NjP *Journal of Business Ethics Education 19.*

Promo 1st Version

Digital Simulation: Applying Critical Thinking to the Practice of Ethical Decision Making

Jay L. Caulfield and Felissa K. Lee
Marquette University, USA

Abstract. Teaching the nuances of ethical decision making is particularly challenging in fully online, asynchronous courses where real-time discussion is not an option. Digital simulations, in the context of an integrative online ethics course, can offer applied learning and assessment experiences. However, scholarship on the impact of digital simulations for teaching ethical decision making is limited. The purpose of this study is to explore whether digital simulation used as an assessment for ethical reasoning and complex decision making is effective in helping business students heighten their awareness of values in tension and discern ethical paths to resolution. We conduct an exploratory analysis of two ethics simulations used in teaching nine graduate business ethics classes offered in an asynchronous, online format. We discuss the results in terms of the Markkula Center for Applied Ethics' five-step ethical decision making framework and outline implications for teaching and future research on business ethics simulations.

Keywords: ethical reasoning, Ethics Lens Inventory©, digital simulation, Markkula Center decision making framework.

Acknowledgement: We wish to express our gratitude to Catharyn Baird, the Founder/CEO of EthicsGame and Professor Emerita, Regis University, for graciously giving us permission to use EthicsGame materials for this study and for generously taking her time to answer several technical questions regarding the simulations as well as to review the final manuscript for accuracy in our reference to EthicsGame materials.

1. Introduction

> *Character is higher than intellect. Thinking is the function. Living is the functionary. The stream retreats to its source. A great soul will be strong to live, as well as strong to think.* (Ralph Waldo Emerson 1837)

Research indicates that digital simulations facilitate important learning outcomes such as complex decision making (Beckem & Watkins 2012; Chernikova *et al.* 2020; Sailer & Homner 2020; Vlachopoulos & Makri 2017). Simulations are becoming increasingly useful and prevalent as evolving technology makes them both lifelike and engaging experiential learning tools (Beckem & Watkins 2012;

Chernikova *et al.* 2020; Vlachopoulos & Makri 2017). Faculty from a variety of disciplines report including digital simulations in their curricula (Angolia & Reed 2019; Alstete & Beutell 2019; Bond & Spillane 2008; Maruca & Diaz 2013; Ziv *et al.* 2003). Further, the recent increase in fully online courses heightens our need for creative digital methods to help democratize education.

Simulations are promising options for courses in business ethics. Society as a whole recognizes that teaching ethical decision making is critically important for the business world (Kaufmann 2018; Montiel *et al.* 2020; Schwartz 2016). Since student engagement and experiential methods enhance learning (Beckem & Watkins 2012; Kolb & Kolb 2009; Kuh 2009; Trowler & Trowler 2010), simulations are an increasingly popular way to give students practice with complex ethical decision making in today's global environment (Montiel *et al.* 2020). In particular, recognizing when ethical values and principles are in tension and knowing how to best resolve that tension are key aspects of navigating business ethics (Kaufman 2018; Sternberg 2012; Velasquez *et al.* 2015).

Therefore, the purpose of this study is to examine whether digital simulation used as an assessment to gauge ethical reasoning and complex ethical decision making is effective in helping business students recognize when ethical principles are in tension and learning to resolve that ethical tension. We draw on the work of Paul and Elder (2006) to define ethical reasoning as being fair-minded and empathetic, considering and respecting the welfare of others as well as ourselves, and embodying the normative ethics of pluralistic communities. We view ethical reasoning as a precursor to ethical decision making.

The contributions of this study are threefold. Foremost, we present a framework for evaluating the effectiveness of a digital simulation in a business ethics course. Although business ethics simulations have appeared in the literature since the 1990s, there is a dearth of research on how to assess their effectiveness and impact (Anderson & Lawton 2009). The process used in this paper offers a starting point for that assessment.

In addition, this paper shows how to use digital ethics simulations as a novel assessment tool to identify gaps in teaching and learning. Simulations are often used as an applied assignment (formative assessment) within a class. Here we demonstrate how digital simulation can serve as a uniquely engaging summative assessment at term's end. Rather than taking a traditional exam, students have a final opportunity to apply course principles to real-world scenarios that approximate what they may face in the work place. Finally, this paper provides an example of how to design an asynchronous online course that is grounded in a well-researched and respected framework for ethical decision-making, the Markkula Center Decision Making Framework (MCDMF). We discuss this framework in a later section.

In the absence of research-based/objective indicators of outcomes, practitioners tend to rely on their personal preferences and anecdotal feedback of students in deciding on the value of a particular digital simulation. Although that

information is relevant, it is not sufficient for providing a comprehensive picture of how well a business ethics simulation delivers on its intended pedagogical purpose (Anderson & Lawton 2009).

As there is very limited scholarship on assessing digital business ethics simulations, we adopted an exploratory approach to examining the factors of interest. Based on a set of initial research questions, we conducted a mixed methods analysis of two ethical simulations used in teaching nine graduate business student ethics classes. The classes were offered in a fully online asynchronous format over a period of four years.

Our paper is organized as follows. First, we begin with a literature review. Next we introduce the Markkula Center for Applied Ethics and summarize its decision-making framework. Third, we provide an overview of the simulation exercises. We follow with methods and results of our exploratory analyses. Finally, we discuss our findings, including future research directions and implications for using digital simulations to advance ethical reasoning and ethical decision making.

2. Literature Review

To successfully function within a society, people in business need to recognize and abide by the normative ethics dominant within that society (Carroll 2016; Gardner *et al.* 2001; Kaufman 2018). Failing to do so often results in punishment such as a decline in revenues due to societal shunning, bad press and, in severe cases, legal ramifications that lead to business failure, criminal convictions and loss of employment for many individuals. Recent well-known examples include Nikola, Wirecard, Wells Fargo and Luckin Coffee (Fortune Editors 2020). Business schools are challenged on how to incorporate and evaluate critical thinking opportunities that engage students in complex ethical decision making in pluralistic ethical environments for the purpose of reducing harm to stakeholders, thereby benefiting society as a whole.

Common Themes

Here we highlight a few key themes that are important for teaching and researching business ethics. First, normative ethical frameworks are important guides to ethical reasoning and decision making (Kaughman 2018; Velasquez *et al.* 2015). These conceptual foundations provide an essential starting point for learners to think precisely and critically about how one ought to behave in a flourishing society. Further, an excellent way for students to begin learning this reasoning process is to reflect critically upon their own moral values, how they developed, and how they relate to the ethical standards (normative ethics) of our society (Churchill 1982; Kaufmann 2018; Kidron 2018).

Second, ethical decision making, a form of critical thinking (Paul & Elder 2006), is best learned through experiential and active learning. In his seminal work, Kolb (1984) defines experiential learning as "a holistic and integrative perspective on learning that combines experience, perception, cognition and behavior" (p. 21). He identifies an iterative four stage learning cycle, (concrete experience, reflective observation, abstract conceptualization and active experimentation) where learning, then, becomes "creating knowledge through the transformation of experience" (p. 38).

Interactive digital simulation is a form of experiential learning (Beckem & Watkins 2012; Every Student Succeeds Act 2015; Kolb & Kolb 2009). In an ethical decision making simulation, for example, the program may assign students specific roles where they are asked to frame the ethical values in tension and to make an ethical decision while considering how their decision will impact a number of stakeholder groups (concrete experience). Following completion of the simulation, students might think about what went well and what did not (reflective observation). Next, learners could be prompted to think about what ethical standards may apply to the situation (abstract conceptualization). Finally, they incorporate their ideas and apply them to future simulations and ultimately to real life (active experimentation). Thus, it is feasible for learners to build ethical decision making skills through well-designed digital simulations that incorporate all four stages of experiential learning.

Active learning is "any pedagogical method that requires and fosters the involvement of learners in their learning process and therefore recognizes and promotes their personal experiences in social contexts" (Vaz de Carvalo & Bauters 2021, p. 1). For example, a character-based literacy program that uses literature to engage in discussions regarding morals and ethics may help students identify and develop their own moral sensitivities (Kidron 2018). Active learning may take many forms, such as discussing how to frame an ethical act or identifying the stakeholders most impacted by an unethical act. Several researchers include active learning under the umbrella of experiential learning (Chiang *et al.* 2021; Gaidis & Andrews 1991; Pallab & Mukhopadhyay 2004) as it often aligns with active experimentation, the fourth step in Kolb's learning cycle.

Third, a key learning objective is the process of navigating ethical conflicts. This process includes recognizing ethical conflicts as they occur, identifying the specific ethical principles/values in tension, applying ethical frames to guide critical thinking, and learning how to harmonize different ethical beliefs inclusively (Kaufmann 2018; Johnson *et al.* 2017; Schwartz 2016). Simulations that include these incremental steps teach learners how to work with major stakeholders to arrive at an ethical decision that maximizes benefit for all parties.

Relatedly, there are two kinds of ethical tensions that arise in the workplace: 1) tensions among the ethical perspectives (lenses, values) of various actors, and 2) the tension between earning profits and behaving ethically while doing so. In