ETHICAL REASONING ABILITIES: ACCOUNTANCY PRACTITIONERS IN IRELAND

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Introduction

The academic community and the media have recently devoted a great deal of attention to the topic of ethics in the business professions. As Brooks (1995) notes, "professional ethics are a prime differential between professionals and people who are just experts in their chosen field of endeavour" (p.XI). Accountants like other professionals need various skills to be successful, among them the ability to make sound ethical judgements. For example, the International Federation of Accountants states that accountants "should understand the nature of professional ethics ... and be able to make value-based judgements and address issues with integrity" (1994, p.5). The issue of ethical orientation of accountants is increasingly being scrutinised. Indeed, recent scandals involving accountants in Ireland (e.g., the beef industry debacle) may have shaken public confidence in the integrity of the profession.

This study examines ethical reasoning abilities for Irish Chartered Accountants (CAs). To our knowledge, this is the first study of its type in Ireland. In addition to filling a void in prior research on ethical reasoning abilities, we consider accountancy practitioners in Ireland for two reasons. First, we want to find out if accountancy practitioners in Ireland have ethical reasoning abilities higher or lower than expected for their age and education. This finding may guide future research in ethical reasoning abilities and in defining effective ethical interventions.

Second, we want to compare the ethical reasoning abilities of accountancy practitioners in Ireland categorised by Big 6 firms, sole- and small-firm practitioners, and those practicing in industry. This comparison is important because of the potential impact on ethical reasoning by the work environment. For example, the work environment for Big 6 firms is highly structured and includes a great deal of institutional support. In contrast, small-firm accountancy practitioners may be confronted with a variety of ethical issues yet do not have the benefit of peer reviews or in-house seminars from which to learn (as might be found in Big 6 firms). In addition, those accountancy practitioners in industry face different kinds of situations of ethical conflict, such as manipulating financial results or falsification of records. The following section discusses prior research in moral reasoning theory and the development of the Defining Issues Test (DIT). This is followed by a description of the research methodology and research

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hypotheses. The next section details the findings and is followed by a discussion of the results and the implications.

Measures of Moral Reasoning Ability and Prior Research

Much of the research in moral development theory has centred on the work of Lawrence Kohlberg (1969, 1976, 1984) who suggests that individuals progress through three levels of moral development, with two stages in each level. At the first level of moral reasoning, the pre-conventional level, individuals possess a self-interest viewpoint. Purposeful behaviour largely stems from the individual's desire to avoid punishment. Level two represents the conventional level of moral reasoning. People at this level desire to be considered a good person and are concerned about others and will act for the welfare of the group with which they identify. Lastly, individuals at the third level of moral development, the post-conventional level, act in accordance with the social good but believe that there exist fundamental values and rights of the individuals (e.g., life, liberty and the pursuit of happiness) regardless of society's interest.

Following Kohlberg, Rest (1979) developed the Defining Issues Test (DIT) which has been used in accounting and other areas to measure ethical reasoning ability. In brief, the DIT consists of several questions that ask subjects to make decisions about social dilemmas. For example, in one scenario, subjects consider whether a relatively poor individual ought to steal medicine for a dying spouse. Twelve possible considerations are listed and subjects are asked to rank their importance in resolving the dilemma. From these rankings, a Principled score (P score) is calculated. Ranking considerations that focus on narrow self-interests or the avoidance of punishment as most important indicates a low level of moral reasoning ability and results in a low P score. High P scores result from ranking considerations which show concern for others or the belief in basic fundamental and self-determined values.

The P scores for the DIT can range from zero to 95. A score of zero indicates that all answers were considerations at the lower four stages (levels one and two); a score of 95 indicates all responses were at stage five and six considerations (level three). Rest's DIT has been validated over a number of years on over 12,000 subjects. A number of studies have used the Defining Issues Test to measure moral reasoning ability and its relationship with nationality/culture, age, gender, social belief and frequency of ethical decision making. These are discussed, in turn, below.

Nationality/culture and MRA

Prior accounting research using the DIT P score as a measure of moral reasoning ability indicates that U.S. accountants, in general, have lower MRA than would be expected, given age, education and experience (Ponemon 1988, 1992; Ponemon and Gabhart 1993). Few studies focusing on accountants and MRAs, however, have been conducted outside the United States. Ponemon and Gabhart (1993) compare Canadian and U.S.

accountants from national public accounting firms. They find that Canadian CAs have statistically significant higher MRAs (P score mean = 44.2) than U.S. CPAs (P score mean = 40.0). Etherington and Schulting's (1995) examination of Canadian Certified Management Accountants (CMAs) finds that they also attain scores expected for college graduates (P score mean = 43.5) while a recent survey of U.S. CMAs (Etherington and Hill 1996) reports lower levels of MRA (P score mean = 39.3).

Age and MRA

Rest (1986) reports that age is a significant explanatory variable for MRA; as individuals age, their moral reasoning abilities generally increase. Yet, accounting researchers report that more experienced accountants (e.g., partners) in U.S. Big 6 firms (who are presumably older) have lower MRA than the more inexperienced (presumably younger) staff accountants (Ponemon 1988, 1992; Ponemon and Gabhart 1990; Shaub 1994). In contrast, studies of Canadian Big 6 CAs and Canadian CMAs report that lower MRA is not found for upper level management (Ponemon and Gabhart 1993; Etherington and Schulting 1995).

Gender and MRA

Prior research reports inconsistent effects of gender on moral reasoning ability. Studies in areas other than accounting which examine gender have found no significant difference in moral reasoning levels. In a meta-analysis of 56 DIT studies examining gender differences, Rest (1986) reports that while female DIT P scores are consistently greater than male P scores, sex differences contributed, on average, less than one percent of the variance in P scores across studies.

Some studies in accounting have reported that, in the U.S., female accounting students have significantly higher moral reasoning abilities than male accounting students (St. Pierre *et al* 1990; Shaub 1994) and that practicing female accountants have significantly higher moral reasoning abilities than practicing male accountants in Canada (Etherington and Schulting 1995).

Social Belief and MRA

Prior research indicates that P scores are correlated with political, social and religious attitudes or beliefs. In general, people who hold more "liberal" social beliefs have higher moral reasoning levels than those who hold more "conservative" social beliefs. Perhaps the public accounting profession in the U.S. attracts, as Ponemon and Glazer (1990) suggest, more conservative individuals. In addition, Ponemon and Gabhart (1993) and Lampe and Finn (1992) suggest that the accountancy profession may attract individuals with a strong rule-orientation. Rule-orientation and conservatism may also be related. This may explain, in part, the relatively low P scores of American accountants and accounting students reported in some studies.

Frequency of Ethical Decision-Making and MRA

Rest (1979) argues that MRA increases with general social development. This means that a host of life experiences (e.g., working in a stimulating environment, becoming involved in one's community, taking interest in large societal issues, and so on) develop MRA. Some specific interventions do affect MRA. In particular, moral education programmes that emphasise discussion of ethical dilemmas do have a definite, albeit modest, positive impact on MRA (Rest 1986). Gaa and Ponemon (1993) also observe that resolution of ethical conflicts is not accomplished by determining the relevant technical rule, but, by acquiring and exercising professional, ethical judgement.

Research Methodology

Sample and Survey Instrument

This study uses as a research instrument the psychometric measure of moral reasoning ability known as the Defining Issues Test. The main purpose of the research is to measure and compare the MRAs of Irish Chartered Accountants to the MRAs reported in prior research of accountancy practitioners in the U.S. We administered in January, 1995 the three scenario version of the DIT together with a small survey to a random sample of 2,118 Irish Chartered Accountants (CAs) in Big 6 firms, sole- and small-firm practices, and industry. We slightly adapted the wording of some vignettes in order to employ commonly used terms. Rest (1986) reports consistent and reliable DIT results when using a DIT instrument that is only slightly different than the original DIT instrument. Rest (1990) also reports that scores obtained from the three story version of the DIT closely correlate (96 percent) with scores obtained from the longer version. Table 1 provides data about the sample. The sample size represents approximately 40 percent of Chartered Accountants in the Republic of Ireland. We received 573 responses overall. Due to the nature of the ethics test and additional survey questions and to ensure complete anonymity, we did not code or identify the respondents. This, however, precluded sending a second request for participation. Given that completion of the survey instrument takes between 30–40 minutes, that January is among the busiest months for many accountants, and that only one request for participation was made, we were satisfied with the response rate of 27 percent.

Scoring of the DIT was performed by the Centre for the Study of Ethical Development at the University of Minnesota. For analysis purposes, we eliminated the inconsistent and meaningless scores leaving 464 respondents in the analysis giving an effective 22 per cent response rate. As shown in Table 1, approximately 58 percent of the included respondents work in industry, 18 percent work in Big 6 accountancy firms, and 24 percent work in small accountancy firms.

Table 1: Sample Information

	Mailed	*Received*	*Incomplete, inconsistent or meaningless scores*	*Responses with valid "P" scores*
Sole Proprietor and Small-Firm Accountancy Practitioners	669	151	41	110 (24%)
Big 6 Practitioners	449	105	19	86 (18%)
Accountants in Industry	1,000	312	44	268 (58%)
Employment not indicated	–	5	5	–
Total	2,118	573	109	464 (100%)

Research Hypotheses

This study examines, inter alia, the MRA of Irish and American accountants. International accounting firms practice throughout the world yet offer essentially the same services. Although, it is reasonable to assume that Irish and American accountants possess similar baskets of technical skill, we are less certain that they possess similar moral expertise, especially in light of prior conflicting research. An international comparison is important to the field of accounting, as the general public perceives accountants and accounting advice as generic worldwide. In this study of Irish accountancy practitioners, we expected to find MRA similar to what is expected for age and experience (as found for Canadian accountants) and higher than the average MRA found for U.S. accountants. Specifically, the first hypothesis is:

H1: The moral reasoning ability of Irish Chartered Accountants is higher than the moral reasoning ability of their American counterparts.

Since accountants are engaged in different work situations, we also examine the impact of work experience on MRA. Accountants who work in Big 6 firms have a wealth of decision-aid resources available to them. In particular, an accountant in a large public accountancy firm can turn to his or her professional colleagues for guidance in making ethical decisions, participate in in-house training, and rely on advice from departments

which specialise in resolving ethical issues. Small-firm practitioners, in contrast to Big 6 CAs, work alone or with only a few colleagues and often must grapple with ethical decisions on their own.

We also calculate and compare the MRA of accountancy practitioners in industry to the MRA for Big 6 and small firm accountancy practitioners. While the work environment for those in industry may be less vulnerable to external pressures and ethical dilemmas involving external parties, management accountants may be influenced by internal pressures that lead to ethical conflicts, e.g., to manipulate financial results and/or falsify records. Since the work environments and work experience for these three groups of accountancy practitioners differ, we expect that the MRA of each group may also be different. Specifically, the second hypothesis is:

H2: The moral reasoning abilities of Irish Chartered Accountants working in Big 6 firms, small firms, and industry will differ.

The second purpose of this study is to determine the effect of several variables on P scores. First, we investigate the impact of age on moral reasoning levels where prior research reports conflicting results. Most studies using the DIT report that older individuals have, all else being equal, higher MRA than younger people. However, studies in accounting (Ponemon and Gabhart 1993; Etherington and Schulting 1995) find that MRA decreases with experience for U.S. CPAs and CMAs. The third hypothesis is as follows:

H3: As age increases, moral reasoning levels for Irish CAs also increase.

The second explanatory variable we consider is gender. We examine whether males and females have similar levels of moral reasoning ability. As noted above, gender does not seem to impact MRA for most populations. Yet, some accounting research has found that female accountancy practitioners and students have higher MRA than their male counterparts. We wish to determine if this is also true in Ireland. Our fourth hypothesis is as follows:

H4: The moral reasoning levels of female accountancy practitioners are higher than those of male accountants.

We also investigate the impact of social belief on MRA. Prior research finds a relationship between social belief and moral reasoning ability and that, in general, individuals with "liberal" viewpoints have higher MRA than "conservatives". It is plausible to argue that the accountancy profession attracts conservative individuals and that this may explain the relatively (compared to other professions) low levels of MRA.

We examine whether differences in moral reasoning ability for Irish Chartered Accountants occur with liberal or conservative viewpoints. The hypothesis to be tested is as follows:

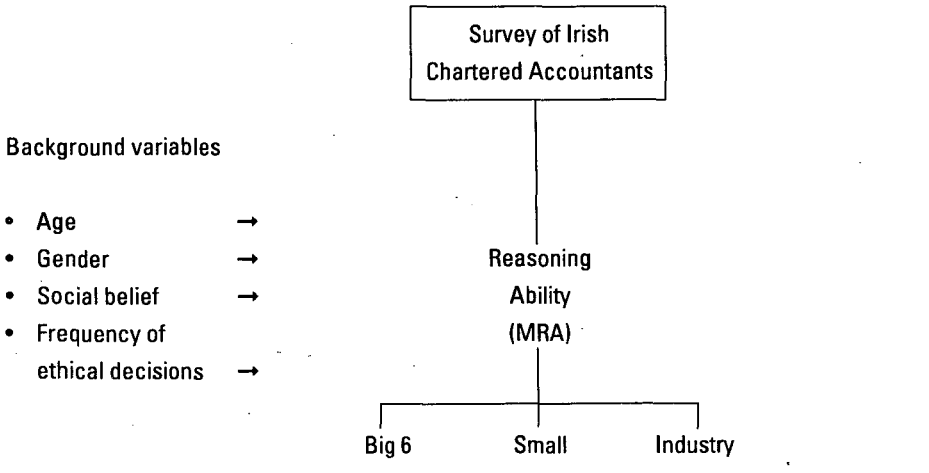
H5: The moral reasoning levels of CAs who rate themselves as liberal are higher than those CAs who rate themselves as conservative.

Finally, we seek to determine if a relationship exists between how frequently one makes ethical decisions and one's ability to make those decisions. We argue that given the complex and changing nature of the work and accounting/auditing environment, accountants are likely confronted with a myriad of ethical decisions to be resolved. We hypothesise that the more often one makes ethical decisions, the higher one's MRA becomes. To assess this variable, we asked the respondents how often (on a five point scale ranging from never through often) they made ethical decisions. We then compare P scores to the response of this question. The related hypothesis is as follows:

H6: CAs who report resolving ethical decisions frequently have higher moral reasoning levels than CAs who do not report resolving ethical decisions frequently.

In brief, this study examines the MRA of Irish Big 6 practitioners, small-firm practitioners and accountants working in industry and compares the MRA to their American counterparts. We also investigate the impact of four variables on MRA, namely, age, gender, social belief (liberalism/conservatism) and frequency of ethical decision-making. A diagram of the overall research design is contained in Figure 1 below.

Figure 1: Research Design



Results

The first objective of this study is to measure the MRA of Irish Chartered Accountants and to compare this with the MRA reported in prior research of accountants in the U.S. Table 2 reports that the overall P score for the Irish sample is 36.1 which is slightly (but not significantly) lower than that reported, on average, for U.S. Big 6 firm CPAs. However, the Irish sample mean is significantly lower than Canadian Big 6 practitioners.

Table 2: Descriptive Statistics & DIT P Score

	Mean P Scores	*(Std. Dev.)*	*n=*
OVERALL IRISH SAMPLE	36.1	(15.9)	464
REPORTED IN PRIOR ACCOUNTANCY RESEARCH			
U.S. Big 6 CPAs			
Ponemon & Gabhart (1993)	40.0	(10.1)	133
Armstrong (1987)	38.5	(15.1)	119
Ponemon (1992)	38.1	(8.1)	180
Average of 3 above studies	38.8	(10.6)	432
Canadian Big 6 CAs [1]	44.2	(11.3)	102

[1] From Ponemon and Gabhart (1993)

Table 3: Mean P Scores

	Mean P Scores	*(Std. Dev.)*	*n=*	*Means t-test*
BIG 6 PRACTIONERS				
Irish	36.8	(17.8)	86	Not significant
U.S.[1]	38.8	(10.6)	432	
SMALL FIRM PRACTITIONERS				
Irish	34.8	915.9)	110	Not significant
U.S.[2]	36.6	(15.3)	131	
INDUSTRY PRACTITIONERS				
Irish	36.5	(15.30	268	0.02
U.S.[3] *(CMAs)*	39.3	(16.5)	468	

[1] Average of 3 U.S. studies noted above in Table 3A [2] From Hill, Stevens and Clarke (1995)
[3] From Etherington and Hill (1996)

Table 4: Mean P Scores (Standard Deviation)

Age	**Big 6 Practitioners**	**Small Firm Practitioners**	**Industry Practitioners**
Age groupings	***		
Ages 23–40	40.4 (17.1) n=61 (71%)	37.2 (16.8) n=49 (45%)	37.2 (15.2) n=201(75%)
Ages 41–50 **	28.9 (16.9) n=15 (17%)	34.4 (14.5) n=44 (40%)	35.0 (16.1) n= 47 (18%)
Ages 51–74	26.5 (16.9) n=10 (12%)	29.2 (16.1) n=17 (15%)	32.7 (14.3) n= 20 (7%)
	n=86 (100%)	n=110 (100%)	n=268 (100%)
Gender	**Big 6 Practitioners**	**Small Firm Practitioners**	**Industry Practitioners**
	***		
Men	34.7 (17.1) n=75 (87%)	34.5 (15.9) n=107 (97%)	36.1 (15.5) n=237 (88%)
Women	52.7 (14.0) n=11 (13%)	47.8 (6.9) n= 3 (3%)	39.1 (14.2) n= 31 (12%)
	n=86 (100%)	n=110 (100%)	n=268 (100%)
Social Belief	**Big 6 Practitioners**	**Small Firm Practitioners**	**Industry Practitioners**
	**	***	**
Liberal	38.8 (14.9) n=19 (22%)	39.7 (14.4) n=35 (33%)	39.4 (15.8) n=103 (39%)
Moderate	43.9 (17.6) n=19 (22%)	36.7 (16.4) n=29 (27%)	35.5 (14.8) n= 78 (29%)
Conservative	33.0 (18.4) n=47 (56%)	29.2 (15.7) n=43 (41%)	33.9 (14.9) n= 85 (32%)
	n=85 (100%)	n=107 (100%)	n=266 (100%)
Frequency of Involvement in Ethical Dilemmas	**Big 6 Practitioners**	**Small Firm Practitioners**	**Industry Practitioners**
		***	
Never or Seldom	39.4 (16.7) n=38 (44%)	32.6 (14.8) n=46 (42%)	35.8 (14.6) n=168 (63%)
		**	
Sometimes	34.3 (18.1) n=39 (45%)	33.3 (15.7) n=51 (46%)	37.3 (15.3) n= 78 (29%)
Frequently Often	36.3 (20.8) n= 9 (11%)	48.8 (14.3) n=13 (12%)	38.6 (20.0) n= 22 (8%)
	n=86 (100%)	n=110 (100%)	n=268 (100%)

** $p < 0.05$

*** $p < 0.01$

We also compare statistically the Irish small-firm practitioners to the U.S. small-firm practitioners, the Big 6 Irish CAs to the Big 6 U.S. CPAs, and the Irish accountants working in industry to the U.S. CMA's. The results contained in Table 3 do not support hypothesis H1: the MRA for Irish accountants is not higher than the MRA for their American counterparts. In fact, the only statistically significant difference is found between the Irish accountants working in industry and American CMAs, where the Irish practitioners score lower. However, it should be noted that the examination and training process of Irish CAs and U.S. management accountants is different which could be an important contributory factor.

Because of differences in work environment, we also hypothesised (H2) that the MRA of the three groups of accountants may be different. While we find no statistically significant difference among the groups, we note that the lowest overall P score is registered by small-firm practitioners which could well indicate that the pressures faced by small-firm practitioners erode the capacity for ethical decision making. It is also interesting to note that the highest standard deviation is registered by Irish Big 6 practitioners suggesting that this group contains some with the highest (and lowest) levels of moral reasoning ability of all respondents.

The finding of lower, but not statistically significant, moral reasoning abilities for Irish accountants, relative to their American counterparts, suggests that we investigate variables that may explain and impact moral reasoning ability. Table 4 reports P score means for four independent variables (age, gender, social belief and frequency of involvement in ethical dilemmas) by type of employment.

Hypothesis H3 investigates the effect of age on moral reasoning ability. Specifically, we investigate whether, as age increases, moral reasoning levels for Irish Chartered Accountants also increase. Table 4 shows, however, that for all types of employment, as age increases MRAs decrease. For example, mean P scores for the younger group in Big 6 firms are 40.4 compared with only 26.5 for the older group. However, this difference is statistically significant only for Big 6 firm practitioners. In general, we cannot support H3 – that as age increases MRA also increases.

Hypothesis H4 investigates the effect of gender on moral reasoning ability. Based on prior accounting studies which find that females score higher on the DIT, we hypothesised that moral reasoning levels of Irish female accountants are higher than those of male accountants. Our findings support prior conclusions. As shown in Table 4, women have higher P scores overall (52.7, 47.8 and 39.1 for women in Big 6 firms, small-firms and industry, respectively, versus 34.7, 34.5 and 36.1 for men in Big 6 firms, small-firms and industry, respectively). The only statistically significant difference, however, is for the Big 6 firms where females heavily outscored their male counterparts. The small-firm respondents only included three women and this reduces the likelihood of finding statistical significance. However, we note that all three scored well above their male counterparts.

Table 5: Multiple Regression Analysis

	Big 6 Practitioners	**Small Firm Practitioners**	**Accountants in Industry**
Variables	**Coefficient (Std. Dev)**	**Coefficient (Std. Dev)**	**Coefficient (Std. Dev)**
Age Groupings			
Age (41–50)	-8.97 (5.33)	-2.21 (3.02)	-1.77 (2.50)
Age (51–74)	-11.15 (6.40)	-7.78 (4.07)	-3.80 (3.60)
Gender			
Females	14.36 (5.73) *	13.12 (8.68)	3.07 (2.98)
Social Beliefs			
Liberal	3.76 (4.57)	10.31 (3.21)**	5.45 (2.22) *
Moderate	4.54 (4.86)	8.39 (3.42)**	1.13 (2.39)
Involvement in Ethical Dilemmas in practice:			
Somewhat	1.78 (4.32)	1.09 (2.96)	1.91 (2.11)
Frequently or Often	3.65 (6.60)	18.19 (4.54)**	3.72 (3.47)
Intercept	34.76 (3.42) **	28.41 (3.17)**	33.43 (1.94) **
Adjusted R-Sq.	0.13	0.19	0.01
n=	86	110	268

* $p < 0.05$ ** $p < 0.01$

The baseline or omitted (dummy) variables include:

Age group 23–40
Gender – Males
Social Belief – Conservative
Involvement in Ethical Dilemmas in Practice: Never or seldom

Hypothesis H5 concerns the relationship between social belief and moral reasoning ability. It should be recalled that respondents were asked to rate themselves as either liberal, moderate or conservative. We hypothesised that the moral reasoning levels of chartered accountants who rate themselves as liberal are higher than those accountants who rate themselves as conservative. We find support for the measure of social belief for the respondents. Although this is a self-evaluated measure, small-firm practitioners and industry respondents who rated themselves as liberal scored statistically significantly higher than those who rated themselves as conservative (39.7 versus 29.2 for small-firm practitioners and 39.4 versus 33.9 for industry practitioners). We also note that 56 percent of the Big 6 firm respondents classified themselves as conservative while only 32 percent of the industry practitioners considered themselves as conservatives.

Hypothesis H6 examines the relationship between the frequency of making ethical decisions and MRA. Specifically we hypothesised that accountants who report resolving ethical decisions frequently have higher moral reasoning levels than those who do not report resolving ethical decisions frequently. For the small-firm practitioners, we find, as hypothesised, that as the number of times one is involved in ethical dilemmas increases, the level of MRA also increases. For the small-firm practitioners, we report a strong result: mean P scores increase from 32.6 to 48.8 as the number of ethical dilemmas faced goes from never or seldom to frequently or often. It appears that these respondents learn from or improve their moral reasoning skills as they are faced with more dilemmas in the workplace. However, it should be recalled that, on average, small practitioners have the lowest overall P scores. This may be because they tend to have the least amount of company "ethical" resources available to them. This suggests that small firm practitioners are in the most need of Continuing Professional Education (CPE) courses and journal articles that help inform them about ethical issues. Big 6 and industry practitioners, however, do not seem to improve their MRAs as they encounter more ethical dilemmas.

The above hypotheses were tested using univariate analysis, i.e., we attempted to associate the variation in the dependent variable (P score) with a single, explanatory variable. A more powerful method of analysis is that of multivariate analysis, which involves the use of several variables as indicators of a single measure. The objective is to use these variables, representing different facets, to obtain a more well-rounded perspective. The method adopted here is that of multiple regression. Ideally, the results using multiple regression should be broadly comparable and consistent with the findings obtained using univariate analysis. The multiple regression equation is:

$$Y = a + B1(X\ 1) + B2\ (X\ 2) + B3\ (X\ 3) + B4\ (X\ 4)$$

where Y = P score; X 1 = age; X 2 = gender; X 3 = social beliefs;
and X4 = frequency of making ethical decisions.

However, a key assumption underlying multiple regression analysis is the independence of the explanatory variables. If this is not so, then multicollinearity exists which makes determining the contribution of each explanatory variable difficult because the effects of the variables are confounded. Thus, the statistical significance of the regression coefficients may be over/understated. One simple test for determining whether or not multicollinearity exists is to examine correlation coefficients. Multicollinearity is a potential problem, in general, if the absolute value of any sample correlation coefficients exceeds 0.7. An analysis of the correlation coefficients of the survey data indicates the absence of multicollinearity.

Table 5 reports a multiple regression which incorporates all four explanatory variables with the appropriate dummy variables omitted. First, the results show that for all respondents the P score generally decreases with age. For example, the older Irish Big 6 firm CAs have P scores lower than the younger CAs by about 9 and 11 points for the two included age groups. Second, female P scores are significantly higher than those for males. The gender coefficient for Big 6 practitioners (14.36) suggests that women's scores are more than 14 points higher than males in these firms, on average.

Finally, for the small-firm practitioners, social beliefs and the frequency of ethical dilemmas are significant when all variables are considered together. The coefficients for social belief – liberal (10.31) and moderate (8.39), and involvement in ethical dilemmas – frequently or often (18.19) all have positive, strong and statistically significant impacts on P scores. For the industry respondents, only the measure for social belief is statistically significant.

Discussion and Implications

We initially examined the MRA of Irish accountancy practitioners using the DIT. These results are similar to prior results for U.S. accountants but are in direct contrast to research in moral reasoning levels for other American professions and disciplines. Perhaps the reason may lie in the technically-based accounting curriculum where, for example, the management of earnings is treated as a technical rather than a moral issue. Alternatively, it could be a reflection of the professional orientation of 'serving the client'. This understandable, but narrow, focus may blind accountants to the broader, ethical issues of accounting information. It should be noted that the findings here for Irish and American accountants are contrary to results reported for Canadian accountants.

We also find, as shown in earlier U.S. studies, that as age increases, MRA, in general, declines for accountancy practitioners. Perhaps the practice of accounting in the U.S. and Ireland limits ethical growth or development and could be part of a gradual process of 'cynicisation'. This is in direct contrast to research in moral reasoning levels for other professions and disciplines. In addition, these results are not found to be true for Canadian accountants which suggests that the practice of accounting and/or the business climate in Canada does not limit or constrain ethical development.

The strong result we find for the gender variable confirms prior research in accounting: female accountants score significantly higher than their male counterparts. Perhaps as more women enter the field of accounting, the average MRA of accountants will increase. The first woman was admitted to the Institute in 1925, and the percentage of women entering the profession has gradually risen each year, to a total of 42 percent in 1993/94 (Barker and Monks 1995).

We find strong support for the impact that liberal and conservative social beliefs have on the Irish small-firm and industry practitioners but less so for the Big 6 firm respondents. The small-firm practitioners and industry respondents who rated themselves as liberal scored significantly higher than those who rated themselves as conservative. This suggests that accounting programmes and employers need to attract individuals with more liberal viewpoints.

Finally, we find that as the number of ethical dilemmas faced by small-firm respondents increases, the level of moral reasoning ability also increases. Since these small-firm CAs typically do not have formal in-house training on which to rely, they must often solve ethical dilemmas on their own. As the number of ethical dilemmas increases, it appears that practitioners gain from past experience in wrestling with various issues as suggested by the higher levels of MRA. For those practitioners who do not often encounter ethical dilemmas in their workplace, increases in moral reasoning skills cannot come from "practice" in resolving ethical dilemmas. When ethical conflicts do occur, practitioners may be unable to deal with them effectively. Therefore, continuing education programmes and the Irish Institute of Chartered Accountants have an important and vital role to play in increasing ethical reasoning abilities of CAs.

It is important to note the limitations of this study. The main limitation concerns the nature of the survey instrument, which requires thoughtful responses to be made. Virtually none of the respondents would have had prior exposure to such a survey instrument and instances of ambiguity may have occurred. Also, we have no way of measuring how seriously the respondents took the entire exercise. However, we have attempted to minimise this potential bias by eliminating incomplete and/or inconsistent responses from our sample. Also, since this was a voluntary exercise with a satisfactory response rate, we are confident that frivolous responses have not been included. In addition, 135 requests from respondents for the final working paper lead us to believe that respondents undertook the survey seriously.

A second limitation is self-reported assessments. For example, the survey instrument asked respondents how frequently they made ethical decisions. Some respondents indicated that they never or rarely make ethical decisions. This may, of course, be a correct assessment of the situation in that they indeed rarely make ethical decisions. Alternatively, it could reflect an incorrect perception of the situation whereby accountants are confronted with ethical decisions but they do not recognise them as such. However, it is reasonable to assume that individuals who cannot recognise ethical decisions as such may not be able to resolve them!

A third point is that this study relies on the DIT as a measure of moral reasoning ability. Therefore, the results reported are only as valid as the DIT itself. We emphasise that the DIT attempts to measure the moral reasoning ability of an individual, but it cannot and does not measure how ethical a person is. This is because people do not always act as they would like or indeed act as they say they would. The only way to determine how ethical a person is would be to examine their behaviour and the motives for their behaviour in the real world. This is, of course, impossible to do.

There can be little doubt that ethics in business is and shall become an important consideration in the future. This has been indicated previously by Clarke (1990) in his survey of Irish Chartered Accountants on important, emerging topics. To some extent this raises the issue of teaching of ethics in the accountancy profession. It is an issue too important to be overlooked. If the accountancy profession in Ireland is to retain its credibility and prominence, we should view our profession not merely as a way to earn a living but as an integral and moral part of the modern business world.

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