Utilisation of Vignettes Instructional Method and Ethical Sensitivity in Decision-Making among Business Studies Teacher Trainees at the University of Nairobi, Kenya

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Article Info	Abstract
	Vignettes have been applied in many academic disciplines over time, as an essential element of experiential learning. At the Department of Educational Communication and Technology, adoption of vignettes instructional method by instructors remains slow, while application by early adopters remains inconsistent. Despite this, little is known about how utilisation of vignettes to teach business ethics at the Department influences teacher trainees' ethical sensitivity in decision-making. The cross-sectional survey design guided the research process, and primary data were sourced in 2018 from 116 learners. Both quantitative and qualitative analysis techniques were applied. Key results show that trainees who strongly agreed that utilisation of vignettes influenced their ethical sensitivity in decision-making had about 2 times the odds of being ethically sensitive in their decisions as their colleagues who expressed strong disagreement about the same. Besides, those who agreed that utilisation of vignettes influenced their ethical sensitivity in decision-making were about 1.9 times as likely to make ethically sensitive decisions as those who indicated strong disagreement. On aggregate, utilisation of vignettes caused a positive and significant influence on trainees' ethical sensitivity in decision-making. It also emerged third in the order of relative importance. Notably, the more the trainees appreciated that utilisation of vignettes influenced their ethical sensitivity in decision-making, the higher odds of making ethically sensitive decisions. Thus, improving trainees' knowledge on the various parameters of vignettes' utilisation is likely to enhance their ethical sensitivity in decision-making. This may be achieved by dedicating a section of training modules on optimisation of vignettes' utilisation.

Introduction

The vignettes teaching technique is a component of experiential learning, a style of education that involves building learners' capacity via real-world events and is usually more complicated than the classical instructional model, according to Harland (2014). Vignettes are defined in the existing literature as brief descriptive scenarios that simulate real-life events in a variety of settings, are packaged in a manner that elicits critical thinking, and are presented as texts, images, as well as audio and visual resources (Erfanian et al., 2020; Polit & Beck, 2006; Jeffries & Maeder, 2006). The purpose of vignettes is to stimulate learners' intellectual thinking in order to arrive at acceptable answers to problems. To substantiate this claim, Krain (2016) and McAllister and McKinnon (2008) independently connected vignettes to the development of cognitive abilities for making successful choices, recognizing critical concerns in real-world situations, and resolving underlying ethical dilemmas. Jeffries and Maeder (2006) also associated vignettes with an increase in learners' analytical abilities, which Lee (2012) defined

as going beyond remembering knowledge to assessing and applying real-world situations in decision-making. Similar sentiments were expressed by Krambia-Kapardis & Zopiatis (2011), who asserted that vignettes enhance learners' critical thinking and problem-solving abilities; Mazanec (2005), who linked vignettes to improvements in learners' attitudes toward ethical decision-making; and Kandemir & Budd (2018), who elaborated that vignettes create dilemmas for learners to investigate as they strive to solve.

Additionally, research such as Kidwell and Valentine (2009); Brookhart (2005); and Mazanec (2005) established a distinct link between the use of vignettes and learners' capacity to relate their experiences in business contexts to learning material. This enhances decision-making throughout the learning process and results, as well as the ability to resolve ethical dilemmas in the professional setting. These assertions imply that the vignettes teaching approach provides valuable business experiences to class, which teachers integrate into the learning process. The degree to which vignettes affect learning outcomes can be determined by examining the materials' context, content, type, structure, and use (Oluoch & Odundo, 2018). The effect of the vignettes teaching technique on learning outcomes may be examined further in terms of the underlying design. Oluoch & Odundo (2018), as well as Jeffries & Maeder (2006), identified vignette design as a significant element affecting change in outcomes such as critical thinking, problem solving, and ethical sensitivity in decision-making. In this respect, inadequate designs are likely to impede trainees' attempts to maximize ethical sensitivity and educational results.

For many decades, the vignettes teaching technique has been used in institutes of higher learning. More precisely, Bradbury-Jones, Taylor, and Herber (2014) said that the approach has been used in a variety of ways to assist learning across a range of academic fields, including health sciences, social work, anthropology, education, business studies, law, and marketing (Sampson & Johannessen, 2020; Bradbury-Jones et al., 2014; Emanuel & Cross, 2012). In education, the vignettes teaching technique has aided in the training of instructors in a variety of subjects, including business studies (Oluoch, Odundo & Mwangi, 2018; Van den Berge & Dichaba, 2013).

Globally, teaching techniques have progressively shifted away from passive information receipt toward active learner-centered interactions (Harland, 2014; Effelsberg et al., 2014; Odundo & Gunga, 2013). This indicates that teachers are increasingly using vignettes to teach students how to assess situations, identify issues, and resolve them. Learner-centered interactions involve empowering learners to lead their own learning processes by critically analyzing material and conversing with peers about it (Harland, 2014; Odundo & Gunga, 2013). This characteristic led writers such as Harland (2014) to praise the vignettes teaching technique for decreasing dependence on instructors, a factor that, according to Odundo and Gunga (2013), disconnects real-world experiences from learning processes. Elsewhere, Effelsberg et al. (2014) lauded the use of vignettes to promote learners' active involvement and to improve learners' attitudes toward real-world circumstances.

Ethical sensitivity in decision-making is a necessary characteristic of successful management, and success in a competitive corporate climate is impossible without it (Suresh, 2011). Decisions made in such settings are ethically responsible if they are governed by values such as professionalism, fairness, confidentiality, accountability, honesty, integrity, non-maleficence, and respect for authority, among others (Oluoch & Odundo, 2018; Suresh, 2011; Kidwell & Valentine, 2009). As Kidwell and Valentine (2009) point out, ethical sensitivity is critical throughout decision-making processes since it has an effect on learning outcomes. In this respect, morally sensitive learners are almost certain to make more successful learning choices than their insensitive peers. While reiterating the claims, Oluoch et al. (2018) promoted

vignettes as an educational technique for fostering teacher trainees' ethical sensitivity in decision-making, especially via exposure to real-world business situations. Decision-making is an essential part of all graduate teacher responsibilities in the workplace, whether in a classroom or commercial environment. As a result, knowledge of ethical problems relating to such duties is essential for decision-making that is consistent with ethical standards. As a result, ethical awareness is critical for teachers to develop in order to make successful choices in their professional contexts (Oluoch et al., 2018; Pan & Sparks, 2012).

Relevant research demonstrates a strong correlation between the use of vignettes as an educational technique and learners' ethical awareness in decision-making. However, the degree and manner of such linkage varies according to context and course. According to Jeffries and Maeder (2006), vignettes have a variety of effects on ethical awareness, including encouraging intellectual debate, introspection, and sharing experiences. Vignettes are critical in this respect for increasing learners' understanding of the ethical concerns that pervade corporate settings. Vignettes contribute to the development of ethical awareness by offering in-depth information about course material from a variety of sources, including real-world experiences, publications, and lectures. Possibly, the more diverse the information base, the more quickly learners increase their awareness and sensitivity to ethical problems (Hughes & Huby, 2002). According to Barkley, Cross, and Major (2014), when learners examine real-life situations packaged as vignettes via a 'ethical lens,' their ethical sensitivity improves, which in turn increases their understanding of underlying problems.

The research was performed at the University of Nairobi (UoN), Kenya's first school of higher learning, founded in 1956. The school had an enrollment of 84,000 students at the time of the research and offered 540 academic programs via six component institutions (UoN, 2017). The College of Education and External Studies (CEES) is one of the institution's professional divisions dedicated to the development of human resources for the education sector, namely teachers. Notably, not all CEES graduates pursue careers in education; a sizable percentage pursue careers in industries such as insurance, transportation, manufacturing, agriculture, finance, and hospitality, to name a few. The College is divided into two schools, one for education and one for continuing and distance education. The former is divided into four departments, one of which is the Department of Educational Communication and Technology (ECOMTEC), which performed this research (UoN, 2017; 2018). ECOMTEC provides a variety of academic programs, including a Bachelor of Education (Arts) that incorporates business studies as a course and business ethics as a course unit. These courses were designed to help students improve their ethical awareness in decision-making (UoN, 2017; 2018).

For at least four decades, traditional teaching has been the predominant mode of course delivery at the UoN, with key characteristics including teacher-centered learning practices, lectures, notes, assignments, and passive involvement in learning processes (Odundo & Gunga, 2013; Omwenga, 2006). According to Petrina (2004), these types of learning techniques obstruct the development of critical analysis, reflection, and problem-solving abilities. Rather of transferring abstract information that learners struggle to comprehend, vignettes bring real-world experiences into the classroom, impacting learners' professional growth. Due to these concerns, ECOMTEC teachers began progressively incorporating vignettes into their delivery of Business Ethics material. The change was prompted by the aim to enhance trainees' ethical awareness in decision-making, learning outcomes, and readiness to deal with ethical workplace issues.

Over the last six decades, vignettes have been used in a variety of disciplines; nevertheless, the connection between the technique and trainees' ethical awareness in decision-making remains

murky in fields such as education. Emanuel and Cross (2012) noted that the majority of relevant research are conducted in the health sciences. Although the use of vignettes to teach business ethics gained traction at the ECOMTEC, teacher acceptance was sluggish, and implementation was uneven across adopters. As a consequence, despite its disadvantages, the majority of teachers favored classical teaching (Harland, 2014; Petrina, 2004). The ECOMTEC teachers' slow adoption and uneven use of vignettes was ascribed to a lack of understanding about how to create and deploy vignettes (Oluoch et al., 2018).

Additionally, although vignettes are increasingly being used in a variety of areas (Krain, 2016; Jeffries & Maeder, 2006), the majority of studies have assessed their application in research. Such studies are primarily concerned with an insufficient study of how using vignettes to teach ethics affects learners' ethical awareness in decision-making. The resulting scarcity of information continues to stymie investments in the creation of vignette-based materials, as well as eroding the institution's use of vignettes in teacher training (Oluoch et al., 2018). This research addressed the aforementioned concerns. It examined five facets of the vignette teaching technique, including context, content, type, construction, and use. The purpose of this study is to examine the effect of using vignettes to teach business ethics on trainees' ethical awareness in decision-making. Its objective was to produce data to aid in policy, administrative, and investment choices, as well as to educate teachers in the vignettes teaching technique. The material was intended to stimulate further academic study on the topic in Kenya and other developing nations.

Literature Review

The use of vignettes as an educational technique has been shown to affect the development of learners' ethical awareness in decision-making over time. According to research performed in a variety of settings, the successful use of vignettes is contingent upon factors such as frequency, time, medium, venue, and methods (Muiz-Rodrguez, Alonso, Rodrguez-Muiz, De Coninck, Vanderlinde, & Valcke, 2018). Variation in these factors results in proportional changes in learning outcomes in terms of satisfaction, perception, awareness, and ethical sensitivity while making decisions. This section summarizes significant results from research that examined the impact of the mentioned factors on vignettes' use and learning outcomes, as well as ethical sensitivity in decision-making. The next paragraphs provide more information.

The regularity with which teachers, in any area and at any level, use vignettes to assist learning has an effect on learning outcomes such as ethical awareness and sensitivity (Ling, Hauck, Doyle, Percario & Henawi, 2019; Abubakar, Ismail & Mamat, 2008; Emerson, Walsh, Lobb, Hatton, Bradley, Schalock & Moseley, 2007). For instance, Ling et al. (2019) found a strong connection between therapists' ethical sensitivity in decision-making and two aspects of vignette use, namely the frequency of exposure to relevant vignettes and the medium via which vignettes were delivered. The authors contended that therapists who were exposed to medical vignettes about ART had a greater chance of making ethical ART choices than those who were just exposed a few times. Abubakar et al. (2008) found in their research that regular exposure to business-related vignettes was essential for developing learners' ethical awareness while making decisions. In this respect, learners were able to give correct answers to ethical issues as a result of the continual use of vignettes to convey course material. This indicated an increase in ethical awareness during decision-making. Similarly, Emerson et al. (2007) established that the frequent use of vignettes in teaching had an effect on learning outcomes related to ethical management practices.

The sequencing, timing, and pace of learning activities are critical for achieving intended results, which include ethical sensitivity in decision-making. Odundo and Gunga (2013) found

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a correlation between the time of vignettes' use and students' capacity to reflect on personal experiences and make accurate conclusions. Ismail and Ghazali (2011) found similar results, stating that the time of vignettes' use was one of the variables affecting learners' knowledge of ethical principles for decision-making. The authors suggested that using vignettes in corporate ethics training at the optimum time improved acquisition of ethical management abilities. Despite the stated results, actual evidence for a connection between the time of vignettes' use and learning outcomes is sparse.

The efficacy of vignettes in educational processes is contingent upon the medium in which they are packaged and presented; they may include visual aids, handouts, flipcharts, markers, overhead projectors, and tape recorders, among others, each with its own set of advantages and disadvantages (Bentley, 2012). Bentley (2012) showed a link between the degree to which learners' ethical thinking changed and the medium in which vignettes were given. In this respect, it was discovered that ICT-based vignettes are more attractive to learners than vignettes presented in print medium. Mateer, Ghent, Porter, and Purdom (2013) found that ICT-based media such as films and music provided more meaningful learning experiences than print media. This was ascribed to its capacity to pique learners' interest and attention. Despite the aforementioned research, actual evidence on the link between vignettes' media and learners' ethical awareness was also missing.

The location of learning activities is another factor that influences the vignettes teaching method's efficacy in achieving targeted learning results. According to pertinent research, experiential learning exercises may take place in classrooms, outdoors, or in professional settings, with different degrees of effect on learners' capacity to connect situations bundled in vignettes with their career goals (Kidwell & Valentine, 2009; Adkins & Simmons, 2004). Still relevant, Adkins and Simmons (2004) highlighted that experiential learning via vignettes was initially intended for an outdoor environment where learners may interact with real-world business situations. This, however, has developed to encompass the incorporation of such experiences into classrooms. Experiential learning, in this context, involves critical examination of vignette situations brought into classrooms. Similarly, Ramburuth and Daniel (2011) emphasized experiential learning's venue versatility, which may encompass classrooms and professional contexts. Notably, none of the mentioned research examined the causal relationship between the venue in which vignettes are used and ethical awareness in decision-making.

Additionally, the literature study found three perspectives on the use of vignettes in experiential learning, including behaviorist, cognitive, and humanist perspectives (Aflalo & Gabay, 2013; Kidwell & Valentine, 2009). According to the behaviorist approach, vignettes integrate corporate experiences to inspire constructive conversations aimed at resolving underlying problems. Such conversations are anticipated to have an impact on learning outcomes, such as ethical awareness in decision-making, in the context of corporate ethics. Whereas the cognitive view calls for the use of vignettes to stimulate learners' analytical abilities, the humanist perspective calls for the use of vignettes to harmonize opinions on sensitive business problems (Aflalo & Gabay, 2013; Kidwell &Valentine, 2009; Felton & Sims, 2005). According to Aflalo and Gabay (2013), the method used when using vignettes affects the degree to which learners' capacity to build personal knowledge, develop cognitive abilities, and enhance perceptions changes. Similarly, Kidwell and Valentine (2009) linked the efficacy of vignettes to instructors' strategies for achieving intended results. Despite the above results, none of the research examined the relationship between methods to vignette usage and learners' ethical awareness in decision-making.

The Experiential Learning Theory (ELT) and the Four-Component Model of Morality (FCMM) were used to shed light on the causal relationship between the vignettes teaching technique and ethical sensitivity in decision-making. From the viewpoint of six premises, ELT describes how knowledge is produced by analyzing real-life experiences packaged as vignettes. In this regard, ELT asserts that learning is a continuous process, not an outcome; that it is founded on experience; that it necessitates the resolution of conflicts between dialectically opposed modes of adaptation to the world; that it is a holistic process of adaptation; that it results from synergistic interactions between learners and their environment; and that it is a process of knowledge creation (Kolb & Kolb, 2017; McLeod, 2017; Manolis, Burns, Assudani & Chinta, 2012). ELT is founded on two mutually reinforcing theoretical ideas, namely a four-stage learning cycle and learning styles, both of which contribute to its success in explaining experiential learning via vignettes.

According to the four-stage learning cycle, experiential learning occurs when the instructional process includes four stages: concrete experience with a new situation; reflective observation of the situation; abstract conceptualization, with an emphasis on reflection; and active experimentation, which entails application of the new experience (Kolb & Kolb, 2017; McLeod, 2017). This indicates that ELT views learning as a holistic process centered on the four phases (McLeod, 2017). While learning may begin at any point throughout the cycle, effective learning occurs only when a learner is capable of completing all four phases (Kolb & Kolb, 2017). Additionally, the Theory asserts that the process of experience learning is spiral rather than linear. The linear model conditions learners to be passive receivers of knowledge, while the spiral model prepares learners to participate actively in the learning process (Kolb & Kolb, 2017).

The learning styles of individuals differ significantly according to their cognitive ability and interactions with their social surroundings (McLeod, 2017). Instructors' selection of learning styles is further influenced by the 'experiential learning style axes,' which include the processing continuum, which depicts how learners approach learning tasks, and the perception continuum, which depicts learners' emotional responses to experiential learning processes (Kolb & Kolb, 2017; McLeod, 2017). The four learning styles, namely divergent, assimilating, tangible experience, and accommodating, are shown in Figure 1 and are linked by the learning style axis.
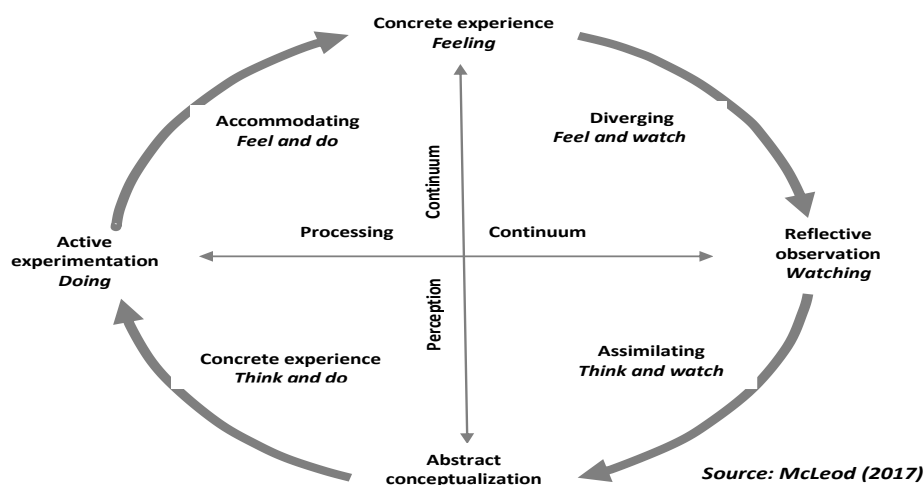

Figure 1. Experiential learning styles and learning axes

While the learning methods are inextricably linked, learners cannot execute both activities on a single axis concurrently. For instance, although learners cannot think and feel simultaneously, they may combine activities associated with neighboring modes, such as thinking and observing. The idea is pertinent to this research because it explains how experiential learning maintains learners connected to the world being studied, distinguishing them from those who just read or write about reality (Kolb & Kolb, 2017). Vignettes facilitate experiential learning by exposing learners to real-world situations. The use of vignettes to expose learners to such situations is critical for experience to be transformed into knowledge. ELT is also lauded for centralizing the topic of study for teacher and student interaction. At the ECOMTEC, the degree to which learners convert experiences into knowledge is determined by the alignment of the business ethics module with the experiential learning cycle and the instructional and learner learning styles.

Additionally, FCMM outlines four distinct psychological processes that are necessary for ethical decision-making:'moral sensitivity,''moral judgment,''moral motivation,' and'moral implementation or action' (Lepper, 1996; Rest, 1983). According to FCMM, the development of ethical decision-making abilities occurs via four psychological stages (You & Bebeau, 2013; Lepper, 1996; Rest & Narvaez, 1994). The purpose of this research was to determine how the use of vignettes to teach business studies affects students' ethical sensitivity in decision-making, which is derived from the model's first component, dubbed'moral sensitivity.' James Rest defined'moral sensitivity' as the capacity of decision-makers to evaluate social circumstances for moral implications, find potential solutions, and assess the impact of such acts on the welfare and interests of others (You & Bebeau, 2013; Weaver, Morse & Mitcham, 2008; Rest & Narvaez, 1994). However, Weaver et al. (2008) observed that in professional settings, decision-making processes are governed by ethical standards; therefore, the term'moral sensitivity' was replaced with 'ethical sensitivity' in this research.

The ethical sensitivity of decision-makers was assessed in this research by comparing participants' answers to a hypothetical vignette to five principles: ethical responsibility, professionalism, confidentiality, honesty, and authority respect. Lind and Swenson-Lepper (2013) assert that business professionals' choices should be assessed in light of their adherence to the principles of ethical sensitivity. FCMM was chosen for this research because it allows educators and students to grasp the notion of ethical sensitivity in decision-making, which refers to an individual's capacity to detect, analyze, and comprehend ethical aspects of real-world events given via vignettes.

The study of the literature shows five characteristics of vignettes' use: frequency, time, medium, location, and method. Numerous studies, including Ling et al. (2019), Mateer et al. (2013), Ismail and Ghazali (2011), and Kidwell and Valentine (2009), have examined the connection between decision-making characteristics and ethical sensitivity in a variety of situations and found conflicting findings. Notably, no such research had ever been performed in Kenya. The purpose of this research was to evaluate the effect of the vignettes teaching technique on teacher trainees' ethical awareness while making decisions. This article discusses the use of vignettes in connection to ethical awareness in decision-making. As a result, the dependent variable was named 'ethical decision-making,' with two potential outcomes: ethically sensitive choices or ethically insensitive ones. The independent variable was the use of vignettes, which was quantified using five metrics. Figure 2 illustrates the predicted connection between the use of vignettes and ethical awareness in decision-making.

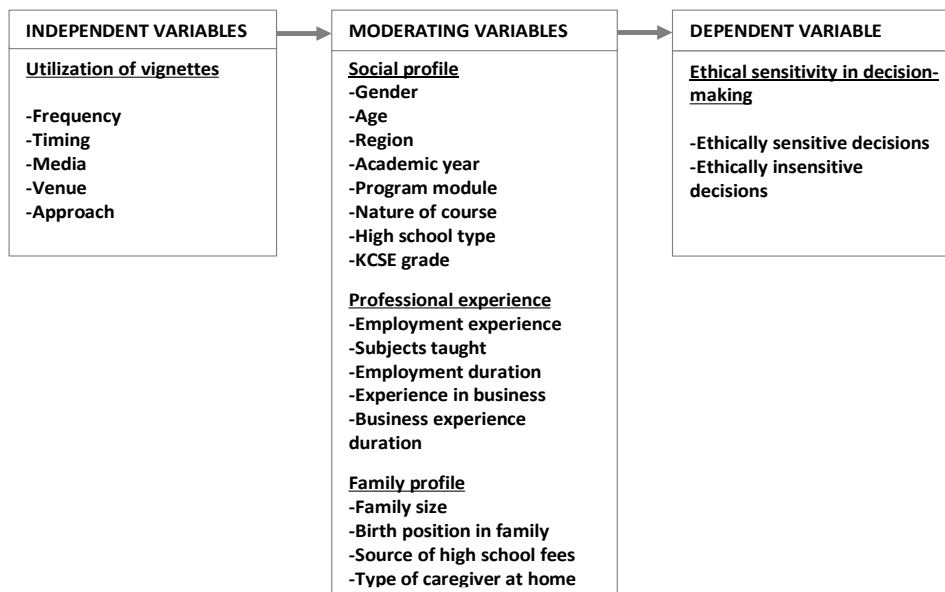| INDEPENDENT VARIABLES	MODERATING VARIABLES	DEPENDENT VARIABLE
Utilization of vignettes -Frequency -Timing -Media -Venue -Approach	**Social profile** -Gender -Age -Region -Academic year -Program module -Nature of course -High school type -KCSE grade **Professional experience** -Employment experience -Subjects taught -Employment duration -Experience in business -Business experience duration **Family profile** -Family size -Birth position in family -Source of high school fees -Type of caregiver at home	**Ethical sensitivity in decision-making** -Ethically sensitive decisions -Ethically insensitive decisions

Figure 2. Relationship between utilisation of vignettes & ethical sensitivity in decision-making

The criteria governing vignettes' use were operationalized in terms of perception statements, to which participants were asked to respond using a five-point Likert scale calibrated as 'strongly agree', 'agree', 'undecided', 'disagree', and 'disagree strongly disagree'. Additionally, the conceptual framework demonstrates that three sets of variables, grouped as trainees' sociodemographic profile, professional experience, and family profile, influenced the connection between vignettes and ethical sensitivity in decision-making. The conceptual framework postulates that each parameter of vignettes' use has an effect on decision-makers' ethical sensitivity. However, this effect is mitigated by the trainees' background characteristics

Methods

The study is based on two parallel philosophical schools of thought, positivism and constructivism, which are diametrically opposed in terms of fundamental assumptions about reality (ontology), knowledge of that reality (epistemology), and the specific methods in which that reality is known (methodology). Primecz (2020); Aliyu, Bello, Kasim, and Martin (2014); and Wong (2014), among others, offer details. The positivist and constructivist paradigms established a foundation for using a mixed methods approach and a cross-sectional design to lead the research process, which included data collection, processing, analysis, and interpretation. The cross-sectional survey design was chosen because it allows for the collection of quantitative and qualitative data, is cost effective, has a low vulnerability to confounding factors due to data collection at a single point in time, and allows for the collection of data using a variety of measurement scales (Setia, 2016; Rindfleisch, Malter, Ganesan & Moorman, 2008).

The research focused on third- and fourth-year undergraduate teacher trainees studying business ethics. Additionally, the research addressed ECOMTEC teachers who are responsible for mentoring business ethics students. At the time of the research, management records showed that the Department had 219 such trainees, with 107 (48.9 percent) in their third year and 112 (51.1 percent) in their fourth year. The sample size was calculated using Cochran's sample size calculation utilizing management data (Cochran, 1977).

$$ni = \frac{Z^2 pq}{d^2} = \frac{1.96^2 \times 0.489 \times 0.511}{0.05^2} = 383.97 \quad \text{...(1)}$$

Where: n_i = sample size, Z = confidence level: 1.96, p = proportion of trainees in the third-year: 0.489 and q = proportion trainees in the fourth-year *(1-p):* 0.511. The output was then adjusted for design effects using Cochran's correction factor indicated in formula 2: -

$$nf = \frac{ni}{1 + \frac{ni}{Ni}} = \frac{383.97}{1 + \frac{383.97}{219}} = 139.46 \quad \text{...(2)}$$

Where nf = sample size correction factor, n_i = computed sample size: 383.97, N_i = population: 219. The correction process obtained a sample size of 139 trainees. The sample size was divided proportionately between the two strata based on the population distribution, using formula 3: -

$$n_o = f * sN_o \quad \text{...(3)}$$

Where n_o = stratum sample size; f = the sampling fraction *(ni/Ni)* and sN_o = the stratum population (Kozak & Zieli´nski, 2005). The division of the computed sample size *(ni)* and the target population *(Ni)* obtained a sampling fraction *(f)* of 0.6368. Using the sampling fraction, the computation yielded proportionate samples of 68 third- and 71 fourth-year trainees.

Furthermore, stratified random sampling procedure was applied to sample trainees; while instructors were sampled purposively. Primary data were sourced between May and November, 2018, using a self-administered questionnaire for trainees, a Focus Group Discussion (FGD) guide for a second set of trainees, and a Key Informant Interview (KII) guide for instructors. The tools and data sourcing approaches were pilot-tested in mid-February, 2018 on second-year teacher trainees at the Department.

Both quantitative and qualitative analyses were performed. In quantitative analysis, techniques such as cross-tabulation with Chi-square (χ^2) test of association, Spearman's Rank Correlation Coefficient, and Binary Logistic Regression (BLR) analysis were applied to fulfil the study's objectives (Berger, 2017; Wuensch, 2006; Myers & Well, 2003). BLR was applied to determine influence of vignettes' utilisation on trainees' ethical sensitivity in decision-making, with two possible outcomes, namely, *ethically sensitive decisions* or *ethically insensitive decisions*. The model is expressed as indicated in formula (4): -

$$Logit[\theta(Y)] = log\left[\frac{\theta(Y)}{1-\theta(Y)}\right] = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots + \beta_i X_i + \varepsilon_i \quad \text{.................(4)}$$

Where Y = the predicted variable, which in this case, was ethical sensitivity in decision-making; $\theta(Y)$ = the probability of a trainee making an ethically sensitive decision considering the key aspect of vignettes' utilisation; $1-\theta(Y)$ = the probability of a trainee making an ethically insensitive decision after exposure to vignettes' utilisation; α = constant term of the equation; $\beta_1, \beta_2 \dots \beta_i$ = regression coefficients; $X_1, X_2 \dots X_i$ = independent variables, including frequency, venue, timing, media and approach of vignettes' utilisation, and ε_i = the error term (Berger, 2017). Although BLR yields various outputs, this article reports results interpreted from *β coefficients* and *odds ratios*. Quantitative analysis was performed using the Statistical Package for Social Sciences and Microsoft Excel packages.

Qualitative data processing and analysis involved organising the data under objectives and key sections; identifying and organising ideas, building overarching themes in the data, ensuring reliability and validity of the findings, and identifying plausible explanations for findings (O'Connor & Gibson, 2003). The study was guided by the Belmont Report three ethical

principles, including beneficence, justice, and respect for participants (Sims, 2010; Dench, Iphofen & Huws, 2004).

Results and Discussion

This section is divided into four sub-sections: analysis of ethical sensitivity in decision-making; trainees' background profiles and ethical sensitivity in decision-making; vignettes' use and ethical sensitivity in decision-making; and the effect of vignettes' use on trainees' ethical sensitivity in decision-making. The following sub-sections provide more information and discussion.

Ethical sensitivity in decision-making

Ethical sensitivity refers to the capacity of decision-makers to recognize and understand ethical problems, to identify suitable remedial measures, and to explain how such actions may impact the individuals involved. When corrective activities adhere to five ethical standards, including ethical responsibility, professionalism, secrecy, honesty, and respect for authority, they become ethically sensitive. In light of this, trainees were instructed to read the following hypothetical scenario and choose the most suitable course of action.

You and Lisa are Business studies teachers at Kitenge High School, a mid-sized boys' boarding school. Your department has recently completed setting the end of term Business Studies exams and your head of department has handed it to with the request that you hand it over to the exam office. You and Lisa are working late that night when you receive a call from the Principal, who asks you to immediately forward him a copy of the draft Business Studies end of term exam. When you locate the copy, you discover that your head of department had sealed it and written "Final Copy, Confidential" on the envelope. Your head of department is out of the country attending a seminar and you know it would be impossible to locate him for consultation. The Principal has a son in your class and the boy is always top of his class. How would you handle the principal's request?

The aim of evaluating participants' choices against the five stated criteria was to ascertain the percentage of participants whose decisions demonstrated evidence of conformity with the cited principles. In light of this, Table 1 shows the percentage of participants whose choices demonstrated compliance with each of the criteria characterizing ethical sensitivity in decision-making.

Table 1. Proportion of trainees adhering to ethical principles

Principles guiding ethical decision-making	Yes		No		Total	
	Frequency	*Percent*	*Frequency*	*Percent*	*Frequency*	*Percent*
Taking ethical responsibility	24	20.7	92	79.3	116	100.0
Acting with professionalism	34	29.3	82	70.7	116	100.0
Maintaining confidentiality	51	44.0	65	56.0	116	100.0
Upholding honesty	14	12.1	102	87.9	116	100.0
Showing respect for authority	26	22.4	90	77.6	116	100.0

The results in Table 1 show that out of 116 participants, 24 (20.7%) took ethical responsibility in their decisions; 34 (29.3%) acted with professionalism; 51 (44.0%) maintained confidentiality in the decision-making process; while 14 (12.1%) upheld honesty. Lastly, 26 (22.4%) participants demonstrated respect for legitimate authority in the decision-making process. Overall, the principle of confidentiality guided the decisions of most participants, 51(44.0); followed by professionalism, 34 (29.3%); while honesty guided the least proportion of participants' decisions, 14 (12.1%). Furthermore, the results in Table 1 were aggregated to determine the overall proportion of trainees who were ethically sensitive and those ethically insensitive in their decisions. The analysis revealed that on aggregate, 30 (25.9%) participants demonstrated ethical sensitivity, while 86 (74.1%) exhibited ethical insensitivity in their decisions. This suggests that ethical sensitivity in decision-making was a binary variable, with only two possible values; which in turn, dictated the type of bivariate and multivariate analyses performed in the following sub-sections.

Trainees' background profile and ethical sensitivity in decision-making

Table 2 shows trainees' socio-demographic attributes, which were cross-tabulated with ethical sensitivity in decision-making. The results show that the trainees included 59 (50.9%) males and 57 (49.1%) females. In relation to ethical sensitivity in decision-making, of those whose decisions were ethically sensitive (n=30), 17 (56.7%) were females, while males were 13 (43.3%). In the category of those who were ethically insensitive (n=86), 46 (53.5%) were males, while 40 (46.5%) were females. Based on this, the analysis indicated that ethical sensitivity decision-making and trainees' gender were not significantly associated ($\chi^2 = 0.556$, df = 1 & ρ-value = 0.456). The results suggest male and female trainees made decisions that were similar, which further suggests lack of significant variations in the level of ethical sensitivity on account of gender.

In terms of age, 73 (61.6%) trainees were below 23 years old, 40 (34.5%) were aged 23-25 years, while 3 (10.0%) indicated 26 years plus. The results in Table 2 further show that trainees who were ethically sensitive (n=30), included 20 (66.7%) in the below 23 years age category, while 7 (23.3%) indicated the 23-25 years bracket. Among those who were ethically insensitive (n=86), 53 (61.6%) trainees were aged below 23 years, while 33 (38.4%) stated the 23-25 years group. The analysis revealed a significant association between ethical sensitivity decision-making and trainees' age at 99% confidence level ($\chi^2 = 10.148$, df = 2 & ρ-value = 0.006). The results suggest that trainees' ethical sensitivity in decision-making varied significantly with their age.

Table 2. Trainees' socio-demographic attributes & ethical sensitivity in decision-making

Teacher trainees' social attributes	Ethical sensitivity in decision-making						Chi square results		
	Ethically sensitive		Ethically insensitive		Total				
	Freq	Percent	Freq	Percent	Freq	Percent	χ^2	df	ρ-value
Gender									
Male	13	43.3	46	53.5	59	50.9			
Female	17	56.7	40	46.5	57	49.1	0.556	1	0.456
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Age									
<23 years	20	66.7	53	61.6	73	62.9			

23-25 years	7	23.3	33	38.4	40	34.5	10.148	2	0.006 ***
26 years+	3	10.0	0	0.0	3	2.6			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Religion									
Christian	29	96.7	84	97.7	113	97.4			
Muslim	1	3.3	2	2.3	3	2.6	0.000	1	1.000
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Academic year									
Third year	18	60.0	73	84.9	91	78.4			
Fourth year	12	40.0	13	15.1	25	21.6	6.740	1	0.009 ***
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Program module									
Modul1	23	76.7	82	95.3	105	90.5			
Module2	7	23.3	4	4.7	11	9.5	6.998	1	0.008 ***
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
High school type									
Mixed day	2	6.7	12	14.0	14	12.1			
Mixed boarding	3	10.0	9	10.5	12	10.3			
Boys boarding	11	36.7	33	38.4	44	37.9	1.502	3	0.682
Girls' boarding	14	46.7	32	37.2	46	39.7			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
KCSE grade									
A-	0	0.0	7	8.1	7	6.0			
B+	11	36.7	10	11.6	21	18.1			
B	9	30.0	17	19.8	26	22.4			
B-	10	33.3	51	59.3	61	52.6	14.384	4	0.006 ***
C+	0	0.0	1	1.2	1	0.9			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			

*, **, *** show significance at $\rho<0.1$, $\rho<0.05$ and $\rho<0.01$ error margins, respectively

The results in Table 2 further show that most trainees were 113 (97.4%) Christians. The latter also formed the majority of those who demonstrated ethical sensitivity, 29 (96.7%); as well as those who were ethically insensitive, 84 (97.7%). Nonetheless, the analysis revealed ethical decision-making and trainees' religion were not significantly associated ($\chi^2 = 0.000$, df = 1 & ρ-value = 1.000). This means lack of a significant variation between the decisions made by Christian and Muslim trainees regarding ethical sensitivity.

Table 2 further shows that 91 (78.4%) trainees were in third year, while 25 (21.6%) were in fourth year. Among the 30 trainees who made ethically sensitive decisions, 18 (60.0%) belonged to third year, while 12 (40.0%) were doing their fourth year. Of the 86 trainees whose decisions were found to be ethically insensitive, 73 (84.9%) were third years, while 13 (15.1%) indicated fourth year. The analysis revealed trainees' ethical sensitivity in decision-making significantly associated with the year of study at 99% confidence level ($\chi^2 = 10.255$, df = 1 &

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ρ-value = 0.005). More still, Table 2 shows that 105 (90.5%) trainees were enrolled under module 1, while 11 (9.5%) were studying under the module 2 program. Among those who were ethically sensitivity (n=30), 23 (76.7%) were under module 1, while 7 (23.3%) stated module 2. Those who were ethically insensitive (n=86), consisted of 82 (95.3%) trainees studying under module 1, and 4 (4.7%) who were under module 2. Based on this, the analysis indicated that ethical sensitivity in decision-making and trainees' program of study were significantly associated at 99% confidence level (χ^2 = 6.998, df = 1 & ρ-value = 0.008). The results suggest that ethical sensitivity varied significantly between trainees in the two modules.

Regarding the type of high school attended, the results in Table 2 show that 46 (39.7%) trainees attended girls' boarding schools, 44 (37.9%) learnt in boys' boarding schools, while 14 (12.1%) indicated mixed day schools. Among those who were ethically sensitive (30), 14 (46.7%) studied in girls' boarding schools, while 11 (36.7%) indicated boys' boarding schools. Among the 86 trainees who were ethically insensitivity, 33 (38.4%) went through boys' boarding, while 32 (37.2) attended girls' boarding schools. Despite this, the analysis revealed lack of a significant association between trainees' ethical sensitivity in decision-making and the type of high school attended (χ^2 = 1.502, df = 3 & ρ-value = 1.682). The results suggested that ethical sensitivity in decision-making had no linkage with type of high school that the trainees attended. More still, the results in Table 2 show that 61 (52.6%) trainees attained grade B- in the Kenya Certificate of Secondary Education (KCSE), while 26 (22.4%) score B. The category of ethically sensitivity trainees (n=30), consisted of 11 (36.7%) members who attained B+ and 10 (33.3%) with grade B-. The ethically insensitive group (n=86), included 51 (59.3%) trainers who achieved B- and 10 (11.6%) who mentioned B+. Based on this, the association between trainees' ethical sensitivity in decision-making and the grade scored in KCSE was significant at 99% confidence level (χ^2 = 14.384, df = 4 & ρ-value = 0.006).

Bivariate analysis further involved cross-tabulation analysis between trainees' ethical sensitivity in decision-making and two categories of background attributes, including professional experience and family profile. Table 3 shows Chi square test results for each attribute encapsulated by professional experience and family profile. The results show significant association between trainees' ethical sensitivity in decision-making and with all the variables constituting learners' professional experience, though at various levels of confidence, including 90%, 95% and 99%.

Table 3. Statistical association between ethical decision-making and learners' profiles

Category	Attributes	Chi square results		
		χ^2	df	ρ-value
Professional experience	Employment experience	5.446	1	0.020***
	Subjects taught	12.734	7	0.079*
	Employment duration	9.886	2	0.007***
	Experience in business	6.981	1	0.008***
	Business experience duration	5.355	2	0.024**
Family profile	Family size	0.222	2	0.895
	Position in family/birth order	7.031	2	0.030**
	Source of high school fees	4.999	4	0.287
	Type of caregiver at home	4.248	3	0.236

*,**,*** *show significance at ρ<0.1, ρ<0.05 and ρ<0.01 error margins, respectively*

Concerning family profile, the results show that trainees' ethical sensitivity in decision-making significantly associated with their position of birth in the family. The attributes that did not show significant associations with ethical sensitivity in decision-making were excluded from multivariate analysis because they were less likely to add value, but impair the robustness of relationship between independent and the dependent variable.

Bivariate analysis of vignettes' utilisation and ethical sensitivity in decision-making

The aspects of vignettes' utilisation, including frequency, venue, timing, media and approach, were operationalized in terms of five perception statements, against which teacher trainees were requested to judge and indicate their views on the five-point Likert scale graduated as 'agree strongly', 'agree', 'undecided', 'disagree' and 'disagree strongly'. Each perception statement was cross-tabulated against ethical sensitivity in decision-making to determine the statistical significance of association. Table 4 presents the results.

Table 4. Trainees' perceptions on utilisation of vignettes and ethical sensitivity in decision-making

Utilisation of vignettes instructional method	Ethical sensitivity in decision-making						Chi square results		
	Ethically sensitive		Ethically insensitive		Total				
	Freq	*Percent*	*Freq*	*Percent*	*Freq*	*Percent*	χ^2	*df*	*ρ-value*
Continuous application of vignettes instructional method enables teacher trainees to respond to moral questions									
Strongly agree	10	33.3	55	64.0	65	56.0			
Agree	11	36.7	21	24.4	32	27.6			
Undecided	2	6.7	6	7.0	8	6.9	13.140	4	0.011 **
Disagree	2	6.7	1	1.2	3	2.6			
Strongly disagree	5	16.7	3	3.5	8	6.9			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Right timing in vignettes instructional method usage is vital for reflection on ethical experiences									
Strongly agree	11	36.7	50	58.1	61	52.6			
Agree	12	40.0	30	34.9	42	36.2			
Undecided	2	6.7	6	7.0	8	6.9	16.447	4	0.002 ***
Disagree	2	6.7	0	0.0	2	1.7			
Strongly disagree	3	10.0	0	0.0	3	2.6			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Use of ICT-based vignettes instructional method enhances									

individual ethical sensitivity development									
Strongly agree	11	36.7	25	29.1	36	31.0			
Agree	8	26.7	42	48.8	50	43.1			
Undecided	6	20.0	13	15.1	19	16.4	9.269	4	0.055 *
Disagree	3	10.0	6	7.0	9	7.8			
Strongly disagree	2	6.7	0	0.0	2	1.7			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Exposure to life experiences out of class help in building ethical sensitivity									
Strongly agree	13	43.3	53	61.6	66	56.9			
Agree	11	36.7	30	34.9	41	35.3			
Undecided	2	6.7	2	2.3	4	3.4	10.882	4	0.028 **
Disagree	2	6.7	0	0.0	2	1.7			
Strongly disagree	2	6.7	1	1.2	3	2.6			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			
Multi-approach usage has significance in building ethical sensitivity									
Strongly agree	14	46.7	39	45.3	53	45.7			
Agree	7	23.3	36	41.9	43	37.1			
Undecided	3	10.0	6	7.0	9	7.8	11.495	4	0.022 **
Disagree	3	10.0	5	5.8	8	6.9			
Strongly disagree	3	10.0	0	0.0	3	2.6			
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**			

*, **, *** *show significance at $\rho<0.1$, $\rho<0.05$ and $\rho<0.01$ error margins, respectively*

The first statement hypothesized that '*continuous* utilisation *of vignettes enables trainees to respond to moral questions'*. The results in Table 4 show that 65 (56.0%) trainees strongly agreed with the statement, 32 (27.6%) agreed, while 8 (6.9%) strongly disagreed. Cumulatively, 97 (83.6%) trainees indorsed the statement, while 11 (9.5%) objected. Among the 30 trainees whose decisions were ethically sensitive, 11 (36.7%) agreed with the assertion, 10 (33.3%) strongly agreed, while 5 (16.7%) disagreed strongly. Those who were ethically insensitive (n=86), consisted of 55 (64.0%) trainees who agreed strongly with the claim, 21 (24.4%) who agreed, and 3 (3.5%) who strongly disagreed. Based on this, the analysis revealed a significant association between trainees' ethical sensitivity in decision-making and their views on the frequency of vignettes' utilisation, at 95% confidence level (χ^2 = 13.140, df = 4 & ρ = 0.011). The results suggest that continuous utilisation of vignettes in the teaching of business ethics is likely to influence trainees' ethical sensitivity in decision-making.

The second statement claimed that '*right timing in vignettes usage is vital for reflection on ethical experiences'*. Table 4 indicates that 61 (52.6%) trainees strongly agreed with the statement, while 42 (36.2%) agreed. However, 2 (1.7%) trainees disagreed with the claim,

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while 3 (2.6%) disagreed strongly. Collectively, up to 103 (88.8%) trainees affirmed the perception statement. In relation to ethical sensitivity in decision-making, among the 30 trainees whose decisions were ethically sensitive, 12 (40.0%) agreed with the statement, 11 (36.7%) strongly agreed, while 3 (10.0%) disagreed strongly. Among the trainees who made ethically insensitive decisions (n=86), 50 (58.1%) agreed strongly with the assertion, while 30 (34.9%) agreed. Based on this, the analysis revealed a significant association between trainees' ethical sensitivity in decision-making their views on timing the usage of vignettes, at 99% confidence level ($\chi^2 = 16.447$, df = 4 & $\rho = 0.002$). The results suggest that timing the usage of vignettes is likely to influence trainees' ethical sensitivity in decision-making.

The trainees also indicated views on the third perception statement, positing that '*use of ICT-based vignettes enhances individual ethical sensitivity development*'. Table indicates that 50 (43.1%) t trainees agreed with the assertion, while 36 (31.0%) strongly agreed. However, 9 (7.8%) trainees disagreed with the statement, while 2 (1.7%) strongly disagreed. Cumulative analysis revealed that up to 86 (74.1%) trainees supported the assertion. In relation to ethical sensitivity in decision-making, among the trainees whose decisions were ethically sensitive (n=30), 11 (36.7%) strongly agreed with the statement, while 8 (26.7%) agreed. Notably though, 3 (10.0%) trainees disagreed with the assertion, while 2 (6.7%) strongly disagreed. Among those whose decisions were ethically insensitive (n=86), 42 (48.8%) agreed with the statement, 25 (29.1%) strongly agreed, while 6 (7.0%) expressed disagreement. Based on this, the analysis revealed a significant association between trainees' ethical sensitivity in decision-making and their views on the on the utilisation of ICT-based vignettes, at 90% confidence level ($\chi^2 = 9.269$, df = 4 & ρ-value = 0.055). The results suggest that utilisation of ICT-based vignettes is likely to influence trainees' ethical sensitivity in decision-making.

The study also captured trainees' views on the fourth perception statement, which asserted that '*exposure to life experiences out of class help in building ethical sensitivity*'. As indicated in Table 4, 66 (56.9%) trainees strongly agreed with the statement, 41 (35.3%) agreed, while 3 (2.6%) strongly disagreed. Cumulatively, 107 (92.2%) trainees endorsed the statement. More still, in the category of trainees who demonstrated ethical sensitivity in their decisions (n=30), 13 (43.3%) strongly agreed with the statement, 11 (23.3%) agreed, while 2 (6.7%) indicated disagreement. In the category those who made ethically insensitive decisions (n=86), 53 (61.6%) strongly agreed with the statement, while 30 (34.9%) agreed. Based this, the analysis reveal a significant association between trainees' ethical sensitivity in decision-making and views on the venue of vignettes' utilisation, 95% confidence level ($\chi^2 = 10.882$, df = 4 & ρ-value = 0.028). This further alludes that trainees' exposure to real-life issues outside classrooms is likely to influence their ethical sensitivity in decision-making.

The fifth perception statement claimed that '*multi-approach usage has significance in building ethical sensitivity*'. The results in Table 4 show that 53 (45.7%) trainees strongly agreed with the statement, 43 (37.1%) agreed, 8 (6.9%) disagreed, while 3 (2.6%) disagreed strongly. Collectively, up to 96 (82.8%) trainees upheld the statement. In the context of ethical sensitivity in decision-making, the category of trainees with ethically sensitive decisions (n=30) included 14 (46.7%) people who strongly agreed with the assertion, 7 (23.3%) who agreed, and 3 (10.0%) who strongly disagreed. Among those whose decisions were ethically insensitive (n=86), 39 (45.3%) strongly agreed with the statement, 36 (41.9%) agreed, while 5 (5.8%) indicated disagreement. Therefore, the analysis revealed a significant association between trainees' ethical sensitivity in decision-making and their views on the approaches in the utilisation of vignettes, at 95% confidence level ($\chi^2 = 11.495$, df = 4 & $\rho = 0.022$). This implies that utilisation of a multi-approach is likely to influence trainees' ethical sensitivity in decision-making.

Bivariate analysis also involved aggregation of trainees' views on all the perception statements in order to determine optimal views regarding utilisation of vignettes and trainees' ethical sensitivity in decision-making. The results presented in Table 5 show that 45 (38.8%) trainees strongly agreed that utilisation of vignettes is likely to influence trainees' ethical sensitivity in decision-making, while 34 (29.3%) agreed. Participants who expressed disagreement with the statement were 11 (9.5%), while 16 (13.8%) expressed strong disagreement. Variation in perceptions between trainees whose decisions were ethically sensitive and those whose decisions were ethically insensitive are also captured by Table 5.

Table 5. Association between aggregated views on vignettes' utilisation and ethical sensitivity

Trainees' aggregated view on utilisation of vignettes	Ethically sensitive decisions		Ethically insensitive decisions		Total	
	Frequency	*Percent*	*Frequency*	*Percent*	*Frequency*	*Percent*
Strongly agree	13	43.3	32	37.2	45	38.8
Agree	11	36.7	23	26.7	34	29.3
Undecided	3	10.0	7	8.1	10	8.6
Disagree	1	3.3	10	11.6	11	9.5
Strongly disagree	2	6.7	14	16.4	16	13.8
Total	**30**	**100.0**	**86**	**100.0**	**116**	**100.0**

Bivariate analysis generated spearman's rank correlation coefficient r_s of -0.275 (ρ-value = 0.003), which suggests up to 99% chance that trainees' ethical sensitivity in decision-making significantly correlated with aggregated views on the utilisation of vignettes. Based on this, the null hypothesis stating that *there is no significant correlation between* utilisation *of vignettes and ethical sensitivity in decision-making* was rejected for being inconsistent with empirical results.

The relationship between utilisation of vignettes and improvement in trainees' ethical sensitivity in decision-making also emerged as a key finding in FGD sessions. In this regard, FGD participants cited various aspects that determine effective utilisation of vignettes in the learning process, including timing, venue, media, approaches and frequency. About timing, some participants admitted interacting with vignettes before business ethics lessons; others interact with vignettes during lessons, while others do so at the end. Interaction with vignettes before lessons enabled trainees to improve knowledge and perceptions about the subject matter, as well as generate multiple ideas for effective participation in class. Pre-lesson utilisation of vignettes also encouraged learner-centered engagements between trainees and their peers. Using the words of a participant, *"...I interact with resource materials containing vignettes before lessons because it helps me to refresh my memory, and to prepare discussion points."*

Regarding media, participants mentioned group and individual emails as the common channels through which instructors disseminate vignette materials. Participants observed that technological advancement facilitated the dissemination of vignette materials without delays. Arguably, prompt access to such resource materials facilitated the learning process and development of individuals' ethical sensitivity. Whereas some participants expressed their preference for engagement with vignettes at the individual level before engaging group members, others indicated their preference for group discussions of vignettes to precede decision-making at the individual level. Group sessions were commended for providing

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opportunity for trainees to share their thoughts and experiences, which generated ideas that informed ethical sensitivity in decision-making.

Still on the same issue, instructors commended group brainstorming sessions approach for enabling trainees to bring out different scenarios relating to the topics being discussed. Using the words of a participant, *"...discussing vignettes in groups helps trainees to develop critical thinking and skills for solving real-life problems,"* which according to the participant, makes vignettes useful instructional resources. Besides, through group discussions, instructors are able to evaluate trainees' understanding of ethical issues in business contexts and the kind of decisions they would make when faced with similar situations.

Participants further noted that the frequency of exposure to vignettes determined the extent to which trainees accumulated knowledge and skills for making ethically sensitive decisions. As the frequency of exposure increases so do the knowledge and skills for making ethical decisions. Despite this, most instructors used vignettes inadvertently to elaborate business concepts taught. However, instructors tended to overuse the types with which they are familiar, including case studies and stories. Inadvertent utilisation and overuse of specific forms of vignettes was attributed to delayed integration of vignettes instructional method in the curriculum. Frequent exposure to vignettes influenced some trainees to apply the same in their teaching practice, because they found the method *"...enjoyable and effective in content delivery"*. At the onset, most trainees were unaware of vignettes, but after multiple exposures, they found the method interesting. In this regard, a participant elaborated that, *"...up to 85% of the trainees responded to an examination question set using a vignette because they could easily remember the story... about 95% of those who attempted the question, scored all the possible marks"*.

Utilisation of vignettes and ethical sensitivity in decision-making: multivariate analysis

Bivariate analyses revealed that trainees' ethical sensitivity in decision-making significantly correlated with utilisation of vignettes instructional method. Notably though, bivariate analyses don't tell the extent to which independent variables influence dependent variables. Based on this premise, the analysis involved regression of vignettes' utilisation against trainees' ethical sensitivity in decision-making, while factoring in trainees' background attributes as moderating variables. Collinearity analysis was performed to identify autocorrelations between independent, as well as moderating variables that would influence accuracy of the regression model. The process revealed significant autocorrelation between trainees' experience in business and duration of business experience. This prompted exclusion of the duration of business experience from analysis because it had a relatively weaker effect on regression coefficients (β), in accordance with the principles BLR (Berger, 2017; Wuensch, 2010). However, no autocorrelation was noted between the aspects of utilisation of vignettes instructional method. Table 6 presents a summary of binary regression results, including Odds Ratios (OR).

Table 6. Regression results between utilisation of vignettes and ethical sensitivity in decision-making

I. Independent Covariates	β	SE	Wald	df	ρ-value	OR	95% C.I. for EXP(β)	
							Lower	*Upper*
Utilisation of vignettes instructional method			**16.309**	**4**	**0.009*****			
Strongly agree	0.728	0.201	13.118	1	0.018**	2.071	1.397	3.071

Agree	0.646	0.212	9.285	1	0.025**	1.908	1.259	2.891
Undecided	0.596	0.225	7.017	1	0.026**	1.815	1.168	2.821
Disagree	0.288	0.441	0.426	1	0.256	1.334	0.562	2.166
Strongly disagree (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
II. Moderating Covariates								
Age			**13.117**	**2**	**0.018****			
<23 years	-1.852	0.615	9.068	1	0.177	0.157	0.047	0.524
23-25 years	-0.938	0.316	8.811	1	0.519	0.391	0.211	0.727
26 years+ (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Academic year			**11.008**	**1**	**0.020****			
Third year	-2.084	0.698	8.914	1	0.633	0.124	0.032	0.489
Fourth year (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Program module			**6.214**	**1**	**0.021****			
Module 1	0.625	0.276	5.128	1	0.035**	1.868	1.088	2.209
Module 2 (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
KCSE grade			**6.828**	**4**				
A-	0.773	0.417	3.436	1	0.027**	2.166	0.957	3.905
B+	0.457	0.436	1.099	1	0.063*	1.579	0.672	2.712
B	0.230	0.470	0.239	1	0.118	1.259	0.501	2.162
B-	0.522	0.465	1.260	1	0.052*	1.685	0.677	2.193
C+ (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Employment experience			**1.992**	**1**	**0.091***			
Yes	0.305	0.424	0.517	1	0.106	1.357	0.591	2.114
No (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Experience in business			**1.656**	**1**	**0.088***			
Yes	0.278	0.747	0.138	1	0.109	1.320	0.305	2.709
No (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Position in family			**7.199**	**2**	**0.031****			
<4th position	0.605	0.276	4.805	1	0.039**	1.831	1.066	3.145
4th - 6th position	0.368	0.335	1.207	1	0.078*	1.445	0.749	2.786
>6th position (RC)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Constant	**4.270**	**0.695**	**37.747**	**1**	**0.000****	**71.522**	**38.316**	**99.624**

*,**,*** *show significance at ρ<0.1, ρ<0.05 and ρ<0.01 error margins, respectively*
RC = Reference Category

Reading from the OR column, the results show that trainees who *strongly agreed* that utilisation of vignettes influenced their ethical sensitivity in decision-making had about 2 times the odds of being ethically sensitive in their decisions as their colleagues who expressed *strong disagreement* about the perception statement (ρ-value = 0.018, β = 0.728, OR = 2.071, C.I. = 1.397-3.071). The analysis indicated that variation between the two groups was statistically significant at 95% confidence level, meaning that the two groups varied significantly in terms of ethical sensitivity in decision-making. In addition, trainees who *agreed* that utilisation of vignettes influenced their ethical sensitivity in decision-making were about 1.9 times as likely to make ethically sensitive decisions as those who indicated *strong disagreement* with the perception statement (ρ-value = 0.025, β = 0.646 OR = 1.908, C.I. = 1.259-2.891); with variation between the two groups being statistically significant at 95% confidence level.

The results show that the more the trainees agreed that utilisation of vignettes influenced their ethical sensitivity in decision-making the higher the odds of making ethically sensitive decisions. This suggests that utilisation of vignettes caused a significant positive influence on trainees' ethical sensitivity in decision-making. Consequently, helping trainees to understand how vignettes instructional methods are utilized to deliver business ethics course is essential for improving trainees' ethical sensitivity in decision-making. In relation to other dimensions of vignettes instructional method, utilisation of vignettes ranked third in terms of extent of influence on trainees' ethical sensitivity in decision-making, judging from the Wald statistic (Wald = 16.309, ρ-value = 0.009).

Conclusion

The study aimed at determining the influence of utilisation of vignettes on trainees' ethical sensitivity in decision-making. The aspects of vignettes' utilisation covered by the study included frequency, timing, media, venue and approaches. Cumulatively, the study found that most trainees, 107 (92.2%), associated venue of vignettes' utilisation with improvement in ethical sensitivity in decision-making; followed by timing of vignettes' utilisation, as cited by 103 (88.8%) trainees; frequency of utilisation, 97 (83.6%); approaches, 96 (82.8%); while media of utilisation ranked fifth, 86 (74.1%). On aggregate, utilisation of vignettes significantly correlated with ethical sensitivity in decision-making (rs = -0.275, ρ-value = 0.003); thereby, prompting rejection of the null hypothesis for being inconsistent with empirical findings.

Additionally, the use of vignettes impacted trainees' ethical awareness while making decisions. In this respect, the use of vignettes before to, during, and after experiential courses increased trainees' ethical awareness while making decisions. The frequency of use also had an effect on the degree to which trainees acquired knowledge and abilities for ethical decision-making. As use grew, so did the degree of knowledge and ability to make ethical choices. The majority of teachers in the Department utilized vignettes unintentionally, which resulted in an overuse of certain kinds of vignettes. This was due to the Department's tardy adoption of the vignettes teaching approach. Additionally, inconsistency in the method's application was linked to the notion that vignettes need more time to implement than lectures.

In terms of time, some trainees engaged with resource materials on vignettes before to and during lessons and group sessions, while others did so during and after lessons. Notably, pre-lesson interaction with vignettes was deemed the most critical for increasing knowledge and abilities, as well as for increasing ethical awareness in decision-making. While the majority of teachers used vignettes inadvertently, some purposefully included them in the practical learning of corporate ethics. Regardless of the conditions, vignettes impacted trainees in a variety of ways, including the incorporation of vignettes into their teaching practice, increased interest in vignette-based test questions, and better performance. Additionally, the results

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indicate that the use of vignettes had a favorable and substantial effect on trainees' ethical awareness in decision-making. Additionally, according to the Wald statistic, the variable placed third in terms of its degree of impact on trainees' decision-making sensitivity.

As trainees gain an appreciation for how vignettes affect ethical awareness in decision-making, the likelihood of making ethical choices in ethical circumstances increases. Trainees' level of appreciation is related to their knowledge of many elements of vignettes' use in experiential learning, such as the time, location, medium, frequency, and methods. Awareness of such issues is likely to affect trainees' ethical sensitivity in decision-making. Inferring from the previous premises, a unit increase in understanding about vignettes' application is expected to result in a proportional increase in the likelihood of making ethical business choices. In light of this, the Department should concentrate on increasing trainees' comprehension of the value of vignettes in experiential learning about business ethics. As trainees acquire knowledge, skills, and experience, they develop a heightened awareness of ethical problems and an increased ability to make ethical choices. This may be accomplished by devoting a portion of training modules to optimizing the use of vignettes.

Additionally, improving trainees' knowledge and abilities regarding the use of vignettes may be accomplished by expanding their contact with relevant instructional resources, both within and outside lecture halls. The more often one is exposed to vignettes, the more experience and confidence one has in making ethical choices. This may be accomplished by offering relevant instructional resources to trainees and engaging them in relevant research activities and publishing material creation. When trainees interact with instructional materials, they not only get a better knowledge of the topic, but also generate numerous ideas that, when presented to peers and instructors, make courses more engaging, learner-centered, and successful in enhancing ethical awareness.

To further enhance trainees' understanding of vignettes, suitable methods must be used to encourage trainees to read ahead of group discussions and to establish specialized media channels for peer-to-peer exchange of ideas with integrated professional engagement standards. Working in groups allows trainees to acquire strong interpersonal skills, which are necessary for problem resolution, as well as to process and apply information about ethical sensitivity in decision-making. This requires the Department to re-culture teachers and trainees around the concept of group learning, which may include the establishment of an atmosphere that fosters individual responsibility. Finally, the use of vignettes came in third place in terms of relative significance, indicating that trainees' understanding of the element, as it relates to ethical sensitivity in decision-making, was neither strong nor weak, but lacking. This highlights the importance of the Department prioritizing interventions aimed at increasing trainees' understanding of how to use vignettes to enhance ethical sensitivity in decision-making.

Acknowledgments

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