Mindfulness, Moral Reasoning and Responsibility: Towards Virtue in Ethical Decision-Making

Cherise Small, Charlene Lew

Abstract

Ethical decision-making is a multi-faceted phenomenon, and our understanding of ethics rests on diverse perspectives. While considering how leaders ought to act, scholars have created integrated models of moral reasoning processes that encompass diverse influences on ethical choice. With this, there has been a call to continually develop an understanding of the micro-level factors that determine moral decisions. Both rationalist, such as moral processing, and non-rationalist factors, such as virtue and humanity, shape ethical decision-making. Focusing on the role of moral judgement and moral intent in moral easoning, this study asks what bearings a trait of mindfulness and a sense of moral responsibility may have on this process. A survey measuring mindfulness, moral responsibility and moral judgement completed by 171 respondents was used for four hypotheses on moral judgement and intent in relation to moral responsibility and mindfulness. The results indicate that mindfulness predict moral responsibility but not moral judgement. Moral responsibility does not predict moral judgement, but moral judgement predicts moral intent. The findings give further insight into the outcomes of mindfulness and expands expand insights into the models of ethical decision-making. We offer suggestions for further research on the role of mindfulness and moral responsibility in ethical decision-making.

Keywords Moral reasoning * Mindfulness * Moral responsibility

Introduction

Ethical decision-making encompasses a broad range of perspectives, and normative ethics provides a way of thinking about how people should act and which decisions are better than others (Hoover and Pepper 2015). Different perspectives exist regarding whether ethical choice results from virtues, fear of consequences or adherence to principles. We know that virtues or character interact with processes of moral reasoning in ethical decisions (Crossan et al. 2013). Beyond mechanisms of moral reasoning interacting with being virtuous, our understanding that the role moral responsibility plays in this relationship is limited, whereas Hoover and Pepper (2015) alluded to the importance of the ethics of care in normative views.

In a review of ethical decision-making theory, Schwartz (2016) offered an integrated decision-making model that recognises two paradigms of ethical choice: the first assumes that ethical decision-making is a process of moral reasoning (rationalist view), and the second that ethical choice is intuitive or based on emotion (non-rationalist view). Schwartz (2016) indicated that the moral capacity of individuals (in addition to the characteristics of a situation) influences the moral reasoning process.

A potential element of moral capacity not mentioned by Schwartz (2016) is mindfulness. Mindfulness, which denotes a non-judgemental and present way of giving attention (Chiesa 2012), has recently been linked to ethics (Amaro 2015; Lindahl 2015; Verhaeghen 2015) and ethical decision-making (Craft 2013; Eisenbeiss and Van Knippenberg 2015; Pandey et al. 2017; Ruedy and Schweitzer 2010; Valentine et al. 2010), and may expand our understanding of moral reasoning. Moral responsibility (feeling responsible to others) is arguably a further non-rationalist component of ethical decision-making, closer to intuition and emotion that influences our moral reasoning. However, it is still unclear how the cognitive processes of moral reasoning are supported by the state of moral responsibility and the virtue of mindfulness to produce ethical decisions in the workplace.

A better understanding of the dynamics of ethical choice is necessary to not only expand the integrated understanding of ethical decision-making, but also to provide guidelines for the development of ethical choice in business practice. On the one hand the world of work assumes the proliferation of corruption is guaranteed given that a slew of devastating corporate scandals keep occurring over time (Lowe and Reckers 2016), while on the other hand there is a rising awareness that business decisions should be based on principles of responsible leadership flowing from *inter alia* ethical intelligence (Miska and Mendenhall 2018). We reason that responsible business practices require ethical decision-

making built on a feeling of accountability, made by virtuous leaders who, when faced by ambiguity, are aware of ethical dilemmas, judge right from wrong, choose what is right and then act on it. Therefore, having greater insights into the framework of ethical choice may assist in the creation of interventions towards good moral decisions in business.

Within the rationalist paradigm, the seminal Rest Model (1986) offers a foundation for understanding the moral reasoning process of ethical decision-making. Discussed in greater depth later, the process involves being aware of the ethical nature of choice, then differentiating between good and bad, before choosing the right action and following through on it (Craft 2013). In terms of mindfulness, a decision becomes ethical when the decision-maker is non-judgemental and present of mind. Within a non-rationalist paradigm, moral responsibility assumes that the decision-maker practices a sense of humanity in feeling responsible for avoiding harming others.

This paper sheds light on the interrelationships of components of moral reasoning, mindfulness and moral responsibility in ethical choice. Of the three constructs, mindfulness may be practiced and used as an intervention, and is arguably developed with greater ease than both moral reasoning and a sense of moral responsibility towards others, for instance through meditation (Kreplin et al. 2018; Kuan 2012). The conditions under which mindfulness may lead to the foundation of ethical choice are still unknown (Kreplin et al. 2018). To begin to understand these relations, we asked a number of questions. Does mindfulness predict the ability to judge right from wrong (moral judgement)? Does mindfulness relate to the desire to avoid harming others as implied in moral responsibility? Does the sense of not wanting to harm others predict the ability to exercise moral judgement (seeing right from wrong)? If that is the case, will mindfulness predict the moral intent of managers (wanting to do what is right) specifically because of a sense of moral responsibility?

This paper explored answers to these questions by reviewing literature on moral reasoning, mindfulness and ethical choice, before the relations among these constructs were empirically tested. We employed a descriptive and explanatory quantitative research design, making use of a survey among 171 first tier employees. Combining three assessments and conducting regression analyses, we found support for predictive relationships between mindfulness and moral responsibility, and moral judgement and moral intent. Mindfulness and moral responsibility were not significant predictors of moral judgement. This led to recommendations being made regarding the further development of an integrated model of ethical decision-making and the enhancement of moral reasoning in business managers.

Moral Reasoning, Moral Responsibility and Mindfulness in Ethical Choice

Moral Reasoning and Moral Responsibility

As a foundation for understanding cognition in ethical choice, Trevino (1986) presented an interactionist model that proposes the relationship between cognition and ethical outcomes is moderated by an interaction between individual and situational variables. According to this model, the relationship between cognition and ethical behaviour is moderated by individual characteristics, for instance ego strength and characteristics of a situation, such as job context and the nature of the organisational culture and work. Hence, an individual's behaviour, when faced with an ethical dilemma, results from cognitions (specifically, the stages of cognitive moral development).

Rest's (1986) model recognises the role of cognition in moral behaviour. Being one of the three foundational theories of rationalist ethical choice, Rest's (1986) model defined four cognitive stages of moral reasoning, namely (a) awareness; (b) judgement; (c) intent; and (d) behaviour (Craft 2013; Crossan et al. 2013). *Moral awareness* is the ability to comprehend the moral nature within a given situation, in other words, the decision-maker becomes aware that the choice presents an ethical dilemma. *Moral judgement* is the ability to determine "right"

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from "wrong", therefore once the decision-maker is aware that the choice may be either "right" or "wrong", a judgement is made between these alternatives. The third phase, *moral intent*, refers to a resolve to act on the morally "right" or "wrong" judgement. The decision-maker could opt to do the "wrong" thing, but as a meta-cognitive process, during the moral intent phase would commit instead to what is "right", and finally will arrive at moral behaviour which is taking action that is "right" (Craft 2013; Crossan et al. 2013).

Jones (1991) synthesised the interactionist model (Trevino 1986) and Rest's (1986) model to show that moral intensity impacts each of Rest's phases in ethical decision-making. Moral intensity refers to "the extent of issue-related moral imperative of the situation", and is made up of "magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect" (Jones 1991, p. 372).

Based on a review of wide-ranging ethical decision-making literature, Lehnert et al. (2015) called for continued critical analysis of Rest's (1986) model and the dynamics of related variables. In an integration of moral reasoning literature, Schwartz (2016) explained Rest's stages as recognising, evaluating, committing and acting in a moral way, adding feeling (emotion), sensing (intuition), reflecting (reason), justifying (rationalisation) and confirming (consultation) as moderators between the stages. In other words, both rational and non-rational processes impact on the moral reasoning process. It stands to reason that virtues, motivation and purpose, and not only cognition or moral reasoning, play a role in ethical decision-making (Crossan et al. 2013). This paper therefore firstly sought to explore the role that a principal virtue, such as mindfulness, may play in ethical choice when related to Rest's cognitive processes.

Moral responsibility may be defined as a feeling of obligation that "we are fundamentally responsible to and for others" (Williams and Gantt 2012, p. 425). It requires individuals to consider the consequences of their decisions (Williams and Gantt 2012),

attributing personal causality to whatever they do (Brees and Martinko 2015). It also denotes a caring for the needs of others (Fasoli 2017) or having non-selfish motives, for instance, in consideration of the environment (Jakob et al. 2017). The notion of moral responsibility asks to what extent and when we are morally responsible for what happens to other individuals (having moral agency). Murray and Lombrozo (2017) questioned whether we are really morally responsible for unintentionally bringing about certain outcomes for other people when manipulated to do so. Moral responsibility is an important component of moral identity or self-concept (Fernandez-Duque and Schwartz 2016). This translates into organisational implications in as far as there is rising awareness among scholars of the question of moral responsibility and shared values (Dempsey 2015; Ha-Brookshir 2017).

Where then would moral responsibility fit in Rest's model that flows through phases of awareness, judgement, intent and action? We may argue that according to Schwartz's (2016) model, it is an element of self-identity and may help moderate the relationships among the moral reasoning phases. Conceptually, there is a difference between moral intent (the resolve to act on right judgement) and moral responsibility (the resolve to minimise suffering and harm) (Craft 2013), yet the conceptual relatedness is discernible at face value.

Mindfulness and ethical decision-making

Definition of mindfulness

There is no consensus in literature on the definition of mindfulness. Western psychology defines mindfulness as "paying attention in a particular way, on purpose, in the present moment, and non-judgementally" (Chiesa 2012, paragraph 13). Originating from Buddhism, mindfulness forms one of eight mutually reinforcing paths along with right view, right thought, right speech, right action, right livelihood, right effort and right concentration.

Considering these paths, Purser and Milillo (2015) presented a triadic model of 'right mindfulness'. Mindfulness requires a person to keep 'right view' in mind (elimination of

suffering) which in turn affects 'right effort'. The outcomes of 'right mindfulness' are skilled mental and emotional states, as well as skilled verbal and physical behaviours. In Buddhism, mindfulness is the "de-automatization of habitual reactions and perceptual evaluations" (Purser and Milillo 2015, p. 5), where the recipient of information accepts it without reacting instinctively or repressing sensations. Thus, the objective of mindfulness is the elimination of suffering (Amaro 2015; Lindahl 2015; Verhaeghen 2015). It leads to changes in behaviour and psychological traits (Purser and Milillo 2015). The latter conceptualisation relates to the virtue of attaining wisdom through intentional wholesome actions that lead to a skilled state of mind (Krägeloh 2016). Virtues are intrinsic strengths which are reinforced by habitual repetition (Morales-Sánchez and Cabello-Medina 2013).

Other scholars regard mindfulness as both a trait and a virtue, strengthened through practice or experience (Chiesa 2012; Morales-Sánchez and Cabello-Medina 2013; Purser and Milillo 2015). Good et al. (2016) found four different operationalisations of mindfulness in research, namely as a trait, state, practice or intervention. In this study, mindfulness was measured as a stable trait based on virtuous character. Integrating different perspectives, we define mindfulness as virtuous traits, thoughts, feelings and actions characterised by self-restraint and uncritical mental presence with the intent of minimising harm. Practising mindful presence may develop the state of mindfulness and ultimately a mindful disposition and character. Likewise, being virtuously mindful develops a mindful state and results in mindful thoughts, feelings and actions. Mindfulness manifests as a contemplative state of mind that is aware, watchful, non-reactive, describing and non-judging (Baer et al. 2006) as opposed to distracted, inattentive, reactive and critical.

Effects of mindfulness

Having been the subject of a profusion of empirical investigations, mindfulness has been associated with multiple positive outcomes, not limited to a reduction of chronic physical pain,

an improvement in psychological disorders such as borderline personality disorder (Chiesa 2012; Monteiro et al. 2015), or long term positive neurological states (Kini et al. 2016). Cognitive and affective mindfulness relate positively to perceived quality of friendship as well as a sense of vitality or feeling alive (Akin et al. 2016). The practice of mindfulness through a mindful awareness trait also reduces intention to smoke (Black et al. 2012).

In the workplace, mindfulness results in significant positive results: it plays a role in innovation through its effect on negative emotion (Francesco et al. 2018), helps to satisfy psychological needs for self-determination (Tiwari and Garg 2017) and encourages intrinsic motivation (Kroon et al. 2017). It also decreases a sense of role incongruence resulting from adverse circumstances such as a lack of resources, discordant practices, or ineffective situations (Valentine et al. 2010). Dispositional mindfulness (a trait), specifically in the workplace, relates to intrapersonal effectiveness measures such as job satisfaction and performance; it reduces burnout and withdrawal, and relates to positive interpersonal relationships (Mesmer-Magnus et al. 2017). When practiced collectively, mindfulness in a team reduces conflict and social undermining (Lingtao and Zellmer-Bruhn 2018). However, in their meta-analysis of the prosocial effects of mindful meditation, Kreplin et al. (2018) challenged the notion of a universal prosocial effect, showing that mindfulness influences compassion and empathy only moderately, and reduces neither aggression nor prejudice, nor does it increase connectedness.

In Good et al.'s (2016) integrative framework of the dynamics of mindfulness, the trait, state, practice or intervention thereof produces improved attention (stability, control and efficiency). In this framework, mindful attention has cognitive, affective, behavioural and physiological dimensions: it is seen in *cognitive* capacity and flexibility, *emotional* life cycle reactivity and valence or strength, *behavioural* self-regulation and reduced automaticity, and *physiological* improvements in stress response, neuroplasticity and delayed aging. These

four human functions of mindfulness in turn produce positive work outcomes such as improved performance, relationships and well-being. Good et al.'s (2016) framework does not incorporate decision-making or ethical choice, however.

Links between mindfulness and ethical choice

In as far as mindfulness is defined as an individual virtue or a trait, we argue that it relates to virtue ethics rather than deontological thinking or consequentialism.[1] Mindfulness requires ethical foundations (Veraeghen 2015) without which it may lead to unwholesome behaviour (Monteiro et al. 2015). It denotes moral conscience with discernment between right and wrong states that leads to self-regulation (Krägeloh 2016). This results in 'right actions' such as 'avoidance of greed, aversion and delusion, and manifests as virtues of generosity, loving-kindness, compassion and wisdom (Purser and Milillo 2015). This suggests a close link between the practice of mindfulness and the values that underpin ethics.

Fundamental values in ethical decision-making include wisdom, courage, humanity, justice, temperance and transcendence (Crossan et al. 2013), as well as prudence, justice, fortitude and temperance (Morales-Sánchez and Cabello-Medina 2013). Since mindfulness is defined by non-reactivity and the avoidance of premature judgement, it seems to embody virtues of both wisdom and temperance.

Further to this, there are also several parallels between mindfulness and ethical decision-making, for example, mindfulness requires intentional thought and reduced automatism, while ethical choice involves intuitive moral judgement (Craft 2013, Moore and Tenbrunsel 2013). In addition, mindfulness requires avoidance of harm (Purser and Milillo 2015) while ethical choice requires socially acceptable and morally responsible behaviour

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[1] Crossan et al. (2013) described three categorisations in ethical choice: (a) consequentialism, which suggests ethics is determined by consideration of costs and benefit outcomes; (b) deontological thinking, which implies that ethics is determined by adherence to universal principles; and (c) virtue ethics, which indicates that it results from good personal character or virtues.

(Williams and Gantt 2012). We therefore presumed that the practice of mindful awareness will invariably supplant the cognitive process of moral awareness and excluded it from the study. Having a *mindful* 'right view' also involves discernment, or arguably a realisation of what 'right action' is (Purser and Milillo 2015), echoing the definition of *moral judgement*. Alternatively, mindful 'right view' discernment gives a sense of an obligation to act on the view, which echoes the definition of *moral intent*. This suggests that mindfulness relates to moral reasoning.

Research findings by Robinson et al. (2017) showed that mindfulness provides the type of attention that helps overcome limitations in judgement and existing cognitive schemas, where the decision-maker takes into account not only the content but also the context of information. Furthermore, Vallabh and Singhall (2014) presented an argument that mindfulness improves decision-making as it enhances information processing and broadens environmental scanning. Beyond the conceptual similarities of mindfulness and ethics, there are also research findings that suggest this is the case, i.e. organisational ethicality has been shown to relate to organisational or collective mindfulness (Valentine et al. 2010). In a similar vein, Eisenbeiss and Van Knippenberg (2015) have found that ethical leadership enables mindfulness and the feeling of moral emotions in followers. Touching on a component of ethics, namely compassion, Atkins and Parker (2012) indicated that the psychological flexibility that mindfulness brings, through "present moment contact", "defusion from thoughts and feelings", "observing approach to self", and "acceptance of unpleasant thoughts and feelings" works with values-directed action to bring about compassion.

Mindfulness has been shown to relate specifically to ethical decision-making through multiple mechanisms. For instance, Fischer et al. (2017) indicated that mindfulness relates to sustainable consumption, potentially because it bridges the gap between attitude and behaviour and supports non-materialism values, well-being and prosocial behaviour. Ruedy

and Schweitzer (2010) held that mindfulness results in ethical decision-making through the mechanisms of greater awareness of the environment and tolerance of situations, as well as greater self-awareness which is associated with honesty. Their research showed links between mindfulness and both greater moral intent and fewer ethical breaches. Shapiro et al. (2012), meanwhile, emphasised the role of the stress reduction mechanism of mindful meditation to yield three positive outcomes supporting ethical decision-making: mindful attention, positive emotion with anxiety reduction and well-being (the measure of which includes notions of compassion and happiness).

Lampe and Engleman-Lampe (2012) cited literature that shows that mindful meditation can suspend preconceived ideas, allowing for greater cognitive flexibility in ethical thinking, and can support emotional regulation when faced with ethical dilemmas. Craft (2013), however, in a meta-analytical study of 84 articles in the 2004 to 2011 period, could only identify one that described a relationship between mindfulness and moral awareness; an early step towards showing a relationship between mindfulness and Rest's model of ethical choice appears in research by Pandey et al. (2017). They showed that mindfulness training increases moral reasoning, mindfulness itself and compassion, while reducing egocentric bias (or the desire to only act for personal gain).

It is clear from the literature reviewed that the mechanisms of mindfulness in ethicality and ethical decision-making are of interest, and further research is required to establish the nature of the underpinning relationships. To help build the understanding of the relationship between mindfulness and ethical choice, this study investigated mindfulness specifically in relation to two of Rest's phases of ethical decision-making, namely moral judgement (phase 2) and moral intent (phase 3). As mindfulness by nature implies awareness, an investigation of its relation to moral awareness (phase 1) was excluded from this study. Likewise, the virtuous state of mindfulness precedes behaviour, therefore the investigation into the

relationships with moral behaviour (phase 4) fell outside the scope of this study. Specifically, the research sought to find out if the ability to pay attention purposefully (being mindful) relates to knowing right from wrong (moral judgement) and the decision to act on what is right (moral intent). We were further interested in the role of moral responsibility in moral reasoning, as the sense of responsibility for others, or absence thereof, may have bearing on how a person reasons about moral issues.

Towards an integration of virtues, moral reasoning and responsibility in ethical decision-making

The literature review examined three sets of constructs: moral reasoning, as embodied in Rest's (1986) phases of awareness, judgement, intent and behaviour; moral responsibility, which deals with a sense of accountability to act in the interests of others; and mindfulness, which involves virtues developed as a trait, in process or through interventions. We reasoned that understanding the dynamics among these three sets of constructs would enhance our understanding of ethical decision-making.

Schwartz's (2016) integrated framework of ethical decision theories recognises not only Rest's (1986) stages of moral reasoning, but adds to that the norms relating to the issue that precedes awareness and a stage that follows behaviour, called learning (or "retrospecting"). With that, Schwartz (2016) proposed that between all the stages, processes of emotion, intuition, reason and rationalisation play a role. Along these processes, aspects of the individual (such as moral capacity) and the situation (including the issue and organisational factors) moderate relationships between each of the stages.

It is therefore reasonable to assume that both moral responsibility and mindfulness would fit into such an integrative framework. Firstly, we considered whether *mindfulness*, through paying attention to the context and content, would relate to *moral judgement* in deciding between "right" and "wrong". Next, we considered whether *mindfulness* relates to

moral responsibility. In other words, we propose that aversion to ill will (the virtue of mindfulness) presupposes a sense of responsibility to others (moral responsibility). As mentioned earlier, Pandey et al. (2017) have found relationships between mindfulness and reduced egocentric bias, which seems to be similar to moral responsibility.

Moral responsibility, which embodies the self as agent, with a moral judgement disposition and a self-conscious moral orientation, acting on moral strength and moral emotions, plays an important role in decision-making (Jennings et al. 2015). Jennings et al. (2015) highlighted that the "mere making of a moral judgement does not inform why someone will attend to moral issues in the first place, why they will feel the need to act, or why they will overcome pressures and temptations to act unethically" (p. 159). Moral judgement does not automatically lead to moral action; individual perceptions, beliefs and virtues (presumably mindfulness too) are also at play in moral responsibility. When an individual feels morally responsible, rather than having moral principles, it becomes a precondition of living a moral life (William and Gant 2012). Moreover, whether a relationship exists between moral responsibility and moral judgement (Rest step 2) is also of interest. One may reason that the mental act of determining right from wrong presupposes a subjective sense of humanity, caring and unselfish consideration of others (moral responsibility).

Finally, we consider that the theorised relationship between moral judgement and moral intent as proposed by Rest (1986) will differ for different scenarios. Monteiro et al.'s (2015) practical example may best illustrate the relationship between mindfulness and moral judgement. A sniper, who reasons he may kill for financial gain or pleasure, may in fact be mindful through focused attention and by being non-reactive, describing and observing. Alternatively, a sniper in service of the police or military may employ utilitarian ethics, which requires the death of one person to save many (Monteiro et al. 2015). The first example

excludes principles of virtue-based mindfulness (eliminate suffering) while the latter complies with both virtue and utilitarian principles that underpin moral judgement.

Conceptually, the research proposes an integration of moral reasoning, values and humane feelings as may be seen in Fig. 1. The figure presupposes that the reasoning processes of ethical decision-making are supported by the virtue of mindfulness and a sense of humanity in moral responsibility. Five hypotheses emerged from our review:

Fig. 1 Research framework within the conceptual model of virtues and moral reasoning
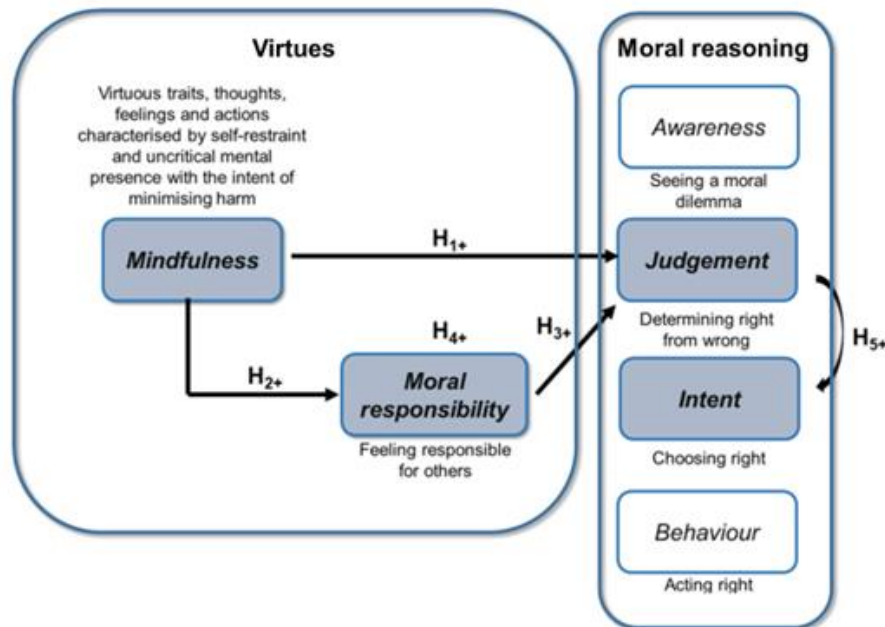
Hypothesis 1: Mindfulness predicts moral judgement (Rest phase 2).

Hypothesis 2: Mindfulness predicts moral responsibility.

Hypothesis 3: Moral responsibility predicts moral judgement (Rest phase 2).

Hypothesis 4: The relationship between mindfulness and moral judgement is mediated by moral responsibility.

Hypothesis 5: Moral judgement predicts moral intent.

Overall, we propose that linking concepts of mindfulness and moral responsibility with moral processes in ethical decision-making will add to our understanding of the role of virtues in ethical choice. We examine the pathways among these concepts as can be seen in Fig. 1.

Methods

Participants and design

Meta-reviews (Craft 2013; Lehnert et al. 2015) of ethical decision-making research indicate a reliance on descriptive investigations. Through explanatory research we sought to describe and quantify the relationships among the variables as defined in Fig. 1 through correlations and measures of prediction (Zikmund et al. 2010), adding further substantiation to descriptive debates. The study's sample was drawn from a medium- to large-sized South African organisation that generates turnover of 7.8 billion rand and had a market capitalisation of 15 billion rand as of September 2015. The heterogeneous organisational group was selected to minimise the potential moderating influences of organisational culture as depicted in the interactionist model of decision-making (Trevino 1986). Two research strategies were best suited to obtain the quantitative data required in alignment with this design, which was the use of surveys and scenarios within this deductive research design.

Through purposive sampling, the study focused on first tier employees who were responsible for complex decisions which could generate significant fiduciary losses. A selected sample of 544 employees from a targeted population of 1258 employees was approached with a resultant sample size of 171 participants after cleaning the data. Of the initial 199 responses, 28 response sets had to be discarded due to major omissions in completing the surveys where missing data treatments could not be applied. Response bias was accounted for after comparing the means of the respondents' intentions with the intentions believed to be held by their peers using the Paired-samples t test ($p < 0.05$). Using

Pallant's (2010) guidelines of the ratio of independent variables to sample size, the resultant sample size was sufficient. The respondents were on average 33.4 years old, with 91.3% falling in the age categories between 25 and 50 years of age, and 43.9% were male. The most common ethnicity of the samples was white (54%), with 23% black, 15% Indian and 8% Asian and other. The majority was of Christian religious orientation (81%).

Data Gathering Process

Prior to gathering data, ethical clearance was obtained through an internal ethics committee of the university and approval was obtained from the organisation. Although the respondents were widely dispersed across South Africa, we made use of face-to-face sessions to introduce the study and administer a paper-based questionnaire to optimise the response rate. The respondents placed completed questionnaires in a container (marked only by location) to ensure anonymity and confidentiality, and ethical considerations were followed when gathering and analysing the data. We recognised the potential of response bias due to the data gathering process and self-report assessments (Dunkel et al. 2016).

Measures

The survey combined three scales, namely the Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al. 2006), the Amended Moral Disengagement Scale (ADMS) (Bandura et al. 1996) and the Multidimensional Ethics Scale incorporating three scenarios (MES) (Cohen et al. 1993). Internal consistency, or Cronbach's alpha, and item to total Pearson's correlation were calculated to determine the reliability of each scale, while principal component analysis (PCA) was conducted to determine construct validity and the effectiveness of the scales (Rea and Parker 2014).

Mindfulness

The 39-item Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al. 2006) uses a five-point Likert scale to measure mindfulness traits and distinct factors as: (a) acting with awareness; (b) observing; (c) non-reactivity; (d) describing; and (e) non-judging. When the observing subscale is removed, the FFMQ adopts traits of a single factor structure (Baer et al. 2006). To illustrate, a few select items read: "When I do things, my mind wanders off and I am easily distracted", "I tell myself I shouldn't be feeling the way I'm feeling", "I make judgements about whether my thoughts are good or bad" or "I can usually describe how I feel at the moment in considerable detail".

The FFMQ has been criticised for not sufficiently assessing the levels of mindfulness between those with lay or proficient meditative experience (Aguado et al. 2015; Baer et al. 2006). We obtained Cronbach's alpha scores for the FFMQ for this sample ranging from 0.68 to 0.78 for the five facets, and a score of 0.86 for the single construct indicating the internal consistency or relatedness of the 39 items together. Kaiser-Meyer-Olkin (KMO) scores for the various dimensions of mindfulness were for observing (0.73), describing (0.79), acting with awareness (0.72), non-judging (0.76) and non-reactivity (0.70) (middling scores) and Bartlett test scores (0.00) were significant for all five dimensions and for the set of items (χ^2 (741)=2324.22, p<.001).

After orthogonal rotation using the Varimax technique, the five factors of mindfulness obtained eigenvalues for observing (2.77), describing (3.25), awareness (2.73), non-judging (2.95) and non-reactivity (2.42) with cumulative percentages of variance ranging from 7.9% to 63.48%. This confirmed the five distinct constructs of mindfulness reported by Baer et al. (2006). Scree plots verified the existence of five components of mindfulness. Item total correlations revealed 20 items with low correlations. As this was a large pool of items we opted to include the items, assuming potential sample size impact. Since all relations were

significant, we assumed content validity based on previous validations of the scale. Factor loadings revealed poor fit of the individual questions and the dimensions of mindfulness, and therefore we failed to find convergent and divergent validity of the subscales. For this reason, the study excluded analyses for individual components of mindfulness and retained trust in the summated score of mindfulness.

Moral Responsibility

Given the absence of a validated assessment of moral responsibility in literature, and since Schwartz (2016) juxtaposed moral responsibility and disengagement, the moral disengagement scale (MDS) (Bandura et al. 1996) was used as it mirrors the concept of moral responsibility inversely to the degree to which a person can use justifications to disengage moral responsibility. The scale is limited as a measure of moral responsibility as it does not identify a baseline considering that a person may employ a high degree of disengagement, but from a principled moral baseline or vice versa.

The MDS consists of 32 items which measure, on a seven-point Likert scale, the extent to which moral responsibility is disengaged. A person may disengage moral responsibility through eight mechanisms measured by the scale, namely moral justification, euphemistic language, advantageous comparison, displacement of responsibility, diffusion of responsibility, disregarding or distorting the consequences, attribution of blame or dehumanising another person. A few illustrative items are "If someone at work causes trouble and misbehaves at work it is their manager's fault", "Someone who is obnoxious does not deserve to be treated like a human being", "If people are careless where they leave their things it is their own fault if they get stolen" or "Teasing someone does not really hurt them". Moral responsibility implies the absence of attitudes that negate moral thinking as illustrated by these items. In other words, a morally responsible person practices moral thinking without making excuses for immoral attitudes. Following pre-testing of the questions with a separate

sample of ten respondents from the population, two items were reworded where question 13 became *"If people are not disciplined they should not be blamed for misbehaving"* and question 17 became *"It is alright to fight for your group's reputation when threatened"*.

An internal validity Cronbach's alpha score of 0.86 was obtained for this sample. Item to total correlation calculations indicated weaker but significant correlations for 19 of the items (1, 2, 4, 7–8, 12–13, 15–20 and 25–29). Results are reported for the full item set as the lack of convergent validity for the subscales may be due to sample size, and to ensure comparability of findings. For the full questionnaire, a KMO score of 0.76 and Bartlett's test significance values (χ^2 (496)=1999,44 p<.001) allowed factor analysis. The subsequent principal component analysis yielded loadings of some items on more than one component. With the aim of data reduction, these items were retained with the factors on which they loaded the highest.

After Varimax rotation and Kaiser normalisation, this study replicated the eight dimensions and low single factor variance of the original questionnaire (Bandura et al., 1996). Eigenvalues ranged from 4.30 to 1.28, and cumulative percentages of variance from 13.48% to 59.78% for components one to eight. Interpretation of the results should take into account that an optimal sample size for factor analysis would have been 640 respondents (Hair et al. 2010). Although convergent validity was not established for the subscales, weak to moderate correlations of items to the overall construct were considered in the interpretation of results and the use of summative scores in further analyses. Thus, we retained confidence in the overall measure of Moral Responsibility but not the subcomponents for this dataset.

Moral Judgement and Moral Intent

To explore *moral judgement*, the Multidimensional Ethics Scale (MES) (Cohen et al. 1993) asked respondents to indicate the ethicality of a series of situations for three scenarios using

a seven-point Likert scale, based on moral philosophies of fairness, justice, contract, duty, consequence and greatest good.

The items of the instrument required agreement along multiple ethical indices or heuristics, such that it "maximises benefits while reducing harm", "is fair", "leads to the greatest good for the greatest number", "violates an unspoken promise", etc. A critique of the MES highlighted problems of conceptual overlap of the implied philosophies of the items (Reidenbach and Robin 1990). It should also be noted that the MES has received critique for yielding mixed results as a measure of moral judgement (Williamson et al. 2011).

We made use of three measures of moral judgement: (a) the full Cohen et al. (1993) scale excluding items dealing with moral intent; (b) the two items that measure moral judgement as an indication of fairness and justice only (Nguyen and Biderman 2008) and (c) individual items as each represented a distinct approach to moral judgement. The implications of the different measures appear under the discussion of results.

The internal consistency measure for the overall instrument was good (α =.87). A KMO score of 0.81 and Bartlett's test significance values (χ^2 (990)=6001,65 p<.001) allowed the use of factor analysis. Principal component analysis with Varimax rotation and Kaiser normalisation revealed five components on the scree plot. Eigenvalues ranged from 7.12 to 2.41, and cumulative percentages of variance from 15.83% to 52.88% for components one to five. Nguyen and Biderman (2008) caution that the structure of the MES may be misrepresented as response tendencies are scenario-specific. This implies potential variance from one scenario to the next.

Principal component analyses with Varimax rotations yielded three components for scenario one, and four for both scenarios two and three with eigenvalues greater than 1, compared to three (Reidenbach and Robin 1990; Williamson et al. 2011) and five or six

(Cohen et al. 1993) in previous research. This indicates contextual influences in factorial structures and confirms that variance based on scenarios (Nguyen and Biderman 2008).

Moral intent was measured using a single item of the MES. The item is based on the same scenarios and requires a judgement on the likelihood that one would undertake the same action, thus signalling moral intent. The scenarios were revised from Miller et al. (2014) to describe situations in which small confidences had been broken, action was taken to benefit one side of a dual relationship, and a company policy was ignored in the vendor application process to benefit a friend (see Table 1). The moral intensity of the scenarios increased from an issue relating to personal relationships, to personal incentives, to something more clearly unethical (nepotism).

Table 1 Scenarios used with the Multidimensional Ethics Scale

Scenario 1
A manager has three employees who report to him/herself. The office is small and members of various departments mingle. One afternoon, one of the managers' friends tells him/her that one of his/her employees is unhappy with his/her management style. In response: he/she confronts the employee about this statement
Scenario 2
A manager realises that the projected quarterly sales figures will not be met, and thus s/he will not receive a bonus. However, there is a customer order which if shipped before the customer needs it will ensure the quarterly bonus but will have no effect on the annual sales figures. Action: the manager ships the order to ensure earning the quarterly sales bonus
Scenario 3
A new company applies for a tender or offers to render services to a manufacturing organisation. The buyer of the manufacturing company is good friends with the owner of the new company, but because the company is new, it does not have all the relevant documents required to become a vender. Action: the buyer loads the new company as a vendor

The scenarios aligned with recommendations made by Bowers and Pipes (2000) that an ethical dilemma is present when firstly two competing ethical principles arise to choose between, and secondly, they represent really challenging ethical concerns. Having multiple

scenarios enhanced validity by overcoming potential issues of vague, irrelevant or unfamiliar content (Mudrack and Mason 2013).

Analysis and Results

Descriptive statistics for the respondents' judgement relating to the ethicality of an action taken, their intent and the perceived intent of their peers to behave in a similar manner, the level of moral disengagement, and mindfulness appear in Table 2. Table 2 also presents the significance of Pearson correlations between the variables. Moral judgement correlates strongly with moral intent (r(169)=0.75, p<0.01), moral responsibility correlates with moral judgement but only for vignette 3 (r(169)=-0.22, p<0.01) and mindfulness correlates with moral responsibility (r(169)=0.34, p<0.01). The coded value of one represents "strongly agree", while seven represents "strongly disagree". The responses were aggregated for the variable moral judgement given that a single underlying construct was identified. The MDS was aggregated to represent a single variable incorporating the nine components since the loadings of various questions were random, and given the single factor originally identified by Bandura et al. (1996). Although the indicators of skewness and kurtosis suggested the violation of normality, the impact can be considered to be negligible for sample sizes of close to 200 such that the data were not transformed (Hair et al. 2010).

Table 2 Means, standard deviations and correlations of moral judgement, moral intent, moral responsibility and mindfulness

	Variable	*M*	*SD*	1	2	3	4	5	6	7
1.	Moral Judgement Vignette 1[i]	3.75	1.33				-			
2.	Moral Judgement Vignette 2[i]	4.77	1.26	-0.23						
3.	Moral Judgement Vignette 3[i]	5.53	0.99	0.04	0.51**					
4.	Moral Judgement	4.69	0.85	0.65**	0.81**	0.66**				
5.	Just and Fair[ii]	4.91	1.02	0.34**	0.30**	0.17**	0.40**			
6.	Moral Intent	5.19	1.21	0.50**	0.61**	0.47**	0.75**	0.32**		
7.	Moral Responsibility	6.31	0.70	0.51	-0.10	-0.22**	-0.11	-0.14	-0.05	
8.	Mindfulness	3.77	3.82	0.08	0.06	0.01	0.75	0.01	0.13	0.34**

Note:
[i] *Variables 1 to 4 represent different measures and components of the same construct. Moral judgement encompasses the three scenarios.*
[ii] *"Just and Fair" represents moral equity, a shortened or alternative measure of moral judgement contained within the MES.*
* Correlations significant at 0.05 level (2-tailed)
** Correlations significant at 0.01 level (2-tailed)

Hypothesis 1: Mindfulness and Moral Judgement

Mindfulness as a trait (rather than as an experimental intervention or process) means that a person is observing, describing, aware, non-judging of and non-reactive to inner experience. It was defined through items that dealt inter alia with the tendency to perceive feelings without reacting on them, not being easily distracted, being aware of physical sensations and sounds, being accepting of own thoughts, and so on.

We found no support for the hypothesis that mindfulness predicts moral judgement ($\beta=0.08$, $p>0.05$, $F(1,169)=0.95$, $p>0.05$). For moral judgement, the responding managers faced competing ethical dilemmas in three scenarios and had to practice *moral judgement*: (1) where a manager learns that one of the employees is unhappy with his management style and decides to confront the employee; (2) where the manager faces the risk of not earning a bonus due to low sales figures, and decides to process the order before a customer requires it in order to earn the bonus; and (3) where a buyer selects a new vendor amongst one of his or her good friends without the required documentation being in place (see Table 1). In

exercising moral judgement of these scenarios, the participants evaluated whether the managers in the scenarios were being just; fair; culturally, traditionally and individually acceptable, and so on. With that they indicated their own *moral intent*, reflecting on whether they were likely to do the same.

Based on the data, the analytical model excluded items relating to observation. The results show that a trait of mindfulness does not predict moral judgement and therefore Hypothesis 1 is rejected. This means that we did not find support for the notion that a person who is mindful would practice moral judgement when faced with moral challenges.

Hypothesis 2: Mindfulness and Moral Responsibility

We found that mindfulness significantly predicts moral responsibility (β=-0.32, $p<0.01$). A significant amount of the variance in moral responsibility can be explained by mindfulness ($F(1,169)$=22.43, $p<0.01$). We therefore accepted Hypothesis 2. In other words, the findings show that we can predict that a person who is mindful, and therefore acts with awareness, and remains observant, non-reactive, describing and non-judging in situations that require moral reasoning will also be morally responsible. Another way to view this is that we have found that we can predict that a mindful person will not be likely to use euphemisms, distortions of consequences, attribution of blame to others or similar moral disengagement strategies when faced with ethical dilemmas.

Hypothesis 3: Moral Responsibility and Moral Judgement

The regression analyses did not show that moral responsibility predicts moral judgement as expected (H$_3$) (β=0.11, $p>0.05$, $F(1,169)$=2.46, $p>0.05$). Theoretically, we expected that a person who thinks in a morally responsible way, thus avoiding justifying actions, or playing down moral errors or consequence, or blaming others or dehumanizing others to justify actions (Lowell 2012) would also practice good moral judgement based on a range of

philosophies (such as believing in justice, family and cultural values, the greater good etc.). We did not find support for Hypothesis 3 and therefore the analysis failed to show a predictive relationship between moral responsibility (values) and moral judgement (reasoning).

Hypothesis 4: Mediation of Moral Responsibility in the Proposed Mindfulness-Moral Judgement Relationship

Since mindfulness was not found as a significant predictor of moral judgement (Hypothesis 1), the conditions for testing for mediation were not met, and Hypothesis 4 was discarded. Moreover, a full regression model offered no support for the theoretical relationship between the selected moral virtues of mindfulness and moral responsibility, and moral reasoning.

Hypothesis 5: Moral Judgement and Moral Intent

Table 3 presents the results for the hypothesis that moral judgement predicts moral intent (H_4). This relationship has previously been shown in literature as part of verifying the Rest model (Nguyen and Biderman 2008).

Table 3 Regression and hierarchical multiple linear regression results for moral judgement predicting moral intent (controlling for age, gender, income and religion)

Variable	Model 1[i]			Model 2i			Model 3			Model 4			Model 5		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Moral Judgement	1.07	0.07	0.75												
Moral Judgement (Scenario 1)				0.46	0.06	0.50**	0.35	0.05	0.38**	0.37	0.05	0.40**	0.37	0.05	0.40**
Moral Judgement (Scenario 2)							0.50	0.53	0.52**	0.37	0.06	0.39**	0.36	0.06	0.38**
Moral Judgement (Scenario 3)										0.32	0.07	0.26**	0.35	0.08	0.28**
Age													0.01	0.01	0.08
Gender (female)[ii]													0.83	0.13	0.34
Income (lower)[ii]													0.23	0.14	0.09
Religion (other than Christian)[ii]													0.02	0.05	0.23
R^2		0.56			0.25			0.51			0.56			0.57	
F (change in R^2)		213.18**			56.30**			88.32**			18.90**			1.03	

Notes: [i] Model 1 presents a simple regression results, and Models 2 to 5 the hierarchical multiple linear regression results
[ii] Dummy variables were coded where males, Christians and higher income groups represented the reference groups
$N = 171$ * $p < 0.05$ ** $p < 0.01$

Firstly, a simple linear regression model indicated that moral judgement significantly predicts moral intent ($β=0.75$, $F(1,169)=213.81$, $p<0.01$). Hierarchical multiple linear

regression analyses revealed that moral judgement predicts moral intent for all three scenarios. Fifty six percent of the variance of moral intent was explained by moral judgement. This means that when managers practice moral judgement in the face of ethical dilemmas such as whether to betray a trust, take shortcuts to secure a bonus or help out a friend, we can predict positive intention to act morally. The predictions remain significant when controlling for age, gender, income and religion, as these demographic variables were not significant predictors of moral intent when added to the regression model.

The Multidimensional Ethics Scale (Cohen et al. 1993) rests on the assumption that in moral judgement one uses a combination of fifteen potential moral philosophies, for instance, a belief to maximise benefits by reducing harm, or to be fair, or to act culturally acceptable. However, it also includes contrary believes such as a philosophy of being self-promoting and self-sacrificing. Interestingly, these two philosophies were the only two that did not significantly correlate with moral intent. Since Nguyen and Biderman (2008) indicated that moral judgement is bound by the specific scenarios, we examine which aspects or philosophies of moral judgement related to the different scenarios. Table 4 begins to show that the choice of philosophy in moral judgement is dependent on the given scenario, as different indicators appeared to significantly predict moral intent for the different scenarios. For instance, when considering the morality of confronting an employee about a statement made privately, moral principles of keeping a promise (β=-0.17, p<0.05), acting for greatest utility (β=0.16, p<0.05) and being aligned to family values (β=0.25, p<0.05) predicted moral intent. However, for the scenario dealing with early shipment of an order, individual acceptability (β=0.26, p<0.05), an obligation to act (β=0.12, p<0.05), family values (β=0.23, p<0.05) and justice (β=0.29, p<0.05) were significant predictors of moral intent. In the final scenario where nepotism and tenders were at stake, a sense of obligation (β=0.13, p<0.05),

contractual considerations (*β*=-0.20, *p*<0.05) and family values (*β*=0.36, *p*<0.05) were the moral judgement elements that predicted moral intent.

Table 4 Multiple linear regression results for moral judgement philosophies predicting moral intent per scenario

Significant Predictors	Scenario 1			Scenario 2			Scenario 3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Just	-	-	-	0.31	0.13	0.29*	-	-	-
Individually acceptable	-	-	-	0.26	0.07	0.26*	-	-	-
Acceptable to family	0.27	0.08	0.25*	0.25	0.08	0.23*	0.35	0.08	0.36**
Greatest utility	0.19	0.08	0.16*	-	-	-	-	-	-
Against unwritten contract	-	-	-	-	-	-	-0.13	0.06	-0.20*
Obligated	-	-	-	0.14	0.07	0.12*	0.12	0.06	0.13*
Against a promise	-0.19	0.07	-0.17*	-	-	-	-	-	-
R² (all variables)		0.69			0.70			0.59	
F (all variables)		22.99**			24.11**			14.99**	

Note: Although only the significant predictors are presented here, the R² and F values apply for a model that includes all fifteen moral judgement philosophies.
*N = 171 * p < 0.05 ** p < 0.01*

Discussion

To better understand the influence of virtue on moral reasoning in ethical decision-making, we explored the interrelationships among constructs of moral reasoning (cognitive dimension), moral responsibility (values dimension) and mindfulness (operationalised as a moral trait dimension). Our findings suggest relationships between mindfulness and moral responsibility (a virtue). The virtues of mindfulness and moral responsibility did not predict moral judgement. Moral judgement, as shown in Rest's (1986) model, predicts moral intent. Different philosophies of moral judgement come into play for different moral decisions.

In our research, we wondered whether *being mindful* would relate to both *moral judgement* and *moral responsibility* as processes in moral reasoning. Contrary to expectations from our literature review (Crossan et al. 2013; Krägeloh 2016; Morales-Sánchez and Cabello-Medina 2013), we did not find support for the idea that mindfulness predicts moral judgement. This is surprising in as far as mindfulness denotes a constant state of awareness, greater than a momentary awareness in moral reasoning, a heuristic or intuition (Jankowski and Holas 2014; Kuan 2012). This, however, echoes the findings of Kreplin et al. (2018), who could only find moderate relations between meditative mindfulness

and prosocial attitudes. This finding indicates that further research is required to understand the relationships among virtue-based constructs such as mindfulness and cognition-based constructs such as moral reasoning in ethical decision-making. Future research should also consider the depth and nature of mindfulness practiced in relation to moral reasoning.

Mindfulness predicted moral responsibility as expected. From this, we learn that when practising virtuous traits, thoughts, feelings and actions associated with mindfulness, decision-makers are also likely to avoid shifting accountability during decision-making. This finding adds to the literature that shows the positive effects of mindfulness such as innovativeness (Francesco et al. 2018), self-determination (Tiwari and Garg 2017), intrinsic motivation (Kroon et al. 2017), positive interpersonal relationships and reduction of conflict (Mesmer-Magnus et al. 2017; Lingtao and Zellmer-Bruhn 2018) and other cognitive, affective, behavioural and physiological benefits (Good et al. 2016). Our finding is significant in as far as it shows the effect of mindfulness in the domain of moral thinking.

The results did not confirm a relationship between *moral responsibility* and *moral judgement.* More work is required to understand the commonalities and differences between the sense of feeling responsible for others and how this relates to all the dimensions of moral reasoning. However, the finding confirming the predictive value of moral judgement on moral intent confirms previous work that found similar relations (Nguyen and Biderman 2008) now with different scenarios and in a different context. Making use of different options to measure moral judgement, we confirm that a measure including indications only of fairness and justice fairs well compared to the full multidimensional scale of moral judgement. From the review we also highlight the need for new measures of moral judgement that recognise the dimensions of moral reasoning that is scenario-specific. Aligned to this, we confirm that the type of situation (as depicted by different scenarios) determines the interrelations between moral judgement and intent. This highlights the complexity of understanding morality and

ethical decision-making and calls for more in-depth insights into the situational and individual factors that impact values and reasoning in ethical choice. This is in line with Schwartz (2016) who indicated that the situation – being the issue or the organisational or personal factors – moderates the relationships between the phases of moral reasoning.

This study has theoretical implications. Schwartz (2016, p. 18) positioned his integrated model as "a 'person-situation' interactionist approach along with an 'intuition/sentimentalist-rationalist' approach to moral judgement", while the findings of this study suggest that the trait of mindfulness should be considered to form part of an integrated framework of ethical decision-making, along with other processes such as emotion or reason that have a bearing on moral judgement and intent. More specifically, it seems that a state of being non-judgemental may relate to these moral reasoning competencies.

The second consideration is around the role of moral responsibility in the process of ethical choice. Citing Bandura (1999), Schwartz indicated that displacement of responsibility can prevent the activation of the first phase in Rest's (1986) model of moral reasoning (moral awareness). In this work, we found that moral responsibility relates to Rest's phase 2 (moral judgement) for one of the scenarios only.

Practical Implications, Limitations and Further Research

The development of ethical leaders requires the development of the moral self, which Jennings et al. (2015, p. 106) defined as "a complex system of self-defining moral attributes involving moral beliefs, orientations, dispositions, and cognitive and affective capacities that engage regulatory focus toward moral behaviour". In order to develop the moral self and related ethical decision-making capabilities of leaders, the process of moral reasoning should be considered. In this research, we were concerned whether mindfulness enabled moral reasoning. Mindfulness has previously been shown to yield many benefits such as improved emotion regulation, self-awareness, learning, working memory, increased engagement and

lower burnout rates (Hyland et al. 2015), and has recently been studied as a mechanism to improve ethical decision-making (Fischer et al. 2017; Valentine et al. 2010). Our study found only a small contribution of the trait of mindfulness in ethical decision-making, however, it seems that in combination with moral responsibility, it has a role to play in ethical choice.

The findings of the study have practical implications. By developing mindfulness in managers, some effect may be seen in improving moral responsibility. Coaching interventions may support the development of moral schemas and raise awareness to accept accountability and responsibility towards others, as well as increase the intent to not harm others as implied in moral responsibility (Khar et al. 2011). Improving ethical decision-making is an undeniable imperative in a world that requires socially responsible actions despite diverse stakeholder needs (Siegel 2015). The practice of scenario-based ethical decision-making in training and development initiatives as employed in the methodology of this study may also prove useful to highlight the full spectrum of factors that enable ethical choice, namely the effectiveness of the moral reasoning process. Presenting managers with ethical dilemmas that contrast the differing requirements of different stakeholders could begin to lay the cognitive pathways for understanding the often conflicting needs of multiple stakeholders.

The findings also highlight future research opportunities. This study focused on only two phases of moral reasoning in relation to mindfulness, thus further studies should incorporate all four phases as well as other elements included in Schwartz's (2016) integrative ethical decision-making framework. Mindfulness, operationalised not as a trait but as a process or intervention, may show stronger relations to moral reasoning too. Further to mindfulness that assumes a non-judgemental virtue, future research could explore the influence of other virtues (such as justice which presupposes judgement) on moral reasoning. Furthermore, situational factors may be incorporated in a research design of moral reasoning.

Given the limitations of the design, we also propose that future studies exploring relationships among or the causality of these variables should control for response bias.

When exploring the relationship between mindfulness and moral responsibility, we became aware of the need for an instrument that could measure a more stable trait of moral responsibility, which might yield a new field of research in ethical decision-making. Furthermore, as the Multidimensional Ethics Scale (Cohen et al. 1993) offers only two items for the measurement of moral intent, ethical decision-making scholars could benefit from future scale development of distinct measures of moral intent and moral judgement. Although this scale is accepted and widely used in studies of moral reasoning (Nguyen and Biderman 2008), results should be interpreted in light of potential conceptual (Reidenbach and Robin 1990), predictive (Williamson et al. 2011) or contextual (Nguyen and Biderman 2008) limitations discussed before.

The underlying notion of the contextual nature of ethical decision-making, as implied by the interactionist model and situational variables as per Schwartz's (2016) model, is clearly supported by the varying responses to the different scenarios. With this, one should consider how the systemic influence of different stakeholder demands may impact leaders when faced with ethical dilemmas. As the homogeneity of the sample of this study entailed both advantages and disadvantages in the interpretation of the data, further studies may incorporate more heterogeneous groups from different cultural groups. Moreover, bigger samples sizes in future research may address issues of the lack of convergent validity of the subscales and allow for showing any relationships among the subdimensions of mindfulness, moral responsibility and moral judgement.

Ethics declaration

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee, and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent was obtained from all individual participants included in the study.

References

Aguado, J., Luciano, J. V., Cebolla, A., Serrano-Blanco, A., Soler, J., & García-Campayo, J. (2015). Bifactor analysis and construct validity of the five facet mindfulness questionnaire (FFMQ) in non-clinical Spanish samples. *Frontiers in Psychology*, *6*, 1–14.

Akin, U., Akin, A., & Uğur, E. (2016). Mediating role of mindfulness on the associations of friendship quality and subjective vitality. *Psychological Reports, 119*(2), 516–526.

Amaro, A. (2015). A holistic mindfulness. *Mindfulness*, *6*, 63–73.

Atkins, P. W., & Parker, S. K. (2012). Understanding individual compassion in organizations: The role of appraisals and psychological flexibility. *Academy of Management Review, 37*(4)*,* 524-546.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27–45.

Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, 3*(3), 193–209.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, *71*(2), 364–374.

Biderman, N. T. (2008). Studying ethical judgements and behavioral intentions using structural equations: Evidence from the Multidimensional Ethics Scale. *Journal of Business Ethics*, *83*, 627–640.

Black, D. S., Sussman, S., Johnson, C.A., & Milam, J. (2012). Trait mindfulness helps shield decision-making from translating into health-risk behaviour. *Journal of Adolescent Health, 51(6),* 588–592.

Bowers, M., & Pipes, R. B. (2000). Influence of consultation on ethical decision-making: An analogue study. *Ethics and Behavior*, *10*(1), 65–79.

Brees, J., & Martinko, M. J. (2015). Judgements of responsibility versus accountability. *Journal of Leadership & Organizational Studies*, *1*(11), 1–11.

Chiesa, A. (2012). The difficulty of defining mindfulness: Current thought and critical issues. *Mindfulness, 4*(3),255–268

Cohen, J., Pant, L., & Sharp, D. (1993). A validation and extension of a Multidimensional Ethics Scale. *Journal of Business Ethics, 12*, 13–26.

Craft, J. L. (2013). A review of the empirical ethical decision-making literature: 2004 – 2011. *Journal of Business Ethics, 117*, 221–259.

Crossan, M., Mazutis, D., & Seijts, G. (2013). In search of virtue: The role of virtues, values and character strengths in ethical decision-making. *Journal of Business Ethics, 113*, 567–581.

Dempsey, J. (2015). Moral responsibility, shared values, and corporate culture. *Business Ethics Quarterly, 25*(3), 319–340.

Dunkel, C. S., Van der Linden, D., Brown, N. A., & Mathes, E. W. (2016). Self-report based general factor of personality as socially-desirable responding, positive self-evaluation, and social-effectiveness. *Personality and Individual Differences, 92,* 143–147.

Eisenbeiss, S. A., & Knippenberg, D. (2015). On ethical leadership impact: The role of follower mindfulness and moral emotions. *Journal of Organizational Behavior, 36*(2)*,* 182–195.

Fasoli, A. D. (2017). Moral responsibility, personal regulation, and helping others: A cultural approach to moral reasoning in U.S. evangelical Christian cultures. *Culture & Psychology, 23*(4)*,* 461–486.

Fernandez-Duque, D., & Schwartz, B. (2016). Common sense beliefs about the central self, moral character, and the brain. *Frontiers in Psychology, 5*, 1–12.

Fischer, D., Stanszus, L., Geiger, S., Grossman, P., & Schrader, U. (2017). Mindfulness and sustainable consumption: A systematic literature review of research approaches and findings. *Journal of Cleaner Production, 16,* 2544–558.

Good, D. J., Lyddy, C. J., Glomb, T. M., Bono, J. E., Brown, K. W., Duffy, M. K., Baer, R. A., Brewer, J. A. & Lazar, S. W. (2016). Contemplating mindfulness at work. *Journal of Management, 42*(1), 114–142.

Ha-Brookshire, J. (2017). Toward moral responsibility theories of corporate sustainability and sustainable supply chain. *Journal of Business Ethics, 145*(2)*,* 227–237.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). New Jersey: Pearson.

Hoover, K., & Pepper, M. (2015). How did They Say That? Ethics Statements and Normative Frameworks at Best Companies to Work For. *Journal of Business Ethics, 131*(3)*,* 605–617.

Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: A new approach to improving individual and organizational performance. *Industrial and Organizational Psychology, 8*(4), 576–602.

Jakob, M., Kübler, D. Steckel, J. C., & van Veldhuizen, R. (2017). Clean up your own mess: An experimental study of moral responsibility and efficiency. *Journal of Public Economics, 155,* 138–146.

Jankowski, T., & Holas, P. (2014). Metacognitive model of mindfulness. *Consciousness and Cognition*, *28*, 64–80.

Jennings, P. L., Mitchell, M. S., & Hannah, S. T. (2015). The moral self: A review and integration of the literature. *Journal of Organizational Behavior*, *36,* 104–168.

Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review, 16*(2)*,* 366–395.

Khar, B., Praveen, M., & Aggarwal, M. (2011). A quasi experimental study on leadership effectiveness and ethics. *Review of Management, 1*(2)*,* 107–115.

Kini, P., Wong, J., Mcinnis, S., Gabana, N., & Brown, J. W. (2016). The effects of gratitude expression on neural activity. *NeuroImage*, *128*, 1–10.

Krägeloh, C. (2016). Importance of morality in mindfulness practice. *Counselling and Values*, *61,* 97–110.

Kreplin, U., Farias, M., & Brazil, I. A. (2018). The limited prosocial effects of meditation: A systematic review and meta-analysis. *Scientific Reports, 8*(2403)*,* 1–10.

Kroon, B., Van Woerkom, M., & Menting, C. (2017). Mindfulness as substitute for transformational leadership. *Journal of Managerial Psychology, 32*(4), 284–297.

Kuan, T. (2012). Cognitive operations in Buddhist meditation: Interface with Western psychology. *Contemporary Buddhism, 13*(1), 35–60.

Lampe, M., & Engleman-Lampe, C. (2012). Mindfulness-based business ethics education*. Academy of Educational Leadership Journal, 16*(3), 99–111.

Lehnert, K., Park, Y., & Singh, N. (2015). Research note and review of the empirical ethical decision-making literature: Boundary conditions and extensions. *Journal of Business Ethics*, *129*, 195–219.

Lindahl, J. R. (2015). Why right mindfulness might not be right for mindfulness. *Mindfulness*, *6*, 57–62.

Lingtao, Y., & Zellmer-Bruhn, M. (2018). Introducing team mindfulness and considering its safeguard role against conflict transformation and social undermining. *Academy of Management Journal, 61*(1), 324–347.

Lowe, D. J., & Reckers, P. M. J. (2016). An examination of the contribution of dispositional affect on ethical lapses. *Journal of Business Ethics*, *111*(2)*,* 179–193.

Lowell, J. (2012). Managers and moral dissonance: Self-justification as a big threat to ethical management? *Journal of Business Ethics, 105*(1), 17–25.

Mesmer-Magnus, J., Manapragada, A., Viswesvaran, C., & Allen, J. W. (2017). Trait mindfulness at work: A meta-analysis of the personal and professional correlates of trait mindfulness. *Human Performance, 30*(2/3), 79–98.

Miller, W., Becker, D. A., & Pernsteiner, A. (2014). The accounting ethics course reconsidered. *Global Perspectives on Accounting Education*, *11*, 77–98.

Miska, C., & Mendenhall, M. E. (2018). Responsible leadership: A mapping of extant research and future directions. *Journal of Business Ethics, 148*(1), 117–134.

Montani, F., Dagenais-Desmarais, V., Giorgi, G., & Grégoire, S. (2018). A conservation of resources perspective on negative affect and innovative work behaviour: The role of affect activation and mindfulness. *Journal of Business & Psychology, 33*(1), 123–139.

Monteiro, L. M., Musten, R. F., & Compson, J. (2015). Traditional and contemporary mindfulness: Finding the middle path in the tangle of concerns. *Mindfulness*, *6,* 1–13.

Moore, C., & Tenbrunsel, A. E. (2013). "Just think about it"? Cognitive complexity and moral choice. *Organizational Behavior and Human Decision Processes*, *123*(2)*,* 1–12.

Morales-Sánchez, R., & Cabello-Medina, C. (2013). The role of four universal moral Competencies in ethical decision-making. *Journal of Business Ethics, 116(4)*, 717–734.

Mudrack, P. E., & Mason, E. S. (2013). Ethical judgements: What do we know, where do we go? *Journal of Business Ethics, 115*(3), 575–597

Murray, D., & Lombrozo, T. (2017). Effects of manipulation on attributions of causation, free will, and moral responsibility. *Cognitive Science, 41*(2)*,* 447–481.

Nguyen, N., Basuray, M., Smith, W., Kopka, D., & McCulloh, D. (2008). Moral issues and gender differences in ethical judgment using Reidenbach and Robin's (1990) Multidimensional Ethics Scale: Implications in teaching of business ethics. *Journal of Business Ethics, 77*(4), 417–430.

Pallant, J. (2010). *SPSS Survival Manual: A step by step guide to data analysis using SPSS* (4th ed.). Maidenhead: Open University Press/McGraw-Hill.

Pandey, A., Chandwani, R., & Navare, A. (2018). How can mindfulness enhance moral reasoning? An examination using business school students. *Business Ethics: A European Review, 27*(1), 56–71.

Purser, R. E., & Milillo, J. (2015). Mindfulness revisited: A Buddhist-based conceptualization. *Journal of Management Inquiry, 24*(1), 3–24.

Rea, L. M., & Parker, R. A. (2014). Designing and conducting survey research: A comprehensive guide (4th ed.). San-Francisco: Jossey-Bass.

Reidenbach, R., & Robin, D. (1990). Toward the development of a multidimensional scale for improving evaluations of business ethics. *Journal of Business Ethics*, *9*(8)*,* 639–653.

Rest, J. R. (1986). *Moral development: Advances in research and theory.* New York, Praeger.

Robinson, J., Sinclair, M., Tobias, J., & Choi, E. (2017). More dynamic than you think: Hidden aspects of decision-making. *Administrative Sciences, 7*(3), 1–29.

Ruedy, N., & Schweitzer, M. (2010). In the moment: The effect of mindfulness on ethical decision-making. *Journal of Business Ethics*, *95*, 73–87.

Schwartz, M. (2016). Ethical Decision-Making Theory: An Integrated Approach*. Journal of Business Ethics*, *139*(4), 755–776.

Shapiro, S. L., Jazaieri, H., & Goldin, P. R. (2012). Mindfulness-based stress reduction effects on moral reasoning and decision-making. *The Journal of Positive Psychology, 7*(6), 504–515.

Siegel, D. S. (2015). Responsible leadership. Academy of Management Perspectives, 3015(1), 1–3.

Tiwari, S., & Garg, P. (2017). Psychological need satisfaction at workplace: The role of mindfulness. *Journal of Strategic Human Resource Management, 6*(3)*,* 40-46.

Trevino, L. K. (1986). Ethical decision-making in organizations: A person-situation interactionist model. *Academy of Management Review*, *11*(3)*,* 601–617.

Valentine, S., Godkin, L., & Varca, P. (2010). Role conflict, mindfulness, and organizational ethics in an education-based healthcare institution. *Journal of Business Ethics, 94*(3), 455–469.

Vallabh, P., & Singhal, M. (2014). Buddhism and decision-making at individual, group and organizational levels. *Journal of Management Development, 33*(8/9), 763–775.

Verhaeghen, P. (2015). Good and well: The case for secular Buddhist ethics. *Contemporary Buddhism*, *16*(1)*,* 43–54.

Williams, R. N., & Gantt, E. E. (2012). Felt moral obligation and the moral judgement – moral action gap: Toward a phenomenology of moral life. *Journal of Moral Education*, *41*(4)*,* 417–435.

Williamson, S., Clow, K. E., Walker, B. C., & Ellis, T. S. (2011). Ethical issues in the age of the internet: A study of students' perceptions using the Multidimensional Ethics Scale. *Journal of Internet Commerce, 10,* 128–143.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods*. Boston: Cengage Learning.