A new approach to the field of ethical decision research is proposed to deal with integrating deontology, utilitarianism and virtue ethics into a unified framework of moral philosophy to study ethical reasoning among business professionals. Three hundred thirty-four managers from Small and Medium Enterprises (SMEs) were tested by using structural equation modeling procedures to determine the best fit indices. Although deontology, utilitarianism and virtue ethics are inter-related within the scope of moral philosophy, it was also found that moral philosophy positively affects ethical reasoning, i.e., awareness, judgment, motivation, and intention. It is hoped that our findings will provide greater insights into how moral philosophy determines the ethical values of managers during the ethical decision making process.

INTRODUCTION

Ethical reasoning ability is considered vitally important in the shared concepts and principles that guide common ethical issues (Paul & Elder, 2005). Ethical reasoning in business depends largely on one’s manner of thinking, i.e., what should be done in making ethical choices to reach a final decision (Treviño et al., 2006). According to Knobe (2005), studies on ethical reasoning have heretofore focused on moral rules and the welfare of others, and neglected the moral character that transmits a moral and altruistic attachment to others (Arjoon, 2000). Moral philosophy has been used interchangeably with ethical theory (Ahmad et al., 2005; d'Anjou, 2011) and remains a crucial component of reasoning in an ethical decision making process. Treviño et al. (2006) proposed that moral awareness (the existence of an ethical dilemma), judgment (deciding what is right), and intent (the meaning of an act), as well as ethical motivation (inspiration to do the right thing) constitute the underlying process of ethical reasoning in a business organization.

Moral philosophy offers a rationale that provides the impetus for elaborating on an ethical reasoning structure. Akrivou et al. (2011) explained that an understanding and knowledge of moral philosophy enables business persons to achieve decisions based on an inclusive moral
comprehension that is reasoned through opinion and intuition. Moreover, this comprehension also serves as an ethical thrust, which in turn develops as a structure for ethical decision making. Deontology, utilitarianism and virtue ethics are said to be the most important moral philosophies for many ethical reasoning studies, from marketing to nursing and from military to information technology (IT). Altman (2007) suggested that moral philosophies proffer a foundation for the practical application of ethical reasoning. This practical application enables an assessment of damage-reduction, self-discipline and virtuous characters in an integrative manner that in succession offers a framework for evaluating business persons’ principles for ethical reasoning. Such assessment is crucial because each business professional possesses a certain degree of moral principles to guide ethical/unethical decisions (Abdolmohammadi et al., 2009). In reality, the practicality of business-as-usual cannot be generalized as the degree to which business professionals are extensively influenced by altered moral principles in decision making. Arjoon (2000, 2007), Forsyth (1980), Hunt and Vitell, (1986), and Shanahan and Hyman (2003) all asserted that moral philosophy should be treated as a decision making tool. This principle affirms the individual as a conscientious moral agent (Treviño et al., 2006) for making ethical decisions. Furthermore, a functioning moral philosophy is essential for illustrating the manner in which a person weighs alternatives as a moral agent (DeConinck & Lewis, 1997).

In fact, previous models proposed by Ferrell and Gresham (1985), and Hunt and Vitell (2006) have classified moral philosophy into only deontology and utilitarianism but neglected the dimension of virtue (Arjoon, 2007) in moral reasoning. This notion is supported by Arjoon (2000, 2007), Whetstone (2001), and Shanahan and Hyman (2003) who have all argued that the virtue of human character should be included to complement compliance with rules and social conscience in ethical reasoning. Ashkanasy et al. (2006) maintained that moral philosophy applies theories of knowledge to practical reasoning. Nonetheless, business persons pay little attention to knowledge and its nature. Interestingly, Christie et al. (2003) highlighted that business people often fail to acknowledge and understand the influence of an underlying moral philosophy. A recent study by Aggarwal-Gupta et al. (2010) claimed that moral philosophy is always regarded independently, and any effort to extend its comprehension as the basis of ethical business decision practices is neglected and leaves ethical reasoning incompetently justified.

Since moral philosophy and ethical reasoning are both drawn from a common notion, moral development (Loviscky et al., 2007; Treviño et al., 2006), it is logical to examine whether a linkage exists between these concepts, and if so, what would be the direction of the relationships. Deontology is legally bound by duty (Altman, 2007), regardless of the consequences (Jecker, 2007), and less on wisdom (van Staveren, 2007) due to behavior control in ethical reasoning. Utilitarianism defines the right to protect for the utmost good of a maximum number of persons (O'Fallon & Butterfield, 2005) with less intention of a moral obligation to society (Weymark, 2005) but neglects moral character (Baugher & Weisbord, 2009) for
reasoning ethical acts; whereas, virtue ethics is proposed to guide moral behavior (Arjoon, 2007) in rationalizing and reasoning ethical decisions for principle-centered acts (Skarlicki & Latham, 1996) with visionary ends (Asheim & Mitra, 2010). Overall, all three moral philosophies harmonize and rationalize a path of ethical actions based on ethical reasoning (Ilies et al., 2009). Arjoon (2007) observed that an integration of moral philosophy into moral reasoning will evade the tendency to classify people according to moral beliefs the absence of justified decisions. Promotion of the greatest interest is insufficient to permit a moral sense of duty without the self-vigilance of sensible wisdom. Therefore, the gap between dutiful, damage-reduction, and wisdom in ethical reasoning is examined in the present study.

The basis for business professionals’ values is expressed in moral philosophy. The differences in ethical consistency in reasoning among business-based persons could entail multiple interpretations among the professional community. This study is vital as it offers an understanding based on the decisions of business professionals, the mode of which is consecutively comprehended to derive solutions to dilemmas. Hence, the present study is an attempt to test an integrative model of a link between moral philosophy and ethical reasoning focusing on data from small-and medium-sized enterprises (SMEs) through a structural model. The following section reviews the supporting literature on the studied variables and fine points for the construction of a model to assist in formulating the hypotheses. Finally, the data analysis and research findings are discussed together with directions for future research.

**LITERATURE REVIEW**

**Moral Philosophy**

Some scholars (e.g., Ferrell & Gresham, 1985; Hunt & Vitell, 2006) have endeavored to insert non-traditional concepts into the framework of moral philosophy. A different reason upheld by some business professionals maintains that ethical reasoning can only be judged morally against moral philosophy, a term referring to a system of ethics that offers guidelines for judging and resolving ethically questionable behavior (Putranta & Kingshott, 2011). Deontology, utilitarianism and virtue ethics are the prominent types of moral philosophies defined in past research (Arjoon, 2007; Hunt & Vitell, 1986).

Kant’s Theory of Ethics maintains that deontology is motivated by a duty principle that is not influenced by experiences (Christie et al., 2008). Ethical behavior is determined to be inherently right or wrong on the basis of essential principles of duty (Hunt & Vasquez-Parraga, 1993) to ensure that the means do not determine the ends. Mill’s Theory of Liberty argued that consequentialism theory (utilitarianism) is superior to deontology (Altman, 2007) because it dictates right or acceptable conduct to provide the greatest good for the utmost people (van Staveren, 2007). Weymark (2005) argued that utilitarianism focuses on societal interests rather
than being principle-centered. Aristotle’s virtue ethics provides guidelines for moral behavior (Arjoon, 2000). Baugher and Weisbord (2009) agreed that virtuous character guides business people to behave rightly. Any ethical or unethical actions in business dealings are developed through cognitive moral development (Kohlberg et al., 1990), which is used to develop good character and habits over time (Christie et al., 2008). Although moral philosophy can be applied independently (Hunt & Vasquez-Parraga, 1993), it cannot escape criticism (Altman, 2007). Coalescing several theories will offer a better perspective on moral concerns that influence ethical reasoning. Karande et al. (2002) argued that ethics offers a foundation for individual moral principles leading to a position of moral rightness or wrongness.

Numerous studies have been implemented to examine the relationship between deontology and utilitarianism (e.g., Cohen, Pant, & Sharp, 2001; Singhapakdi et al., 1999; Yetmar & Eastman, 2000); whereas, few have examined relationships between deontology and virtue ethics (e.g., Nichols & Mallon, 2006), or utilitarianism and virtue ethics (Diets & Asheim, 2012; Bartels & Pizarro, 2011), as well as the integration of a tripartite moral philosophy in ethical reasoning (e.g., Furler & Palmer, 2010; Yoon, 2011). Published works in the field of moral philosophy are largely on theoretical models lacking in empirical research (e.g., Arjoon, 2007; Christie et al., 2008; Schumann, 2001). Valasquez (2002) confirmed that a different set of moral philosophies provides better insights for moral issues, a finding supported by a recent study by Yoon (2011) which acknowledged that various moral beliefs have dissimilar possessions on individuals’ ethical reasoning. Accordingly, Arjoon (2000) concluded that the existing alternatives of a one-dimensional or a dual-dimensional moral philosophy are inadequate to balance the role of duty and maximization of benefits without the role of a virtuous character in moral reasoning. In this study, we adapt an approach similar to those used in previous research (e.g., Ahmad et al., 2005; Bartlett, 2003; Graham et al., 2008; Putranta & Kingshott, 2011; Rothhaar, 2010; Saee, 2009; Warna-Furu et al., 2010) in rationalizing moral issues in business processes, whereby three constructs are examined: (1) deontology, (2) utilitarianism and (3) virtue ethics.

**Deontology**

Kant’s deontological theory is based on the idea that individuals possess both a duty and an obligation to be fulfilled as well as the power to determine their moral law (Christie et al., 2008), thus rejecting the fundamental proposition of utilitarianism (Fraedrich & Ferrell, 1992). Moreover, van Staveren (2007) acknowledged that an ideology of the utility of the individual and the greatest number of in society is unrealistic because economic equation cannot quantify happiness. Knights and O'Leary (2006) reported that a decision should be made primarily by considering one's duties and the rights of others. The elemental obligation and rights of various persons in ethical reasoning is the principal focus of deontological ethics (Hunt & Vitell, 2006).
but noticeably less a concern in utilitarianism, which emphasizes overall outcomes (Zhu et al., 2004) but lacks an emphasis on virtue, which is concerned with personal morality that controls means and ends (van Staveren, 2007).

Deontology focuses on the notion of the means justifying the ends, wherein it stresses the intention of a behavior; whereas, relativism emphasizes what is right and wrong to do as an obligation of an individual (Coughlan, 2005). Idealist marketers demonstrate higher deontological norms and ethical decision making (Singhapakdi et al., 2000) than is relativism (Singhapakdi & Vitell, 1991). Moreover, van Staveren (2007) emphasized that Kant’s categorical imperative is a truism action accepted by the universal law of nature (van Staveren, 2007).

The thrust of deontology provides incontrovertible behaviors. According to van Staveren (2007), deontology fits the positional objectivity in the economics of a non-ambiguous objective. Miner and Petocz (2003) clarified duty as absolute, either positive or negative and never conflicting. Beekun et al. (2008) explained that relativism is the deontology of different persons perceiving different types of happiness. Although a direct relationship between deontology and ethical reasoning has been elusive, Yoon (2011) established a positive direct relationship between deontology and ethical judgment, which in turn does not directly influence ethical reasoning. Studies conducted by Guoxi (2010), Micewski and Troy (2007), Piller (2009), and Rothhaar (2010) all support such a relationship, finding that morality is hindered by emotions; therefore, duties and obligations guide what ought to be done. These findings concur with those of Friedman and Friedman (1988), and Hilmiana and Zusnita-Muizu (2016), who maintained that ethical custom, norms, culture and law are indispensable societal rules that require the business professional to perform duties and obligations because a profit-driven business must meet social responsibilities to be recognized as a good organization.

**Utilitarianism**

Works by Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873) pioneered the conceptual development of utilitarian theory, which proposes that moral action should maximize the welfare of the greatest number of people (Ferrell & Ferrell, 2005). This theory also suggests that an organization should be compelled to produce greater positive benefits and effects for its stakeholders (Weymark, 2005). Consequentialists acknowledge that reasoning is considered ethical only when a decision satisfies the greatest good for the maximum number of people (Ferrell & Ferrell, 2005; Hunt & Vasquez-Parraga, 1993), regardless of sound moral character and the fulfillment of obligation. Moreover, de Colle and Werhene (2008) argued that the implications of actions in evaluating the morality or amorality of manners are crucial in determining the forthcoming consequences. The deemed consequences of the greater good need to be defined by society (Liu, 2011), which is a separate subjective moral assessment process in
accordance with individual preferences (van Staveren, 2007). However, Yoon (2011) concluded that the utilitarian approach is less satisfying in a business context because it relies exclusively on the moral worth of behavior aimed at maximizing stakeholders’ benefits in ethical reasoning (Fleischman et al., 2010).

Numerous studies have firmly established the existence of mixed relationships between utilitarianism and ethical reasoning. A recent studies by Danon-Leva et al. (2010) in Hong Kong. and Yang, Colvin, and Wong (2016) in China reported that business people practice utilitarianism to their respective enterprises to achieve a good outcome for the benefit of each company; whereas, another study found that benevolence is perceived to be less important for ethical reasoning (Lau & Wong, 2009). However, studies by de Colle and Werhene (2008), Reynolds and Bowie (2004), and Rothhaar (2010) all argued that employees’ basic rights may be violated to please the interests of the majority in an organization. Knights and O’Leary (2006) noted that a majority of shareholders might pressure executives to exercise bad judgment to maximize the wealth of the former. Hartman, (1998) also critically observed that the use of market pricing in determining the cost-benefits of actions is impossible while being engaged in a subjective assessment of value. Therefore, moral obligations to society are ignored as utilitarianism shapes an organization’s principles. Moreover, de Colle and Werhene (2008) as well as van Staveren (2007) obtained evidence that ethics is perceived as a symbol for the congruence of values in an organization’s societal preferences; therefore, virtuous character is dismissed from functioning social duties (van Staveren, 2007; de Colle & Werhene, 2008).

Virtue Ethics

Aristotle’s system of virtue ethics is characterized by individual integrity of character (Knights & O’Leary, 2006). Nevertheless, an act is less accentuated in business ethical reasoning as the focus of virtue ethics is on the moral agent. Integrity and ethics have different meanings, yet ethics is a subset of integrity (Shanahan & Hyman, 2003). Arjoon (2007) further explained that integrity is a moral conduct; whereas, professional conduct within organizational context comprises ethics. Arjoon (2000) suggested that virtue ethics must be integrated with act-oriented and result-based ethics to obtain a better insight into moral issues and dilemmas. Christie et al. (2008) proposed that virtue ethics balances the act of damage-reduction and self-discipline to support an interactive tripartite approach to normative leadership, as claimed by Whetstone (2001). Christie et al. also observed that moral philosophies better support managers’ practice of ethical reasoning. Mellema (2010) articulated that managers deal with an implication to conform to moral pressure; in which an act can be wrong but for the right reasons.

The virtue-ethics approach builds on the actor’s character, motivations and intentions (Trevino & Nelson, 2007), the latter two elements being associated with the particular purposes to which ethical reasoning acknowledges as law. According to Solomon (1992), the ideal
combination of character and goodness in a person has created the concept of virtue ethics. Character is closely related to virtue by reinforcing the link between an individual and the values applied in business decision making where the organizational citizen will act on the basis of the virtuous principles nourished via the organization’s culture and code of conduct. Therefore, to embrace the good life to which Aristotle refers as practical wisdom (Carroll, 2004), ongoing pressure should be managed via a sense of fairness or justice, self-control and courage.

The results obtained in studies by Christie et al. (2008), de Colle and Werhene (2008), and van Staveren (2007) all revealed that societal benefits are delivered through honesty, loyalty, trust and other similar attributes. A recent study by Warna-Furu et al. (2010) reported that when the level of virtue ethics is high, fewer sick leaves are taken by employees in companies. Lau and Wong (2009) discovered that equity is an antecedent for distributive norms. Arjoon (2007) argued that although the concept of virtue ethics was introduced millennia ago by Aristotle, only a few empirical findings have been reported concerning virtue ethics. Since deontology, utilitarianism and virtue ethics are absolutely independent, perhaps these three ideologies could merge into a tripartite approach, as suggested by Christie et al. (2008), who suggested that the most important aspect in moral philosophy is to search for the level of each that realistically contributes to ethical reasoning in a business context rather than examining each one independently and possibly obtaining unrealistic findings.

**Ethical Reasoning**

Piaget’s Cognitive Development Concept pioneered the practical use of ethics and morality in dealing with behavioral issues (Rest et al., 2000). In the 1950s, Kohlberg (2008) introduced the Theory of Cognitive Moral Development (CMD), which depicts the evolution of the moral reasoning of an individual in a series of stages. This concept became the foundation of Rest’s Four Component Model of moral behavior (Rest, 1999). Moreover, Kohlberg’s CMD has been integrated into much of the subsequent ethical reasoning research (Ferrell & Ferrell, 2005; Loviscky et al., 2007; Treviño et al., 2006) to better understand the impediment of an individual’s ethical construction. Ethical reasoning is related to human action that is morally constrained within reality (Treviño et al., 2006). Yusoff and Murugiah (2004) acknowledged that integration of moral philosophy helps business organizations to consciously comprehend the process of ethical reasoning.

Rest (1999) argued that a moral decision involves logical rather than chronological thinking. Thus, he introduced four major psychological processes that enable individuals to behave morally on the basis of a moral development domain having different initial viewpoints for recognizing different levels of ethical decisions, namely, (1) awareness, (2) judgment, (3) intention and (4) behavior. Rest et al. (2000) asserted that the moral decision model is subjective and not amenable to a linear problem-solving model because it involves the traditional domains
of cognition, affect and behavior (Eisenberger et al., 1986), as explained in the Theory of
Reasoned Action (Fishbein & Azjen, 1975). Furthermore, CMD has been criticized for being
incomprehensive, focusing on justice rather than rational aspects of morality (Rest et al., 2000)
such as obligation-and-consequence theories (Hunt & Vitell, 1986) and character theory
(Arjoon, 2000) that affect the reaction of an individual’s ethical reasoning and behavior
(Mustamil & Quaddus, 2009). Gibbs et al. (1992) argued that behavior is the outcome of ethical
reasoning. They also identified ethical motivation as a component of ethical reasoning that Rest
had neglected (1999). Furthermore, ethical motivation is a cognitive process in which an
individual ethically decides on an action based on personal values, interests and self-efficacy
(Kielhofner, 2008).

O’Fallon and Butterfield (2005) reported that, in 15 studies between 1996 and 2003, a
cognitive process positively and significantly affected ethical decisions. DeConinck and Lewis
(1997) argued that rewards and punishment, whether ethical or unethical, are justifiable through
the cognitive process of a moral philosophy. Studies on MBA students and marketing personnel
have proven that cognitive moral development significantly affects social philanthropy due to
ethical reasoning (Judeh, 2011). Agreeing with the significance of a cognitive process in ethical
decisions, Ford and Richardson (1994) and Loe et al. (2000) also observed that a cognitive
process is difficult to study due to the high magnitude of complexity of ethical reasoning.
Abdolmohammadi et al. (2009) argued that many studies have identified and examined factors
that contribute to ethical reasoning, but the respective researchers failed to understand the
underlying degree of moral philosophies and ethical reasoning components influencing ethical
conduct in business. Several researchers have also argued that ethical reasoning does not
necessarily demonstrate ethical behavior (Brown et al., 2005; Eisenberger et al., 1986; Victor &
Cullen, 1988). O’Fallon and Butterfield (2005) also suggested that Rest’s framework should be
revised. Thus, an ethical decision not only involves rational thinking but is also complicated by
the emotional involvement and values commitment inherent in ethical reasoning (Etzioni, 1988).
Furthermore, the ethical choice of an individual who wears different hats (e.g., a conscientious
moral agent or a moral manager) in an organization may generate built-in conflict as personal
and business objectives clash (Trevino & Nelson, 2007).

Arjoon (2007); Etzioni (1988); and Judeh (2011) all recommended further investigation
of the association between moral philosophy and ethical reasoning. As suggested by McDevitt et
al. (2007), although the model presents an individual information matrix embedded in an ethical
reasoning process, it is still necessary to define the content variables to sufficiently understand
how individuals reach ethical or unethical decisions. This is due to the significant attention given
thereto in numerous empirical studies examining the direct effects of ethical judgment, intent and
behavior. However, the importance of awareness and motivation in ethical reasoning has been
overlooked. O’Fallon & Butterfield (2005) observed that, among 185 empirical studies on ethical
judgment, 86 on ethical intent and 85 on ethical behavior implemented between 1996 and 2003, only 28 examined ethical awareness. The approach adapted in our study is similar to those used in previous research examining ethical reasoning (e.g., Ahmad et al., 2005; Barnett & Valentine, 2004; Cohen et al., 2001; Conroy & Emerson, 2004; Desplaces et al., 2007; Gibbs et al., 1992; Liu, 2011; Loviscky et al., 2007). The four ethical constructs examined are (1) awareness, (2) judgment, (3) intention and (4) motivation.

MODEL DEVELOPMENT

An integrated model was used to test the relationships between moral philosophy and ethical reasoning (See Figure 1). The Statistical Package for the Social Sciences (SPSS), Analysis of Moment Structures (AMOS), Arbuckle, 2006) software for Structural Equation Modelling (SEM) was employed to analyze the causal relationships between variables. The theoretical bases to support the hypothesis development are henceforth discussed.

![Figure 1: RESEARCH MODEL](image)

Association between Deontology, Utilitarianism And Virtue Ethics

Moral philosophy is used to weigh various options resolving ethical problems (Hunt et al., 1990). Hunt and Vasquez-Parraga (1993) and Hunt and Vitell (1986) proposed that business people’s ethical reasoning is pillared by the criteria of deontology and utilitarianism. Many philosophers have been tempted to think that such persons must choose one moral philosophy as an approach in order to justify a particular course of actions (Altman, 2007). One notable feature which many philosophers conclude is that moral philosophy studies neglect deeds exercised for the greatest good and virtue of characters (Beadle & Moore, 2006; d'Anjou, 2011). Trevino et al.
argued that virtuous character practices and effective leadership support the obligations of moral agents and organizations.

Buccholtz and Rosenthal (1998), Trevino and Nelson (2007), and Weiss (2003) all noted that virtuous human approaches are the common pillars in ethical reasoning as well as in complementary duty-and-consequences approaches. Koehn (1995) concluded that moral character is the bedrock for any justification of morality in conjunction with utilitarian and deontological approaches.

Bellizzi and Hite (1989), Hunt and Vasquez-Parraga (1993), Hunt and Vitell, (1986), and Hunt et al. (1984) all believed that utilitarianism and deontology exhaust all possible modes of ethical reasoning, thereby neglecting natural human virtue in analyzing ethical decisions. De Colle and Werhane (2008) suggested that the integration of moral theories considerably affects their practical application within an organization. The absence of virtuous human character as a full complement to moral reasoning creates an imbalance in supporting a moral obligation to act on the consequences of a deed. This approach is assumed to minimize unethical decisions made due to limited choices when using a single personal moral-philosophy approach.

Arjoon (2000) argued that an important element of virtue ethics is not included in most research reports related to ethical reasoning. He added that the good intention of virtue is overshadowed by benevolence as a result of the absence of virtuous human characteristics (d'Anjou, 2011). Baugher and Weisbord (2009) further explained that moral philosophy can only differentiate the moral relevancy of human actions rather than delineating a complete and comprehensive form of moral acts. Morally acceptable acts rely on individual judgment to determine the guidelines to be used as an ethics screen to establish equilibrium in interpersonal relationships between one’s individual and community for life fulfillment while holding business and societal motives as important (Ali, 1987).

According to de Colle and Werhane (2008), the differences between organizational and individual ethics perspectives are due to the different factors supporting the ethical reasoning process. Sims (1992) observed that individual employees’ moral philosophies are based on values, beliefs and norms accepted by the society and culture in which they live. An individual ethical philosophy can be based upon any of the following:

1. The moral worth of any action (Piller, 2009);
2. Achieving the greatest overall happiness (de Colle and Werhane, 2008) and improving the fairness of social outcomes (Kircher et al., 2009) or
3. Emphasizing the process of personal moral character development through focusing on motivation and the source of action as well as identifying the contextual importance to improve understanding and complement personal character (Whetstone, 2001).

Business professionals’ perspectives are more concerned with their respective business reputations, implications and economic values. Their ethical viewpoints are not solely based on
those of society or their rights, obligations, sense of fairness and benefits to a society that usually abides ethical reasoning (Sims & Brinkmann, 2002). Trevino and Nelson (2007) proposed that ethical choices involve thinking patterns that advise for the decisions of a conscientious moral agent. A prescriptive approach also provides grounds, on the basis of rational arguments, for whether a certain course of action is either morally desirable or reprehensible (Loviscky et al. 2007). Two pivotal questions thus arise: (1) What is right or wrong, and (2) What is good or bad? These questions lead to the development of a framework for ethical reasoning consisting of teleology, rights and a virtuous approach.

Akaah’s (1997) research found that ethical reasoning related to marketing ethics focuses on the concepts of deontology and less on utilitarianism. He added that a rewards/punishment system within a business organization influences the personal moral philosophy adhered to internally. Christie et al. (2008) argued that the employment of moral philosophy to analyze ethical dilemmas will reduce the risk of organizations. Consistently, Piller (2009) argued that one should believe in a value and act accordingly. Moreover, the values of a believer assist in ethical reasoning. The empirical literature variously emphasizes consequences (teleology) and actions (deontology) (Altman, 2007). Hunt and Vitell’s (1986) General Theory of Marketing Ethics has directly supported the empirical analysis of moral philosophy, where deontology and teleology have significantly impacted ethical reasoning in particular situations in organizations (Ferrell and Gresham, 1985; Fraedrich and Ferrell, 1992; Ferrell et al., 1989; Hunt and Vasquez-Parraga, 1993). However, Arjoon (2000) proposed that formal ethical theories cannot be measured independently but are instead directly related to one’s character. Wood et al. (1988), and Jones and Gautschi (1988) observed that business professionals and future business executives are required to align their moral philosophy with a corporate requirement to succeed. Fraedrich and Ferrell (1992), and Singhapakdi et al. (2000) argued that moral philosophy is an antecedent of ethical reasoning in business, a premise supported by Hunt and Vitell’s (1986) Theory of Marketing Ethics, which proposes that different ethical/unethical decision outcomes are produced by different types of personal moral philosophy.

The noblest characteristics of human conduct are not perceived as pivotal in moral philosophy as studied by many researchers (d’Anjou, 2011). Marketing and management researchers have focused independently on the deontological and teleological ideologies underlying the moral motives in the ethical reasoning of sales personnel in America (Hunt and Vittel, 1986; Hunt, Wood, and Chonko, 1989; Hunt and Vasquez-Parraga, 1993); business managers in Thailand (Singhapakdi et al., 2000); managers and non-managers in Hong Kong (Siu & Lam, 2009); and marketing personnel in Australia, America and Malaysia (Karande et al., 2002). Arjoon (2000) argued that the important aspects of virtue to which business professionals adhere are always overlooked by researchers and ethicists. He also observed that Aristotle’s
virtue ethics complement both the deontological and the utilitarian philosophies to which professionals within business organizations adhere.

Bellizzi and Hite (1989), Hunt and Vasquez-Parraga (1993), Hunt and Vitell (1986), and Hunt et al. (1984) all believed that utilitarianism and deontology exhaust all possible modes of ethical reasoning. However, Buccholtz and Rosenthal (1998), Trevino and Nelson (2007), and Weiss (2003) all noted that some philosophers are reluctant to accept human-nature approaches wholeheartedly. They argued that personal character perspectives are more fundamental to act-oriented theories in moral reasoning. According to Koehn (1995), virtue ethics is a must for moral justification, together with the utilitarian and deontological approaches. The absence of virtue ethics in human character as a full complement to moral reasoning creates an imbalance in supporting both the obligation to act and the consequences of utilitarianism. De Colle and Werhane (2008) concluded that the integration of individual moral philosophies will affect ethical wisdom and its practical application in organizations. This approach is assumed to minimize unethical decisions made due to limited choices using a single moral philosophical approach.

Pimentel, Kuntz, and Elenkov (2010) emphasized that previous studies have focused on establishing alternatives to current theory; thus, a comprehensive theory is essential to understand and guide an individual in reasoning based on psychological and physiological motivational approaches that affect intentions. Arjoon (2007) noted that the absence of a comprehensive moral theory can affect each of the following (p. 396):

1. Deciding which theory to apply in a given situation,
2. Choosing guidelines in applying these different theories and approaches,
3. Determining the criterion that applies the best theory for the given problem, and
4. Making a decision if the application of results from different theories provides different courses of actions.

Altman (2007) claimed that researchers always insufficiently report on a good-quality characterization of individuals. Such negligence occurs because moral philosophy theories can be categorized not only independently as deontology or teleology but also simultaneously in a combination of both (Beekun et al., 2008). Cornelius and Gagnon (1999) argued that deontology and utilitarianism are inflexible. Practically, moral managers need space to think before reaching conclusions in decision making. Thus, a dynamic of solitude will facilitate reflection in an ethical context in the decision making process (Akrivou et al., 2011). Objectivity prevents deontology from dealing with real problems and a rigid inability to react to changes in ethical evaluation over time. Utilitarianism does not prohibit harming others if such behavior is consistent with maximizing self-interest or utility. Utilitarianism also promotes an ends-justify-the-means approach that establishes distributive injustice in an organization. It has been argued that virtue ethics theory does not have clear rules and procedures for ethical decision making (Arjoon,
2000). Solomon (1992) asserted that managers should promote a good/right intentional characterization of oneself rather than recognizing the rights of others, which should be supported by organizational support systems through clear roles and responsibilities in each duty. With such an aspect, the roles and responsibilities become a repetitive and indirectly habitual practice for managers. Arjoon (2000) agreed that practice is required as a critical component in many forms of virtue theory.

A personal moral philosophy is used to evaluate various alternatives to resolve an ethical problem (Hunt et al., 1990). However, business professionals may behave unethically (due to unethical decision making) if duty (deontology) permits the initiation of positive consequences (utilitarianism) for an organization (Hunt & Vasquez-Parraga, 1993). For example, marketers place utilitarianism in the fundamental level of the moral philosophy pyramid to be rewarded for contributions to the profit-sharing of organizations because utility maximizes the overall good consequences of meeting a target. In order to be rewarded, basic rules should be deontologically fulfilled but not as an obligation to demonstrate the good virtue of individual characters to meet the sales target. With regard to this concept, Philips and Margolis (2000) commented that a personal moral philosophy and ethical reasoning must be mutually exclusive in a business environment. Beekun et al. (2008) proposed that a moral philosophy is not an independent deontology or teleology but rather a component integrated with the good-quality character of an individual (Altman, 2007). Therefore, the following hypotheses are posited for our study:

\begin{itemize}
  \item \textbf{H1:} Utilitarianism is correlated with deontology
  \item \textbf{H2:} Deontology is correlated with virtue ethics
  \item \textbf{H3:} Virtue ethics is correlated with utilitarianism
\end{itemize}

\textbf{Relationship between Moral Philosophy and Ethical Reasoning}

Business practices can only be judged morally with reference to the reasoning held by particular business persons (Altman, 2007). The actions of people in the context of business organizations are judged against moral principles. As a result, business decisions are types of human action, and all moral actions are morally constrained in reality. Consistency or absence of contradictions within an organization as a legal entity guides business professionals to be rational (Velasques et al., 1998).

Ethical reasoning in decision making is important for business professionals because they have discretion and are likely to deal with ambiguous and ethically charged issues (Loviscky et al., 2007). The ethical reasoning of business people can seriously affect stakeholders. Additionally a decision made by business people can establish a precedent for success and influence others in pursuit of the objectives of the respective organizations. It is important to be
able to assess business persons’ moral-philosophy reasoning capability since it is relevant to roles and responsibilities within the organizations (Watley & May, 2004).

Researchers agree that ethics is concerned with the effects of individual actions on others (Zhu et al, 2004) that are guided by a principle of right-or-wrong or good-or-bad in human conduct or behaviors (Abdolmohammadi et al, 2009). Absence of contradiction is a hallmark of ethical reasoning. Employees are required to modify their individual moral standards, values and actions before entering the door of an organization on the first day of reporting to work (Trevino and Nelson, 2007). Previous studies have shown the effects of the moral philosophies of egoism, utilitarianism, deontology and virtue ethics on ethical reasoning (Ahmad et al., 2005; Arjoon, 2007; Bartlett, 2003; Christie et al., 2008; Guoxi, 2010; Saee, 2009; Micewski and Troy, 2007; Piller, 2009; Rothhaar, 2010; van Staveren, 2007; Warna-Furu et al., 2010). Particularly, the ethical decision making processes of marketing personnel, business executives and managers, as well as business students have provided empirical evidence for distinctive moral-philosophy comprehension (Asheim and Mitra, 2010; Lau & Wong, 2009; MacKewn & VanVuren, 2007; Siu & Lam, 2009). However, the findings are mixed (O'Fallon & Butterfield, 2005).

Despite the strong empirical support for differences in moral philosophy in ethical reasoning processes, a survey of 191 American university students also confirmed that Forsyth’s (1980) model of relativism and relativism itself were strongly correlated with ethical reasoning. The findings indicated that idealism is driven by moral absolutes; whereas, relativism is dependent upon the situational context (MacKewn & VanVuren, 2007). A comparative study of American, Australian and Malaysian marketers found idealism and relativism to be positively and negatively related to ethical values, respectively (Karande et al., 2000). Consistent responses from 189 marketing executives and managers in a corporate organization in the United States revealed that both utilitarianism and deontology affected ethical reasoning (Fraedrich & Ferrell, 1992).

Justification is important when actions are not explained (Whetstone, 2001). Business professionals in organizations have more than one reason for doing something motivated by their self-interest (Gupta & Sulaiman, 1996). However, many philosophers have been tempted to think that such professionals must choose one ethics theory as an approach in order to justify a particular course of actions (Altman, 2007). Hunt and Vitell (1986) explained how an individual in an organization might make a decision when confronted with an ethical problem: a person must first perceive that an ethical situation exists before examining possible solutions to resolve the dilemma.

Arjoon (2007) explained that the duty to act due to a high-caliber character may create desirable consequences in ethical reasoning. An individual business professional might refrain from cheating in business dealings for at least three reasons: (1) that is the right way to act, (2) such behavior creates a better reputation and relationships, and (3) one is an honest person. In
reality, the ethical reasoning of persons in business organizations is has considerable clout and is defined by classical moral philosophies as well as influenced by the particular organizational setting to support their decision reasoning. Deontology and utilitarianism are tools used in organizational settings to provide consistency in the sense that moral standards, values and actions should not be contradictory between business people and their organization. This dimension helps to clarify the different moral assumptions of business professionals who are involved in ethical reasoning in decision making for appropriate conduct (Trevino & Nelson, 2007).

According to Crockett (2005), the business sentiments toward social and moral issues have drawn significant interest toward the gap between theory and practice. Reconciliation via a practical integrated model combining the moral-philosophy approaches of utilitarianism, deontology and virtue ethics has characterized the organizational structure and culture. Thus, this reconciliation has been instituted for a reciprocal affiliation between business professionals and communities within organizational and social contexts. Hartman (1998) concluded that business ethics accounts for the external and organizational factors that shape the internal structure according to the remedy and its justification thereof for accountability through ethical reasoning.

Whetstone (2001) concluded that justification is crucial when explaining actions in business ethics. This is due to the tendency of business people to be motivated to fulfill their self-interest (Gupta & Sulaiman, 1996). Thus, prevention through ethical decision processes is better than ameliorating an unethical act. Shanahan and Hyman (2003) asserted that virtue ethics is critical in cataloguing business persons on the basis of their beliefs with reference to virtuous qualities. According to Koehn (1995), the justification for morality must be associated with virtue ethics together with the support of utilitarianism and deontology. Arjoon (2007) added that virtuous character guides an act of duty and the anticipated consequences. Therefore, virtuous practice is supported as a critical component of many forms of virtue theory (Arjoon, 2000).

Therefore, the following hypothesis is posited for our study:

\[ H4: \text{The higher the level of moral philosophy, the higher the level of ethical reasoning} \]

**RESEARCH METHODOLOGY**

**Sampling Procedure**

This study targeted managers and executives from SMEs listed in the 2010 SMEs Corporation (SME Corp) Directory, regardless of whether the companies were listed under the agriculture, manufacturing or services sectors. The level of analysis was focused on the managers and executives who had authority and involvement with the business practices and dealings of their respective companies. Surveys were mailed randomly to 2,500 managers and
executives. A response rate of 13.76% (344 respondents with complete answers) was generated, based on the 2,500 questionnaires originally distributed.

Research Instrument

Independent Variables: Deontology and Utilitarianism

The study adapted the idealism and relativism components of Forsyth’s Ethics Position Questionnaires (EPQ) (1980). Each construct was measured by a total of 9 and 6 statements, respectively, using a six-point Likert scale ranging from 1 = strongly disagree to 6 = strongly agree. Representative statements included the following: “If an action could harm an innocent other, then it should not be done” (Idealism); and “What is ethical varies from one situation and society to another” (Relativism).

Singhapakdi et al. (2000) explained that the EPQ provides simple general statements that are easy to understand and examine. EPQ is a valid instrument (MacKewn & VanVuren, 2007); moreover, empirical research has demonstrated that the EPQ supports a significant relationship between moral philosophy and ethical reasoning in different nations and across cultures (Forsyth, 1980; Redfern & Crawford, 2004) with a high degree of accuracy. This validity exists because the items are contextually appropriate for measuring subjective moral philosophy in a given situation (MacKewn & VanVuren, 2007).

Independent Variable: Virtue Ethics

Adapting procedures similar to those in a previous study by Ahmad et al. (2005), we used the Virtue Ethics Scale developed by Shanahan & Hyman (2003) to examine the virtuous character of business professionals. This instrument was developed to complement the dutiful and consequential outcomes of ethical reasoning, which might otherwise be incomplete and could harm the ethical reasoning and business reputation of an organization. The Virtue Ethics Scale measures three constructs of virtuous character, namely empathy, integrity and reliability, by the use of a six-point Likert scale (1 = strongly disagree to 6 = strongly agree) having a total of 16 statements: seven statements on empathy; six on integrity; and three on reliability. Representative statements include the following: “I should listen and understand (Empathy); “I am always willing to reciprocate” (Integrity); and “I will fulfill my responsibility” (Reliability).

Dependent Variable: Ethical Reasoning

Ethical reasoning was measured with an adaptation of the scales used by Cacioppo et al. (1984), Epstein et al. (1996), Fritzche and Becker (1982), Harris (1990); Jones and Ryan (1997), and Longnecker et al. (1989). Those scales were selected on the basis of criteria established for
measuring the ethical reasoning ability of the responding SME managers and executives. A six-point Likert scale was employed to measure four constructs of ethical reasoning, consisting of eight aspects of awareness, six of judgment, seven of intention and four of motivation. All constructs ranged from 1 = strongly disagree to 6 = strongly agree, except for the awareness variable, which ranged between 1 = strongly unethical and 6 = strongly ethical. Sample statements included: “In order to increase the profits of the firms, a general manager used a production process that exceeded the legal limits for environmental pollution” (Awareness); “I don’t have a very good sense of intuition” (Judgment); “I believe in trusting my hunches” (Intention); and “I enjoy intellectual challenges (motivation).

Data Analysis

In this study the Statistical Package for Social Sciences (SPSS for Windows) and AMOS 18.0 (Arbuckle, 2006) were used to estimate the structural equation models and path analyses of the collected data. According to Anderson and Gerbing (1998), a Confirmatory Factor Analysis (CFA) of the measurement model is crucial to assess the uni-dimensionality of each factor before the structural model can be measured. Construct validity was used to determine the goodness of fit indexes (GFI) and the Root Mean Square Error of Approximation (RMSEA). Sivo et al. (2006) proposed that values of 0.90 and closer to 1.00 indicate a better fit for GFIs. According to Bentler (1990), the RMSEA requires lower values than 0.08 to demonstrate an adequate fit of the measurement model. The empirical results revealed that the GFIs of all these factors are greater than 0.90, thus indicating that the model is accepted (Bagozzi & Yi, 1988; McQuitty, 2004). The recorded RMSEA value of less than 0.08 indicates the adequate fit of the model. Therefore, this result implies that it is reasonable to also accept the unidimensionality of the model (Anderson, 1987; Churchill, 1979; Germain et al. 1994; Sivo et al. 2006).

The $p$-values and the factor loadings ($\lambda$) were tested for convergent validity. Following the recommendations by Lei and Wu (2007) and Fornell and Larcker (1981), the measurement model of convergent validity was based on three conditions: (1) The normal rules of all indicators of $\lambda$-values should be significant and exceed 0.50 for acceptability; (2) The average variance extracted (AVE) of each factor should be at least 0.5 or higher for a high convergent validity indication (Fornell & Larcker, 1981) and (3) the composite reliability (CR) should be greater than 0.70 (Hair et al., 2006; Sivo et al. 2006). Several researchers have also theorized that factor loadings and AVEs rely heavily on psychological factors of the respondents (Byrne, 2010; Joreskog, 1993; Schumacker & Lomax, 2004). In this study, the use of AVE and CR is based on the two-step procedure proposed by Anderson and Gerbing (1998).
Table 1
RESULTS OF RELIABILITY AND VALIDITY TESTS
(n=344)

<table>
<thead>
<tr>
<th>Variables and Items</th>
<th>Indicators</th>
<th>Convergent Validity Test</th>
<th>Total Items</th>
<th>Reliability Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Factor Loadings</td>
<td>AVE**</td>
<td></td>
</tr>
<tr>
<td>Deontology</td>
<td>D1</td>
<td>0.734</td>
<td>0.377</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>0.704</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>0.527</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>0.444</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilitarianism</td>
<td>U1</td>
<td>0.643</td>
<td>0.484</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>U2</td>
<td>0.506</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U3</td>
<td>0.880</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U4</td>
<td>0.700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virtue Ethics</td>
<td>V1</td>
<td>0.671</td>
<td>0.532</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>V2</td>
<td>0.837</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>V3</td>
<td>0.819</td>
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</tr>
<tr>
<td></td>
<td>V4</td>
<td>0.741</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>V5</td>
<td>0.597</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>V6</td>
<td>0.680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Awareness</td>
<td>EA1</td>
<td>0.86</td>
<td>0.451</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EA2</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EA3</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EA4</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EA5</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EA6</td>
<td>0.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Judgment</td>
<td>EJ1</td>
<td>0.911</td>
<td>0.534</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>EJ2</td>
<td>0.764</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EJ3</td>
<td>0.665</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EJ4</td>
<td>0.529</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Motivation</td>
<td>EM1</td>
<td>0.659</td>
<td>0.545</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>EM2</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EM3</td>
<td>0.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EM4</td>
<td>0.840</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EM5</td>
<td>0.515</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Intention</td>
<td>EI1</td>
<td>0.770</td>
<td>0.553</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>EI2</td>
<td>0.848</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EI3</td>
<td>0.703</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EI4</td>
<td>0.534</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EI5</td>
<td>0.826</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EI6</td>
<td>0.737</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: *Composite Reliability (CR) = (Σλ̂i^2)/[(Σλ̂i^2 + Σδ̂i)], (λ̂ = standardized factor loadings, i = observed variables, δ̂ = error variance); **AVE = Σλ̂i^2/n (i = 1 ..n, λ = standardized factor loadings, i = observed variables)

The λ-values for all items were between 0.44 and 0.91, and the AVE ranged from 0.38 to 0.55, in which deontology and utilitarianism have lower AVEs than the cut-off value of 0.50 suggested by Fornell and Larcker (1981). Lorenzo-Romero et al. (2010) argued that previous studies have provided examples of acceptable scales with lower AVEs and that a minimum value
of 0.50 is usually very conservative (e.g.; Sharma, 1996; Tellis et al., 2009a; Trellis et al., 2009b). Our model represented an acceptable convergent validity; therefore, the obtained measurement was accepted. The \( \lambda \)-values for all items and the results of the AVE for the constructs are listed in Table 1.

RESULTS

Table 2

<table>
<thead>
<tr>
<th>Profile of Respondents and Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic Profile</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Position in company</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>No. of years in current company</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
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<tr>
<td>Age group</td>
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<td></td>
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<tr>
<td>Gender</td>
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<td></td>
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<tr>
<td>Educational background</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Profile of Firms</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>No. of employees</td>
</tr>
<tr>
<td></td>
</tr>
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<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Business sector</td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

Profiles of Responding Firms

For our purpose, the SMECorp Directory (SME Corp Malaysia, 2010) was used to obtain a more representative sample of respondents in this study. The demographic breakdown of respondents and profile of the respondents and firms are presented in Table 2.

This study included SMEs from all industry sectors because all business activities require the authority of business professionals in decision making. As displayed in Table 3, the
independent $t$-test results indicated no significant differences in the variables between the responses across gender, firm size based on the number of employees, and business sector of business professionals, thereby confirming that combining data from all these demographic profiles yielded no significant differences.

**Measurement Model**

Discriminant validity should be examined for each construct in three ways (White & Snyder, 2000). Fornell and Larcker (1981) insisted that AVEs must be compared with the correlation to the second power ($r^2$) between two variables. Discriminant validity is supported when the square root of the AVE exceeds this correlation ($AVE > r^2$). Our findings indicated that the $r^2$ of all constructs were between 0.013 and 0.211; moreover, the AVEs of all constructs were $> r^2$, thus exhibiting satisfactory discriminant validity.

Moral philosophy and ethical reasoning are also presumed to be measured by these constructs because the $\lambda$-values ranged from 0.44 to 0.84 [$\chi^2 = 103.228$, $df = 53$, $\chi^2/df = 1.948$, NFI = 0.945, CFI = 0.972, TLI = 0.952, RMSEA = 0.053], and 0.51 to 0.91 [$\chi^2 = 338.556$, $df = 139$, $\chi^2/df = 2.436$, NFI = 0.919, CFI = 0.950, TLI = 0.924, RMSEA = 0.065], respectively. The high $\lambda$-values presented a sufficient indication for convergent validity. Thus, these values are supported as acceptable measurement properties.

The correlation matrix and $r^2$ values between the independent and dependent variables are listed in Table 4. Since all of the $r$-values were less than 0.90, we conclude that there was no evidence of multicollinearity (Hair et al., 2006).

**Structural Model**

The path coefficients of the manifested constructs were calculated by using SEM to analyze the relationships between the moral philosophy of deontology, utilitarianism and virtue ethics, with ethical reasoning levels expressed in terms of awareness, judgment, motivation, and intention. To test the structural model for total aggregation, the following multiple fit indices were used: (1) Chi-Square ($\chi^2$) statistics to the degree of freedom ($df$); (2) absolute fit indices (GFI and RMSEA); (3) the comparative fit index (CFI); and (4) the normed-fit index (NFI) to evaluate the goodness of fit of the measurement model.
Table 3
STATISTICS FOR ESTIMATING DIFFERENCES IN RESPONSES BETWEEN GENDERS, NUMBER OF EMPLOYEES, AND BUSINESS SECTOR

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deontology</td>
<td>Male</td>
<td>114</td>
<td>4.400</td>
<td>0.512</td>
<td>0.048</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>4.454</td>
<td>0.465</td>
<td>0.031</td>
<td></td>
</tr>
<tr>
<td>Utilitarianism</td>
<td>Male</td>
<td>114</td>
<td>4.643</td>
<td>0.682</td>
<td>0.064</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>4.721</td>
<td>0.594</td>
<td>0.039</td>
<td></td>
</tr>
<tr>
<td>Virtue Ethics</td>
<td>Male</td>
<td>114</td>
<td>4.561</td>
<td>0.659</td>
<td>0.062</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>4.694</td>
<td>0.663</td>
<td>0.044</td>
<td></td>
</tr>
<tr>
<td>Ethical Awareness</td>
<td>Male</td>
<td>114</td>
<td>3.756</td>
<td>0.542</td>
<td>0.051</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>3.781</td>
<td>0.585</td>
<td>0.039</td>
<td></td>
</tr>
<tr>
<td>Ethical Judgment</td>
<td>Male</td>
<td>114</td>
<td>3.808</td>
<td>0.482</td>
<td>0.045</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>3.907</td>
<td>0.558</td>
<td>0.037</td>
<td></td>
</tr>
<tr>
<td>Ethical Motivation</td>
<td>Male</td>
<td>114</td>
<td>3.664</td>
<td>0.703</td>
<td>0.066</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>3.732</td>
<td>0.761</td>
<td>0.050</td>
<td></td>
</tr>
<tr>
<td>Ethical Intention</td>
<td>Male</td>
<td>114</td>
<td>4.364</td>
<td>0.602</td>
<td>0.056</td>
<td>n.s.</td>
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<tr>
<td></td>
<td>Female</td>
<td>230</td>
<td>4.423</td>
<td>0.624</td>
<td>0.041</td>
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<tr>
<td>B. Number of Employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deontology</td>
<td>&lt; than 50 employees</td>
<td>175</td>
<td>4.346</td>
<td>0.496</td>
<td>0.037</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>&gt; than 50 employees</td>
<td>169</td>
<td>4.529</td>
<td>0.447</td>
<td>0.034</td>
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</tr>
<tr>
<td>Utilitarianism</td>
<td>&lt; than 50 employees</td>
<td>175</td>
<td>4.357</td>
<td>0.695</td>
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<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>&gt; than 50 employees</td>
<td>169</td>
<td>4.504</td>
<td>0.632</td>
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</tr>
<tr>
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<td>4.698</td>
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<td>n.s.</td>
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<td>&gt; than 50 employees</td>
<td>169</td>
<td>4.900</td>
<td>0.626</td>
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<td>Ethical Awareness</td>
<td>&lt; than 50 employees</td>
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<td>4.052</td>
<td>0.651</td>
<td>0.049</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>&gt; than 50 employees</td>
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<td>3.657</td>
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Note: n.s. = non-significant

Table 4

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<td>( .070)</td>
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<td>.267*</td>
<td>.211**</td>
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<td>( .042)</td>
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<td>( .013)</td>
<td>( .096)</td>
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**Correlation is significant at 0.01 level (2-tailed)
* Correlation is significant at 0.05 level (2-tailed)
Note: $r^2$ values are indicated in parentheses.

Statisticians have suggested that 0.90 is the threshold value for both the CFI and the TLI to provide a satisfactory model of fit (Hair et al., 2006; McQuitty, 2004). As shown in Fig. 2, the structural model analysis had a reasonably good fit for the data collected [$\chi^2 = 16.808, df = 7, NFI = 0.957, CFI = 0.974, TLI = 0.921, RMSEA = 0.064$]. The ratios of chi-square to degree of freedom were 2.401, which is less than the conventionally accepted standard of 3.0 (Sivo et al., 2006).

Figure 2
PATH ANALYSIS RESULTS
The empirical validation of the model provides support for the conceptual framework proposed for moral philosophy and ethical reasoning. Therefore, these findings are constructive for future research and practical applications.

In this study, the results of the bivariate correlations revealed that deontology, utilitarianism, and virtue ethics were moderately correlated to each other. Thus, these results suggest that the predictor variables: consisting of deontology, utilitarianism, and virtue ethics are inter-related within the scope of moral philosophy. Moreover, the results of the bivariate correlations of ethical reasoning between awareness, judgment, motivation, and intention indicated a relatively moderate relationship between the variables examined, thereby suggesting that the predictor variables are inter-related within the span of ethical reasoning.

The results obtained from the structural model supported the tested hypotheses. Deontology, utilitarianism, and virtue ethics were positively and significantly correlated, with \( r \) between 0.32, \( p<0.05 \) and 0.41, \( p<0.05 \). In this study, moral philosophy had a significant positive relationship to ethical reasoning, with a path coefficient of 0.52, \( p<0.05 \), which strongly suggests that high levels of moral philosophy lead to greater levels of ethical reasoning. The components of ethical reasoning, such as awareness, judgment, motivation, and intention, have a direct impact on the ability of managers and executives’ to support their respective moral philosophies.

The empirical findings revealed that deontology influences moral philosophy to the greatest extent, having the highest \( \lambda \)-value of 0.67 in comparison to utilitarianism and virtue ethics, with \( \lambda \)-values of 0.55 and 0.59, respectively. However, ethical intention was measured at 0.88, the highest \( \lambda \)-value among the various subscales under ethical reasoning. The results indicate that the different moral philosophies influenced the ethical reasoning components in different ways. All three moral philosophies complemented the needs of the moral reasoning components in business practices, but deontology appeared to have a stronger impact on ethical reasoning when compared to deontology and utilitarianism.

**CONCLUSION**

In summary, this study has highlighted the complexities involved in improving ethical reasoning of employees in SMEs through appreciating employee’s moral philosophy and that the underlying mechanisms and linkages require greater empirical examination. Findings stemming from an array of studies involving various ethical decision making models to produce an ethical reasoning framework to capture supported techniques at the individual level; the moral agent of organization. This is a valuable step towards understanding the antecedents of ethical reasoning change and process in the workplace, and potential effective intervention techniques for decision
making. Specifically, the result of this study and integration of findings offer four major contributions and further development to researchers and practitioners involved in this area.

First, the modified ethical reasoning framework (see Figure 1) is for a domestic and specific-sector behavior decision making. Therefore, this study expand the Rest (1999) framework that focused solely on moral-rational thinking in sequence-manner. This study go beyond sequence-manner process in ethical decision making, and consider the conditions that may support emotional involvement and value commitment (Etzioni, 1988) in its broader sense, broadening both the theoretical and practical application of the framework. This supported the claim made by previous study that some critical components of ethical reasoning have been neglected in measuring moral philosophy orientations (Ross & Robertson, 2003; Treviño et al., 2006). Researchers’ attention has been concentrated on ethical judgment rather than on awareness, motivation, and intention (O’Fallon & Butterfield, 2005). Efforts directed toward the traditional moral philosophies of deontology and utilitarianism have been extended to entire business practices, and such patterns have focused more on economic and psychological assumptions (Etzioni, 1988). Trevino, Weaver, & Reynolds (2006) proposed that the emotional involvement of virtue ethics influences the non-monogamy of ethical reasoning. Holian (2006) supported the aforementioned position by arguing that deontology and utilitarianism have become routine in a thinking process that can be easily overridden by deliberate and emotional thought. To rectify this situation, individual competence is important (Carroll, 2004) in describing thoughts, feelings, actions, reactions and reflections to facilitate the notion of bounded rationality in reasoning ethical issues (Zutshi & Creed, 2011).

Practitioners and researchers could make use of the modified ethical reasoning framework when planning or researching employee engagement in moral behavior, focusing efforts on the factors that have received greatest empirical support. By focusing study analysis on interventions and factors that affected ethical reasoning, confidence of practitioners can be increased because the antecedents and factors have been identified as effective and have demonstrable practical impact. As ethical behavior has becoming an indispensable wording in organization’s mission statement (King, Case, & Premo, 2010), this framework will provide insight and create conditions for changes in behavioral decision making, and as a consequence, improvements within the SMEs context in ethical reasoning.

This study has based the modified ethical reasoning framework on research evidence that measured self-reported ethical decision making from multi-sectors employees across the globe, rather than relying model replication. Results from this study proven that existing theoretical frameworks can be used to connect interrelated bodies of knowledge for examining ethical reasoning. Business entities have been scrutinized and penalized for unethical practices, but the underlying hidden factors motivating business practitioners have remained unexplained and unexamined. Through empirical evidence, this study has demonstrated the importance of
strategies: the integration of virtue ethics with deontology and utilitarianism exhibits its role of balancing duty and consequences (Pryor, Taneja, Toombs, & Chris-White, 2010) in ethical reasoning components individually, being less rational and less complete in nature. The four dimensions of ethical reasoning, consisting of awareness, judgment, motivation, and intention, are heightened for emotional healing, which can lead to clearer thinking towards action that successfully copes with emotional demands (Holian, 2006).

Although the existing studies provide a good starting point in identifying some of key antecedents for modified ethical reasoning framework, further research is required to enhance and extend this framework. Further development on modified ethical reasoning framework by focusing on actual ethical attitudes in multi-level factors, which contains individual, group, organizational and contextual factors. These are needed if future efforts are to adequately distinguish between the interventions that are effective and those that are less effective for improving the bottom-line of ethics. This will provide insight to the methodological issues, as many additional studies may have resulted in ethical behavior, unfortunately they did not record the extent of ethical attitudes involved in demonstrating ethical behavior.

Thirdly, this study has contributed to the development of modified ethical reasoning framework that shows two distinct levels and approaches in moral-rational decision; the individual level prescriptive approach, and organizational level psychological approach. Consistent with the findings in previous studies, deontology was found to sharpen ethical awareness (e.g: Altman, 2007; d’Anjou, 2011; Singhapakdi & Vitell, 1991); utilitarianism, to move towards comfort with conscious choices (e.g: Loviscky et al., 2007; Meara et al., 1996; Yoon, 2011); and virtue ethics, to emphasize moral agency in capturing ethical moral actions (e.g: Palanski & Yammarino, 2009; van Staveren, 2007; Valentine & Bateman, 2011). Individual or collective practical reasoning requires managers and executives to have different degrees of moral philosophies for interacting with the components of moral reasoning. The inter-component interaction within ethical reasoning, which is non-linear in nature, encourages good moral choices for ethical decision making, and subsequently, ethical behavior. This occurs because each business practitioner has a different degree of emotions, imagination and cognition that, on the basis of the respective job descriptions and specifications, proposes specific relationships between an individual moral philosophy and ethical reasoning.

The combination of these levels and approaches will provide a powerful route toward ethical attitudes in reasoning moral dilemmas concerning SMEs, particularly by encouraging the targeting of prescriptive and psychological antecedents at multiple levels of SMEs. Consideration on social-situational context of employee may further enhance the framework and provide a robust conceptual framework. Perception defined by the decision process and the degree of influence from social-situational context will further facilitate the construction ethical
reasoning of employee. This goes beyond micro-level conceptualizations of ethical behavior prediction through decision making.

In the SMEs context, thoughtful ethical reasoning is generally needed before ethical behavior occur. A key findings from literatures is that ethical reasoning is not necessarily a pre-requisite for ethical behavior (Brown et al., 2005; Eisenberger et al., 1986; Victor & Cullen, 1988). This is contrary to the findings by O'Fallon & Butterfield (2005) that individual dimension of ethical reasoning had been used to examine and predict ethical behavior. It should be noted, however, these studies did not measure the multi-faceted ethical reasoning into one measureable construct in predicting ethical behavior. The strength of ethical attitude may be important in determining ethical action or self-reported behavior. This study has found that ethical behavior due to ethical reasoning may be achieved when employee linked their moral-value to the ethical culture and policies of organization. When employee are aware of the issue, and are provided with the practical or procedural knowledge of organizational ethical culture and governance, it will drive motivation to make ethical judgment to build intent.

In Malaysia various ethical reasoning surveys (e.g: Ahmad & Seet, 2009; Karande et al., 2000; Mustamil & Quaddus, 2009) have been implemented to gain an understanding of how business professionals rationalize the varying levels of emotions, imagination and cognition in thinking based on their moral philosophies (deontology, utilitarianism and virtue ethics) when faced with ethical dilemmas in business settings. Similar to findings in a study by Mustamil and Quaddus (2009), it was found that conflicts may arise between ways of thinking of moral philosophy as a conscientious moral agent and how to maximize a business outcome without the virtuous role of moral character. This occurs because managers and executives believe their own respective moral philosophies (Valentine & Bateman, 2011). Alhough O'Fallon and Butterfield (2005) found that previous studies on ethical decision making were focused on only ethical judgment, the findings in a study by Arnaud (2010) revealed that the synergy between each component of ethical reasoning is important to foster the collaboration of various individuals in values-focused thinking. Synchronization of moral philosophies in rationalizing the dexterity of the components of ethical reasoning will help business organizations to consciously focus on the composition of the ethical values that crucially affect the comprehension of the business reputation to which a societal value system adheres.

In addition to its several methodological strengths, the current study have limitations. First, this study was concentrating on single-sector demographic profile. Thus, the robustness of result due to the homogeneous sample can limited the generalizability of the findings. Secondly, the generalizability of studied results is restricted because the study was focused on ethical attitudes—not ethical behaviors—generated within a single sector (SMEs) in only one country (Malaysia). Multiple sector samples can expand the stratum for testing the argument by Leitao and Faustino (2009) that employees within the parameter of the same industry or sub-industry
have homogenous characteristics and culture in their business practices. Therefore, an attempt at sample generation from different industries and countries is needed to establish and extend the generalization of the findings for future studies. Singhapakdi et al. (2000) have proposed that the degree to which moral-philosophy factors contribute to ethical reasoning in each country is different and varied, perhaps due to the culture, the societal context, and the nature of the jobs. Finally, this study does not recognized the implications for ethical leadership, an ethical climate, and organizational support within the parameter of the modified ethical reasoning framework. Works stemming from these fields must be considered in this light. It has been suggested that employees are more likely to be motivated by a sense of reciprocation in the workplace (Parboteeah, et al., 2010). As such, these moderating factors should provide an enhanced understanding of how ethical reasoning is being most efficiently practiced in different situational contexts.

REFERENCES


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