

The effect of group diversity on ethical decision-making of accounting students

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Abstract

Purpose

This paper uses empirical evidence to test whether individuals in diverse groups act more ethically than those in homogenous groups. Socio-psychological theories are provided as explanations for the manner in which diversity might impact ethical decision making in an individual in a group.

Methodology

An assessment conducted with 688 accounting students (127 groups), across four experiment conditions (homogenous/observed, homogenous/unobserved, diverse/observed and diverse/unobserved), was used to identify instances of unethical behaviour (dishonesty). A two-way ANOVA was used to test whether variations in the diversity of a group have a significant effect on the frequency and severity of dishonest behaviour.

Findings

The effect of both group (homogenous/diverse) and condition (observed/unobserved), as well as the interaction effect of group and condition were all significant, supporting the hypothesis that variations in the diversity of a group have a significant effect on the frequency and severity of dishonest behaviour.

Contribution and value

These results are relevant for corporate governance policymakers and practitioners - given the emphasis on diversity of management groups - as well as for academics interested in better understanding the dynamics of student groups.

Paper type

Research paper

1. Introduction

The King III Report and Code on Corporate Governance (2009) for South Africa (the Report) sets out a number of corporate governance principles and best practices. One fundamental principle is that an entity's leadership (the board of directors) should have an ethical foundation. The Report also advocates diversity within the board composition, stating that "diversity applies to academic qualifications, technical expertise, relevant industry knowledge, experience, nationality, age, race and gender" (King III Report, Institute of Directors of South Africa, 2009, para 71). There is little elaboration on the rationale for this recommended best practice. The Report merely states the best practice is due to "the positive interaction and diversity of views that occur between individuals of different skills, experience and backgrounds..." (King III Report, Institute of Directors of South Africa, 2009, para 62).

Diversity in the workplace is also a national agenda with the entrenchment of Broad-Based Black Economic Empowerment (BBBEE). From a compliance perspective, companies in South Africa have a direct incentive to achieve higher levels of diversity within the ranks of the senior strategic management of the entity in order to raise their BBBEE score. Despite this direct incentive, prior research by Ferreira and de Villiers (2011) shows a negative correlation between an entity's BBBEE score and its future returns. International research has revealed positive association of increased board diversity (percentage of women and minorities representation) with firm performance (Erhardt, Werbel and Shrader, 2003). Miller and del Carmen Triana (2009) suggest the underlying reason for this improved performance is improvements to the firm's

reputation and innovation (positive association was also found between increased board diversity and measures of firm reputation and innovation).

Therefore, it is necessary to determine whether there are other benefits created by group diversity – perhaps whether one of these “positive interactions” (as mentioned in the King III Report) might include improved ethical decision-making. Since a board of directors can also be regarded as a team (Swartz and Firer, 2005), the results of this study will be applicable and of use to corporate governance policymakers and practitioners.

The rest of this paper is structured as follows: Section 2 discusses the relevant literature relating to how group diversity or homogeneity might shape our behaviour, specifically social identification and categorization and then social norms and conformity. Literature which considers whether academic cheating is a suitable proxy for dishonesty within the corporate environment is explored. Section 3 details the research methodology, including how the different experiment conditions were assigned. Section 4 provides the results and a discussion of these. Section 5 concludes and provides recommendations based on the findings.

2 Background and literature review

Many variables might affect a person's decision to act unethically. It is not only the rational cost-benefit analysis of an unethical action but also subconscious and irrational reasons which lead people to act dishonestly, and, more importantly for this study, to act dishonestly (Gino, Ayal and Ariely, 2009). Below are relevant socio-psychological theories discussed in more detail.

2.1 Social identification and categorization

One of the first socio-psychological processes to occur for an individual within a group is identification and categorization. Individuals categorize group members and themselves into social groups which are most commonly based on demographic characteristics, including those most observable such as race and gender (Pelled, Eisenhardt and Xin, 1999).

An individual either identifies closely with other members of the group (ingroup) or feels dissimilar from the other members (outgroup) (Cialdini and Trost, 1998, p. 142). This ingroup or outgroup social identification can have a significant effect on the perceived social situation as it is likely to change the individual's attitude and the desire for his/her actions to conform with those of the group.

Individuals are motivated to act in such a way to conform to social norms of their category. Members of a group strive to maintain positive self-esteem and social identity within the group (Rubin and Hewstone, 1998; Gino et al, 2009). Therefore, by acting in

a manner contrary to the perceived appropriate norms of the other group members, the individual would seemingly be alienating him or herself from that group.

Although this identification and self-categorization is the initial step toward establishing the group identity, it is necessary to understand the mechanism through which social norms drive individual conformity.

2.2 Social norms and conformity through self-awareness/social anxiety

Israel and Tajfel (1972, p. 101) define the concept of social norms “as being an individual’s expectations of how others expect him to behave and of how others will behave in any given situation”. Social norms contain two distinct ideas affecting decision-making: firstly, the norm of how an individual *should* typically act – what would be considered acceptable or unacceptable social behaviour. Secondly, the perception of how others *actually do* act is used to inform his/her own behaviour. These are termed injunctive and descriptive norms respectively.

The difference between tax compliance and tax evasion is a good example to explain these two norms. Most taxpayers would agree with the injunctive norm that tax evasion is unethical. However, many would attempt to justify such action on the grounds of the descriptive norm that they believe many other people may be committing tax evasion (Wenzel, 2005). The ultimate decision made by an individual will depend greatly on the type of norm to which the individual desires to conform.

The desire for conformity to either injunctive or descriptive norms could be linked to the level of self-awareness an individual feels within a group. Self-awareness is described as the state of having a focused attention directed toward oneself (Fenigstein, Scheier

and Buss, 1975) and can be produced through changes in several variables such as the social environment; this includes whether an individual is in the presence of others who might be evaluating his/her behaviour (Wicklund and Duval, 1971).

More specifically, this self-awareness can cause public self-consciousness which “involves awareness of self as a social object” (Buss and Scheier, 1976, p. 463). Public self-consciousness can be caused by social contact – which can give rise to feelings of anxiety as the individual becomes aware of him/herself as a social object. When an individual experiences a high level of public self-consciousness, he/she is more concerned with how he/she appears to others (Buss and Scheier, 1976).

Fenigstein et al (1975) find that public self-consciousness is related to ideas first formulated by Mead (1934) that a person can only experience public self-consciousness when that person is aware of another person’s perspective (which would occur more frequently in a group setting as compared to individually). The individual considers how others would react to his/her actions. A group setting provides this social contact and the characteristics of the others in the group will affect the extent of self-consciousness experienced (Wicklund and Duval, 1971).

When this level of public self-consciousness increases, an individual may become anxious about the perceived judgement of others (Fenigstein et al, 1975). Singer, Brush and Lublin (1965) used clothing as the cue for identifiability when testing whether the level of identifiability impacts on conformity and anxiety. This cue for identifiability could arise when an individual is within a diverse group (outgroup). This anxiety and fear of judgement creates a movement toward more normative behaviour and an individual

would likely be more greatly affected by the desire to conform to injunctive norms (the decision that most believe *should* be taken) (Diener and Wallbom, 1976).

Conversely, there are means by which self-consciousness can be reduced. Deindividuation is described as a “state in which group members do not stand out as individuals” and, as a result, they lose their self-consciousness (Wicklund and Duval, 1971, p. 320). Citing the research of Festinger, Pepitone and Newcomb (1952), Singer et al (1965) show that in group situations of reduced identification (i.e. homogenous groups), individuals in those groups are more likely to behave in an antinormative manner. The cause of this antinormative behaviour is thought to stem from the loss of one’s sense of individuality in the group and the resultant liberation from one’s inner inhibitions (Singer et al, 1965).

This could explain why descriptive norms play a greater role than injunctive norms in such homogenous groups. Firstly, the desire for positive self-esteem and acceptance within a group setting with strong similarities among group members leads to heightened conformity with the actions that it is thought will *actually* be taken by other group members (Turner and Oakes, 1989; Levine and Moreland, 1990). Secondly, due to the deindividuation or reduced self-consciousness, individuals are affected less by the injunctive norms.

2.3 Students and cheating as a proxy for dishonesty

Prior research has revealed two matters of interest regarding a student’s propensity to cheat. Firstly, there is a correlation between how accounting students feel about ethical

issues and the actual occurrence of academic dishonesty (Ameen, Guffey and McMillan, 1996). This study included a survey of 386 accounting students across four American universities. The survey asked students for their perceptions of 23 different questionable academic practices, as well as other questions which gathered information about actual incidences of cheating. The severity of the 23 cases was then compared to the actual incidence of cheating to identify any correlation between the two. The findings were that the less grave a student perceived a questionable practice to be, the more likely he was to actually have cheated in an academic environment.

Secondly, there is a strong relationship between a student's propensity to cheat in an academic environment and his/her attitude toward unethical behaviour in the corporate environment (Lawson, 2004). In their analysis of prior literature, Ameen et al (1996) also present support for findings indicating that cheating at school or university could be an early warning sign of a person's propensity to act unethically.

These two findings, firstly that academic dishonesty occurs more frequently among students who have less serious perceptions and judgements of questionable academic behaviour, and, secondly, that cheating at a university level does indicate a higher propensity to cheat later on in life, indicate that cheating is a suitable proxy for the general attitude toward ethical behaviour.

Based on the literature reviewed, the hypothesis to be tested with this research experiment is as follows:

Introducing diversity into groups will reduce the extent of dishonest behaviour of individuals within the group. A lack of diversity within a group will lead to an increase in dishonest behaviour.

3 Research methodology

Following a similar approach to Gino et al (2009), a mathematical assessment was used to infer cheating among students. A 5-minute mathematical assessment was provided to a sample of 688 accounting students, placed into either homogenous or diverse groups. Groups consisted of between 4-7 members. A total of 127 groups participated in the study.

Homogenous groups were defined as all members of the same racial group and gender, consistent with Watson, Kumar and Michaelsen (1993). Diverse groups consisted, as far as possible, of a mix between racial groups and gender. Furthermore, 63 groups were allocated to the “observed” condition, meaning that the completion of the assessment would be observed by University staff members. This was done to confirm that the instructions (detailed below) for the assessment were followed by all participants and that no cheating occurred within these groups. The University staff members made certain that no communication between members occurred, no calculators were used and that the time limit of 5 minutes was strictly adhered to. The remaining 64 groups were left in the “opportunity” condition - unobserved by any staff while completing the assessment. These groups had the opportunity to cheat on the assessment by either sharing their answers, using a calculator or taking additional time. In these “opportunity” conditions, University staff were on hand to receive the new group, provide and explain the instructions and then set the 5-minute timer. Participants were told as soon as the 5 minutes were completed, that they should cease writing and group their assessments in the middle of the table to be collected by the University staff member later.

This experiment design is consistent with others (Mazar, Amir and Ariely, 2005; Gino et al, 2009) in which a control experiment with no opportunity to cheat is contrasted with other experiment conditions in order to determine what other variables might affect the decision to act unethically. The design attempts to assess whether diversity within the group reduces the extent to which individuals in the group cheat, even when such an opportunity exists. Consistent with the literature reviewed, an individual within a diverse group should place more importance on the injunctive norm of not cheating, whereas within a homogenous group, the individual will place more importance on the descriptive norm, conforming to how he/she believes the other group members will actually act.

Based on the hypothesis, there should be no statistical difference between the mark achieved for groups who were observed. However, for groups with the opportunity to cheat, there should be significantly more cheating in homogenous groups as compared to diverse groups.

Matrix 1: Sample sizes across experiment conditions

Racial & Gender Diversity

	Homogenous	Diverse	Total <i>n</i>	
Opportunity to Cheat	Observed	All group members of same race and gender. Observer present for duration of test. (n=173) (groups= 33)	Group members are not all same race and gender. Observer present for duration of test. (n=177) (groups= 30)	350
	Opportunity	All group members of same race and gender. No observer, students are free to cheat in front of other group members. (n=155) (groups= 32)	Group members are not all same race and gender. No observer, students are free to cheat in front of other group members. (n=183) (groups= 32)	338
	Total n	<i>N=328, Groups=65</i>	<i>N=360, Groups=62</i>	688

The sample consisted of 49.6% male and 50.4% female. The breakdown of racial group was: Black 57.2%, Indian 24%, White 16%, Coloured 1.5%, and Chinese 1.3%.

The assessment consisted of 20 high school level mathematical problems. Students were required to solve as many of these problems as possible in 5 minutes. Independent assessments by several staff members with strong mathematical skills, performed prior to use within the experiment, revealed the near impossibility of completing all 20 questions in the 5-minute period.

Assessments were completed by each individual but with the other group members present also completing their assessments. Students were neither allowed to use calculators, nor to communicate with other members in the group. If a student used either a calculator or the group shared answers through communicating, it is highly likely that their mark on the 5-minute assessment would drastically improve. Furthermore, any of these methods of cheating, if used, would be evident to the rest of the group members.

Groups who completed their assessments within the observed conditions had an additional deterrent against cheating, since a staff member was present for the duration of the 5-minute assessment to ensure that students did not communicate with one another and no calculators were used.

While the assessment itself tested mathematical ability, through the experimental design of the homogenous/diverse groups and observed/opportunity conditions, dishonesty can be inferred through statistically significant differences across performance of individuals within different groups and conditions. A similar method was used by Gino et al (2009) in which a mathematical task was used as the subject matter in an attempt to distinguish cheating students from honest students.

In order to test for statistical significance, a two-way ANOVA was performed together with pairwise comparisons.

The various assumptions, which are required for the use of an ANOVA, were tested. Firstly, the test scores are a continuous variable. Secondly, both independent variables should consist of two or more categorical independent groups. In this study, the

independent variable of Group has two subgroups, Diverse and Homogenous, and the Condition independent variable has the two subgroups, Opportunity and Observed. Third, there should be independence of observations within each of the subgroups. As different students have been used in each subgroup, and no student was in more than one subgroup, each subgroup's observations are considered to be independent of one another.

Fifteen (15) outlying data points were removed to enable analysis using an ANOVA. The skewness and kurtosis was assessed as being between 1 and -1 in all cases, confirming that the data approximates a normal distribution (Bulmer, 2012). The Levene's test for homogeneity of variance was violated as the p value was less than 0.05. However, due to comparable group sizes, this violation does not invalidate the use of the ANOVA (Field, 2013, p. 445).

4 Results and discussion

Per Table 4.1 sample sizes are large and relatively comparable across subgroups. Significant differences, at the 5% level, are noted in the means within the homogenous groups and less significant differences in the diverse groups – both means increasing when moving from the observed to the opportunity conditions.

Table 4.1 Descriptive statistics

Group	Condition	N	Mean*	Std. Deviation*
Homogenous	Observed	173	4.72	2.063
	Opportunity	155	9.32	4.186
	Total	328	6.87	4.001
Diverse	Observed	177	4.72	2.033
	Opportunity	183	7.23	3.35
	Total	360	5.98	2.982
Total	Observed	350	4.72	2.046
	Opportunity	338	8.28	3.981
	Total	688	7.57	3.565

**Mean and standard deviation before removal of outlier data points*

Table 4.2 ANOVA Tests of Between-Subjects Effects - Mark as dependent variable

Effect	Sum Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group	317.698	1	317.698	34.954	0.000	0.05
Condition	1981.057	1	1981.057	217.959	0.000	0.246
Group Condition Interaction *	259.803	1	259.803	28.584	0.000	0.041
Error	6080.636	669	9.089			
Total	34602	673				

Table 4.2 shows that all effects are significant using an alpha value of 5% which is consistent with most studies of this type (Soni, Maroun and Padia, 2015). All p values are all less than 0.05. The significant interaction effect is an indication that the group

differences change across the different conditions. The effect size for the interaction effect is small as evidenced by the eta-squared value of 0.041 (η^2 : Small \approx 0.02).

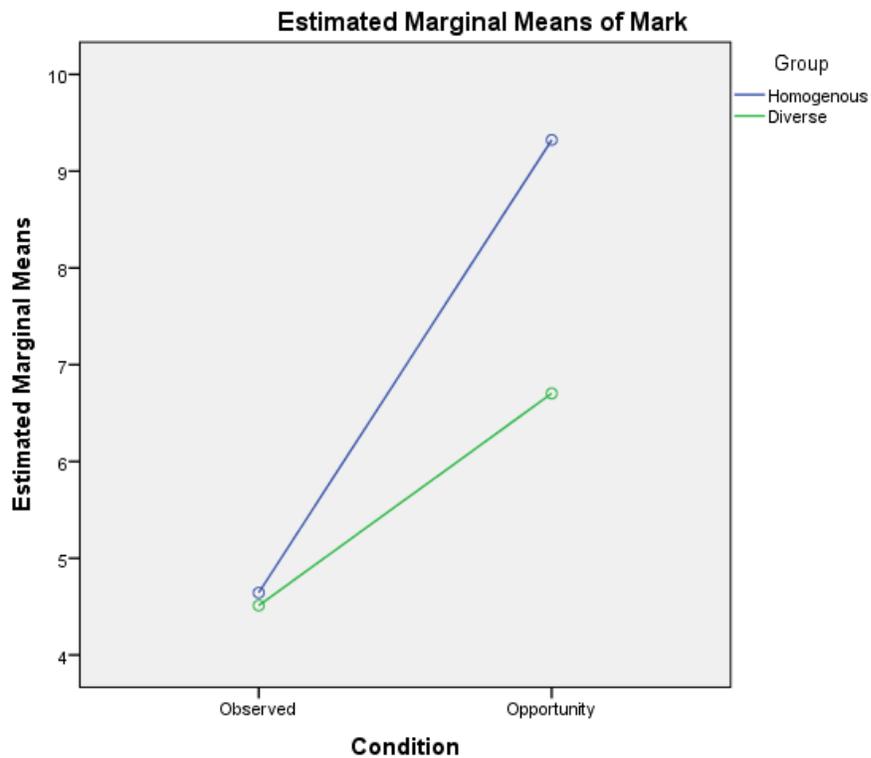
The $R^2=0.285$, indicating that 28.5% of the variance is explained by the factorial model.

Table 4.3 Pairwise comparisons of Condition

Condition	(A) Group	(B) Group	Mean Difference (A-B)	Std. Error	Sig
Observed	Homogenous	Diverse	0.132	0.330	0.690
Opportunity	Homogenous	Diverse	2.544	0.337	0.000

Table 4.3 shows that the mean difference between the opportunity condition groups is higher than the difference in the observed condition. Refer also to chart 4.1 below which plots the marginal means for each group across conditions.

Chart 4.1 Estimated marginal means of Mark across condition



The pairwise comparisons table and chart of the marginal means above show that there is no significant difference between the Homogenous and Diverse groups within the observed condition. However, within the opportunity condition, there is a significant difference as evidenced by the p value of less than 0.05.

5 Conclusions, recommendations and limitations

In terms of the application of King III and corporate governance policy, there appears to be benefits associated with diversity, beyond the explicitly mentioned “diversity of views”. The benefit of improved ethical decision-making ties in with the principles of King III (Institute of Directors of South Africa, 2009, principle 1.1) and would certainly add value to stakeholders of an entity.

The results of the statistical analysis lend support to the hypothesis that individuals within diverse groups act more honestly than those in homogenous groups. The most striking question which is raised from the results is why members of the diverse/opportunity groups did not take the opportunity to cheat to the same extent as those in the homogenous/opportunity groups.

To examine this behaviour with reference to the literature reviewed, the following could explain how group diversity might impact ethical decision making. Individuals in a group tend to self-categorize and also categorize others within the group (Pelled et al, 1999). In these experiments, it is possible that students either noted that they were in a completely homogenous group, associating themselves with the rest of the group (ingroup categorization) or alternately, they noted they were in a diverse group, categorizing themselves as different from some of the other members (outgroup).

The presence of others, from a different demographic, acts as a catalyst for increased self-awareness and heightened public self-consciousness (Wicklund and Duval, 1971; Buss and Scheier, 1976). Once an individual feels like an outsider, the resulting social anxiety leads to considering one’s actions more in light of injunctive norms (i.e. cheating

is unethical) (Diener and Wallbom, 1976). When in a homogenous group, firstly the strength of the injunctive norms is reduced as the individual feels less social anxiety and secondly, individuals are more motivated to gain acceptance within the group and act in accordance with descriptive norms of the group (Festinger et al, 1952).

A limitation of this research is the use of student groups as proxy for other functional groups or teams. However, the application of socio-psychological theories is equally applicable in a business context which involves such social interaction. Furthermore, these student groups were observed at a single point in time so nothing can be inferred about how the diversity of the group might be affected by the familiarity of group members over time.

Of interest is how much group diversity is required in order to affect the ethical decision making of the individual in the group. Using the same experiments with groups that are assigned a diversity score (e.g. a grouping of 5 white males and 1 black male would not be as diverse as a grouping of 2 black females, 1 white female, 2 black males and 1 white male) would allow analysis of whether even a relatively small level of diversity has similar positive ethical decision-making effects.

While this study has investigated the effect of diversity on ethical decision-making, these results could be bolstered when considered in conjunction with empirical evidence from a similar experiment using groups who were previously familiar (or unfamiliar) with the other group members irrespective of gender/race diversity.

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