Changes in attitudes towards business ethics held by former South African business management students

Gavin Price* • Andries Johannes van der Walt

G. Price (*) and A. J. van der Walt
Gordon Institute of Business Science, Johannesburg, Gauteng,
South Africa
e-mail: priceg@gibs.co.za
A. J. van der Walt
e-mail: andries@gymnogene.co.za

Abstract

The objective of this study was to assess whether, and how, the attitudes towards business ethics of former South African business students have changed between the early 1990s and 2010. The study used the Attitudes Toward Business Ethics Questionnaire (ATBEQ) and applied a comparative analysis between leading business schools in South Africa.

The findings of this study found a significant change in attitudes based on a set time frame, with a trend towards stronger opinions on business ethics and espoused values. Eleven factors came out as fundamental, although they were less able to explain the variation in the attitudes than the previous study. A significant change in the rankings of variables was noted and indicated a shift in attitude toward a teleological moral philosophy as well as utilitarian motives. This shows a clear trend

towards compliance-based ethics, which can be explained by the proliferation of business legislation and regulation in the wake of recent corporate governance failures and the subsequent global financial crisis.

Keywords: Business ethics; Ethical attitudes

Introduction

South Africa, like many countries, has undergone meaningful changes in ethical attitude in the business context over the last twenty years. South Africa is, however, a special case as it has undergone a radical change as a result of the end of Apartheid and the creation of its first democratically elected government in 1994. The country has also witnessed dramatic change to the corporate governance regime that dictates appropriate business conduct. The failures of companies such as Enron and WorldCom and the global financial crisis of 2008 that was brought on, in part, through a failure of corporate governance in general, and business ethics in particular, has led to an increased focus on business ethics around the world (Tseng, Duan, Tung, & Kung, 2010). This is reflected in a significant increase in business ethics courses at top business schools over the last two decades (Christensen, Peirce, Hartman, Hoffman, & Carrier, 2007). The authors argue consequently that even though the ethics component in course content is increasing, there is still much debate on the role, relevance and form of ethics education in business courses. It is argued that it behoves the course content creators to ensure that the content remains relevant and in line with the current attitudes towards business ethics held by business students.

The core issue facing the ethics course content designers is to identify the aspects of business ethics that should be of greatest concern to businesses and contextualised within the realm of the contemporary business space, and therefore to business education. This is of special interest in South Africa because of its cultural diversity and the major socio-political changes it has undergone during the past 20 years.

This study seeks to answer two key questions: *"How have attitudes towards business ethics of business students changed between the early 1990s and 2010?"* and *"What aspects of business ethics need to be addressed the most urgently by business schools and business practitioners?"*

Literature Review

Attitudes towards Ethics

The majority of ethical attitude studies have focused on national comparisons and differences (Arlow & Ulrich, 1988; Grubisic & Goic, 1998; Phau & Kea, 2006; Bageac *et al,* 2010). These studies showed that there are significant differences in attitude amongst the various samples that were compared, or described how ethical attitudes are being changed though intervention in areas as diverse as socio-economics, politics or environmental issues (Gao, 2008; Newell, 2008). Less frequent are studies measuring how attitudes towards ethics change over time. The longitudinal studies of attitudes towards business ethics found that the attitudes have generally become stronger (Emerson & Conroy, 2004) and that there are some significant generational differences between cohorts (Twenge, 2010). This implies that the ethical stance of companies should improve over time and that should lead to fewer and less severe failures in ethical governance. However, this raises questions on

how the most devastating financial crisis in recent history could have been caused by what was principally a failure of ethics (Yandle, 2010).

Changes in the ethical environment

Card (2005) has shown that individuals may sometimes abdicate their moral obligations when acting on behalf of an organisation and that there is a systematic erosion of agency over time where there tends to be less accountability for actions taken by the organisation. The author argues that an organisation, with its hierarchy and policies, may reduce an individual's willingness to accept responsibility for his actions and the individual may therefore be able to act immorally while acting on behalf of the organisation.

The development of Corporate Social Responsibility (CSR) has also seen the reduction of the individual as moral agent for the organisation (Liedekerke & Dubbink, 2008). They argue that the development of an organisation, with its processes and technology, encodes many decisions into the operations of the organisation and thereby atrophy the role and importance of any individual's actions. It is therefore clear that the organization, as well as its policies, processes, standards and technology, are determining factors of an individual's attitude towards business ethics.

The ultimate control on the activities of a business is its financial statements and reports – as an expression and summation of all that it, as a legal entity, has done during the reporting period. The King Code on Governance for South Africa 2009 (IoDSA, 2009) requires companies to report not only on financial performance, but also on social and environmental contribution.

Research has also shown that executive board involvement is a significant driver of ethical behaviour. Felo (2007) has found that for companies where the board is directly involved in defining and implementing codes of ethical conduct, the companies disclose more information in their reports and have greater disclosure transparency. Moreover, companies with high levels of reporting transparency, e.g. prominently disclosing their own codes of ethics, experience higher levels of public trust (Bernardi & LaCross, 2005).

The attitudes of individual managers within an organisation will therefore see their attitudes towards business ethics develop in line with the espoused values and the rigour with which they are applied in the organisation.

The ATBEQ Assessment Tool

Preble and Reichel (1988) conducted initial studies that led to a series of similar assessments across four additional countries over the past two decades. All six cases used the same assessment tool – the "Attitudes Towards Business Ethics Questionnaire" (ATBEQ), which was developed by Neumann and Reichel (Preble & Reichel, 1988) in 1987. These studies found statistically significant differences in varying numbers of questions between different countries with the main differentiating factor being culture (Sims & Gegez, 2004) with South Africa, USA and Australia being similar and Israel and Turkey dissimilar.

The Moore and Radloff Study at Rhodes University

Moore and Radloff (1996) administered the ATBEQ to final-year Bachelor of Commerce students at Rhodes University for three consecutive years, 1989 to 1991(the Rhodes study). They compared the results from their sample with the results published by Preble and Reichel (1988) as well as Small (1992) and found

that the only significant difference in attitude was between their and the Israeli results. They also performed a factor analysis that identified eleven factors, seven of which they could theoretically label. This study followed a similar analysis methodology in order to maintain validity and comparability.

Research Questions

Have attitudes towards business ethics in South Africa changed since the early 1990s?

For the parametric tests the hypothesis is:

H_{1A}: There is a significant difference in the attitudinal factors between the comparative studies.

For examining the changes in rank of the variables through a non-parametric test the hypothesis is:

H_{1B}: There is a significant difference in the ranks of the variable means of the Rhodes study samples and the current sample of GIBS alumni.

How have the attitudes towards business ethics changed? Have they become either more or less extreme?

H_{1C}: There is a significant difference in the attitudes measured in the questionnaire between the comparative samples.

H_{0A-C} were only rejected if 16 or more of the variables show a statistically significant change in the mean between the GIBS and Rhodes samples at a 0.05 α-level.

Method

The study was conducted as a cohort study, using the same ATBEQ instrument with two separate samples over an interval of more than sixteen years.

The population for this study were past management students who had completed their Masters in Business Administration (MBA) studies between 2006 and 2010 at the Gordon Institute of Business Science (GIBS). A total of 147 responses were obtained from 754 requests distributed. An invitation to participate in the research was sent to the GIBS MBA alumni mailing list members via an e-mail containing a hyper-link to an electronic questionnaire. No incentive to participate was offered and the response rate of 19.5% was expected since no measures were taken to encourage participation from the alumni members in the interest of maintaining a positive on-going relationship between them and GIBS.

This sample was compared with the sample from the Rhodes study that consisted of students completing a Bachelor of Commerce (B.Com.) degree at Rhodes University. The GIBS sample, however, had a greater age range and more business experience than their Rhodes counterparts.

Research Instrument

The research instrument consisted of two parts. The first part consisted of a number of questions to determine cultural demographics. These were completed by selecting pre-populated values in order to maintain scalability. A question on nationality was also included to exclude non-South Africans from the analysis.

The second part of the instrument contained the 30 question ATBEQ where each question was assessed using the same five point Likert scale. Despite

recommendations to refine the instrument (Moore & Radloff, 1996), the ATBEQ was not modified to maintain validity when comparing results with the previous study. The ATBEQ is based on the business theories of Social Darwinism, Machiavellianism, Objectivism, and Ethical Relativism (Preble & Reichel, 1988). Even though each question directly relates to one of these theories, the actual mapping was not provided. It was therefore necessary to identify the common factors from the results through factor analysis.

Evaluation of Responses and Descriptive Statistics

The data was first inspected to identify any responses which should be removed from the analysis. The reliability statistics for the sample was then calculated before any further processing was done. An acceptance value of 0.6 was set for the Cronbach's Alpha statistic. The data was then tested for any highly biased or unintended submissions by inspecting the mean and standard deviation of each record.

The Rhodes study evaluation criteria were applied in order to maintain consistency of method and evaluation. H_1 was evaluated by a statistically significant difference in the mean of each question for at least half of the questions. In other words, H_0 was only rejected if 16 or more questions showed a statistically significant difference in the mean at a 0.05 α-level as either an increase or decrease.

Principal Component and Factor Analyses

A principal component analysis (PCA) was done to determine the number of potential uncorrelated underlying factors which may explain the observed behaviour of the respondents across all variables, thereby attempting to reduce the complexity

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of the model. It was important to determine the uncorrelated factors as there may have been inherent correlations between the various variables.

The PCA was executed without robust covariance estimation and used the correlation matrix for the analysis. No factor rotation was applied and an eigenvalue of 1.0 was used as the cut-off for factor estimation. The number of components identified in the PCA was then used as input for the varimax factor analysis.

A rotated varimax factor analysis (Abdi, 2003) was applied to the data for the number of factors identified in the PCA in order to develop the strongest possible model with variables assigned to factors where they had the greatest contribution. A qualitative analysis was then performed on these factors to identify the underlying drivers of business ethics, which were then compared to the results of the Rhodes study which were obtained in a similar analysis.

Results

Sample Analysis and Description

The response rate was 19.5%. Five responses were excluded as they were only partially completed. This left a total of 142 responses that were used in the analysis. The responses were obtained over a 26 day period during September and October 2010. The data was analysed using NCSS 2007 (Student Version) rel. 07.1.14 with subsequent processing and analysis on Microsoft Excel 2007.

A significance level (α) of 0.05 was consistently applied to all analyses. Parametric tests are two-tailed unless specifically stated as one-tailed.

The responses showed an acceptable level of internal consistency with a Cronbach's α value of 0.698, which is significantly greater than the acceptance level of 0.6.

Descriptive Statistics

Table 1 contains both parametric and non-parametric measures of central location and standard deviation for both the GIBS and Rhodes studies. Appendix A contains the questions to which each variable listed refers.

Table 1: Sample Descriptive Statistics

Var.	Counts					GIBS				Rhodes	
	1	2	3	4	5	Mode	Median	Mean	σ	Mean	σ
Q1	54	66	9	7	6	2	2	1.91	1.01	2.31	1.29
Q2	98	41	1	2	0	1	1	1.35	0.57	1.68	0.66
Q3	15	42	18	41	26	2	3	3.15	1.32	2.97	1.21
Q4	28	80	13	19	2	2	2	2.20	0.96	2.09	0.74
Q5	15	52	45	27	3	2	3	2.65	0.98	3.08	0.58
Q6	15	73	13	34	7	2	2	2.61	1.11	3.09	1.14
Q7	85	48	3	4	2	1	1	1.52	0.80	1.76	0.63
Q8	29	74	20	18	1	2	2	2.21	0.94	2.73	0.98
Q9	68	68	1	3	2	1	2	1.61	0.74	1.99	0.78
Q10	36	64	12	23	7	2	2	2.30	1.16	1.98	1.05
Q11	35	63	8	32	4	2	2	2.35	1.16	2.26	1.01
Q12	6	33	15	61	27	4	4	3.49	1.17	3.60	1.32
Q13	53	61	12	13	3	2	2	1.96	1.01	3.31	1.37
Q14	125	13	3	0	1	1	1	1.16	0.51	1.60	0.93
Q15	80	51	6	5	0	1	1	1.55	0.74	2.15	0.96
Q16	110	29	2	1	0	1	1	1.25	0.51	2.12	1.05
Q17	16	32	17	49	28	4	4	3.29	1.32	2.70	1.38
Q18	2	12	6	75	47	4	4	4.08	0.92	3.95	0.96
Q19	5	49	20	52	16	4	3	3.18	1.13	3.17	1.00
Q20	28	82	8	21	3	2	2	2.22	1.00	2.55	1.33
Q21	69	53	9	7	4	1	2	1.76	0.97	2.07	1.16
Q22	49	67	8	16	2	2	2	1.98	0.99	2.48	1.08
Q23	7	27	16	66	26	4	4	3.54	1.14	3.85	1.09
Q24	18	47	16	52	9	4	3	2.91	1.21	3.44	1.14
Q25	11	45	26	47	13	4	3	3.04	1.15	3.12	1.18
Q26	6	24	43	50	19	4	3	3.37	1.05	3.24	1.18
Q27	25	49	37	26	5	2	2	2.56	1.09	2.99	1.07
Q28	27	78	26	10	1	2	2	2.15	0.84	2.36	0.85
Q29	10	36	16	65	15	4	4	3.27	1.16	3.29	1.27
Q30	0	28	28	63	23	4	4	3.57	0.98	2.98	1.32
								n =	142	n =	379

Factor analysis

A principal component analysis was done with the aim of reducing the number of variables in the analysis by identifying new factors as aggregates of the original variables. These factors can then be rotated in order to optimise the groupings for best descriptive capability.

Table 2: Principal Component Analysis

Component	Eigen-value	Percentage Contribution	Cumulative Contribution	Significant
1	4.26	14.22	14.22	Yes
2	2.43	8.12	22.33	Yes
3	1.95	6.50	28.83	Yes
4	1.79	5.95	34.78	Yes
5	1.62	5.41	40.19	Yes
6	1.53	5.10	45.30	Yes
7	1.27	4.22	49.52	Yes
8	1.24	4.13	53.64	Yes
9	1.12	3.75	57.39	Yes
10	1.06	3.53	60.92	Yes
11	1.00	3.32	64.24	Yes
12	0.92	3.05	67.29	No
13	0.90	3.02	70.31	No
14	0.84	2.79	73.10	No
15	0.79	2.64	75.74	No
16	0.77	2.57	78.31	No
17	0.73	2.44	80.75	No
18	0.70	2.35	83.09	No
19	0.65	2.16	85.26	No
20	0.63	2.09	87.35	No
21	0.51	1.72	89.07	No
22	0.50	1.67	90.74	No
23	0.46	1.52	92.26	No
24	0.43	1.43	93.69	No
25	0.42	1.40	95.09	No
26	0.39	1.31	96.40	No
27	0.31	1.05	97.45	No
28	0.31	1.03	98.48	No
29	0.26	0.86	99.34	No
30	0.20	0.66	100.00	No

The Principal Component Analysis indicated that there were eleven uncorrelated variables with an eigenvalue of 1.0 or greater, i.e. factors which show a clear ability to describe the attitudes. This is not ideal as the ATBEQ was developed around only

five ethical philosophies and it would have lent credibility to the framework if those five factors were reflected in the results. Additionally, the eleven factors accounted for only 64% of the variation seen in the responses where a higher cumulative contribution would have been a stronger result.

These results do however echo the Rhodes study. The varimax factor analysis was therefore conducted for eleven factors.

Table 3: Comparison of Identified Factors

GIBS			Rhodes		
Factor	**Variable**	**Loadings**	**Factor**	**Variable**	**Loadings**
1	Q7	0.745	1	Q7	0.726
	Q6	0.646		Q2	0.717
	Q9	0.412		Q9	0.680
2	Q15	0.782		Q1	0.568
	Q16	0.697		Q4	0.481
	Q14	0.509	2	Q16	0.770
	Q13	0.431		Q15	0.671
3	Q5	-0.548		Q14	0.664
	Q20	-0.503		Q13	0.475
	Q27	-0.485	3	Q23	0.710
4	Q23	0.860		Q24	0.700
	Q24	0.465	4	Q29	0.756
5	Q8	0.541		Q25	0.585
6	Q28	0.607		Q28	0.446
	Q18	-0.482	5	Q17	0.620
	Q26	0.427		Q12	0.534
7	Q19	-0.633		Q21	0.466
8	Q17	0.582	6	Q26	0.750
9	Q11	0.533		Q27	0.723
10	Q29	0.626	7	Q5	0.678
11	Q1	-0.630		Q3	0.653
	Q2	-0.577	8	Q19	0.823
			9	Q11	0.783
			10	Q30	0.798
				Q18	0.500
			11	Q8	0.771

The varimax factor analysis provided an improved model simplifying the interpretation by associating each variable strongly with one (or a few) factors and having each factor comprised of a small number of variables.

The factor analysis was moderately successful with only 22 variables contributing meaningfully to the 11 factors. Five of the factors have only one variable and was therefore not able to reduce the complexity of the model.

There were a number of similarities (factors 2, 4, 5, 7 and 9 concur with factors identified in the Rhodes study), whereas the other factors showed fairly little resemblance between the studies.

Changed Attitudes

A t-test of whether the GIBS sample might follow the same probability distribution as was measured by the Rhodes sample was conducted for each variable at an α-level of 0.05. These tests were conducted on a two-tail probability with a combined 519 degrees of freedom on the Student's T-distribution.

Table 4: t-Test Results

Variable	t-Test		
	T value	P(T)	Result
Q1	4.71	< 0.005	Reject H_0
Q2	7.04	< 0.005	Reject H_0
Q3	1.63	0.104	Cannot reject H_0
Q4	1.44	0.152	Cannot reject H_0
Q5	5.16	< 0.005	Reject H_0
Q6	5.15	< 0.005	Reject H_0
Q7	3.56	< 0.005	Reject H_0
Q8	6.59	< 0.005	Reject H_0
Q9	6.04	< 0.005	Reject H_0
Q10	3.33	< 0.005	Reject H_0
Q11	0.89	0.372	Cannot reject H_0

	t-Test		
Variable	**T value**	**P(T)**	**Result**
Q12	1.05	0.293	Cannot reject H_0
Q13	15.91	< 0.005	Reject H_0
Q14	10.24	< 0.005	Reject H_0
Q15	9.66	< 0.005	Reject H_0
Q16	20.24	< 0.005	Reject H_0
Q17	5.30	< 0.005	Reject H_0
Q18	1.70	0.090	Cannot reject H_0
Q19	0.07	0.941	Cannot reject H_0
Q20	3.96	< 0.005	Reject H_0
Q21	3.76	< 0.005	Reject H_0
Q22	6.06	< 0.005	Reject H_0
Q23	3.26	< 0.005	Reject H_0
Q24	5.24	< 0.005	Reject H_0
Q25	0.76	0.447	Cannot reject H_0
Q26	1.46	0.146	Cannot reject H_0
Q27	4.79	< 0.005	Reject H_0
Q28	2.88	< 0.005	Reject H_0
Q29	0.20	0.843	Cannot reject H_0
Q30	7.13	< 0.005	Reject H_0
α (0.05)		$t_{(0.025,519)} = 2.249$	

H_0 can be rejected for 21 of the 30 variables. It may be noted that the results were unchanged at an α of 0.005. The base hypothesis required more than 15 variables to show significant changes in the mean of the variable. There was a very small (less than 0.01) probability of having a false positive result due to the highly significant results of the t-tests. For this to happen, more than six of the individual t-tests would have to have false positive results. This means that the overall null hypothesis – that there has been no significant change in attitudes towards business ethics – can be rejected.

Changes in Ranks

Another view on the validity of the changes measured in the attitudes was gained by examining the rankings of the various variables and how they have changed. The

Wilcoxon Signed Rank Test was used to measure whether the changes in the rankings of the means of the variables are statistically significant.

Table 5: Variable Rankings

Variable	GIBS Mean	Rhodes Mean	GIBS Rank	Rhodes Rank	Change in Rank	t-Test Significant?
Q1	1.908	2.308	23	20	-3.00	Yes
Q2	1.345	1.683	28	29	+1.00	Yes
Q3	3.148	2.968	9	14	+5.00	No
Q4	2.204	2.089	19	24	+5.00	No
Q5	2.655	3.077	12	11	-1.00	Yes
Q6	2.613	3.092	13	10	-3.00	Yes
Q7	1.521	1.759	27	28	+1.00	Yes
Q8	2.211	2.729	18	15	-3.00	Yes
Q9	1.613	1.989	25	26	+1.00	Yes
Q10	2.303	1.978	16	27	+11.00	Yes
Q11	2.345	2.258	15	21	+6.00	No
Q12	3.493	3.596	4	3	-1.00	No
Q13	1.958	3.306	22	5	-17.00	Yes
Q14	1.162	1.604	30	30	+0.00	Yes
Q15	1.549	2.149	26	22	-4.00	Yes
Q16	1.254	2.122	29	23	-6.00	Yes
Q17	3.289	2.702	6	16	+10.00	Yes
Q18	4.077	3.947	1	1	+0.00	No
Q19	3.176	3.169	8	8	+0.00	No
Q20	2.218	2.550	17	17	+0.00	Yes
Q21	1.761	2.068	24	25	+1.00	Yes
Q22	1.979	2.484	21	18	-3.00	Yes
Q23	3.542	3.854	3	2	-1.00	Yes
Q24	2.908	3.440	11	4	-7.00	Yes
Q25	3.042	3.116	10	9	-1.00	No
Q26	3.366	3.238	5	7	+2.00	No
Q27	2.556	2.994	14	12	-2.00	Yes
Q28	2.155	2.357	20	19	-1.00	Yes
Q29	3.275	3.294	7	6	-1.00	No
Q30	3.570	2.981	2	13	+11.00	Yes

$T^+ = 345$ LCL = $s_{30,0.025}$ = 137   UCL= $n(n+1)/2 - s_{30,0.025}$ = 328

$T+$ is greater than the upper control limit (UCL). The H_0 that there was no significant difference in the ranks could therefore be rejected at an α-level of 0.05 when testing on a two-tailed hypothesis.

There were generally relatively small changes in the rank of variables with only five variables which changed rank by more than five places and displaying a statistically

significant change in the mean at an α-level of 0.05. These variables, which showed a significant change in rank, highlighted specific aspects of the attitudes towards business ethics that had shown marked changes between the GIBS and Rhodes samples.

Both the t-Tests and the Z-Tests showed identical results, confirming that 70% of the variables have changed. Furthermore, the Wilcoxon Signed Rank Test showed that the rankings of the variables have changed and that some attitudes have changed significantly. This can be taken as strong evidence that there have been significant changes in the attitudes towards business ethics between the GIBS and Rhodes samples.

Extremity of Attitudes

The second objective was to determine whether the GIBS respondents expressed stronger opinions on ethical questions than their Rhodes counterparts. The process followed was consistent with the process of the first hypothesis.

The mode of each variable was determined by the most frequent response in the GIBS sample – an "Agree" or "Strongly Agree" was classified as "Agree" while a "Disagree" or "Strongly Disagree" was classified as "Disagree".

The second step was to calculate the movement in the mean of responses for each variable across both samples. A positive value meant that there had been a shift toward agreement whereas a negative value indicated a shift toward disagreement.

If the shift was found to be statistically significant at an α of 0.05 on a two-tailed test and the shift was in the direction of the mode, then the shift is probably indicative of a strengthening of attitude, i.e. responses became stronger "Agree" or stronger

"Disagree". A general trend of attitudes becoming stronger over time would be indicated if the majority of variables exhibited a significant move to the extremes.

Table 6: Evaluation of Changes in Means

Variable	Mode	Δ-Mean	Significant	Extremity
Q1	Disagree	-0.40	Yes	Yes
Q2	Disagree	-0.34	Yes	Yes
Q3	Disagree	0.18	No	No
Q4	Disagree	0.12	No	No
Q5	Disagree	-0.42	Yes	Yes
Q6	Disagree	-0.48	Yes	Yes
Q7	Disagree	-0.24	Yes	Yes
Q8	Disagree	-0.52	Yes	Yes
Q9	Disagree	-0.38	Yes	Yes
Q10	Disagree	0.32	Yes	No
Q11	Disagree	0.09	No	No
Q12	Agree	-0.10	No	No
Q13	Disagree	-1.35	Yes	Yes
Q14	Disagree	-0.44	Yes	Yes
Q15	Disagree	-0.60	Yes	Yes
Q16	Disagree	-0.87	Yes	Yes
Q17	Agree	0.59	Yes	Yes
Q18	Agree	0.13	No	No
Q19	Agree	0.01	No	No
Q20	Disagree	-0.33	Yes	Yes
Q21	Disagree	-0.31	Yes	Yes
Q22	Disagree	-0.51	Yes	Yes
Q23	Agree	-0.31	Yes	No
Q24	Agree	-0.53	Yes	No
Q25	Agree	-0.07	No	No
Q26	Agree	0.13	No	No
Q27	Disagree	-0.44	Yes	Yes
Q28	Disagree	-0.20	Yes	Yes
Q29	Agree	-0.02	No	No
Q30	Agree	0.59	Yes	Yes

More Extreme	18
Less Extreme	3
Not significant	9

Since 18 of the variables showed a statistically significant move to the extremities the H_0 can be rejected and a strengthening of opinion is indicated. This is in contrast with only three variables that showed a significant move to neutrality. There were

also nine variables for which a statistically significant conclusion could not be reached at an α of 0.05.

Discussion of results

The analysis of the data was able to provide conclusive results on both research objectives. The attitudes arising out of the GIBS study significantly differed from the attitudes of the Rhodes study. The analysis showed that the factors to which the respondents were most sensitive have also changed over time and that significantly stronger opinions are currently held on ethical issues than in the past.

The GIBS sample may be assumed to be representative of the current cohort of management and junior executives in corporate South Africa. The original GIBS selection process does not discriminate unfairly against any demographic and thus the MBA alumni that graduated from GIBS are therefore representative of all major South African ethnic, cultural and language groupings and echo the diversity found in the workplace.

The Rhodes sample, on the other hand, was representative of the South African management cohort as it existed in the early 1990's, during the final years of the Apartheid regime. Another factor which should be considered in the interpretation of the results is that the GIBS sample were, on average, approximately ten years older than their Rhodes counterparts and had practical business management experience that the Rhodes students would have lacked. This difference in experience and age may account for some of the differences measured in the attitudes.

Changes in South Africa

South Africa has seen significant change and transformation since the first democratic elections in 1994. The democratisation of South Africa gave rise to its readmittance into the global environment including access to capital markets (Malherbe & Segal, 2001). Corporate Governance reform was further driven by the forces of the political economy that recognised the importance of adopting the similar reform policies that had occurred in the Commonwealth economic systems (Andreasson, 2008; Diamond & Price, 2012). The King Report on Corporate Governance (Institute of Directors in Southern Africa, 2009) is the third iteration of Corporate Governance regulation applicable to companies in South Africa and brought about specifically in recognition of the changes in international corporate governance trends (Institute of Directors in Southern Africa, 2009, p5). As a result, the financial crisis and corporate governance scandals have had a profound impact on governance standards and practices leading to a significantly stronger legal and regulatory framework. Furthermore, international standards and enforcement of anti-corruption and counter-terrorist financing have been implemented.

South Africa has also implemented Affirmative Action and Broad Based Black Economic Empowerment (BBBEE) initiatives that have transformed the demographic composition of management teams. Corporate South Africa has also become more socially aware and less parochial and many companies have Corporate Social Responsibility and sustainability initiatives.

Attitude Changes

Significant Changes in Attitudes on Individual Questions

There were five questions where the "centre of gravity" of responses changed from a generally agree to generally disagree response. Of these, three were marginal responses from the Rhodes study, but the other two showed strong and significant shifts. The first was on statement 13 *"As a consumer when making an auto insurance claim, I try to get as much as possible regardless of the extent of the damage."* The other was on statement 17 *"Employee wages should be determined according to the laws of supply and demand."* The responses on both these questions could be interpreted as being more utilitarian motivated, enforcing a teleological moral philosophy.

Another insightful result is that the rankings of the individual questions have changed significantly. Understandably, statements 13 and 17 changed rank significantly, but there were another three statements which showed a statistically significant change and moved rank by more than five places. These were statement 10 *"The business world today is not different from what it used to be in the past. There is nothing new under the sun"*, statement 24 "*The business world has its own rules"* and statement 30 *"You should not consume more than you produce."* The change in response to statements 10 and 30 underscores the perception that there has been a significant change in the way that business is conducted and regulated and that there is a more utilitarian focus in business. Statement 24 also shows a move towards the utilitarian, but with the respondents being strongly divided between agreement and disagreement, it would be unwise to infer too much from the statement alone.

Changes in the Factors Identified

The PCA and Factor Analysis yielded mixed results – the model could only account for 22 of the questions as contributing significantly. Furthermore, five of the eleven factors identified were unable to reduce the underlying complexity of the model by each mapping to a single question. Five of the factors, numbers 2, 4, 5, 7 and 9 were similar to the Rhodes study, with the other factors bearing little resemblance between the studies. The fact that there were eleven significant factors identified is another indication of the underlying complexity of the attitudes displayed by the respondents. As the questionnaire was developed according to only five philosophies, i.e., Machiavellianism, Objectivism, Social Darwinism, Universalism and Relativism, a good result would have been five to eight factors identified, with the principal factors correlating to the philosophies. The complexity is also understandable from a business environmental perspective. There are numerous stakeholders involved in most major business decisions and with the current governance models requiring justification, oversight and disclosure, it is easy to see the complex balancing act that the business decisions become.

Combined Hypothesis Tests

21 of the 30 questions showed a statistically significant difference between the Rhodes study and the GIBS sample. Even though the hypotheses tests were run at a 95% confidence, the result was unchanged at 99.5% confidence. The net result was that there is very strong evidence that there has been a significant change in attitudes towards business ethics between the Rhodes study in the early 1990s and the GIBS sample in 2010.

Extremity of Attitudes

The evaluation of the results showed that 18 of the 21 questions that had showed a statistically significant change had showed a strengthening of attitude. I.e. respondents from the GIBS sample tended to agree more or disagree more with the questions than the Rhodes study. This is a significant finding as it represented a large proportion of the results and the calculated reliability of the result was in excess of 98%.

Changes in Motives and Philosophies

A review of the motives behind the 18 questions which showed a move to the strengthening of attitudes revealed that none exhibited a strengthening of egoism, but rather a move towards utilitarianism, where a clear distinction could be made. The same was true when assessing the base moral philosophy – none of the questions showed a move to the deontological philosophy, but rather a strong trend towards the teleological moral philosophy.

By combining these results it is clear that the GIBS sample showed a much stronger absolutist (high idealism- low relativism) (Forsyth, 1980) attitude towards the ethical questions posed.

Exploring the Probable Causes

Apart from the fact that a similar study came to the conclusion that there has been a significant move in the direction of utilitarian or compliance-focussed attitudes towards business ethics (Emerson & Conroy, 2004), there are a number of factors which may be cited as contributing to this swing.

Firstly, there is the number of significant ethical failures across the globe, e.g. Enron and WorldCom that have forced the international standards and oversight bodies to improve the standards on governance and reporting which led to the implementation of the International Financial Reporting Standards (IFRS) and laws such as the Sarbanes-Oxley Act in the United States. Further to this, the terrorist attacks on the US on 9 September 2001 initiated a series of improvements to the counter-terrorist financing and anti-money laundering standards and their enforcement by the Financial Action Task Force (FATF) of the Organisation for Economic Cooperation and Development (OECD). All countries wishing to participate in the global economy, including South Africa, are required to abide by the FATF regulations and implement similar controls through their national regulators. This has forced the vast majority of companies to adopt a much more compliance-oriented attitude.

Secondly, there seems to be an unending fascination with large scale failures of moral judgement and these lapses are played out in the media in graphic detail. This increases the reputational risk to organisations that would influence the "tone at the top". It may be possible that many companies decline lucrative business opportunities due to potential negative publicity.

The third factor which influences the ethical stance of companies is the socio-political environment in which the companies operate. This is of especially high relevance in South Africa where there are significant social challenges and persistently high levels of inequality. Addressing social issues at the company's expense has become the norm to the point that social accountability has been codified into the King Code on Governance for South Africa 2009 (IoDSA, 2009) and the BBBEE transformation targets set by the Department of Trade and Industry as well as the various sector charters.

There is general agreement around the world that the existing patterns of consumption, pollution and natural resource exploitation is unsustainable in the long run (Newell, 2008). This is forcing many companies to adopt policies that are environmentally aware and have significant long-term financial impacts on them, but which they implement as the morally right thing to do.

Conclusion

This study shows conclusively that the attitudes towards business ethics have changed significantly over the past twenty years – from the time when South Africa was in social and political turmoil to the current economic reality of stable, if moderate, growth but with its own set of realities and challenges. Furthermore, the espoused attitudes towards business ethics have also become stronger – managers today have stronger opinions on what is "wrong" and what is "right" business behaviour.

These findings bode well for the implementation of new business-oriented legislation and codes such as the new Companies Act (Act 71 of 2008), the Protection of Personal Information Act, the Consumer Protection Act, the Competition Act and the King Code on Corporate Governance. Fundamentally, all of these require that companies, as corporate citizens, commit to, and execute a socially acceptable code of ethics. It is then up to the new set of business leaders, such as recent business school graduates, to define these codes of ethics and oversee its implementation.

Recommendations for teaching ethics in business schools

In light of the evidence to support the finding that there is a trend toward a more absolutist or universalist view of ethics in former business students, it is important for

business schools to reinforce their focus on two of their goals: Firstly, they must ensure that they create an effective level of understanding of a broad range of ethical philosophies and approaches, both relative and absolute, that may be applied in the ever changing complex business context. Secondly, given that the results of this study highlight a trend towards absolutism and that this be interpreted as evidence of managers more readily accepting that any "legitimate" action is "right" and thereby confusing "legal" with "ethical", business schools should ensure that the underlying principles behind any rule or regulation are understood and considered in the ethical decision-making process and that students progress beyond the second level of cognitive moral development developed by Kohlberg (1969).

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Appendix A: ATBEQ Research Instrument

Attitudinal Survey Questions – Neumann and Reichel, 1987 as cited in Preble and Reichel (Preble & Reichel, 1988)	Likert Scale: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
1. The only moral of business is making money.	1 – 2 – 3 – 4 – 5
2. A person who is doing well in business does not have to worry about moral problems.	1 – 2 – 3 – 4 – 5
3. Every business person acts according to moral principles, whether he/she is aware of it or not.	1 – 2 – 3 – 4 – 5
4. Act according to the law, and you can't go wrong morally.	1 – 2 – 3 – 4 – 5
5. Ethics in business is basically an adjustment between expectations and the way people behave.	1 – 2 – 3 – 4 – 5
6. Business decisions involve a realistic economic attitude and not a moral philosophy.	1 – 2 – 3 – 4 – 5
7. Moral values are irrelevant to the business world.	1 – 2 – 3 – 4 – 5
8. The lack of public confidence in the ethics of business people is not justified.	1 – 2 – 3 – 4 – 5
9. 'Business ethics' is a concept for public relations only.	1 – 2 – 3 – 4 – 5
10. The business world today is not different from what it used to be in the past. There is nothing new under the sun.	1 – 2 – 3 – 4 – 5
11. Competitiveness and profitability are independent values (exist on their own).	1 – 2 – 3 – 4 – 5
12. Conditions of a free economy will serve best the needs of society. Limiting competition can only hurt society and actually violates basic natural laws.	1 – 2 – 3 – 4 – 5
13. As a consumer when making an auto insurance claim, I try to get as much as possible regardless of the extent of the damage.	1 – 2 – 3 – 4 – 5
14. While shopping at the supermarket, it is appropriate to switch price tags or packages.	1 – 2 – 3 – 4 – 5
15. As an employee, I take office supplies home; it doesn't hurt anyone.	1 – 2 – 3 – 4 – 5

16. I view sick days as vacation days that I deserve.	1 – 2 – 3 – 4 – 5
17. Employee wages should be determined according to the laws of supply and demand.	1 – 2 – 3 – 4 – 5
18. The main interest of shareholders is maximum return on their investment.	1 – 2 – 3 – 4 – 5
19. George X says of himself, "I work long, hard hours and do a good job, but it seems to me that other people are progressing faster. But I know my efforts will pay off in the end." Yes, George works hard, but he's not realistic.	1 – 2 – 3 – 4 – 5
20. For every decision in business the only question I ask is, "Will it be profitable?" If 'yes' I will act accordingly, if not, it is irrelevant and a waste of time.	1 – 2 – 3 – 4 – 5
21. "In my grocery store every week I raise the price of a certain product and mark it on sale." There is nothing wrong with doing this.	1 – 2 – 3 – 4 – 5
22. A business person can't afford to get hung up on ideals.	1 – 2 – 3 – 4 – 5
23. If you want a specific goal, you have got to take the necessary means to achieve it.	1 – 2 – 3 – 4 – 5
24. The business world has its own rules.	1 – 2 – 3 – 4 – 5
25. A good business person is a successful business person.	1 – 2 – 3 – 4 – 5
26. I would rather have truth and personal responsibility than unconditional love and belongingness.	1 – 2 – 3 – 4 – 5
27. True morality is first and foremost self-interested.	1 – 2 – 3 – 4 – 5
28. Self-sacrifice is immoral.	1 – 2 – 3 – 4 – 5
29. You can judge a person according to his work and his dedication.	1 – 2 – 3 – 4 – 5
30. You should not consume more than you produce.	1 – 2 – 3 – 4 – 5