

Does Marketing Attract Less Ethical Students? An Assessment of the Moral Reasoning Ability of Undergraduate Marketing Students

Carmel Herington and Scott Weaven

This article assesses the level of moral reasoning ability (MRA) of undergraduate marketing students and compares the results with the MRA of students in a range of other business disciplines. The aim was to determine if marketing attracts individuals who have a greater predisposition to unethical behaviors given that marketing is often reported as the most unethical of all business activities. The Defining Issues Test (DIT) was used to measure MRA. Although frequently used to measure the MRA of undergraduate students, the DIT has not been used within the marketing domain. The findings indicate that marketing students do not exhibit a lower level of MRA than other business disciplines. Marketing students are no less ethical in their thinking than those pursuing other business careers. The perception of unethical behavior is more likely to be a product of the visible nature of marketing activities to consumers.

Keywords: *Defining Issues Test; marketing students; moral reasoning ability; marketing education; ethics education*

Marketing has frequently been perceived as being the most unethical business function given that it is often associated with unethical practices (Akaah & Riordan, 1989; Cox, Goodman, & Fichlander, 1965; Davidson, 1997; Goolsby & Hunt, 1992; Murphy & Laczniak, 1989). It is also considered the most vulnerable to unethical business activities (Chonko & Hunt, 1985; Chonko, Tanner, & Weeks, 1996), offering “ample opportunity for the display of unethical activities” (Vitell & Grove, 1987, p. 433).

Marketing encompasses a number of visible business activities such as advertising, promotion, selling, product packaging, and pricing, many of which are frequently associated with unethical business practices. For example, an annual ethical and honesty perception survey of Australian occupations has consistently rated advertising and selling occupations (cars and real estate) among the least ethical professions, with advertising typically in the lowest three (Roy Morgan Research, 2005). Similar results are reported within the U.S.

literature (e.g., *The Week* as cited in Nill & Schibrowsky, 2005). This may be due to the prominent visibility of the marketing function. Unlike other business functions such as accounting and human resources management, the general public is the focal point of all marketing activities. Hence, we assume that students wishing to pursue a marketing career would be aware of suspect and deceptive practices associated with the marketing discipline through their previous experiences as young consumers.

However, given the high visibility of marketing and its unethical practices, often in the form of advertising, promotion, deceptive packaging, and so on, it may also be the case that those who are attracted to study marketing may be more amenable to unethical behaviors. That is, marketing may attract students who are willing to behave less ethically. If indeed marketing does attract individuals with a predisposition to unethical behavior, there are considerable implications for marketing educators. In particular, educators may need to provide ethical training, especially as one role of higher education is to develop morality and character within students (Bruess, 2002). On this basis, ethics constitutes an important issue within the field of marketing (Nill & Schibrowsky, 2005; Nocera, Kahn, Rynecki, & Leaf, 2002; Nussbaum, 2002; Roth, 2002).

A review of the marketing literature shows significant support for the proposition that marketing is more attractive

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to unethical people. For instance, Goolsby and Hunt (1992) stated, "Many critics of marketing believe, quite simply, that marketing attracts individuals who have questionable ethics at best or are unscrupulous at worst" (p. 57). The most obvious question to be answered is does marketing attract individuals who are more unethical, or is marketing being maligned due to its visible profile?

The ethics of marketers remains a prominent area of research interest, focusing on general perceptions of the ethics of marketers (Cox et al., 1965; Farmer, 1967, 1977; Ricklefs, 1983), ethical problems within the marketing function (Baumhart, 1961; Brenner & Molander, 1977), and attempts to develop theoretical models aimed at predicting how ethical decisions are made (Ferrell & Gresham, 1985; Ferrell, Gresham, & Fraedrich, 1989; Hunt & Vitell, 1986, 1993; Trevino, 1986). However, currently there is no research that has produced empirical evidence to adequately answer the question as to whether or not this perception that marketers are less ethical in their behaviors can be attributed to marketing attracting individuals who are less ethical in the first instance.

In an attempt to fill this gap in knowledge about the ethical predisposition of marketing students entering marketing courses, this research answers the question: Does marketing attract less ethical students? A quantitative study was conducted to address this question. We commence with a review of the moral reasoning ability (MRA) literature to determine how we may measure the ethical disposition of students. Next, we report the methods used to collect data about the ethical nature of a sample of marketing students. Then, the results of the data analysis are reported prior to discussing those results and presenting implications for marketing education in relation to ethical training.

LITERATURE REVIEW

The Ethical Disposition of Marketing Students

The previous discussion suggesting that marketers are unethical, or at least more unethical than is evident in other business disciplines, has mainly been sourced from commentary from people outside of the marketing profession. To date, limited research has actually been undertaken examining the ethical predisposition of marketing students as they enter the profession. However, previous research supports the contention that marketing may be perceived as attractive to less ethical students. For example, Goolsby and Hunt (1992) referred to a 1981 conference paper by Beisel and Fugate that found that marketing majors scored 11th (out of 12 different professions) on a test measuring factors such as honesty, trustworthiness, and generosity in different vocations.

In addition, a study by Lane (1995) explored the reactions of a sample of Australian business students to a number of marketing-based ethical dilemmas, finding that marketing students were more willing to engage in unethical

courses of action than business students in other disciplines. However, as the scenarios in the study were directly related to marketing activities, the author cautioned as to the significance of these findings, suggesting that the results were more pertinent to the knowledge of marketing students than other business students. He went on to question whether the findings would have been different given dilemmas specifically related to the career choice of each of the respondents. For example, different results may have been found if accounting students responded to accounting dilemmas, which were more within their realm of expertise. Thus, the research and discussion by Lane highlights the need to adopt a framework that will accommodate general comparisons of ethical disposition between different discipline groupings.

Although the academic literature does not offer any additional empirical evidence of the ethics of marketing students being any more questionable than others, there has been additional investigation into the ethics of marketers in general. In one of the earliest empirical studies of business ethics, Baumhart (1961) asked business people what they regarded as the salient problems and unethical behaviors in business and was able to catalog eight major ethical problems. These include (a) price discrimination and unfair pricing; (b) dishonest advertising; (c) unfair competitive practices; (d) cheating customers, unfair credit practices, and overselling; (e) price collusion between competitors; (f) gifts, gratuities, bribes, and "call" girls; (g) dishonesty in making or keeping a contract; and (h) unfairness to employees and prejudice in hiring. Of significance to this research is the observation that five out of the eight problems are directly related to marketing (i.e., price discrimination and unfair pricing; dishonest advertising; unfair competitive practices; cheating customers, unfair credit practices, and overselling; and price collusion between competitors). Respondents also believed that marketing afforded the greatest number of opportunities for unethical behavior and that marketing processes encouraged questionable business practices (Baumhart, 1961).

Some 15 years later, Brenner and Molander (1977) replicated the Baumhart (1961) study. They confirmed the existence of similar undesirable practices, thus disclosing an ongoing concern that the marketing function itself created an environment that promoted unethical behavior. These empirical findings are consistent with the previously cited research by Farmer (1967, 1977), Hensel and Dubinsky (1986), Murphy and Lacznik (1981), and Chonko and Hunt (1985). However, given the importance of this issue, it is curious that no other empirical evidence as to the ethical nature of the marketing profession exists.

Thus, although the marketing business function is often associated with unethical behavior, an accurate portrayal of the ethical disposition of students who are attracted to the marketing discipline is currently unknown. With this information, marketing educators may be better able to critically

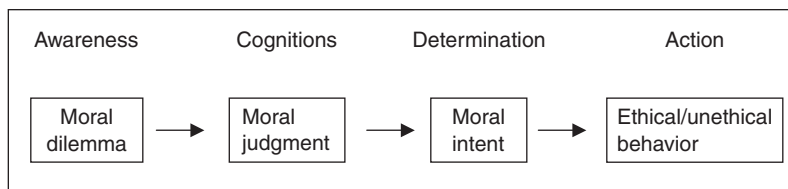


FIGURE 1: A Basic Model of the Link Between Moral Reasoning Ability and Ethical Action
SOURCE: Rest (1986).

assess methods of instruction so as to ensure that students not only receive a marketing education but also develop the skills sets necessary to make ethically responsible decisions within the marketing community.

Measuring Ethical Disposition and Propensity to Make Unethical Decisions

Previous researchers have stated that the measurement of an individual's tendency to be "unethical" is too subjective an activity and as such represents an impossible undertaking (Clarke, Hill, & Stevens, 1996). This may explain in part the lack of knowledge in relation to the ethical disposition of marketing students. However, a number of conceptual models of ethical decision making have been proposed within both the business ethics and marketing ethics fields (e.g., Ferrell et al., 1989; Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Jones, 1991; Rest, 1986; Trevino, 1986; Wotruba, 1990). There is also considerable research within the psychology literature that purports to explain ethical decision making in business contexts (Rest, 1986). Generally these models explain ethical decision-making processes by identifying variables that have significant effects on ethical behavior.

However, to date a majority of these models have presented frameworks for assessing how individuals should act rather than engaging in confirmatory testing of how they do act. The exception is Rest's (1986) theory, which has received extensive support in the psychology literature (e.g., Gautschi & Jones, 1998; Jones, 1991; Rest, 1986). As illustrated in Figure 1, Rest's model consists of four components. These are (a) the recognition of a moral dilemma, (b) making a moral judgment, (c) establishing moral intent, and (d) engaging in moral behavior. Underlying Rest's theory is the proposition that the ability to judge the moral magnitude of a situation influences an individual's perceptions of the ethicality of an act and is hence closely linked to the final decision as to how to act (Robertson, 1993). This link is supported by considerable empirical evidence. For example, Blasi (1980) found an overall positive link between the ability to make a moral judgment and moral actions. However, the greatest evidence was provided by Thoma and Rest (1986), with their meta-analysis of moral reasoning studies that tested the strength of the relationship between different

actions and the level of MRA, finding consistent results that the level of moral reasoning was related to actual behavior.

Through considerable empirical research it has been established and is generally widely accepted (Kohlberg, 1976; Rest, 1979, 1986) that the ability to make a moral judgment and the moral judgment made is dependent on an individual's level of moral development. Moral reasoning ability is the variable that has been used to explain the reasoning processes used by individuals in making a moral judgment as to an appropriate course of action when confronted with an ethical dilemma (Ferrell et al., 1989; Jones, 1991; Rest, 1986; Trevino, 1986; Wotruba, 1990). And certainly the works of Blasi (1980) and Thoma and Rest (1986) were based on studies that had measured moral reasoning ability. As this research also adopts the premise that an individual's moral reasoning ability can be used as an indicator of an individual's likelihood to engage in unethical behavior, the following discussion will examine the nature of this variable.

Moral Reasoning Ability

Moral reasoning ability has been defined as "the set of cognitive skills a person employs to reason about a moral problem" (Elm & Nichols, 1993, p. 818). Moral psychologist Lawrence Kohlberg (1969) introduced the term in reference to the specific variable he created in relation to his theory titled *cognitive moral development* (CMD; Rest & Narvaéz, 1994). The measurement of moral reasoning ability forms the basis of the theory of cognitive moral development and is based on the seminal work of Piaget (Goolsby & Hunt, 1992; Ponemon, 1992, 1993; Rest, 1983), who hypothesized that the skills involved in ethical decision making develop over time (Castleberry, French, & Carlin, 1993) and that moral reasoning ability develops in sequential and distinctive cognitive stages (Fraedrich, Thorne, & Ferrell, 1994; Kohlberg, 1984; McDonald & Pak, 1996; Trevino, 1992).

CMD theory proposes that the level of an individual's moral reasoning ability is closely linked to the eventual action taken and the action is likely to be more ethical as the level of moral reasoning ability increases (Colby & Kohlberg, 1987; Kohlberg, 1976). According to Kohlberg (1976), there are a total of six different stages of CMD, which are evenly

TABLE 1
SIX STAGES OF COGNITIVE MORAL DEVELOPMENT

LEVEL 1—Preconventional level: Focus is on self
Stage 1: Obedience: You do what you are told to avoid punishment.
Stage 2: Instrumental egoism and simple exchange: Let's make a deal or only consider the costs or benefits to self.
LEVEL 2—Conventional level: Focus is relationships
Stage 3: Interpersonal concordance: Be considerate, nice, and kind and you'll make friends.
Stage 4: Law and duty to social order: Everyone in society is obligated to and protected by the law.
LEVEL 3—Postconventional level: Focus is personally held principles
Stage 5: Societal consensus: You are obligated by whatever arrangements are agreed to and by due process and procedure. Focus is on determining law or rule on grounds of equity and equality.
Stage 6: Nonarbitrary social cooperation: Rational or impartial people would view cooperation as moral. Fairness of law or rules is derived from general principles of just and right as determined by rational people.

SOURCE: Adapted from Rest and Narvaéz (1994).

divided into three higher sequential levels of moral development: preconventional, conventional, and postconventional (Colby & Kohlberg, 1987). Details of each of the stages are provided in Table 1.

The important aspect of moral reasoning is the reasons influencing actual decisions. Individuals will generally be found to justify their actions based on their level of moral development. For example, someone reasoning at the preconventional level (Stages 1 and 2) will justify his or her decision on the basis of self-interest, whereas someone able to reason at the postconventional level (Stages 5 and 6) is more likely to consider his or her response through principled reasoning. The contention is that individuals who operate at lower levels of MRA are unaware that they can take different courses of action.

Despite wide acceptance, there has been some criticism of Kohlberg's (1976) theory. For example Gilligan (1977; Gilligan & Attanucci, 1988) alleged a gender bias toward men, and Carpendale (2000) questioned the contention that the nominated six stages are sequential and irreversible. However, such criticisms have been addressed (e.g., Colby, Kohlberg, Gibbs, & Lieberman, 1983; Snarey, 1985; Snell, 1996), and there remains wide acceptance of Kohlberg's theory. In particular, many researchers contend that extensive longitudinal, cross-cultural, and cross-sectional research conducted over four decades supports both the validity of hypothesized stage sequencing and generalizability across diverse populations and cultures (Colby et al., 1983; Goolsby & Hunt, 1992; Ho, Vitell, Barnes, & Desborde, 1997; Rest & Narvaéz, 1994). Furthermore, Rest and colleagues (discussed in the following) have extended this theory through offering a method of measuring

MRA that provides a framework to score the degree to which a person generally reasons at particular levels.

Importantly, previous research suggests that the measurement of moral reasoning ability is a predictor of the likelihood to engage in unethical actions (Kohlberg, 1976; Rest, 1979, 1986). Considerable research has been undertaken using the measurement of moral reasoning ability to determine an individual's propensity to immoral actions. Therefore, the measurement of this variable is highly applicable to this research.

Measuring Moral Reasoning Ability

Although Kohlberg (1969) developed his own instrument to measure moral reasoning ability (called the Moral Judgment Interview), a review of the cognitive moral development literature reveals that an instrument termed the *Defining Issues Test* (DIT) is the most widely accepted (and superior) device for measuring moral reasoning ability (Gibbs & Widaman, 1982; Goolsby & Hunt, 1992; Rest, 1986). Even Kohlberg lent his support to the Defining Issues Test as it provides a broader spectrum and provides greater scoring reliability than the Moral Judgment Interview (Rest, 1979). Other proponents of the DIT provide further justification for the use of the DIT in terms of its ability to overcome issues related to the ability to articulate one's reasoning. For example, Narvaéz and Bock (2002) explained why the self-complete written test is preferred over the interview in stating,

The DIT does not measure the more competent end of the "zone of proximal development" in which verbal articulation of one's perspective is required. To obtain a high score on a measure requiring verbal production such as the [Moral Judgment Interview], one must be able to explain one's reasoning logically and coherently, an ability that is facilitated by training in moral philosophy, but not necessarily by everyday life. The DIT tests the other, less competent, end of the "zone," that which is apparent when assistance (such as words on a page) is available. (p. 298)

Specifically, the DIT presents a number of moral dilemma scenarios to respondents and requests written responses related to the decision made and how that decision was arrived at (further details provided in the following). The DIT instrument has been extensively used to measure the MRA of university students. For example, King and Mayhew (2002) reported discovering more than 500 DIT studies using student samples. However, there is no evidence that any of these studies have measured the moral reasoning ability of marketing students. Despite considerable research that has reported the MRA of university students, previous research has adopted a generalist focus, and none have specifically focused on marketing. Other disciplines such as accounting (Armstrong, 1987; Ponemon, 1993; Ponemon & Glazer, 1990) and medical sciences (e.g., Akabayashi, Slingsby, Kai, Nishimura, & Yamagishi, 2004; Fleisher, Kristjanson,

Bourgeois-Law, & Magwood, 2003; Patenaude, Niyonsenga, & Fafard, 2003) have received some specific attention, demonstrating the usefulness of exploring the MRA of particular groups of professions. However, despite these instances, much of the remaining research has adopted a generalist focus using students as a convenience sample and in particular as a proxy for bright young people (King & Mayhew, 2002). Hence, a particular focus on marketing students can advance broad MRA and DIT knowledge as well as aid in understanding the ethical disposition of marketing students.

Although DIT measures have not examined the MRA of marketing students, the instrument has been used to measure the moral reasoning ability of marketing professionals. For example, Goolsby and Hunt (1992) surveyed American Marketing Association (AMA) members to assess the extent of difference between the level of MRA of professional marketing practitioners and other professional and societal groups. In comparing the results of their research to that of several other populations studied by other researchers and reported by Rest (1986), they found that professional marketers “compared favorably” with other groups of similar age and education (Goolsby & Hunt, 1992). Given these findings, Goolsby and Hunt concluded that “low cognitive moral development is probably not an explanatory factor” (p. 62) as to the extent of unethical activity in the marketing profession.

In a subsequent study of AMA members, Ho et al. (1997) confirmed Goolsby and Hunt’s (1992) findings and also concluded that the moral reasoning level of professional marketers was comparable to other populations of similar demographic backgrounds. Significantly however, Ho et al. (1997) cautioned that the use of AMA samples did not cover the domain of all marketing practitioners, and there was a potential for bias in that these samples were likely to underrepresent lower-level marketers. Therefore, it remains possible that a difference may have been found between lower-level marketers and new entrants to the marketing discipline in the form of undergraduate marketing students.

Castleberry et al. (1993) investigated whether the continuing criticism of unethical decision making was related to the level of moral reasoning of marketing researchers. Hypothesizing that “there is no a priori reason to assume that marketing researchers in general, and advertising agency researchers in particular, are less morally developed than society as a whole” (p. 41), Castleberry et al. determined that marketing researchers did not reason about moral problems at a lower level of moral development than other members of society.

Despite these seemingly positive results, none of the aforementioned studies have provided comparative evidence of the level of moral reasoning of marketers to the other business functions. Furthermore, prior empirical research

has not reported on the notion as to whether or not in the first instance marketing might be more attractive to those who have a lower level of moral reasoning ability. Hence we tested the following hypothesis with the aim of increasing our knowledge about the ethical disposition of future marketing practitioners:

Hypothesis: There is no significant difference between the average moral reasoning ability of students of marketing and other business disciplines.

METHOD

To examine the moral reasoning ability of individuals attracted to marketing as a career, the population of interest for the study was deemed to be undergraduate business degree students. As previously stated, the DIT has been administered to student samples (e.g., Abdolmohammadi, Gabhart, & Reeves, 1997; Mason & Mudrack, 1997; Robin & Babin, 1997). A convenience sample of students from a single Australian university was chosen. Questionnaires were administered to a large first-year class in the early weeks of the first semester. The course was an introductory core business course that is compulsory for all business students at the university. The purpose was to capture a broad spectrum of students pursuing a variety of different majors and to test the level of MRA at the entry level to an academic career.

The Defining Issues Test consists of a series of short standardized vignettes relating to general social dilemmas, for example:

A lady was dying of cancer which could not be cured, and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of painkiller like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn’t stand the pain and she was going to die in a few months anyway. What should the doctor do?

Although the full DIT contains six vignettes, a three-vignette version of the DIT was used for this research. The three-vignette version is popular among researchers, particularly where there is a concern regarding the likely response rates (e.g., Bay & Greenberg, 2001; Earley & Kelly, 2004; Eynon, Hill, Stevens, & Clarke, 1996; Goolsby & Hunt, 1992; Ho et al., 1997) and has a reported high degree of correlation with the longer version of the DIT (usually between .91 and .94) (Rest, 1986). The choice of stories was based on their applicability to the Australian environment, necessitating minimal cultural adaptation of moral dilemma topics. Despite the fact that the DIT is well used in moral reasoning assessment, we conducted pilot testing so as to measure the “Australianization” of chosen scenarios. This included spelling

changes, removal of gender specification of scenario characters (e.g., *he* changed to *the doctor*), and Australianizing the location and character name in one scenario.

There are three processes involved in completing the DIT. The respondents read each vignette separately and are asked to choose one of three courses of action that should be taken in relation to the dilemma, that is, what should and should not be done and an option for answering "can't decide." These respondents rate the importance (on a 5-point Likert scale from *great importance* to *no importance*) of each of the 12 issues in determining their preferred course of action. Each issue is a prototypical statement representing one of the six stages of cognitive moral development, as defined by Kohlberg (1969). The following are examples of statements and the stages of moral reasoning they represent: "whether the doctor should make it appear like an accident" (Stage 2), "whether the woman's family is in favor of giving her the overdose or not" (Stage 3), "can society afford to let everybody end their lives when they want to" (Stage 4), "can society allow suicides or mercy killing and still protect the lives of individuals who want to live" (Stage 5), "is helping to end another's life ever a responsible act of cooperation" (Stage 6). Respondents are expected to endorse the statements according to their developed level of reasoning. After rating the issues, respondents are then asked to select and rank the four statements they believe are most important in making their determinations about their chosen course of action.

From this data an index called the *P* score (standing for principled morality) is calculated. Rest (1986) described this score as "the relative importance a subject gives to principled moral considerations in making a decision about moral dilemmas" (p. 2). When a respondent includes a statement reflecting principled reasoning in the four most important statements, a weighted score (on the basis of importance rank) is assigned. The *P* score represents the percentage of total possible scores (0 to 95) assigned to Stages 5 and 6 statements (according to Kohlberg's cognitive moral development theory), with higher scores indicating a higher level of moral reasoning ability equating with the ability to reason at the higher stages of cognitive moral development. To ensure accuracy, we followed Rest's (1993) guidelines for survey administration and scoring calculations during the data collection and analysis stages.

Reliability checks are also included as part of the test, and this research strictly adhered to Rest's rules for consistency (Rest, 1986, 1993). The first test involves the calculation of an *M* score, which stands for meaningless. The *M* index is an internal reliability check for the researcher to detect nonthoughtful respondents. Rest (1986) explained how *M* items were written to sound lofty and pretentious but had no assigned meaning. The *M* items are not representative of any stage of thinking, and individuals who score too highly on these items are considered to be unreliable respondents and as such are discarded from the data set.

A second inbuilt check on subject reliability is called the consistency check. Each respondent's ratings are compared with their rankings. It is expected that the rankings should correspond to the ratings. Logically, an item ranked as most important in Part C of the test should not have any other items rated above it in Part B. Rest (1986) considered those respondents who are inconsistent in following this logic cannot be considered reliable as the inconsistency is most likely due to such factors as careless responding, random checking, or misunderstanding instructions. Rest listed a series of rules and cut-off points for the inconsistency checks. Although these rules and cutoff points have been empirically derived (Rest, 1979), Rest suggested that researchers may vary these according to individual needs. He also claims a typical response loss of 5% to 15% due to the adoption of respondent reliability checks (Rest, 1986).

A two-step analysis process was necessary. First, possible moderating influences of gender and age were assessed and either discounted or controlled. Examination of previous moral reasoning ability research does show some evidence that both gender and age have moderating effects on the level of moral reasoning ability. Research related to gender remains inconclusive, with a number of previous studies concluding that gender has an impact on moral reasoning ability (e.g., Clarke et al., 1996; Eynon, Hill, & Stevens, 1997; Goolsby & Hunt, 1992; Mason & Mudrack, 1997). In comparison, other research reports that gender does not impact on MRA (e.g., Bruess, 2002; Ford & Richardson, 1994; Paradice & Dejoji, 1991; Ponemon, 1992; Rest, 1986). Similarly, age has sometimes been found to influence MRA (e.g., Colby & Kohlberg, 1987; Dawson, 1997; Deshpande, 1997; Ponemon, 1992; Rest, 1986; Ruegger & King, 1992), whereas other researchers report no age-related influences on MRA (Goolsby & Hunt, 1992; Ho et al., 1997; Mason & Mudrack, 1997; Paradice & Dejoji, 1991; Ponemon, 1993). Hence, once *P* scores were calculated, both gender and age were assessed for their moderating influences using a *t* test and ANOVA, respectively. The intention was to ensure similar distributions of response between the sample groupings should significant differences be found. Finally, an independent *t* test was conducted to test for the existence of a significant difference between the two sample groups, that is, marketing and business students.

RESULTS

Initially, 369 responses were obtained. Elimination of responses due to nontargeted disciplines (37), incompleteness (31), and Rest's inconsistency checks (69) resulted in a final usable sample size of 232. Nontargeted disciplines included students of other university programs such as sport and health who would have been enrolled in the course as an elective. The reasonably high level of loss due to incompleteness can be attributed to the DIT requirement for every question of the

TABLE 2
TESTS OF SIGNIFICANT DIFFERENCE FOR DEMOGRAPHIC VARIABLES^a

Group	N	M	SD	t Value	F Value	DF	Significance
Gender							
Male	112	36.62	13.98				
Female	120	41.56	16.78	-2.419		226	.016
Age							
< 20	119	34.0196	14.41986				
20 to 24	75	34.2105	14.59533				
25 to 29	21	38.2796	15.24785				
30 to 34	9	41.1111	15.97886				
35 to 39	3	43.2593	13.93507				
40 to 44	2	42.2917	11.39972				
45 to 49	1	42.5333	21.02203				
50 to 54	1	34.7619	7.41798				
55+	1	38.8889	18.35857		1.772	8,223	.084

a. Independent samples *t* tests for gender and enrollment; ANOVA results for age.

test to be completed. There is also no provision for missing values treatment with the DIT. Although the further loss of 18.7% of responses due to the DIT inconsistency checks is outside the expected bounds suggested by Rest (1993), it is less than many previously reported losses such as 26% (Paradice & Dejoji, 1991) and 31% (Eynon et al., 1997) and the same as that reported by Clarke et al. (1996).

As would be expected with a first-year university course, the majority of students were younger than the age of 25 (83.6%). Gender was balanced, with 48.3% of respondents being men and 51.7% women. The majority of respondents were studying full-time (77.1%), 28.9% of the respondents indicated that they were marketing students, with the remaining 71.1% studying a range of other business courses. Examination of cross-tabulations indicated consistency with demographic variables between the marketing and other business disciplines subsamples, demonstrating homogeneity in the two sample groups.

Using SPSS and following the DIT guide book (Rest, 1993) instructions carefully, *P* scores were first calculated for each individual response. The overall mean *P* score for the sample was 38.99 with a standard deviation of 15.47 and a range of 6.67 to 80.0. The distribution of *P* scores was found to be normal, based on a Q-Q plot of normality. Given the findings of the literature review as to the limited usage of the Defining Issues Test in Australia, it is difficult to determine whether the results of this survey are consistent with what would be expected for a similar sample group. In addition, the literature base is mostly from the United States. However, in making a comparison with previously reported *P* scores, it was thought that some observation of how *P* scores compare would assist in validating the results. In general, it was found that previous DIT research has reported *P* scores ranging from 35.92 to 43.1. Hence, the results falling within this range were deemed as valid for the research. The scores were also found to fall midway between two previously reported surveys using

Australian samples, being higher than a mean score of 34.2 for a recently reported survey of Australian auditors (Tsui & Windsor, 2001) but lower than those reported by Clarke (cited in Rest, 1986) in a survey of Australian teachers.

Next we assessed for the possible moderating influences of gender and age. A significant difference was found between men and women. On average, women (41.56) were found to exhibit a higher level of MRA than men (36.62), and this difference was significant, $t(226) = -2.42, p < .05$. However, given a similar distribution for gender between the two subsamples, this finding appeared unlikely to bias results. Results did reveal a variation in the level of MRA according to age, with the range of means for different age categories being from 34.02 (< 20) to 42.53 (45 to 49). However, this variation was found not to be significant, $F(8, 223) = 1.772, p > .05$. Hence, no adjustments were made to the sample groupings for either gender or age. Results are reported in Table 2.

Next, the mean *P* scores for the marketing and other business disciplines were calculated. The results are reported in Table 3. Although the results for the marketing subsample (37.96) were lower than for the other group (39.75), little difference was observed between the *P* scores, and this was confirmed with a *t* test finding no significant difference between these means, $t(227) = -0.80, p = .42$.

DISCUSSION AND CONCLUSIONS

The objective of this study was to empirically investigate the contention that marketing as a discipline is more attractive to those more willing to engage in unethical behaviors. We demonstrated that lower levels of moral reasoning ability would be a good indicator of predisposition to unethical behavior. Hence, the most popular and psychometrically validated measure of moral reasoning ability—the Defining Issues Test—was used to measure and compare the moral

TABLE 3
MEAN P (PRINCIPLED MORALITY) SCORES

	M	SD	Range
Overall	38.99	15.47	6.67 to 80.00
Career			
Marketing	37.96	16.60	13.33 to 80.00
Other business	39.75	14.86	6.67 to 73.33

reasoning ability of marketing students and other business students beginning their undergraduate university studies. The results of the study suggest that there is no variation between the reasoning abilities of marketing and other business students. Although marketing students have not been previously examined and the measurement of moral reasoning ability has had limited application in the Australian environment, the findings of this study are consistent with previous DIT research. For example, in the workplace, marketing practitioners have not been found to exhibit any different level of MRA than other professionals or society as a whole (Castleberry et al., 1993; Goolsby & Hunt, 1992; Ho et al., 1997).

Although this research is unique in examining the ethical reasoning of marketing students, the calculated mean results fall within the range of similar DIT research conducted overseas. This lends validity to the results reported here as well as further validity of the DIT instrument, which has been most frequently used with U.S. samples. Given that the results fit within previous Australian samples results (e.g., Clarke as cited in Rest, 1986; Tsui & Windsor, 2001), these findings lend further support to the continued use of the DIT instrument in moral reasoning research.

The results of this research suggest that marketing does not appear to be more attractive to individuals exhibiting more unethical dispositions. Hence, negative perceptions of marketing do not appear to accord with reality when the ethical disposition of those keen to pursue a marketing career is measured. We have provided support to the argument that marketing students do not commence from a premise of thinking any less morally than entrants into other business professions.

However, this study has some associated limitations in both sampling and measurement. The results are based on a single university population of students and also to the Australian context. This currently limits generalizability of the findings until replication of the research with broader sampling can confirm the results. However, in using a standardized and frequently used MRA test, we have maximized the validity of our results. In addition, we have also assumed that the validity of the DIT is a reasonable measure of MRA given that it has been extensively used in multidisciplinary research and has been psychometrically validated. Finally, although providing suitable justification, we have also assumed that the measure of moral reasoning ability is an appropriate indicator of the predisposition of marketing students to behave unethically. This is

despite the fact that the DIT has not been used exclusively with a marketing sample.

Although we have demonstrated that considerable evidence supporting the link between MRA and eventual action exists, it is acknowledged that other situational factors may influence the eventual decision. For example, Trevino (1986) proposed that industry, organizational and job climate, and individual moderators such as ego strength and locus of control may also influence the eventual action taken. Hunt and Vitell (1986, 1993) also recognized a number of other moderating variables to eventual action. However, such propositions remain untested, providing an opportunity to examine the moderating influence of such variables on the MRA-behavior link.

The results provide a number of additional implications for the marketing discipline and specifically, marketing education. In particular, the results suggest that there is a need to engage in strategies that will assist in changing negative perceptions associated with the marketing function in organizations. Certainly to a degree the public has been more recently alerted to the possibility of other functions being unethical and the consequences resulting from such unethical behaviors through "accounting irregularities." However, marketers need to "sell" themselves as ethical decision makers in business, and marketing academics need to instruct marketing students as to the value of ethical reasoning and maintaining high standards of conduct within their tertiary studies and working lives. This provides some implications for the benefit of ethics education.

This research used a standardized test of moral reasoning ability to ensure validity and reliability of findings. Lane (1995) previously highlighted the possible moderating influence of occupation specific scenarios. Hence, we should also test if students exhibit different levels of MRA with occupation-specific scenarios. For the current study however, it was important to present a level playing field as respondents were sourced from a number of different disciplines. Future research should consider using a modified version of the DIT incorporating discipline-specific ethical scenarios and administer these just prior to finishing studies so as to assess the level of moral reasoning ability as students begin to embark on their professional careers.

Further research is also recommended in relation to confirming the findings of this research in terms of the ethical disposition of our entrants to the marketing discipline. In addition, it would be interesting to measure any change in the ethical disposition of our students over the course of their university studies. Using the DIT specifically as a form of exit assessment of students from professions has already been previously recommended (e.g., Akabayashi et al., 2004). The impact of intervention studies, such as ethical education, can also be assessed using the DIT, which may resolve some of the current debate about whether or not to formalize ethics education.

This research was also limited to the comparison of marketing to other business disciplines, setting the research within the realm of the business environment. Even though we can conclude that there is no difference between the MRA of marketing and other business students, we cannot be sure that all business students are not ethically challenged. Future research should compare the MRA of marketing students to other students of professions within the sciences or medical disciplines.

Finally, we may conclude that students are not being attracted to the marketing discipline because they perceive the opportunity to be able to engage in unethical business practices. However, it is the responsibility of educators to ensure that they do not leave university with this notion either. Hence, we look forward to the next stage of the research incorporating the measurement of the MRA of our graduating marketing students and comparing results with those from other disciplines.

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