into the introductory
psychology course curriculum. *Teaching of Psychology*, 24(3), 172.

- Flores, L. E., & Berenbaum, H. (2016). The social regulation of emotion and updating negative contents of working memory. *Emotion, 17*(3), 547-556. doi: 10.1037/emo0000265
- Fossen, C. M., Anderson-Meger, J. I., & Daehn Zellmer, D. A. (2014). Infusing a new ethical decision-making model throughout a BSW curriculum. *Journal of Social Work Values and Ethics, 11*(1), 66-81.
- Franke, G. R., Crown, D. F., & Spake, D. F. (1997). Gender differences in ethical perceptions of business practices: A social role theory perspective. *Journal of Applied Psychology, 82*(6), 920-934. doi: 0.1037/0021-9010.82.6.920
- Gaudine, A., & Thorne, L. (2001). Emotion and ethical decision-making in organizations. *Journal of Business Ethics, 31*(2), 175-187. doi: 10.1023/a:1010711413444
- Gilligan, C. (1982). *In a Different Voice*. Cambridge, MA: Harvard University Press.
- Gray, M., & Gibbons, J. (2007). There are no answers, only choices: Teaching ethical decision making in social work. *Australian Social Work, 60*(2), 222-238.
- Groessler, J. (2015). Teaching note: Conceptualization of a contemporary social work ethics course. *Journal of Social Work Education, 51*(4), 691-698.
- Harkrider, L. N., Bagdasarov, Z., MacDougall, A. E., Johnson, J. F., Devenport, L. D., & Mumford, M. D. (2013a). Improving case-based learning with clear content and simple presentation. *Journal of Organizational Psychology, 13*(1/2), 56.
- Harkrider, L. N., MacDougall, A. E., Bagdasarov, Z., Johnson, J. F., Thiel, C. E., Mumford, M. D., . . . Devenport, L. D. (2013b). Structuring case-based ethics training: How comparing cases and structured prompts influence training effectiveness. *Ethics & Behavior, 23*(3), 179-198. doi: 10.1080/10508422.2012.728470

- Hepworth, D. H., Rooney, R. H., Rooney, G. D., & Strom-Gottfried, K. (2013). *Direct Social Work Practice: Theory and Skills* (9th ed.). Belmont, CA: Brooks/Cole, Cengage Learning.
- Hung, W. (2013). Problem-based learning: A learning environment for enhancing learning transfer. *New Directions for Adult & Continuing Education*, 2013(137), 27-38. doi: 10.1002/ace.20042
- Idhraratana, A., & Kaemkate, W. (2012). Developing and validating a tool to assess ethical decision-making ability of nursing students, using rubrics. *Journal of International Education Research*, 8(4), 393-398.
- Johnson, J. F., Bagdasarov, Z., Connelly, S., Harkrider, L., Devenport, L. D., Mumford, M. D., & Thiel, C. E. (2012). Case-based ethics education: The impact of cause complexity and outcome favorability on ethicality. *Journal of Empirical Research on Human Research Ethics*, 7(3), 63-77. doi: 10.1525/jer.2012.7.3.63
- Johnson, J. F., Bagdasarov, Z., Harkrider, L. N., MacDougall, A. E., Connelly, S., Devenport, L. D., & Mumford, M. D. (2013). The effects of note-taking and review on sensemaking and ethical decision making. *Ethics & Behavior*, 23(4), 299-323. doi: 10.1080/10508422.2013.774275
- Jonassen, D. (1997). Instructional design models for well-structured and ill-structured problem-solving learning outcomes. *Educational Technology Research and Development*, 45(1), 65-94. doi: 10.1007/BF02299613
- Jonassen, D. (2012). Designing for decision making. *Educational Technology Research & Development*, 60(2), 341-359. doi: 10.1007/s11423-011-9230-5
- Jonassen, D. H. (2000). Towards a design theory of problem solving. *Educational Technology*

- Research & Development*, 48(4), 63-85.
- Jonassen, D. H. (2004). *Learning to Solve Problems: An Instructional Design Guide*. San-Francisco, CA: Pfeiffer/John Wiley & Sons.
- Jonassen, D. H. (2011). *Learning to Solve Problems: A Handbook for Designing Problem-Solving Learning Environments*. New York , NY: Routledge.
- Jonassen, D. H. (2014). Assessing problem solving. In J. M. Spector, M. D. Merrill, J. van Merriënboer, J., & M. P. Driscoll. (Eds.), *Handbook of Research on Educational Communications and Technology: Third Edition*. (pp. 269-287). New York: Routledge.
- Kim, S., Phillips, W. R., Pinsky, L., Brock, D., Phillips, K. & Keary, J. (2006). A conceptual framework for developing teaching cases: A review and synthesis of the literature across disciplines. *Medical Education*, 40(9), 867–876. doi:10.1111/j.1365-2929.2006.02544.x
- Kligyte, V., Marcy, R. T., Waples, E. P., Sevier, S. T., Godfrey, E. S., Mumford, M. D., & Hougen, D. F. (2008). Application of a sensemaking approach to ethics training in the physical sciences and engineering. *Science and Engineering Ethics*, 14(2), 251-278. doi: 10.1007/s11948-007-9048-z
- Kligyte, V., Connelly, S., Thiel, C., & Devenport, L. (2013). The influence of anger, fear, and emotion regulation on ethical decision making. *Human Performance*, 26, 297-326. doi: 10.1080/08959285.2013.814655
- Kousta, S.-T., Vinson, D. P., & Vigliocco, G. (2009). Emotion words, regardless of polarity, have a processing advantage over neutral words. *Cognition*, 112(3), 473-481. doi: <https://doi.org/10.1016/j.cognition.2009.06.007>

- Kreitler, C. M., Stenmark, C. K., Rodarte, A. M., & DuMond, R. P. (2014). ACED IT: A tool for improved ethical and moral decision-making. *Journal of Moral Education, 43*(4), 447-467. doi: 10.1080/03057240.2014.943166
- Krippendorff, K. (1980). *Content analysis and introduction to its methodology*. Beverly Hills, CA: Sage Publications.
- Landis, L. R., & Koch, G. G. (1977.) The measurement of observer agreement for categorical data. *Biometrics, 33*(1), 159-174.
- Lindström, B. R., & Bohlin, G. (2011). Emotion processing facilitates working memory performance. *Cognition and Emotion, 25*(7), 1196-1204.
- Lynn, S. K., Ibagon, C., Bui, E., Palitz, S. A., Simon, N. M., & Barrett, L. F. (2016). Working memory capacity is associated with optimal adaption of response bias to perceptual sensitivity in emotion perception. *Emotion, 16*(2), 155-163. doi: 10.1037/emo0000111
- MacDougall, A. E., Harkrider, L. N., Bagdasarov, Z., Johnson, J. F., Thiel, C. E., Peacock, J., . . . Connelly, S. (2014). Examining the effects of incremental case presentation and forecasting outcomes on case-based ethics instruction. *Ethics & Behavior, 24*(2), 126-150. doi: 10.1080/10508422.2013.824819
- Marra, R. M., Jonassen, D. H., Palmer, B., & Luft, S. (2014). Why problem-based learning works: Theoretical foundations. *Journal on Excellence in College Teaching, 25*(3/4), 221-238.
- Martin, A., Bagdasarov, Z., & Connelly, S. (2015). The capacity for ethical decisions: The relationship between working memory and ethical decision making. *Science and Engineering Ethics 21*(2), 271-292. doi: 10.1007/s11948-014-9544-x
- McCormick, A. J., Stowell-Weiss, P., Carson, J., Tebo, G. Hanson, I., & Quesada, B. (2014).

- Continuing education in ethical decision making using case studies from medical social work. *Social Work in Health Care*, 53(4), 344-363.
- Miñano, R., Uruburu, Á., Moreno-Romero, A., & Pérez-López, D. (2017). Strategies for teaching professional ethics to IT engineering degree students and evaluating the result. *Science and Engineering Ethics*, 23(1), 263-286. doi:10.1007/s11948-015-9746-x
- Moskal, B. M., & Leydens, J. A. (2000). Scoring rubric development: Validity and reliability. *Practical Assessment, Research & Evaluation*, 7(10), 1-6.
- Mumford, M. D., Connelly, S., Brown, R. P., Murphy, S. T., Hill, J. H., Antes, A. L., . . . Devenport, L. D. (2008). A sensemaking approach to ethics training for scientists: Preliminary evidence of training effectiveness. *Ethics & Behavior*, 18(4), 315-339. doi: 10.1080/10508420802487815
- National Association of Social Workers, (2017a). About NASW. Retrieved from <http://www.socialworkers.org/nasw/default.asp>
- National Association of Social Workers, (2017b). Code of Ethics. Retrieved from <http://www.socialworkers.org/pubs/code/default.asp>
- Nelson, J., Smith, L. B., & Hunt, C. S. (2014). The migration toward ethical decision making as a core course into the B-School: Instructional strategies and approaches for consideration. *Journal of Education for Business*, 89(1), 49-56. doi: 10.1080/08832323.2012.749205
- North Carolina Social Work Certification and Licensure Board. (n.d.a). Home. Retrieved from <http://www.ncswboard.org/>
- North Carolina Social Work Certification and Licensure Board. (n.d.b). Statute. Chapter 90B. Retrieved from <http://www.ncswboard.org/page/statute1#b11>
- North Carolina Social Work Certification and Licensure Board. (n.d.c). Current disciplinary

- action. Retrieved from <http://www.ncswboard.org/page/complaints-disciplinary-actions>
- Osmo, R., & Landau, R. (2001). The need for explicit argumentation in ethical decision-making in social work. *Social Work Education, 20*(4), 483-492.
- Padilla-Walker, L. M., & Jensen, L. A. (2015). Validation of the long- and short-form of the Ethical Values Assessment (EVA): A questionnaire measuring the three ethics approach to moral psychology. *International Journal of Behavioral Development, 40*(2), 181-192. doi: 10.1177/0165025415587534
- Park, E.-J. (2013). The development and implications of a case-based computer program to train ethical decision-making. *Nursing Ethics, 20*(8), 943-956. doi: 10.1177/0969733013484489
- Pawlukewicz, J., & Ondrus, S. (2013). Ethical dilemmas: The use of applied scenarios in the helping professions. *Journal of Social Work Values & Ethics, 10*(1), 1-12.
- Peacock, J., Harkrider, L. N., Bagdasarov, Z., Connelly, S., Johnson, J. F., Thiel, C. E., . . . & Devenport, L. D. (2013). Effects of alternative outcome scenarios and structured outcome evaluation on case-based ethics instruction. *Science & Engineering Ethics, 19*, 1283-1303. doi: 10.1007/s11948-012-9402-7
- Peluso, P. R. (2003). The ethical genogram: A tool for helping therapists understand their ethical decision making styles. *The Family Journal: Counseling and Therapy for Couples and Families, 11*(3), 286-291.
- Pugh, G. L. (2017). A model of comparative ethics education for social workers. *Journal of Social Work Education, 53*(2), 312-326. doi: 10.1080/10437797.2016.1234497
- Reamer, F. G. (2006). *Social Work Values and Ethics*, 3rd ed. Chichester: NY. Columbia University Press.

- Reamer, F. G. (2014). The evolution of social work ethics: Bearing witness. *Advances in Social Work, 15*(1), 163-181.
- Ringel, S., & Mishna, F. (2007). Beyond avoidance and secrecy: Using students' practice to teach ethics. *Journal of Teaching in Social Work, 27*(1/2), 251-269. doi: 10.1300/J067v27n01_16
- Shackman, A. J., Sarinopoulos, I., Maxwell, J. S., Pizzagalli, D. A., Lavric, A., & Davidson, R. J. (2006). Anxiety selectively disrupts visuospatial working memory. *Emotion, 6*(1), 40-61. doi: 10.1037/1528-3542.6.1.40
- Sharma, P., & Hannafin, M. (2004). Scaffolding critical thinking in an online course: An exploratory study. *Journal of Educational Computing Research, 31*(2), 181-208. doi: 10.2190/TMC3-RXPE-75MY-31YG
- Shuman, L. J., Sindelar, M. F., Besterfield-Sacre, M., Wolfe, H., Pinkus, R. L., Miller, R. L., ... & Mitcham, C. (2004). Can our students recognize and resolve ethical dilemmas? In *CD Proceedings, 2004 American Society for Engineering Education Annual Conference & Exposition*.
- Souders, T. M., & Stefaniak, J. E. (2017). *An exploratory study examining the instructional strategies used to teach ethics in social work education*. Manuscript in preparation.
- Sprinthall, R. C. (2012). *Basic Statistical Analysis* (9th ed.). Boston, MA: Pearson Education, Inc.
- Stenmark, C. K., Antes, A. L., Xiaoqian, W., Caughron, J. J., Thiel, C. E., & Mumford, M. D. (2010). Strategies for forecasting outcomes in ethical decision-making: Identifying and analyzing the causes of the problem. *Ethics & Behavior, 20*(2), 110-127. doi: 10.1080/10508421003595935

- Stenmark, C. K., Antes, A. L., Thiel, C. E., Caughron, J. J., Xiaoqian, W., & Mumford, M. D. (2011). Consequence identification in forecasting and ethical decision-making. *Journal of Empirical Research on Human Research Ethics*, 6(1), 25-32. doi:10.1525/jer.2011.6.1.25
- Stevenson, R. A., Mikels, J. A., & James, T.W. (2006). Characterization of the affective norms for English words by discrete emotional categories. *Behavior Research Methods*, 45(4), 1191-1207. doi: 10.3758/s13428-012-0314-x
- Stokes, J., & Schmidt, G. (2012). Child protection decision making: A factorial analysis using case vignettes. *Social Work*, 57(1), 83-90.
- Strom-Gottfried, K. (2015). *Straight Talk about Professional Ethics*, 2nd ed. Chicago: IL. Lyceum Books, Inc.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi: 10.5116/ijme.4dfb.8dfd
- Tawfik, A., & Jonassen, D. (2013). The effects of successful versus failure-based cases on argumentation while solving decision-making problems. *Educational Technology Research & Development*, 61(3), 385-406. doi: 10.1007/s11423-013-9294-5
- Thiel, C., Connelly, S., Harkrider, L., Devenport, L., Bagdasarov, Z., Johnson, J., & Mumford, M. (2013). Case-based knowledge and ethics education: Improving learning and transfer through emotionally rich cases. *Science & Engineering Ethics*, 19(1), 265-286. doi: 10.1007/s11948-011-9318-7
- Viera A. J., & Garrett, J. M. (2005). Understanding interobserver agreement: The Kappa statistic. *Family Medicine*, 37(5), 360-363.
- Voss, J. F., & Post, T. A. (1988). On the solving of ill-structured problems. In M. T. H. Chi, R.

Glaser, & M. J. Farr (Eds.), *The Nature of Expertise* (pp. 261-285). Hillsdale, NJ: Lawrence Erlbaum.

Warriner, A. B., Kuperman, V., & Brysbaert, M. (2013). Norms of valence, arousal, and dominance for 13,915 English lemmas. *Behavior Research Methods*, *45*(4), 1191-1207. doi: 10.3758/s13428-012-0314-x

Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, *98*(2), 219-235. doi: 10.1037/0033-2909.98.2.219

Xie, W., & Zhang, W. (2016). Negative emotion boosts quality of visual working memory representation. *Emotion*, *16*(5), 760-774. doi: 10.1037/emo0000159

APPENDICES

Appendix A - Case example without emotive content

Kayla is completing her field placement at a family service agency that provides after-school supportive services for youth and their families. Kayla was assigned to work with Hannah a few weeks into her field placement. Hannah was referred to the program after missing school for several weeks. She had repeatedly been running away from home. Agency records indicate that Hannah was suspected of experiencing sexual abuse from her mother's brother when the family lived together in a small rural town in the eastern part of the state. Hannah currently lives with her mother who works various part-time jobs and is not home most of the time. Hannah also has an older brother who dropped out of school a few years ago.

To get to know Hannah, Kayla asked about her family and friends. Hannah began to open up to Kayla and even shared some pictures of her family and boyfriend on her cell phone. Kayla shared pictures of her family and boyfriend in an effort to build rapport with Hannah. After seeing the photos, Hannah exclaimed, "I have more on Facebook!" and immediately sent Kayla a friend request. Kayla wasn't sure whether she should accept the friend request or not.

Kayla's supervisor at her field placement is Ryan. Ryan asked Kayla to observe a group session with several youth. The focus of the group session was to learn how to manage conflict using I-statements. Ryan and Kayla engaged in a role play to demonstrate the use of I-statements to the group. Ryan asked Hannah and another group member, Taylor, to try it out using a different role play. In the new role play, Taylor begs Hannah to skip class so the two of them can hang out with their boyfriends. At first, Hannah struggled to use I-statements, but after some prompting from Ryan and Kayla, Hannah describes the effect skipping school would have on her grades. After the group session ended, Kayla pulled Hannah aside to complement her on her progress.

Later that evening, Kayla wrote on Facebook about her field placement and how much progress Hannah was making. As always, Kayla was careful not to use Hannah's name. In class the next day, students were asked to provide an update on their field placements. Kayla told the class about the role play and how Hannah was making progress.

For several weeks, Hannah had been attending the after-school program, but this week Kayla notices that Hannah is not there. Ryan didn't know where Hannah was, although Hannah was expected to return to the program and participate in the group session. After overhearing Taylor say something about Hannah, Ryan asked Kayla to check the Internet and social media accounts for any information regarding Hannah's whereabouts. Kayla immediately remembered Hannah's friend request and wondered if she might learn more from her Facebook page, if she accepted the friend request and reviewed her posts, as Ryan requested.

Appendix B – Case example with emotive content (bolded)

Kayla, **an energetic 22-year-old who is a 4.0 student in her graduate social work program**, is completing her field placement at a family service agency that provides after-school supportive services for troubled youth and their families. **Kayla is really anxious about working with teenagers since she is only a few years older than most of them and looks rather young herself.**

Kayla was assigned to work with Hannah a few weeks into her field placement. Hannah **is a 14 year old girl who wears baggy clothes to cover her too thin body. She rarely smiles and has a serious, sad look on her face most of the time.** She was referred to the program after missing school for several weeks. She had repeatedly been running away from home. Agency records indicate that Hannah was suspected of experiencing sexual abuse from her mother's brother when the family lived together in a small, **conservative** rural town in the eastern part of the state. Hannah currently lives with her mother who works **cleaning houses and at a local bar** and is not home most of the time. Hannah also has an older brother who dropped out of school **due to drug use** a few years ago. **Records note that Hannah is a bright, but quiet girl who tends to keep to herself. Kayla felt immediately drawn to Hannah and was invested in helping her.**

To get to know Hannah, Kayla asked about her family and friends **as she was curious about what Hannah did for fun and what her experiences at home were like.** Hannah began to open up to Kayla, **which was surprising given her shy nature**, and even shared some pictures of her family and boyfriend on her cell phone. **Kayla already thought that Hannah was too young for a boyfriend and was even more startled by the boyfriend's picture. The boyfriend looked like he was in college, but Kayla didn't want to embarrass Hannah so she kept those thoughts to herself. Kayla couldn't help but feel worried about Hannah, especially knowing her history of abuse. Still, Kayla shared pictures of her family and boyfriend, **along with photos from their most recent trip to the mountains**, in an effort to build rapport with Hannah. After seeing the photos, Hannah exclaimed, "I have more on Facebook!" and immediately sent Kayla a friend request. Kayla wasn't sure whether she should accept the friend request or not, **but was thrilled that Hannah was finally opening up to her.****

Kayla's supervisor at her field placement is Ryan. **Ryan, a licensed clinical social worker, has been at the agency almost ten years. Ryan has had really good experiences with other social work students and was eager to work with Kayla since the last intern was recently hired by the agency.** Ryan asked Kayla to observe a group session with several youth. The focus of the group session was to learn how to manage conflict using I-statements. Ryan and Kayla engaged in a **spirited** role play to demonstrate the use of I-statements to the group. Ryan asked Hannah and another group member, Taylor, to try it out using a different role play. In the new role play, Taylor begs Hannah to skip class so the two of them can hang out with their boyfriends. At first, Hannah struggled to use I-statements **because she was nervous and intimidated by Taylor**, but after some prompting from Ryan and Kayla, Hannah describes the effect skipping school would have on her grades. After the group session ended, Kayla **was very proud of Hannah's ability to demonstrate new skills and privately pulled Hannah aside to complement her and tell her how delighted she was on her progress.**

Later that evening, Kayla wrote on Facebook about her field placement and how much progress Hannah was making. As always, Kayla was careful not to use Hannah's name. **Kayla felt a sense of pride as she reflected on her own professional growth and thought that maybe she could work effectively with teenagers after all.** In class the next day, students were asked to provide an update on their field placements. **Excitedly**, Kayla told the class about the role play and **how grateful she was** that Hannah was making progress.

For several weeks, Hannah had **faithfully** been attending the after-school program, but this week Kayla notices that Hannah is not there. **Kayla was confused and asked Ryan if he knew why Hannah was absent.** Ryan didn't know where Hannah was, although Hannah was expected to return to the program and participate in the group session. After overhearing Taylor say something **suspicious** about Hannah **and her boyfriend**, Ryan asked Kayla to check the Internet and social media accounts for any **useful** information regarding Hannah's whereabouts. Kayla immediately remembered Hannah's friend request and wondered if she might learn more from her Facebook page, if she accepted the friend request and reviewed her posts, as Ryan requested. **Kayla didn't recall reading anything in the agency policies about Facebook but since Ryan asked her to check, she assumed it was okay.**

Appendix C - Knowledge acquisition questions

UNIQUE IDENTIFICATION #: _____

Instructions: You have just read a case example. Think about the case example and please answer the following multiple choice questions. Circle one letter that represents the best answer to the question. You can take as much time as needed.

1. What was the **central** ethical issue/problem in this case?
 - a. Setting clear, appropriate, and culturally sensitive boundaries
 - b. Placing limits on services provided
 - c. Providing services in an emerging area of practice
 - d. Accessing private client information using technology
2. What ethical standard from the NASW Code of Ethics is **most relevant** to this case?
 - a. Boundaries / dual relationships
 - b. Informed consent
 - c. Practitioner competence
 - d. Privacy and confidentiality
3. What was the name of the **social worker student** in this case?
 - a. Hannah
 - b. Ryan
 - c. Kayla
 - d. Taylor
4. What was the **primary setting** in which the case example occurred?
 - a. Hospital
 - b. Family service agency
 - c. In-home
 - d. Substance use agency
5. According to the social work student, what was the **main reason** the client was receiving services?
 - a. To learn to manage conflict
 - b. To get better grades
 - c. To attend school
 - d. To build better relationships
6. From the client's perspective, what is the **most unethical behavior** the social work student engaged in?
 - a. The social work student breached the client's confidentiality.
 - b. The social work student failed to secure informed consent from the client.

- c. The social work student exceeded the bounds of professional competence by working with the client.
 - d. The social work student engaged in a dual relationship with the client.
7. If the social work student could have done **one thing differently**, what would it be?
- a. Disguise the client's situation better when posting on Facebook
 - b. Seek guidance from a more experienced social worker before searching the Internet
 - c. Decide not to post anything related to clients on Facebook
 - d. Observe a few more group sessions before taking an active role

Please answer the following questions about you. Your time is very much appreciated.

1. What is your age? _____
2. What is your gender? _____
3. What is your race/ethnicity? _____
4. Which MSW Program best describes the one you were you admitted to?
 - Advanced Standing program
 - Full-time program
 - Triangle 3 Year Distance Education Program
 - Winston-Salem 3 Year Distance Education Program
5. Are you currently in your field practicum?
 - Yes (if yes, please answer question 6)
 - No (if no, please proceed to question 7)
6. Which field practicum are you currently enrolled?
 - Foundation/Generalist
 - Concentration
7. Which of the following courses have you taken?
 - SoWo 740: Implementing Evidence Informed Practice with Individuals, Families and Groups (Direct practice)
 - SoWo 770: Implementing Evidence Informed Practice with Organizations and Communities (Macro practice)
 - I've taken both courses

I've not taken either course

8. Are you currently employed in the social work field?

Yes

No

Thank you very much for your time and participating in this study.

****Place this sheet inside the envelope and return it to the study administrator. ****

Appendix D – Open ended questions

UNIQUE IDENTIFICATION #: _____

Instructions: The following four questions are related to the case example you just read. You may refer back to the case example as often as you like in order to fully answer the questions. Please write as much as you can to answer each question and be as specific as possible. You are encouraged to reference the NASW Code of Ethics in your answers.

[NOTE: For the study, participants were able to use the front and back of the paper to answer each question. The questions are listed here on one page to save space.]

1. Describe all the ethical issues that are present in this case example. Use facts from the case example to support your claim. Note any assumptions or unknown facts that may influence the ethical issues present in this case example.
2. Analyze the ethical issues by describing all the possible consequences or outcomes that could result from actions taken or not taken by the social worker. Compare and contrast alternatives that are available to the social worker. Consider the short term and long term implications of the situation.
3. Describe what the social worker should do. Be specific regarding what action or actions the social worker should take. Explain the justification for your decision. Discuss how the social worker should implement and evaluate their decision.
4. Describe your feelings toward the two main characters in the case example (Kayla- the social work student and Hannah- the client).

****Place this sheet inside the envelope and return to the study administrator. ****

Appendix E – Rubric for assessing ethical sense making

UNIQUE IDENTIFICATION #: _____

Rater Initials: _____

Social Work Ethical Sense Making Rubric (SWESMR)

Instructions to raters: Carefully read the answers to the open ended questions. Use the rubric below to rate each response. Use the criteria contained in the rubric to decide on the most appropriate score for each component. Use whole numbers (1, 2, 3, 4) only.

Open Ended Question #1: Identify ethical issues

On a scale of 1-4, rate the thoroughness and accuracy of the overall response in identifying and describing the ethical issues from the case example. Circle the most appropriate scale score.

- 1 = poor** (does not identify ethical issues; realizes something is wrong but does not clearly identify the issue; offers no support from case example; sees issues in simplistic terms)
- 2 = fair** (identifies at least one potential issue; uses few facts to support claim; does not hypothesize or speculate about how facts may influence situation)
- 3 = good** (identifies at least two issues, uses some facts from case example; hypothesizes or speculates about how facts may influence situation; alludes to ethical choices)
- 4 = excellent** (identifies three or more issues; uses specific facts from case example; hypothesizes or speculates about how facts may influence situation and potential impact; clearly describes ethical choices)

Open Ended Question #2: Analyze ethical issues

On a scale of 1-4, rate the thoroughness and accuracy of the overall response in analyzing the ethical situation. Circle the most appropriate scale score.

- 1 = poor** (no analysis provided; takes vague position without justification; analysis does not reference ethical rules or guidelines; no timeframes discussed)
- 2 = fair** (minimal effort at analysis; relevant ethical rules ignored; missed opportunity to identify possible outcome or consequence; only short term outcomes considered)
- 3 = good** (considers potential consequences or conflicts; acknowledges alternative actions; notes different perspectives of situation; considers several short term consequences)
- 4 = excellent** (considers multiple potential consequences or conflicts; explores alternative actions and resulting outcomes; considers short term and long term consequences)

Open Ended Question #3: Resolve ethical issues

On a scale of 1-4, rate the thoroughness and accuracy of the overall response in resolving the ethical situation. Circle the most appropriate scale score.

- 1 = poor** (no resolution proposed or proposed resolution lacks integrity or adherence to ethical guidelines)
- 2 = fair** (proposes a resolution but does not justify decision; infers consequences; plan of action

is incomplete or lacks integrity)

3 = good (proposes a plan and considers consequences; discusses potential risks; plan is ethically sound and does not violate ethical standards)

4 = excellent (develops a realistic plan of action; discusses nuances of implementation; displays evidence of logical, systematic decision-making; plan is ethically sound and does not violate ethical standards)

Open Ended Question #4: Describe feelings toward characters

On a scale of 1-4, rate the thoroughness and accuracy of the overall response in describing feelings toward the main characters in the case example. Circle the most appropriate scale score.

1 = poor (no positive or negative feelings described; no affective words used; no mention of how feelings may influence the identification or resolution of ethical issues)

2 = fair (provides brief description of feelings toward one but not both main characters; uses one or two affective words; does not mention how feelings may influence ethical situation)

3 = good (describes positive and/negative feelings toward both main characters and/or supervisor; uses several affective words to describe feelings; mentions how feelings may influence identification and resolution of ethical issues)

4 = excellent (clearly describes positive and/or negative feelings toward main characters; mentions feelings toward supervisor and peer; uses numerous affective words; details how feelings may influence identification /resolution of ethical issues)

Overall application of Code of Ethics in open ended responses

On a scale of 1-4, rate the thoroughness and accuracy of applying the code of ethics, ethical standards/values to the case example. Circle the most appropriate scale score.

1 = poor (no ethical standards/values identified; relevance of ethics not articulated; incorrect references or application of code)

2 = fair (notes ethical standards/values; applies code and/or values but discussion is incomplete; fails to identify primary ethical standards)

3 = good (correctly cites professional code and standards; explains how code/standards impact ethical situation)

4 = excellent (fully and accurately incorporates code and standards; notes that alternative standards may result in different outcomes; evaluates the merits of differing options)

Appendix F – Participation requests

PARTICIPATION REQUEST - EMAIL

Dear Social Work Students,

You are invited to participate in a research study about **the use of case examples to teach ethics related concepts in social work education**. This research study will take place over lunch (pizza & soft drinks provided). Upon completing the study, participants will be given an opportunity to enter a drawing for one of twelve \$25.00 gift cards to the University bookstore. Additionally, students who complete the study will receive a certificate of participation which can be used to satisfy a portion of the field practicum continuing education requirement. Responses to the study will be kept confidential.



If you are interested in participating in the study over lunch (12:00pm-1:45pm), please review the study dates below. Email Tina Souders at tsouders@email.unc.edu with the date you prefer to participate. A confirmation email will be sent within 48 hours of your email.

Monday, September 18, 2017	(School of Social Work- TTK building)
Tuesday, September 19, 2017	(School of Social Work- TTK building)
Friday, September 22, 2017	(School of Social Work- TTK building)
Friday, October 6, 2017	(Winston-Salem- Forsyth DSS)

Thank you for considering your participation in this study. If you have any questions about this study, please feel free to contact me at the email below.

Principal Investigator: Tina M. Souders tsouders@email.unc.edu 336-703-3398

PARTICIPATION REQUEST - FLYER

Dear Social Work Students,

You are invited to participate in a research study about **the use of case examples to teach ethics related concepts in social work education**. We are seeking participation from social work graduate students. This research study will take place over lunch (pizza & soft drinks provided). Upon completing the study, participants will be given an opportunity to enter a drawing for one of twelve \$25.00 gift cards to the University bookstore. Additionally, students who complete the study will receive a certificate of participation which can be used to satisfy a portion of the field practicum continuing education requirement. Responses to the study will be kept confidential.



If you are interested in participating in the study, please review the study dates below. Write your name and email in the space provided. Place a checkmark next to the date you prefer to attend. Return the completed flyer to Tina Souders. Her mailbox is located in the faculty mailroom on the first floor. Tina Souders (tsouders@email.unc.edu) will confirm your selected date via email, along with additional information about the study.

Thank you for considering your participation in this study. If you have any questions about this study, please feel free to contact me at the email below.

Principal Investigator: Tina M. Souders tsouders@email.unc.edu 336-703-3398

tear here

.....

YES, I would like to participate in your study about the use of case examples to teach ethics related concepts during lunch on one of the dates below.

My name is: _____ My email is: _____

I would prefer to participate in the study over lunch (12:00pm-1:45pm) on:

- Monday, September 18, 2017
- Tuesday, September 19, 2017
- Friday, September 22, 2017

Appendix G – Relevant sections from NASW Code of Ethics

1.01 Commitment to Clients

Social workers' primary responsibility is to promote the well-being of clients. In general, clients' interests are primary. However, social workers' responsibility to the larger society or specific legal obligations may on limited occasions supersede the loyalty owed clients, and clients should be so advised. (Examples include when a social worker is required by law to report that a client has abused a child or has threatened to harm self or others.)

1.03 Informed Consent

(a) Social workers should provide services to clients only in the context of a professional relationship based, when appropriate, on valid informed consent. Social workers should use clear and understandable language to inform clients of the purpose of the services, risks related to the services, limits to services because of the requirements of a third-party payer, relevant costs, reasonable alternatives, clients' right to refuse or withdraw consent, and the time frame covered by the consent. Social workers should provide clients with an opportunity to ask questions.

1.04 Competence

(a) Social workers should provide services and represent themselves as competent only within the boundaries of their education, training, license, certification, consultation received, supervised experience, or other relevant professional experience.

(b) Social workers should provide services in substantive areas or use intervention techniques or approaches that are new to them only after engaging in appropriate study, training, consultation, and supervision from people who are competent in those interventions or techniques.

1.06 Conflicts of Interest

(a) Social workers should be alert to and avoid conflicts of interest that interfere with the exercise of professional discretion and impartial judgment. Social workers should inform clients when a real or potential conflict of interest arises and take reasonable steps to resolve the issue in a manner that makes the clients' interests primary and protects clients' interests to the greatest extent possible. In some cases, protecting clients' interests may require termination of the professional relationship with proper referral of the client.

(b) Social workers should not take unfair advantage of any professional relationship or exploit others to further their personal, religious, political, or business interests.

(c) Social workers should not engage in dual or multiple relationships with clients or former clients in which there is a risk of exploitation or potential harm to the client. In instances when dual or multiple relationships are unavoidable, social workers should take steps to protect clients and are responsible for setting clear, appropriate, and culturally sensitive boundaries. (Dual or multiple relationships occur when social workers relate to clients in more than one relationship,

whether professional, social, or business. Dual or multiple relationships can occur simultaneously or consecutively.)

1.07 Privacy and Confidentiality

(a) Social workers should respect clients' right to privacy. Social workers should not solicit private information from clients unless it is essential to providing services or conducting social work evaluation or research. Once private information is shared, standards of confidentiality apply.

(b) Social workers may disclose confidential information when appropriate with valid consent from a client or a person legally authorized to consent on behalf of a client.

(c) Social workers should protect the confidentiality of all information obtained in the course of professional service, except for compelling professional reasons. The general expectation that social workers will keep information confidential does not apply when disclosure is necessary to prevent serious, foreseeable, and imminent harm to a client or other identifiable person. In all instances, social workers should disclose the least amount of confidential information necessary to achieve the desired purpose; only information that is directly relevant to the purpose for which the disclosure is made should be revealed.

(i) Social workers should not discuss confidential information in any setting unless privacy can be ensured. Social workers should not discuss confidential information in public or semipublic areas such as hallways, waiting rooms, elevators, and restaurants.

(m) Social workers should take precautions to ensure and maintain the confidentiality of information transmitted to other parties through the use of computers, electronic mail, facsimile machines, telephones and telephone answering machines, and other electronic or computer technology. Disclosure of identifying information should be avoided whenever possible.

2.05 Consultation

(a) Social workers should seek the advice and counsel of colleagues whenever such consultation is in the best interests of clients.

3.09 Commitments to Employers

(a) Social workers generally should adhere to commitments made to employers and employing organizations.

4.03 Private Conduct

Social workers should not permit their private conduct to interfere with their ability to fulfill their professional responsibilities.

4.06 Misrepresentation

(a) Social workers should make clear distinctions between statements made and actions engaged in as a private individual and as a representative of the social work profession, a professional social work organization, or the social worker's employing agency.

Appendix H – Informed consent

**University of North Carolina at Chapel Hill
Consent to Participate in a Research Study
Adult Participants****Consent Form Version Date:** August, 2017**IRB Study #** 17-1891**Title of Study:** The effect of emotive content on knowledge acquisition and ethical sense making in social work education**Principal Investigator:** Tina M. Souders**Principal Investigator Department:** School of Social Work**Principal Investigator Phone number:** 336-703-3398**Principal Investigator Email Address:** tsouders@email.unc.edu

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary.

You may choose not to participate, or you may withdraw your consent to be in the study, for any reason, without penalty. Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies. Deciding not to be in the study or leaving the study before it is done will not affect your relationship with the researcher or the University of North Carolina-Chapel Hill. Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researcher named above any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this study is to examine the effect of emotive content in case examples. Case examples or vignettes are commonly used in social work to teach ethics related material and how to address ethical dilemmas. The literature supports the use of case examples to teach ethics related material, however, the extent to which certain features of the case example might influence learning have not been fully explored. Findings from the study will be used to support the development and presentation of effective case examples to address ethical issues found in social work practice.

You are being asked to participate in this study because you are a social work graduate student at the UNC-CH School of Social Work. The study will take place during lunch in a classroom at the Tate-Turner-Kuralt Building (for students enrolled in the Full-Time, Advanced Standing, or Triangle DE programs) or the Forsyth County Department of Social Services (for student

enrolled in the Winston-Salem DE program). If you consent to participate, you will only be eligible to participate one time.

Are there any reasons you should not be in this study?

If you are not currently enrolled as a graduate student at the UNC-Chapel Hill School of Social Work, then you should not be in this study.

How many people will take part in this study?

There will be approximately sixty graduate social work students in this research study.

How long will your part in this study last?

The study is expected to last 1 hour and 45 minutes on the day you participate. There are no follow up visits or meetings once you complete the study materials.

What will happen if you take part in the study?

If you agree to take part in this research study, you will be asked to read an ethics related case example and respond to a series of questions. The study will take place in a quiet classroom. After giving your consent to participate, you will read the case example, which is approximately two pages in length. After reading the case example, you will respond to four open-ended questions and seven multiple choice questions related to the case example. You will be asked to provide demographic information such as your age, gender, ethnicity, as well as whether you are currently in field and whether you've taken the concentration macro and/or direct practice course. Upon completing all study materials, you will have an opportunity to enter a drawing for one of twelve \$25.00 gift cards to the University bookstore. You will also receive a certificate of participation which can be used to satisfy a portion of your continuing education requirement for your generalist field practicum.

What are the possible benefits from being in this study?

The main benefit to you for participating in this study is that your participation will enhance the knowledge base regarding the use of case examples in social work ethics education. This research may not benefit you directly, however, it may assist in the development of instructional strategies that would benefit future social work educators, students, and practitioners.

What are the possible risks or discomforts involved from being in this study?

While it is not the intent of the study and it would be highly unusual, there is a very small risk that you may be upset by the scenario in the case example. The case example is related to the use of social media (namely Facebook) when working with a teenage client but is not about a highly troubling situation. Likewise, there is a small risk you may be embarrassed if you have trouble answering a question, however, the point of the study is to test the material, not your performance as a student or social worker. You may skip any question you like and you are able to withdraw or walk away from the study at any time.

How will information about you be protected?

The researchers will make every effort to keep private information confidential, such as demographic information. No personally identifying information will be recorded on the study materials. A unique identification number will be used on all study materials. The unique identification number will not be matched, linked, or associated with your name. Only the researcher will have access to your name, which is contained on the consent form. The consent form will not be associated with the unique identification number and will be secured in a locked file box, in a locked file cabinet, separate from the research data. Written responses to the study questions, along with your consent form, will be kept in a locked file, in a locked office. Electronic files will be password protected and uploaded to a secure server. All information obtained about you in this study is strictly confidential unless disclosure is required by law. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. The results of this study may be used in reports, presentations, and publications, but the research will not identify you.

What if you want to stop before your part in the study is complete?

It is OK for you to stop at any time, without penalty. Your decision to stop will not affect your relationship with the School of Social Work, UNC-CH, or the researcher. The researchers reserve the right to withdraw your participation in this study, at any time, if they observe potential problems with your continued participation, such as failure to follow instructions or because the entire study has been stopped.

Will you receive anything for being in this study?

The researchers want your decision about participating in this study to be absolutely voluntary. Yet, they recognize that your participation may pose some inconveniences to you. In order to help defray any inconvenience, lunch (consisting of pizza and soft drinks) will be provided before the study begins. Participants who complete and turn in both study packets can enter a drawing for one of twelve \$25.00 gift cards to the University bookstore and will receive a certificate of participation that can be used to satisfy a portion of the field practicum continuing education requirement. The researcher will not examine the completed study materials when you turn it in and are unable to give you any payment for participating in this study.

Will it cost you anything to be in this study?

There are no costs to participating in this study, other than your time to complete the study materials.

What if you are a UNC student?

You may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing, grades at UNC-Chapel Hill, or relationship with the researcher. You will not be offered or receive any special consideration if you take part in this research. Your participation is purely voluntary.

Who is sponsoring this study?

This research is being conducted in partial fulfillment of the researcher's doctoral degree. There is no funding from any sponsor or other institution supporting this study. The researcher is not being paid by any funder and does not have any financial interest with any sponsor.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study, complaints, or concerns, you should contact the researcher listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

Signature of Research Participant

Date

Printed Name of Research Participant

Signature of Research Team Member Obtaining Consent

Date

Printed Name of Research Team Member Obtaining Consent

Appendix I – Responses to knowledge acquisition questions by study group

Note: correct answer bolded

What was the central ethical issue/problem in this case?

Answer choices	Emotive	Non-emotive	Total
Setting clear, appropriate, and culturally sensitive boundaries	24	21	45
Placing limits on services provided	0	0	0
Providing services in an emerging area of practice	0	0	0
Accessing private client information using technology	13	13	26

What ethical standard from the NASW Code of Ethics is most relevant to this case?

Answer choices	Emotive	Non-emotive	Total
Boundaries/dual relationships	13	17	30
Informed consent	2	0	2
Practitioner competence	4	2	6
Privacy and confidentiality	18	15	33

What was the name of the social work student in this case?

Answer choices	Emotive	Non-emotive	Total
Hannah	2	1	3
Ryan	0	0	0
Kayla	34	33	67
Taylor	1	0	1

What was the primary setting in which the case example occurred?

Answer choices	Emotive	Non-emotive	Total
Hospital	0	0	0
Family service agency	36	34	70
In-home	1	0	1
Substance use agency	0	0	0

According to the social work student, what was the main reason the client was receiving services?

Answer choices	Emotive	Non-emotive	Total
To learn to manage conflict	2	6	8
To get better grades	4	0	4
To attend school	20	23	43
To build better relationships	11	5	16

From the client's perspective, what is the most unethical behavior the social work student engaged in?

Answer choices	Emotive	Non-emotive	Total
The social work student breached the client's confidentiality	24	20	44
The social work student failed to secure informed consent from the client	3	7	10
The social work student exceeded the bounds of professional competence by working with the client	1	0	1
The social work student engaged in a dual relationship with the client	9	7	16

If the social work student could have done one thing differently, what would it be?

Answer choices	Emotive	Non-emotive	Total
Disguise the client's situation better when posting on Facebook	0	0	0
Seek guidance from a more experienced social worker before searching the Internet	12	5	17
Decide not to post anything related to clients on Facebook	23	27	50
Observe a few more group sessions before taking an active role	2	2	4

VITA

Tina M. Souders

STEM Education and Professional Studies Department
Darden College of Education
Old Dominion University

EDUCATION

Ph.D. Candidate, Instructional Design and Technology, Old Dominion University, Norfolk, VA

J.D. School of Law, North Carolina Central University, *Cum Laude*, Durham NC

MSW School of Social Work, University of Illinois at Urbana-Champaign, Urbana, IL.

B.A. Sociology, Bloomsburg University of Pennsylvania, Bloomsburg, PA.

PROFESSIONAL EXPERIENCE

Director, Winston-Salem 3 Year MSW Program, 2005-present

University of North Carolina at Chapel Hill, School of Social Work, Chapel Hill, NC

Director of Quality Improvement & Director of Integrated Services, 2000-2005

The Children's Home, Inc., Winston-Salem, NC

Lead Willie M. Regional Service Manager, Willie M. Regional Service Manager, & Area Program Consultant, 1995-2000

NC Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, Raleigh, NC.

Cottage Director, Intake Coordinator, Program Services Assistant, & Child Care Worker, 1989-1995

Cunningham Children's Home, Urbana, IL.

PUBLICATIONS

Souders, T. (2017). Understanding your learner: Conducting a learner analysis. *Advancing Medical Education through Strategic Instructional Design*. Jill Stefaniak, (Ed). IGI Global. 1-30.

Souders, T., & Stefaniak, J. (under review). An exploratory study examining instructional strategies and ethics related topics in social work education.

PRESENTATIONS

Souders, T. (2017). *An exploratory study examining the instructional strategies used to teach ethics*. AECT International Convention, Jacksonville, FL.

DESIGN & DEVELOPMENT COMPETITION

Sentz, J. & **Souders, T.** (2016). Design & Development Competition. Association for Educational Communications & Technology. Finalist.

Souders, T. & Ross, M. (2014) PacifiCorp Design Competition. Association for Educational Communications & Technology. 2nd round.

