

The Effects of Spirituality and Moral Intensity on Ethical Business Decisions: A Cross-Sectional Study

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4 **The Effects of Spirituality and Moral Intensity on Ethical Business Decisions:**
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7 **A Cross-Sectional Study**
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9

10 **Abstract**
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15 We present a cross-sectional study of ethical decision-making correlated with spirituality and
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17 utilizing moral intensity as a moderator for workers in the Southeastern United States ($N=117$).
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19 This study presents both spirituality as an individual variable and moral intensity as a situational
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21 variable along with ethical decision-making to examine the interaction of these factors in moral
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23 dilemmas. Utilizing previously validated instruments for ethical decision-making and individual
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25 spirituality, we find that workers with relatively high measured spirituality made less ethical
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27 decisions compared to workers with relatively lower measures of spirituality. Further, we find
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29 that the introduction of high moral intensity as a situational variable does not moderate the
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31 observed correlation between spirituality and ethical decision-making. This research supports the
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33 conceptual nature of the Interactionist Theory by presenting in a single study both individual and
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35 situational variables in ethical decision-making.
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56 **Keywords:** Ethical decision-making, Spirituality, Moral intensity, Interactionist Theory
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59 **JEL Classification:** G30, G40, G41.
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4 **Introduction**
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7 The 2008 global recession created widespread business restructuring actions that led to the loss of
8
9 more than 27 million jobs globally including 8.7 million jobs lost in the United States (U.S.
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11 Department of Labor, 2014; United Nations, 2011). This economic crisis was largely attributed to
12
13 unethical decisions by certain market participants and some business leaders (Friedman, Lynch, &
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15 Herskovitz, 2013; Perri, 2015; Schutte, 2016). The specific decisions that precipitated this crisis
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17 are deemed unethical from a normative perspective of utilitarianism since the actions taken were
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19 detrimental to the majority of market participants (Noble, 1979). Averting a similar economic crisis
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21 in the future challenges business leaders to encourage and understand the process of ethical
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23 decision-making by employees.
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29 As business leaders foster ethical conduct in the workplace and seek to avoid the moral lapses
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31 which led to the 2008 crisis, research indicates an emergent linkage between ethical decision-
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33 making and the individual variable of worker spirituality (Crossan, Mazutis, & Seijts, 2013;
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35 Fourie, 2014; Junghare, 2016; Kanagaretnam, Lobo, Wang, & Whalen, 2015; Leventis, Dedoulis,
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37 & Abdelsalam, 2018; McGhee, 2015; McGhee & Grant, 2017; Peterson, Albaum, Merunka,
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39 Munuera, & Smith, 2010). As a separate construct from religion or religiousness, individual
40
41 spirituality is defined as personal feelings or expressions of interconnectedness, purpose and higher
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43 meaning (Willard & Norenzayan, 2017). In this context, individual spirituality in the workplace is
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45 receiving renewed interest within the context of business ethics research (Giacalone, Jurkiewicz,
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47 & Fry, 2014; Zsolnai, 2015).
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53 Separately, moral intensity is a situational variable in ethical decision-making and
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55 characterized by the magnitude or relative importance of a specific moral decision made by the
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57 individual (Jones, 1991). In a situational context, moral intensity may affect the reasoning of the
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4 moral agent based on the degree of influence give the social consensus, magnitude of
5 consequences, and probability of effect of each decision (Rawski, Kish-Gephart, Anand, &
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9 Reychav, 2014). Similar to this examination, the linkage between moral intensity and ethical
10 decision-making is explored by Lincoln & Holmes' (2011) study of Naval Academy students and
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14 Morris & McDonald's (2013) research with ethical judgment in undergraduate students in the
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17 United States.

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19 As such, understanding the extent to which moral intensity moderates any relationship between
20 individual spirituality and ethical decisions can address several relevant questions for business
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24 leaders: Can organizations encourage ethical conduct by providing spiritually-accommodating
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27 business cultures? How might spiritually-accommodating cultures affect ethical decision-making
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30 in professions such as medicine and law where substantial moral judgments and consequences are
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33 inherent? How might the organizational performance advantages from spiritually-accommodating
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36 cultures cited by other research be a further competitive advantage in industries where difficult
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38 decisions with high moral intensity are commonplace?

38 **Ethical Decision-Making**

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41 The growing body of research in recent years has begun to shift academic consensus as to both
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43
44 the viability and importance of studying ethics along with spirituality (Craft, 2013). More
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46
47 importantly, the evolution of research into spirituality has progressed along a predictable schema
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49
50 of qualitative phenomenological methods as an initial exploration of the subject and more
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52 contemporary studies based on quantitative measures as the understanding of theory has deepened.

53 **Kohlberg's Theory of Moral Development**

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56 A preeminent theoretical basis for normative ethical reasoning can be attributed to Lawrence
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59 Kohlberg's theory of cognitive moral development (Snarey & Samuelson, 2015). Kohlberg's
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4 theories are devoted to the cognitive development of individuals as a methodical explanation for
5
6 moral decision-making.
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9 Kohlberg theorized the existence of six distinct stages of individual moral development within
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11 three levels that are linear and progressive (Dubas, Dubas, & Mehta, 2014). Each of these
12
13 theoretical levels as depicted in Table 1 progresses from perspectives of punishment, expectations
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15 and increasingly altruistic measures of right and wrong moral decisions.
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19 Collectively, Kohlberg's theory of moral development breaks down the ethicality of a decision
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21 on a continuum of inner and outer views of the self, juxtaposed with specific situational authority
22
23 toward general principles of morality. Thus, the theoretical development of moral judgment
24
25 espoused by Kohlberg is a foundational theory for subsequent models of cognitive ethics employed
26
27 in this study.
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31 **Table 1.**
32 ***Kohlberg's Theory of Moral Development***

Level	Stage
I Pre-conventional	Obedience & Punishment
	Instrumental Purpose & Exchange
II Conventional	Interpersonal conformity & moral expectations
	Social Accord & Systems Maintenance
III Post-Conventional	Social contract & individuals rights
	Universal Ethical Practices

43 Adapted from Crane, A., & Matten, D. (2004). *Business ethics: A European perspective*. Oxford,
44 UK: Oxford University Press. Copyright 2004 by Crane & Matten.
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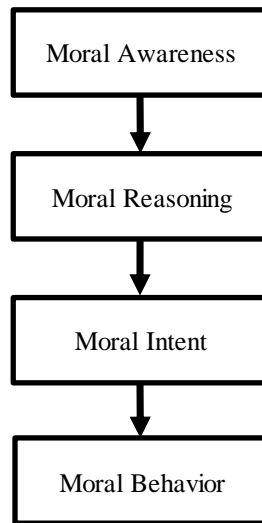
46 Rest's Four Component Model

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49 Ensuing theories sought to expand models for both moral development and moral decision-
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51 making processes. As Kohlberg's theory addresses the incipient model of individual cognitive
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53 recognition of moral judgments, additional theories were developed to explain the specific
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55 components of moral decisions. Rest (1986) posits a theory of ethical decision-making as
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57 comprised of four distinct components: moral awareness of a specific moral issue; moral judgment
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4 or the assessment of various alternatives; establishment of moral intent as a decision toward
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6 conduct; and, behavior or action which is derived by cognition.
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9 The distinct cognitive processes related to Rest’s model of ethical decision-making are
10 depicted in Figure 1.
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34 **Fig. 1: Rest's Four Component Model**

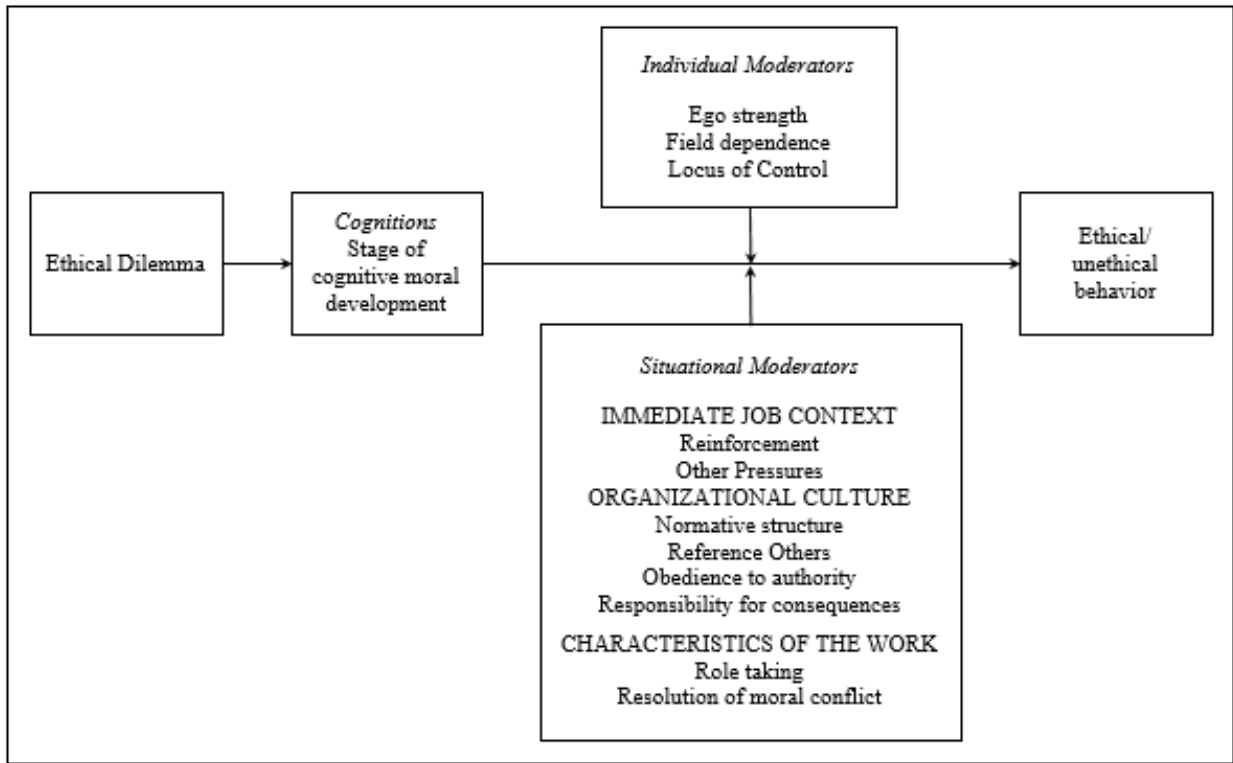
35 Adapted from Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York,
36 NY: Praeger. Copyright 1986 by Rest, J. R.
37

38 Each component of Rest’s model raises distinct questions about the degree to which an
39 individual’s cognitive and experiential basis affect the process of moral decision-making. Further,
40 each component can be separately examined in more depth consistent with work by Miller
41 Rodgers, & Bingham (2014). The specific focus of this study is the second component of moral
42 reasoning as a representation of ethical judgment defined by Rest’s model.
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50 Treviño’s Interactionist Theory

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52 As subsequent theories regarding ethical decisions often refer to Kohlberg’s and Rest’s models,
53 a progression of insights developed about the influences acting upon a moral agent on moral
54 decision-making. By studying the circumstances by which managers in organizations may
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4 compromise individual ethical decisions, Treviño (1986) theorized about how the combination of
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6 individual and situational moderators interact upon a moral agent to influence ethical conduct as
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8 depicted in Figure 2. The interactionist theory calls into context the role of individual and
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10 situational factors that are relevant in ethical decision-making (Treviño, Weaver, & Reynolds,
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12 2006). Using Kohlberg’s research on cognitive moral development and Rest’s component theory,
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14 Treviño et al. introduced an array of moderators which influence the moral, cognitive processes
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16 but also the moral character that can affect the decision-making of moral agent.
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Fig. 2: Treviño’s Interactionist Theory of Ethical Decision-making

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50 Adapted from Treviño, L. K. (1986). Ethical decision making in organizations: A person-situation
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52 interactionist model. *Academy of Management Review*, 11, 601-617. Copyright 1986 Linda
53
54 Treviño.

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56 This study aligns with Treviño’s interactionist theory in several aspects. First, individual
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58 moderators as described by this model can be extended beyond the demographics of the moral
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60 agent to include spirituality. A significant body of research has examined the role of individual
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4 moderators in ethical conduct such as age and experience as these variables are both easily
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6 observed and objective in nature (Wang & Calvano, 2015). More recent interest in worker conduct
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8 has highlighted spirituality as an individual moderator in heightened ethical conduct (Fernando &
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10 Chowdhury, 2010; Issa & Pick, 2011; Kolodinsky, Giacalone, & Jurkiewicz, 2008). For example,
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12 contemporary research into spirituality and ethical conduct includes McGhee's (2015) study of
13
14 service workers found that study participants with high levels of spirituality also scored high in
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16 ethical judgment.
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21 Second, situational moderators are another aspect of Treviño's model, and this research also
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23 investigates the role of these variables in ethical decision-making. Situational variables that
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25 research suggests affect moral judgment includes types of organizational leadership, the use of
26
27 codes of conduct and organizational awareness of ethical issues (Lincoln & Holmes, 2011; Willey,
28
29 Mansfield, Sherman, & Updike, 2013). A more salient situational variable in moral judgment is a
30
31 moral intensity to determine at least in part the degree of influence that proximity, social consensus
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33 and magnitude of consequences effect decision-making (Morris & McDonald, 2013).
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38 The core premise of Treviño's interactionist theory had been untested from known research
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40 that examined either individual (spirituality) or situational (moral intensity) variables in ethical
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42 decision-making. However, this study evaluates both individual and situational variables
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44 simultaneously from a moderating perspective (Treviño, 1986).
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48 **Spirituality**

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50 Spirituality is a theoretical construct in individual cognition and decision-making both internal
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52 and external to the business enterprise. While spirituality is a multidimensional phenomenon,
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54 Mitroff & Denton's global theses of workplace spirituality have synthesized a set of regularly
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56 recurring common themes that form the basis of contemporary research (Fourie, 2014). These
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4 theses are notional by subject yet span a sufficiently broad range of social, cultural and
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6 demographic specifics that collectively define spirituality in theoretical terms (Gibbons, 2000).
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9 The recurring themes common in the theoretical development of spirituality include:
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11 transcendence; interconnectedness; meaning and innerness (McGhee & Grant, 2017; Mitroff &
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13 Denton, 1999).
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16 Transcendence as a common theme in spirituality refers to beliefs in both a purpose beyond
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18 the individual and the creation of context beyond any current situation (McGhee, 2015). Striving
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20 for goals that create a greater benefit to society instead of just to the individual as well as examining
21
22 the current situation in a broader context, transcendence is both aspirational and inspirational.
23
24 Interconnectedness in the context of spirituality defines a deeper and more meaningful connection
25
26 toward other people (McGhee & Grant, 2017). Consistent with a larger sense of continuum in the
27
28 universe, interconnectedness includes an awareness of action and reaction that resists the
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30 compartmentalization or isolation of activity from the result (Speck, 2005).
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36 According to Mitroff and Denton (1999) spirituality also evokes a sense of meaning or purpose
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38 which adds importance and sacredness to ordinary activities. In part a belief in the guiding forces
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40 of nature, purpose conveys a sense of a higher order or power which adds significance to words
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42 and actions. The notion of submitting to a higher power is a key measure of ego strength as an
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44 individual moderator. Finally, spirituality is conveyed by the theme of innerness which is a source
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46 of emotional strength and resilience. Further, innerness includes the innate ability for self-
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48 examination of action contrasted with an ideal internal standard of behavior. This inward reflection
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50 and ability to draw mental strength from within are instrumental concepts of innerness. Altogether
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52 the commonality of transcendence, interconnectedness, meaning, and innerness recur as
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54 definitional aspects of theoretical spirituality.
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4 This research relates to the global theses of Mitroff and Denton (1999) in several important
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6 respects. First, this study subscribes to the broader view of spirituality as described by these larger
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8 themes. Second, the selection of instrumentation to include the SAS aligns with these same themes.
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10 Therefore, the research questions about and defined by spirituality align with the theory of
11
12 spirituality as articulated by Mitroff & Denton.
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15 16 **Moral Intensity**

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18 Jones' (1991) theory of moral intensity extends both Kohlberg's and Treviño's theories of context
19
20 dependencies and develops an additional theory of moral volition by introducing the notion of
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22 issue dependencies for ethical judgments. Before Jones' research, historical research by Ferrell and
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24 Gresham (1985), Hunt and Vitell (1986) and Dubinsky and Loken (1989) confined ethics to
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26 marketing decisions or in a psychological context instead of applied ethics with defined situational
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28 factors. This research relates to Jones' theory in that ethical decisions include individual and
29
30 situational specific variables which have a combined effect upon the moral agent in ethical
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32 decision-making. Specifically, the present research question is congruent with Jones' theory as
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34 moral intensity will be utilized as an issue dependent test for understanding the extent, if any, that
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36 moral intensity acts as a moderating variable in ethical decision-making.
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43 The concept of issue dependency is based on Jones' identification of six factors that comprise
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45 moral intensity: the magnitude of consequences; social consensus; the probability of effect;
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47 temporal immediacy; proximity; and, the concentration of effect. In this theory, the total benefit or
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49 harm to society of the moral dilemma is the notion of moral consequences.
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53 Social consensus is the general agreement in society as to the good or bad of an action. This
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55 consensus is derived from both logical and empirical explanations by examining the rule of law
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57 and social views of transgressions (McGhee, 2015). When the likelihood of an action is considered
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4 along with the consequences, probability of effect influences the relative moral intensity of a
5 contemplated action (Treviño et al., 2006). Temporal immediacy refers to the time interval between
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7 the decision to undertake moral action and the commencement of consequences of that choice. In
8
9 a direct relationship higher temporal immediacy roughly equates to increased moral intensity.
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14 The relative psychological, cultural or social nearness that the moral agent has to those affected
15
16 by a moral decision is the concept of proximity. Person(s) affected by moral judgment to whom
17
18 the moral agent shares closer proximity generally have higher moral intensity (Morris &
19
20 McDonald, 2013). Finally, the concentration of effect is a function of the span of individuals
21
22 affected by moral action. In an inverse relationship, a direct impact of moral significance on fewer
23
24 individuals is posited by Jones to have a higher concentration and thus more intense consequences.
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28 **Methodology**

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30 A quantitative correlational method as chosen for this study would indicate the degree and strength
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32 of the relationship between variables and potential computable differences in respondents' moral
33
34 perceptions without explaining causality (Bell, Bryman, & Harley, 2018). Second, quantitative
35
36 methods for the research enabled comparability with other studies using similar instruments and
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38 disparate populations. Third, the quantitative analysis yielded correlative and regressive statistics
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40 to determine both associative and interactionist measures between variables (Kopf, Hsu, Shows,
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42 & Albinsson, 2016).
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47 **Research Questions**

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49 Three variables were the focus of this study: spirituality; moral intensity; and, ethical decision-
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51 making. The first hypothesis employs spirituality as an independent variable and ethical decision-
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53 making as a dependent variable. Spirituality will be measured using Howden's (1992) Spirituality
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55 Assessment Scale (SAS) consistent with prior quantitative studies of spirituality by Forsythe
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4 (2016), Peng & Chen (2014, Peng (2015), McGhee (2015), and Qadri, Hassan, & Sheikh (2017).
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6 Ethical decision-making was quantified by Reidenbach & Robin (2013) Multidimensional Ethics
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8 Scale (MES) Moral Equity (ME) subscale consistent with prior quantitative studies of ethical
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10 decision-making by Beekun & Westerman (2012), Clark & Dawson (1996), McGhee (2015) and
11
12 Razzaque & Hwee (2002). The SAS and MES (ME) variables were utilized in a correlation design
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14 to test the first research question; which involves the relationship between these variables. The
15
16 above discussion leads us to the following hypothesis:
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21 H1: There is a relationship between individual spirituality and ethical decision-making in
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23 business.
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26 The second research question combines spirituality and ethical decision-making with moral
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28 intensity. Moral intensity was an additional dependent variable measured by the McMahon's
29
30 (2002) Perceived Moral Intensity Scale (PMIS) is a comparable method as employed by Lincoln
31
32 and Holmes (2011), Musbah, Cowton, & Tyfa (2016), and Sparks and Siemens (2014). Similarly,
33
34 these variables will be studied in a correlation design to address the second research question;
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36 which involves moral intensity as a moderator between individual spirituality and ethical decision-
37
38 making in business. The above discussion leads us to the following hypothesis:
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43 H2A: Moral intensity, as a situational variable, moderates the relationship between individual
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45 spirituality and ethical decision-making in business.
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48 In addition to the three instruments noted, demographic data for age, gender, education, current
49
50 employment status, occupational role were collected for each participant. The combined
51
52 demographic data and instrument questionnaire resulted in a 53-item survey. The collection of data
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54 for this research was facilitated using a third-party internet survey tool. Subscription to the third-
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56 party online survey service enabled efficient recruitment, collection, and analysis of respondent
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4 data. Respondents engaged the online survey site prior to specific survey dissemination, and the
5
6 data collection procedures reflect the role of this service to manage respondent data.
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9 Design

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11 This study utilized a quantitative correlation method which is grounded in objectivity and
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13 deductive processes to arrive at descriptive and inferential statistics for the interaction between the
14
15 variables (Neuman & Robson, 2014). Correlation methods for testing hypotheses also enable
16
17 comparability to prior research and enable confirmation of these results through future research.
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21 Data were collected from each of the three instruments along with the demographic information
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23 and numerically scored. Numerical scoring of survey responses was compiled consistently with
24
25 the requirements of each instrument. From the numerical values assigned and compiled, the
26
27 research conducted statistical testing for outliers, normality, association, and moderating effect. A
28
29 statistical measure of correlation will be used to test the first research hypothesis. The second
30
31 research hypothesis will be tested using a statistical measure of the moderating effect.
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36 Population and Sample Selection

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38 For this study, the general population includes employed adults between the ages of 30 and 65
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40 with a two-year college degree in the State of North Carolina. From this general population, a
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42 random sampling method was employed to arrive at the target population of working adults self-
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44 identified as meeting the demographic and geographic criteria previous ascribed to the third-party
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46 online survey service.
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51 The United States Census Bureau estimates the population of North Carolina at 10,146,788 as
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53 of July 1, 2016 (Quickfacts, 2017). From the total state population, Suburban Stats estimates that
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55 there are 1,359,300 adults between the ages of 30 and 65 having attained at least a two-year college
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57 degree (SuburbanStats, 2017). For narrowing selected participants based on employment, the
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4 employment rate for college graduates in North Carolina is estimated at 95.6% based on statistics
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6 compiled by the University of North Carolina Population Center resulting in a population pool of
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8 1,299,490 potential residents for this study.
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11 The desired sample size from this population was calculated using G*Power Software for one
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13 dependent variable of moral equity plus two independent predictor variables of spirituality and
14
15 moral intensity (Faul, Erdfelder, Buchner, & Lang, 2009). Effect size is an indicator of the relative
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17 strength between two or more measures indicated by the value of Cohn's f^2 calculated as the ratio
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19 of the variance explained to the residual error (Lakens, 2013; Maher, Markey, & Ebert-May, 2013).
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21 Generally, a small effect size is indicated by $f^2 = .02$, whereas a medium effect size is $f^2 = .15$ and
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23 a large effect size is $f^2 = .35$. Further, a Cohen's medium effect size equal to $f^2 = .15$, $\alpha \geq .05$,
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25 and $\beta = 0.95$, results in a required minimum sample size of 107.
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31 Instrumentation

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33 In addition to the demographic information collected, three previously validated survey
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35 instruments were utilized for analyzing each of the variables for the proposed research. Permission
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37 to use each instrument was obtained before collecting survey data.
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41 First, ethical decision-making was measured using the Moral Equity subscale of the MES via
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43 questionnaire responses (Reidenbach & Robin, 2013). This 13-item 7-point Likert type instrument
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45 measured three dimensions: moral equity, relativism, utilitarianism, contractualism, and
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47 behavioral intentions. The application of the MES is consistent with prior quantitative studies of
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49 ethical decision-making by Beekun and Westerman (2012), Clark and Dawson (1996), McGhee
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51 (2015) and Razzaque and Hwee (2002). The MES Moral Equity subscale aggregate score was the
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53 dependent variable in the first hypothesis.
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57 Second, individual spirituality was measured by the Spirituality Assessment Scale (SAS). The
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4 SAS instrument was utilized in a manner consistent with prior quantitative studies of spirituality
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6 by Forsythe (2016), Peng and Chen (2014), Peng (2015), McGhee (2015), and Qadri et al. (2017).
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8 This 28-item 6-point Likert type instrument measured four dimensions: unifying transcendence;
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10 purpose and meaning in life; innerness; and transcendence. The SAS was scored as an aggregate
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12 value with Likert-based scoring. The aggregate SAS score was utilized as the independent variable
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14 in the first hypothesis.
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19 Third, moral intensity was measured by the Perceived Moral Intensity Scale (PMIS) developed
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21 by McMahon (2002) based on previous research by Singhapakdi, Vitell, & Kraft (1996). The PMIS
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23 utilized the high-intensity scenarios in a 6-item 7-point Likert type instrument that measured three
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25 dimensions or constructs of moral intensity: magnitude of consequences; proximity; and social
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27 consensus. The employment of McMahon's (2002) PMIS is consistent with similar studies by
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29 Lincoln and Holmes (2011), Musbah et al. (2016), and Sparks and Siemens (2014). The PMIS was
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31 scored according to instructions for the instrument and will be used as a second dependent variable
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33 along with the SAS and MES independent variable for the second hypothesis.
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38 Validity

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40 Construct validity for psychometric scales such as the MES, SAS, and PMIS indicated the ability
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42 of each instrument to measure the attributes of the concept being examined (DeVon et al., 2007).
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44 Construct validity includes translational validity, comprising the subsets of the face and content
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46 validity, as well as criterion validity, which extends to concurrent, predictive, convergent, and
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48 discriminant validity. In the development and use of psychometric tests, both exploratory factor
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50 analysis (EFA) and confirmatory factor analysis (CFA) are most commonly used to measure
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52 validity.
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57 EFA combines items within an instrument into associated groups or factors that relate to the
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4 construct and seeks to achieve the highest explanation of variance with the fewest number of
5 factors (Adachi, 2016). If unrelated factors are successfully removed during the development of
6 the instrument, EFA is summarized statistically by an eigenvalue > 1.0 indicating acceptable EFA
7 validity (Schmitt, 2011). If EFA is achieved, then CFA follows to quantify the degree to which the
8 model explains the actual data being studied and may be expressed as a percentage of variance
9 explained or either R^2 , Pearson's Chi-Square (χ^2) or a Goodness of Fit Index (GFI) (Brown, 2014).
10 An R^2 value greater than 0.90 or GFI greater than 0.90 is deemed acceptable for CFA validity
11 (Perry, Nicholls, Clough, & Crust, 2015). Thus, for each of the three psychometric instruments,
12 EFA and CFA are relevant indicators of validity.
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16 The MES demonstrates validity with a three-factor model achieving an R^2 of 0.95 (Reidenbach
17 & Robin, 2013). Howden's (1992) SAS establishes adequate validity with a four-factor solution
18 that notes an R^2 of 0.91. Finally, the PMIS demonstrates validity with a three-factor solution that
19 achieves a GFI validity score of 0.92 (McMahon, 2002).
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22 Reliability

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24 Statistical measures of reliability indicate the ability of an instrument to measure a specific
25 construct or concept consistently. For psychometric tests, Cronbach's α is used to measure the
26 expected correlation of two variables in construct reliability (Bonett & Wright, 2015). Cronbach's
27 α presents an indicator of reliability for social science instruments with a value range between zero
28 and one as the ratio of the individual component covariance's to the total covariance. As such,
29 Cronbach's α as a measure of reliability indicates that an instrument consistently measures the
30 intended concept.
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34 Instruments deemed to exhibit good internal reliability have a Cronbach $\alpha \geq 0.70$ (Cho &
35 Kim, 2015). The internal reliability of the MES is adequate as reflected in a Cronbach $\alpha = 0.80$
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(Lincoln & Holmes, 2011). Also, the SAS demonstrates sufficient internal reliability as indicated by a Cronbach $\alpha = 0.92$ (McGhee, 2015). Finally, the PMIS establishes good internal reliability with a Cronbach $\alpha = 0.79$ (McMahon, 2002). As such each of the three instruments demonstrate sufficient internal reliability.

Descriptive Data

About 62% of the respondents were female. Most of the respondents were between 30-59 years of age, had earned master’s degrees, and were professional workers (Table 2).

Table 2. *Descriptive Statistics (N = 117)*

Category	n	%
Gender		
Female	72	62%
Male	45	38%
Age		
30-39 years	11	9%
40-49 years	25	21%
50-59 years	31	26%
60-64 years	50	43%
Education		
Associate’s Degree	41	35%
Bachelor’s Degree	34	29%
Master’s Degree	42	36%
Occupational Role		
Professional (No direct reports)	86	74%
Manager (1-2 direct reports)	18	15%
Senior Manager (3-4 direct reports)	6	5%
Executive (5+ direct reports)	7	6%

The three variables to be used in this study were formed by SAS items combined for a composite score, Multidimensional Equity was scored using an average for the ME subscale responses, and PMIS items were averaged consistent with the instructions for each instrument.

Descriptive statistics for each variable are summarized in Table 3.

Table 3. *Descriptive Statistics of Measurement Dimensions (N = 117)*

Dimension	Mean	Std. Dev	Skew
Spirituality Assessment Scale (SAS) ^a	133.6	19.4	-0.41
Multidimensional Ethics Scale (MES) - Moral Equity Subscale (ME) ^b	5.94	1.51	-1.70
Perceived Moral Intensity Scale (PMIS) ^c	7.12	0.77	-0.05

^a Formed by totaling items 1 through 28; ^b formed by averaging items 29 through 33; ^c Formed by averaging items 42-27

Tests for Normality

Consistent with the prescribed methodology, tests for normality were calculated on the scales formed from the instruments. The K-S test was performed for each scale value. All untransformed variables did not achieve a normal distribution as noted by the K-S test significance of $p > .05$.

Since none of the three variables of interest followed a normal distribution ($p > .05$), attempts were made to transform the variables using Tukey's ladder of powers to identify a solution for normal transformation; however, only SAS could be transformed to follow an approximately normal distribution ($p > .05$). Given the non-normal distribution of the MES Moral Equity Subscale and inability to achieve normality with transformation, nonparametric testing was employed for hypothesis testing.

Table 4. *Kolmogorov-Smirnov Tests for Normality of Distribution (N = 117)*

Dimension	x^n	Transformed <i>D</i>	Sig.
Spirituality Assessment Scale (SAS)	2.675	.067	.224
Multidimensional Ethics Scale (MES) - Moral Equity Subscale (ME)	3.945	.243	< .001
Perceived Moral Intensity Scale (PMIS)	1.188	.085	.036

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4 Give the results to attempt transformation of each of the three variables to approximate a
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6 normal distribution failed, nonparametric (normal distribution-free) tests were used to examine the
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8 hypotheses.
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10 11 **Results**

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13 Since efforts to transform all variables to approximate a normal distribution failed, nonparametric
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15 (distribution-free) tests were used to examine the hypotheses.
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18 19 Summary of the Study

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21 The purpose of this quasi-experimental, correlational, cross-sectional research was to examine the
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23 relationship between individual spirituality and ethical decision-making considering the influence
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25 of moral intensity as a moderator. The first research question was to identify the relationship
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27 between individual spirituality and ethical decision-making in business. The second research
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29 question was the degree, if any, to which moral intensity acts as a situational variable to moderate
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31 the relationship between individual spirituality and ethical decision-making in business. These
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33 questions guided the study design and research methods.
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38 There are two key findings from this research developed further in the next section: individual
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40 spirituality and ethics correlated in a statistically significant manner; and, moral intensity does not
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42 moderate the relationship between spirituality and ethics.
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45 46 First Research Question

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48 The first research question seeks to understand the relationship between individual spirituality and
49
50 ethical decision-making in business. Since the variable moral equity could not be coerced to follow
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52 a normal distribution, the nonparametric Spearman Rank-Order Correlation Coefficient (r_s) was
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54 used as the test statistic. The result of the test reflected a weak, negative relationship between the
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56 variables, $r_s (117) = -.227, p = .012$. Given these results, the null hypothesis that there is no
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4 relationship between individual spirituality and decision-making (H10) can be rejected.
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7 Second Research Question 8

9 The second research question focuses on whether moral intensity moderates the relationship
10 between individual spirituality and ethical decision-making in business. Given the non-normal
11 distribution of PMIS, Spearman Rank-Order Correlation with bootstrapping was employed with
12 MES_ME as the dependent variable, SAS as the independent variable and PMIS as moderating
13 variable. Bootstrapping was performed with the survey data using *R* with 10,000 replicates
14 performed for non-parametric simulation to generate the confidence interval related to moderation
15 testing.
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26 The Spearman Rank-Order Correlation produced a statistically significant test with r_s (117) =
27 -0.231, a 95% confidence interval of -.050; -.382, p -value of 0.013 and test statistic of 337080. Since
28 the confidence interval range does not include zero, these results indicate that Spearman's ρ is not
29 equal to zero when PMIS is tested as the moderating variable. While the results of moderating
30 testing indicate statistical significance of moral intensity, the estimated value of Spearman's ρ
31 value for moderation of -0.231 is considered a negligible correlation (Mukaka, 2012).
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41 Further, compared to the nonparametric Spearman Rank-Order Correlation Coefficient (r_s)
42 value of -0.227 for MES_ME and SAS, the Spearman's ρ value for moderation of -0.231 are very
43 similar in value. The similarity of Spearman values for both the first and second research question
44 indicates that the moderation effect, while statistically significant, was essentially unchanged on
45 ethical decision-making. Given these findings, the null hypothesis that there is no relationship
46 between individual spirituality and decision-making when controlling for moral intensity (H20)
47 can be accepted. As such, moral intensity is not shown to moderate the relationship between
48 spirituality and ethical decision-making.
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4 **Implications**
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7 Theoretical implications
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9 Data analysis from this study indicated a statistically significant relationship between
10 spirituality and ethical decision-making for this study and specific population. The significance of
11 this finding is a substantiation of ethical theories suggesting that spiritual individuals demonstrate
12 ethical judgment differently than non-spiritual individuals and uniquely amongst a broader
13 demographic.
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21 This research found a statistically significant moderating effect of moral intensity that did not
22 measurably affect the correlation between spirituality and ethics. These findings of a moderating
23 variable indicate that individuals with higher measured levels of spirituality approach ethical
24 decision-making differently compared to individuals with lower measured levels of spirituality in
25 situations regardless of moral intensity. The identification of a statistically significant moderation
26 effect presented by moral intensity in a multivariate interactionist study is the first known
27 confirmation of both individual and situational variables interacting in the same study of business
28 ethics is the most significant contribution of this research to the field of ethics. Analyzing this
29 finding in the context of the theory and literature review yielded several conclusions.
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43 Consistent with Kohlberg's theory of moral development the MES composite scores as a proxy
44 for ethical decision-making did correlate in a statistically significant manner with education
45 (Kohlberg & Hersh, 1977). From the pool of pre-registered online survey users, potential
46 participants were selected with a two-year college degree or higher level of education. As
47 postulated in Kohlberg's theory, education and moral development grow commensurately. What's
48 unexpected is Spearman's ρ value was -0.227 which is an inconsequential correlation and while
49 statistically significant cannot definitively indicate correlation that is either inverse or direct.
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4 Jones' (1991) theory of moral intensity consists of six dimensions (magnitude of
5 consequences; social consensus; the probability of effect; temporal immediacy; proximity; and,
6 the concentration of effect) of which three (magnitude of consequences; social consensus;
7 probability of effect) were found to be statistically significant in this study. Consistent with
8 research by Chia & Lim (2000) and Treviño et al. (2006), this study confirms the theoretical
9 linkage between the moral intensity dimensions of Social Consensus and Magnitude of
10 Consequences as statistically significant predictors of ethical decision-making. Additionally, this
11 research extends the work by Lincoln & Holmes (2011) with Naval Academy students who also
12 found that probability of effect is also a reliable dimension of moral intensity.
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26 Additionally, this multivariate study supports the interactionist theory by Treviño et al. (2006)
27 as inclusive of both individual (spirituality) and situational variables (moral intensity) in ethical
28 business decision-making. The statistical significance of moderation in this study suggests that
29 the interactionist theory has merit for the complex nature of moral assessments and related ethical
30 judgments in business for a broad cross-section of respondents. The simultaneous presence of both
31 individual and situational variables in a single study confirms Treviño's theory not previously
32 identified in known research.
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42 Practical implications

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44 The first practical implication of this research is additional evidence of linkage between
45 spirituality and ethical judgment amongst a broader cross-section of workers. This research adds
46 to similar studies which include spirituality as a factor in ethical decision-making (Barron & Chou,
47 2017; Hardy, Zhang, Skalski, Melling, & Brinton, 2014; McGhee, 2015; McGhee & Grant, 2017).
48 Along with a growing body of research in workplace spirituality, this relationship between
49 spirituality and ethical decision-making explained by this study further suggests the potential
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4 competitive advantages realized by accommodating individual spirituality in the workplace:
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6 higher ethical awareness; reduced turnover; increased affective commitment; and, improved
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8 creativity (Forsythe, 2016; Fourie, 2014; Giacalone, et al., 2014; Issa & Pick, 2011; Kolodinsky et
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10 al., 2008; Naidoo, 2014; Qadri et al., 2017; Vitell, Singhapakdi, & Nishihara, 2015; Walker,
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12 Smither, & DeBode, 2012). Together this body of knowledge indicates spiritual persons can be
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14 critical assets to the entire organization and the inherent benefits from these persons convey
15
16 significant competitive advantages.
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21 The second practical implication pertains to the role of moral intensity in professions which
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23 can benefit from this research. Moral intensity is directly applicable to professions which require
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25 substantial moral judgments in decision-making such as medicine, law and senior management
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27 roles such as CEOs, CFOs, and COOs in the organization. The ethical decisions made by these
28
29 professions are of similar moral intensity as examined in this research. As such, the interaction
30
31 between moral intensity, spirituality, and ethics identified in this research is beneficial to
32
33 understanding the benefits of spiritually accommodating cultures to potentially improve
34
35 performance in these specific occupational roles. Improved ethical decision-making by these roles
36
37 can provide higher satisfaction for patients, clients, and stakeholders. Other benefits might include
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39 higher affective commitment, reduced stress, lower incidences of burnout and less costly turnover
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41 in these occupations. Thus, the adoption of spiritually diverse cultures could be beneficial for roles
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43 with measurably higher moral intensity.
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50 Collectively, the practical implications of this study apply to business leaders in establishing
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52 corporate policies and norms of behavior which collectively create the culture of the organization.
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54 By creating a diverse culture for workplace spirituality, leaders can encourage ethical decision-
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56 making and realize other potential benefits identified by this emerging field of study. The finding
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4 that moral intensity does not moderate the linkage between spirituality and ethical decision-making
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6 suggests specific occupations can realize benefits from workplace spirituality in decision-making
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8 regardless of the moral magnitude of specific situations.
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10 11 **Recommendations**

12 13 14 Recommendations for future research

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16 The first area for additional study arises from moral intensity as a potential moderating variable
17
18 between spirituality and other components of the cognitive, ethical process as an extension of this
19
20 study. Rest's (1986) four-component model of ethical decision-making distinguishes between
21
22 moral reasoning or decision-making and moral intention or motivation. As an extension of this
23
24 study, additional research can determine if moral intensity also moderates the relationship between
25
26 spirituality and behavioral intentions as measured by the Multidimensional Ethics scale, behavioral
27
28 intention subscale as similarly examined by McGhee (2015). An investigation of behavioral
29
30 intention may serve to expand the known moderation effect of moral intensity beyond spirituality
31
32 and ethical decision-making identified in this study.
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38 A second area for additional study is the relationship between education and moral
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40 development noted in this research. Kohlberg's theory of moral development suggests education
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42 and moral development increases proportionally to an individual's education (Kohlberg & Hersh,
43
44 1977). However, using the Kruskal-Wallis non-parametric test of variances between groups with
45
46 Bonferroni correction for the use of a single data set, respondents with graduate college degrees
47
48 were found to score lower on the MES scale compared to those with a two-year college degree.
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50 While the p -value of 0.044 was not statistically significant at $\alpha \geq 0.05$, further research might
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52 provide insight into a possible contradiction between Kohlberg's theory and MES scores between
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54 subjects based on educational attainment.
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4 The third area for further study is an examination of measured spirituality in a between-subjects
5 design using Howden's (1992) Spirituality Assessment Scale based on age and generational
6 characteristics. This research was sufficiently cross-sectional to provide future bases of
7 comparison to Millennials as recent entrants to the work force relative to non-Millennials on
8 measured spirituality. Further research could explore the potentially significant role that self-
9 identification as 'spiritual but not religious' correlates with measured spirituality for Millennials.
10 Additional cross-sectional studies of workplace spirituality for Millennials can provide insights
11 for business managers on workplace policies for a growing segment of the workforce.
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23 Fourth, the research findings presented are based upon a limited number of participants from
24 a specific but broad cross-section of the general population. Additional research is needed with a
25 larger pool of respondents to determine if these findings are generalizable to larger groups and
26 populations. Further, due to the specific limitations of this study regarding sample size, the
27 observed skew of the MES Moral Equity sub-score could be studied with a different population to
28 confirm the extent, if any, of self-selection bias in comparable surveys and possible adjustment of
29 scores for this or other potential bias.
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41 Fifth, this research provided a specific occupational view based on management level relatively
42 to moral intensity and ethics given the MES and PMIS instruments employed. Additional research
43 is needed to examine the extent of correlation, if any, between ethical scores by management role
44 such as CEO, COO, and CFO and perceived moral intensity. Research by Rawski et al. (2014) and
45 Lincoln & Holmes (2011) can be synthesized with the results of this study to examine the potential
46 moderating effect of management role on the correlation between perceived moral intensity and
47 ethics.
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4 Finally, the impact of individual spirituality in this study was examined in the context of the
5 individual but not the holistic organization consistent with the full scope of the Interactionist
6 Theory (Treviño et al., 2006). Additional research is needed to understand how the business
7 performance of spiritually accommodating organizations differ, if any, from non-accommodating
8 organizations or comparable industry benchmarks. Business performance may be evaluated
9 through the perspectives of financial profitability, market share, employee satisfaction or similar
10 measures suitable for comparative analysis. Understanding the performance differential between
11 spiritually accommodating and non-accommodating business cultures is appropriate for objective
12 evaluation of the performance implications for the entire organization.
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25 26 Recommendations for practice 27

28 Workplace spirituality as examined in this research is a distinctly different construct than
29 religion (Fourie, 2014). These recommendations for practice are based upon the findings of this
30 research consistent with the examined themes of spirituality identified by Mitroff & Denton
31 (1999): interconnectedness, transcendence, innerness, and meaning (Junghare, 2016;
32 Kanagaretnam et al., 2015; Leventis et al., 2018; McGhee, 2015). Themes are practical
33 interpretations for fostering organization cultures that recognize the findings of this research. The
34 application of these themes in practice include worker and manager adaptations that recognize the
35 relational nature of ethics, individual spirituality and organizational purpose.
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48 In recent years the notion of corporate social responsibility has begun to acknowledge a
49 broader organizational obligation to customers, communities, suppliers, and employees. The
50 emergent acknowledgment of individual spirituality in the workplace as examined in this research
51 is a continuation of corporate social responsibility. Similar to corporate social responsibility,
52 spirituality in the context of the organization recognizes the interconnectedness between the
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4 individual as a worker in the enterprise and the greater obligation to take action in alleviating social
5 challenges (Crossan et al., 2013; Junghare, 2016; Kanagaretnam et al., 2015; Leventis et al., 2018;
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9 McGhee, 2015; McGhee & Grant, 2017; Speck, 2005).

10
11 An awareness of individual spirituality in the workplace should encourage business managers
12 to adapt corporate mission statements that rally the resources of the enterprise around positive
13 social outcomes that express the interconnectedness between the enterprise and society. As
14 millennials recognize the responsibility of business to improve social causes, workplace
15 spirituality translates this obligation by interconnectedness that drives the mission of the
16 organization. Changing corporate mission statements to reflect the interconnectedness between
17 business and society is a practice related to this study of workplace spirituality. If prevailing trends
18 on workplace spirituality continue, the primary benefit of this practice could be improved
19 recruitment, retention, and motivation of millennial workers.
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33 In the context of workplace spirituality, transcendence is both a purpose beyond individual
34 action and the creation of context beyond the current circumstance. While most workers are
35 necessarily employed for economic reasons, motivation resulting from commitment and creativity
36 resulting from engagement are products of individual transcendence. In practice, workplace
37 spirituality translates into encouraging workers to express a higher purpose through their work.
38 Whether worker transcendence is expressed by providing food and shelter to their family, saving
39 for their children's future education, or faith-based manifestations, expressions of individual
40 purpose can influence motivation and engagement.
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53 The theme of innerness in workplace spirituality refers to an individual's source of emotional
54 resilience which is also an essential skill for successful business leaders (Mitroff & Denton, 1999).
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57 Along with trust, transparency, and effective communication, resilience in leadership is a powerful
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4 motivator to pursue goals and objectives with unwavering dedication. In practice, business leaders
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6 can foster spirituality accommodating cultures by sharing and being transparent about their sources
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8 of resilience: faith, family, social justice, and personal growth are all exemplary foundations.
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11 As a collection of many intricate skills, business leadership requires showing others how and
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13 what motivates, drives and provides resilience during inevitable failures, downturns, and
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15 unexpected setbacks. Business leaders who exhibit both resilience and are transparent about their
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17 sources of resilience can be powerful enablers of spiritually accommodating business cultures. By
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19 communicating their sources of resilience, business leaders benefit workers through potentially
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21 improved commitment but also reinforce their belief systems.
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25 The themes above of workplace spirituality and related organization, individualistic, and
26
27 leadership adaptations are recommendations for future practice to foster organizational cultures
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29 that accommodate workplace spirituality. The application of these practices is in part extensions
30
31 of current approaches of corporate social responsibility, individual motivation, and leadership.
32
33 However, recommended practices based on this research and current knowledge of workplace
34
35 spirituality should be applied in the context unique to each enterprise and industry to maximize
36
37 the potential benefits of ethical decision-making in business.
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42 43 **Concluding Remarks**

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45 Global economies have mostly recovered from the 2008 economic crisis perpetrated by unethical
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47 decisions by certain market participants and some business leaders. As noted in this crisis and
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49 earlier lapses in the 1980s and 1990s, the destruction of economic value and consequences for the
50
51 global workforce from this crisis are historic reminders for emphasizing ethical decision-making
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53 as an inherent responsibility of the business enterprise. While economies have recovered,
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55 relationships between employers and employees have been altered with vital competitive
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4 advantages entirely dependent on worker commitment and engagement.
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7 Workplace spirituality as examined in this research is an extension of corporate social
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9 responsibility that has already begun to alter the business landscape. By building upon prior
10
11 research, this study along with related qualifiers given the small sample affirmed the linkage
12
13 between spirituality and ethical decision-making. More importantly, the linkage between
14
15 spirituality and ethical decision-making considered along with the moderating effect of moral
16
17 intensity contributes to knowledge in the field of ethics. As further research examines the role of
18
19 spirituality in the workplace, the full implications for business practitioners remain an area of
20
21 intrigue and exploration.
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