

**ETHICAL PERCEPTIONS: MANAGEMENT VERSUS PRODUCTION AT A LARGE
MULTINATIONAL SEED COMPANY**

Pieter Craven²⁴ & Christo Bisschoff

*Potchefstroom Business School, North-West University
SOUTH AFRICA*

Abstract

This study determines the ethical profiles and dispositions of three groups of managers in South Africa. These groups consisted of:

- *Top & Middle Managers from a specific company active in the agricultural sector in South Africa.*
- *Production Managers from a specific company active in the agricultural sector in South Africa.*

The research objectives were to, firstly, measure the ethical views of the groups as it pertain to questionable actions undertaken by anonymous businesses and consumers. Secondly, to identify ethical discrepancies that exist among the different respondent groups, and thirdly, once identified, to determine the statistical significance of those differences. The research uses a well-tested research tool developed by Fullerton (1993) that poses an international battery of questionable actions by management. Individual as well as company behaviour is tested within the research instrument. The research provides a snapshot of the three chosen groups. Overall, the aggregate sample's ethical dispositions offer no evidence for concern, especially regarding individual behaviour. When segmented on the basis of field of study, the groups also do not differ significantly from each other on individual ethical behaviour. Regarding company ethics, the groups also show acceptable ethical dispositions; however, they differ more in their views of which actions are acceptable and which are not, and more so with regard to company behaviour than with individual behaviour. Still, all of the groups show a high level of ethical standards, and the grand means calculated for each group show that it cannot be concluded that neither group of managers regard the RSA environment to be a laissez faire society where anything goes.

Keywords: Multinational company, ethical perceptions, business ethics, code of conduct

Introduction

The primary objective of this study is to determine the ethical profiles and dispositions of South African managers in a multinational agricultural seed company. In total, two groups of managers were surveyed to determine their ethical profiles and dispositions. The two groups of managers used in the research consisted of:

²⁴ The article stems from research by Pieter Craven in the completion of his Masters in Business Administration degree at the North-West University

- Top and middle managers from a specific company active in the agricultural sector in South Africa; versus
- Production managers from a specific company active in the agricultural sector in South Africa.

Observed differences are then subjected to inferential scrutiny to determine whether or not the gaps are statistically significant. The research uses a battery of questionable actions undertaken by anonymous business entities and individuals in the marketplace (Fullerton, 1993).

This study seeks to aid managers in their efforts to gain a better understanding of the ethical predisposition of economic active role-players in the RSA within a specific agricultural company. In addition, the differences in behavior within a specific company by these managers who are subjected to the same code of ethics is analysed. If one understands the ethical predispositions and resulting behaviour of the managerial environment in the RSA, one should be able to make better decisions on business and commerce.

Problem Statement

The core problem presenting itself is determining the ethical predispositions of managers as that of economic role-players. This implies that managers, as economic active groups, enter the market with specific views on ethics, conduct their economic and business activities according to their ethical predispositions. Several key questions remain. Do these views differ between the managerial groups from current ethical standpoints or views, and if they indeed differ, on what grounds and to what extent? Secondly, the next problem is to determine to what extent these views differ among the different groups with regard to their departments they are employed in. Therefore, does a typical top and middle manager's ethical profile or views differ from that of the typical production manager from a specific company, and if so, on what aspects do they agree or differ?

Research Objectives

The primary objective of this study was to determine whether employees in Production and Management at Monsanto SA, exhibit the high level of business ethics (as measured by the proven measuring instrument compiled by Fullerton (1993:317-323).

The following secondary objectives have been identified for the study:

- Developing an ethical profile for top level and middle management in Monsanto SA, as these are the leaders who guide the ethical behaviour in the organisation.
- Developing an ethical profile for employees in the Production division of Monsanto SA, who are in constant contact with government officials and suppliers at different levels of the production stages.
- Determining whether there are any differences in the perceptions in regard to ethical conduct between these different groups of employees.

By attaining the above secondary objectives, the primary objective was achieved.

Hypotheses

To determine whether there are any differences between the ethical perceptions of the two groups, two hypotheses need to be tested. Hypothesis 1 states that there is no difference between the means of Management and Production with regard to individual behaviour. Hypothesis 2 states that there is no difference between the means of Management and Production with regard to their perceptions on company behaviour.

HYPOTHESIS 1:

$$H_0: M_{mi} = M_{pi}$$

$$H_1: M_{mi} \neq M_{pi}$$

HYPOTHESIS 2:

$$H_0: M_{mc} = M_{pc}$$

$$H_2: M_{mc} \neq M_{pc}$$

M_{mi} , M_{mc} , M_{pi} , and M_{pc} represent the means of each of the groups for the respective scenarios tested.

Research Methodology

A measuring instrument designed by Fullerton (1993:317-323) was employed in the empirical research (see Appendix A). This consists of a questionnaire measuring the attitudes of participants towards business practices that may be viewed as potentially corrupt. In the first section of the questionnaire, participants were required to complete questions regarding demographic information in order to assist in descriptive data analysis. The potentially corrupt practices were presented in the form of two separate sections in the questionnaire – one (Section 2 – see Appendix 1) describing conduct by individuals and the other part (Section 3 – see Appendix 2) describing company behaviour. Fourteen different scenarios are portrayed in each of the latter two sections. Some of these scenarios represent situations where there are clear indications to whether or not such conduct is right or wrong.

Participants were required to voice their opinions concerning each of these scenarios, which are measured using a balanced six-point Likert scale ranging from (1 = not acceptable) to (6 = very acceptable). *A low rating would thus indicate a more ethical inclination, whereas a high rating would indicate a less ethical inclination by the respondent.*

The sample for this study consisted of participants from two groups namely Management, which include employees at top and middle management, as well as in Production (referred to as Seed Supply). Questionnaires were sent to 32 Management employees of which 21 (65.6%) responded while 26 (76.5%) of the 34 Production employees responded.

Differences between the two groups were determined on the basis of determining practical significance (d) or the *effect size* as described by Ellis and Steyn (2003:52). The range of the d -value is between 0 and 1.0. This implies that a large practical significance was found with a d -value of 0.8 and higher. Medium practical significance was identified for d -values between 0.5 and lower than 0.8, while a d -value of at least 0.2 but less than 0.5 depicts a small effect (Ellis & Steyn, 2003:54). For this study d -values of 0.5 and above, thus indicating medium or high levels of practical significance, are considered significant differences between the ethical perceptions of the two groups.

Results

Demographic profile

The demographic profile are summarised in Table 1. From this, it is evident that a favourable demographic disposition exists with 44.7% of respondents being in Management and 55.3% in Production. The majority of respondents were male (74.5%) and female respondents making up the rest at 25.5%. Furthermore, 74.5% of the respondents are between the ages of 31 to 50 with a smaller percentage of respondents nearing retirement and a few younger respondents at the start of their careers. The number of respondents having worked for Monsanto between 5 to 20 years, consist of 70.2%, which should also give more credibility to the results as they have been exposed to the code of conduct and business practices within the company for a number of years.

Table 1: Summary of the demographic disposition of the respondents

Category		% in Category
Employment level	Top/Middle Management	44.7
	Production	55.3
Gender	Male	74.5
	Female	25.5
Age (years)	Younger than 30	4.3
	31-35	17.0
	36-40	21.3
	41-50	36.2
	Older than 50	21.3
Time at the company	Less than 5yrs	23.4
	5 - 10yrs	34.0
	11-15yrs	21.3
	16-20yrs	14.9
	More than 20yrs	6.4

Ethical perceptions on individual behaviour

Hypothesis 1 deals with the ethical perceptions of employees with regard to ethical behaviour of consumers. Figure 1 compares the ethical profiles of Management and Production employees. Since a rating scale of one (not acceptable) to six (very acceptable) was used in this analysis, item means below the midpoint of 3.5 was deemed unacceptable, thus indicating a more ethical inclination. Item means above 3.5 were deemed as acceptable behaviour, showing a less ethical inclination. These results indicate that the respondents in both groups have identified 12 of the 14 scenarios (see Table 1) as unacceptable behaviour. Those scenarios that have been deemed as acceptable by Management include:

- A7 - repeated visits to a store to take advantage of single purchase limits with a mean of 3.524; and
- A6 - using retailer information to purchase products from a cheaper source (5.910).

Employees in the production division identified:

- A10 - negotiating lower prices based on unverified information (3.615); and
- A6 - using retailer information to purchase products from a cheaper source (4.538) as acceptable.

These anecdotal profiles also seem to support the premise that Management exhibited a stronger ethical disposition than that of Production.

Figure 1: Profile of ethical perceptions of management versus production regarding the behaviour of individuals

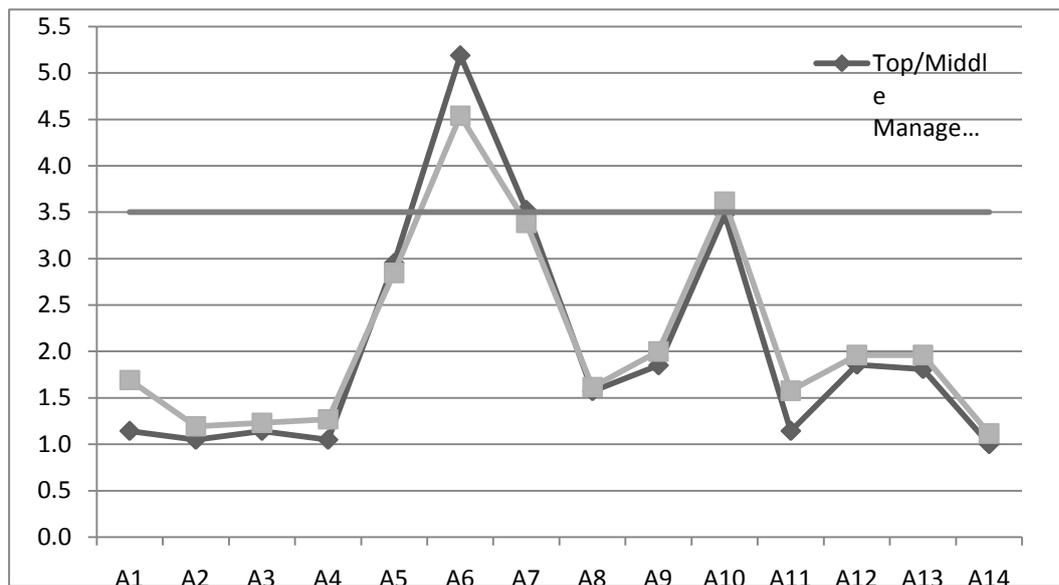


Table 2.4 summarises the comparative analysis of the two groups with the effect size (d) as well as the t-test (p) statistics reflecting the practical and statistical significance of differences observed between the two groups. These results also confirm the more ethical inclination of Management (Grand mean = 2.054) compared to Production (Grand mean = 2.143), although by the slightest of margins. Although there may be some differences visible in the profiles described in Figure 1, according to the results in Table 4, none of these was of practical or statistical significance.

Table 2: Practical and statistically significant differences between ethical perceptions of management versus production regarding individual behaviour

Scenario	Top/Middle Management		Production		Effect size (d)*	t-test (p)**
	Mean	Standard deviation	Mean	Standard deviation		
A1	1.143	0.478	1.692	1.225	0.4484	0.0592
A2	1.048	0.218	1.192	0.402	0.3600	0.1456
A3	1.143	0.478	1.231	0.514	0.1709	0.5509
A4	1.048	0.218	1.269	0.533	0.4154	0.0812
A5	2.952	1.532	2.846	1.642	0.0647	0.8213
A6	5.190	1.209	4.538	1.555	0.4193	0.1225
A7	3.524	1.662	3.385	1.722	0.0808	0.7809
A8	1.571	0.870	1.615	1.203	0.0366	0.8890
A9	1.850	1.599	2.000	1.442	0.0938	0.7403
A10	3.476	1.940	3.615	1.745	0.0718	0.7971
A11	1.143	0.478	1.577	1.172	0.3703	0.1186
A12	1.857	1.014	1.962	1.216	0.0859	0.7545
A13	1.810	1.030	1.962	1.113	0.1366	0.6328
A14	1.000	0.000***	1.115	0.431	0.2674	0.2277
Grand Mean	2.054		2.143			

* Practical significance: $d \geq 0.8$ (large effect) and $0.5 \leq d < 0.8$ (medium effect)

** Statistical significance: $p < 0.05$

*** Standard deviation = 0 (due to all respondents in Management selecting 1 – not acceptable for this scenario)

Scenario A14 (Table 2) was deemed as not acceptable by both Management and Production. Respondents of both management groups felt that wearing clothes and returning it was wrong to such an extent that each respondent in this group gave this scenario a rating of 1 (Not Acceptable), hence the standard deviation of 0.000.

Therefore, *Hypothesis 1* can be accepted as that there were no practical or statistically significant differences between the perceptions of Management and Production regarding ethical conduct by individuals.

Ethical perceptions on company behaviour

Hypothesis 2 addresses the ethical perceptions of employees with regard to ethical behaviour of companies. The comparison of the ethical profiles of the two groups with regard to the behaviour of companies is shown in Figure 2. Results in this analysis indicate that Management has identified seven of the fourteen scenarios as unacceptable compared to Production employees who deemed nine of these scenarios unacceptable (being above the midpoint of 3.5). The scenarios that have

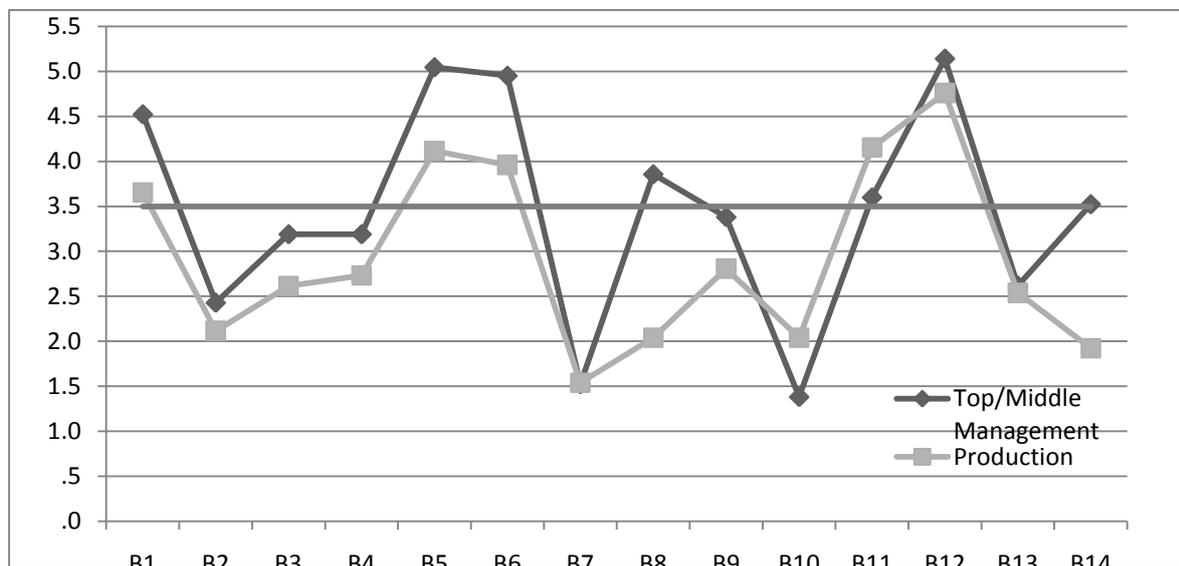
been deemed as acceptable by Management include:

- B14 - raising prices of products then dropping them and advertising it as *sale* prices (3.524);
- B11 - advertising calls to Santa for children, with their parents’ permission (3.600);
- B8 - estate agents not putting up sold signs to attract new business (3.857);
- B1 - a manufacturer not selling to other retailers in turn for a large purchase from a certain buyer (4.524);
- B6 - delaying market entry of new products till stock of obsolete products are sold (4.952);
- B5 - using sports personalities to endorse products (5.048); and
- B12 - outsourcing production to areas with lower labour costs (5.413).

Employees in the Production division identified:

- B1 - a manufacturer not selling to other retailers in turn for a large purchase from a certain buyer (3.654);
- B6 - delaying market entry of new products till stock of obsolete products are sold (3.962);
- B5 - using sports personalities to endorse products (4.115);
- B11 - advertising calls to Santa for children, with their parents’ permission (4.154); and
- B12 - outsourcing production to areas with lower labour costs (4.760), as acceptable practices.

Figure 2: Profile of ethical perceptions of management versus production regarding the behaviour of companies



The significance of the differences recorded between Production and Management are shown in Table 3. The table shows the calculated effect sizes and the effect each one has.

Table 3: Practical and statistically significant differences between ethical perceptions of management versus production regarding individual behaviour

Scenario	Top/Middle Management		Production		Effect size (d) *	T-test**
	Mean	Standard deviation	Mean	Standard deviation		
B1	4.524	1.806	3.654	1.696	0.4817	0.0963
B2	2.429	1.989	2.115	1.608	0.1574	0.5534
B3	3.190	1.806	2.615	1.577	0.3184	0.2502
B4	3.190	2.064	2.731	1.638	0.2227	0.3990
B5	5.048	1.322	4.115	1.751	0.5324	0.0496
B6	4.952	1.687	3.962	1.612	0.5872	0.0460
B7	1.524	1.289	1.538	1.029	0.0114	0.9656
B8	3.857	2.007	2.038	1.311	0.9061	0.0005
B9	3.381	1.962	2.808	1.674	0.2923	0.2854
B10	1.381	0.805	2.038	1.248	0.5267	0.0426
B11	3.600	1.957	4.154	1.912	0.2829	0.3403
B12	5.143	1.459	4.760	1.665	0.2299	0.4159
B13	2.619	1.658	2.538	1.726	0.0467	0.8721
B14	3.524	1.861	1.923	1.354	0.8603	0.0014
Grand Mean	3.454		2.298			

* Practical significance: $d \geq 0.8$ (large effect) and $0.5 \leq d < 0.8$ (medium effect)

** Statistical significance: $p < 0.05$

The comparative analysis for the two groups (Table 3) also confirms that with regard to the ethical behaviour of companies employees in Production seem to be more ethically inclined than Management, based on the grand means of the two groups, as seen in Table 3. Furthermore, statistically as well as practically significant differences between the means of five of the scenarios have been identified. Both Management and Production have deemed importing illegal pharmaceutical products to help patients as unacceptable behaviour, however, as only with medium effect ($d=0.5267$). Using sports personalities to endorse products ($d=0.5324$) and delaying market entry of new products until stock of obsolete products were sold ($d=0.5872$) were deemed acceptable practices by Management and Production, both with medium practical significance. However, two scenarios that have been deemed acceptable behaviour by Management have been deemed unacceptable by Production employees, both with large effects regarding practical significance. These are:

- B14 - raising prices then dropping them and advertising it as *sale* prices ($d=0.8603$); and
- B8 - estate agents not putting up sold signs so as to attract new business ($d=0.9061$).

One also notices that of the five scenarios where there were significant differences it was only for the unacceptable practice of (B10) importing illegal pharmaceutical products to help patients that

the mean for Production employees (2.038) was significantly higher than that of Management (1.381).

Considering the results in Table 3, *Hypothesis 2* can be rejected on the basis that five of the scenarios that show significant differences between the two groups on both measures of practical and statistical significance. Furthermore, three of the effect sizes calculated show medium differences and the other two document large differences. The grand means also show a noticeable difference between the two groups along with the visual differences in profiles (Table 2). It is clear from this that the means of Management and Production regarding ethical perceptions on company behaviour cannot be considered equal.

Summary

The research provides a snapshot of the two managerial groups. Generally their ethical dispositions offer no evidence for concern, especially regarding individual behaviour. Both the groups exhibit a relatively high level of ethical standards, while few significant differences were found between the groups. The groups correlated positively and in general show similar views on acceptability or non-acceptability of the various scenarios. Although the similarities is not surprising because the respondents are all employed by the same agricultural company, it is nonetheless comforting that ethics policy results in similar behaviour in different departments of the company.

References

- Ellis, S.M. & STEYN, H.S. 2003. Practical significance (effect sizes) versus or in combination with statistical significance (p-values), *Management dynamics*, 12(4):51-53.
- Fullerton, S. 1993. The ethical predisposition of our next generation of business and community leaders. Proceedings of the Atlantic marketing association, March, 317-323.
- Painter-Morland, M. 2006. Triple bottom-line reporting as social grammar: integrating corporate social responsibility and corporate codes of conduct. *Business ethics: a European review*, 15(4):352-364.
- Sansor: South African National Seed Organisation. 2008. <http://www.sansor.org/about2.htm>. Date of access: 25 Nov. 2008.

APPENDIX 1: SCENARIOS DEPICTING POSSIBLE ETHICAL CONCERNS RELATED TO INDIVIDUAL BEHAVIOUR

Scenario	Description
A1	A co-worker was given too much change from the shop assistant at the corner bakery. Your co-worker kept the extra money.
A2	A friend's apartment was damaged by a fire. In reporting losses to the insurance company, your friend included items that she never owned and also inflated the value of items that were lost in the fire.
A3	You have seen other people misrepresent their own age in order to take advantage of discounts that are given to senior citizens.
A4	You have seen other people misrepresent their children's age in order to take advantage of a child's discount.
A5	A friend of yours finds an item at a store that is obviously mismarked at a lower price. Rather than notifying the store, your friend purchased the product at the incorrect price.
A6	Some people will go to a retailer to get information on a specific product and then use this information to purchase the product from a cheaper source. (A catalogue and the Internet are two examples).
A7	Some people will go to the same store repeatedly in order to take advantage of an offer that limits the amount that can be purchased per visit.
A8	Someone you know sold a frequent flier ticket to a friend despite specific airline rules that prohibit such a sale.
A9	Through word-of-mouth, you hear that a neighbour returned a product to a shop other than the shop where the product was purchased.
A10	Someone you know went to purchase a TV. In order to get a better deal, your acquaintance told the salesperson that another retailer was selling the same TV at a much cheaper price. The retailer, without verifying the competitor's price, matched the lower price. Your acquaintance then purchases the TV.
A11	At the supermarket, the person in front of you redeems coupons for items that were not purchased.
A12	In order to sell an item at their garage sale, your neighbours exaggerate its quality
A13	People that you know, have sometimes been less than truthful on marketing research surveys.
A14	Friends of yours purchased clothing from a local retailer. After wearing the clothing, they see it at another store for a substantially lower price. They return the worn clothing for a refund; then they buy the same clothing at the store offering the lower price.

Source: Fullerton (1993)

APPENDIX 2: SCENARIOS DEPICTING POSSIBLE ETHICAL CONCERNS RELATED TO COMPANY BEHAVIOUR

Scenario	Description
B1	A manufacturer agrees to supply a retailer with a highly desirable new product. In return for the guarantee of a large initial purchase by the retailer, the manufacturer agrees not to sell to any other retailers within that trade area.
B2	A retailer advertised a portable, brand-name colour TV for R749. When customers arrived at the store, they were told that the retailer had sold out of the bargain TV. An attempt was then made to sell each customer a more expensive TV.
B3	Supply and demand dictate prices in the marketplace. After a recent hurricane in Florida and an earthquake in Los Angeles, many shops were closed. With the supply of many products down and demand up, many prices rose substantially. Prices on some products were three to eight times the normal price. Retailers argued that price is a function of economic conditions and refused to lower their prices.
B4	A grocery chain has stores in both a wealthy suburb and a poor city with a high incidence of crime. Insurance premiums, theft, and vandalism make it more expensive to operate in the poorer area. These expenses are passed on to customers. As a result, customers in the poorer city pay more for identical products than do their wealthier suburban counterparts.
B5	People have a great admiration for sports heroes. A marketer often uses these athletes to endorse products because of their belief that such an endorsement will lead consumers to prefer their products over those of their competitors.
B6	A company has developed a new product that will render one of its old products obsolete. The company has a large inventory of the old products, so it delayed the introduction of the new technology until it had sold off the existing inventory of the old, soon to be obsolete, product.
B7	A manufacturer has a large inventory of products that have been sold in the USA for several years. The government recently ruled that the products are unsafe and required all products to be removed from American stores. Rather than discard the product, the company decided to export it to foreign countries that don't have strict regulations on safety. The manufacturer argues that this action is good for the company's stockholders and the US economy.
B8	A real estate agent sells a desirable house in a nice neighbourhood. The agent does not put up a <i>sold</i> sign because they want people to continue to call and inquire about the house. When potential buyers call, they are informed that the house is sold and informed of the availability of other houses listed by the agency.
B9	A manufacturer does business in several countries. In allocating expenses to the various international operations, it is common practice for the manufacturer to assign higher costs in countries with high tax rates. As a result, the facilities that are located in countries with low tax rates show a larger profit. The net result is that the manufacturer reduces its total tax liability by "shifting" profits to low tax countries.
B10	A US doctor believes that a particular experimental pharmaceutical product could provide benefits to certain patients. The drug is illegal in the United States because it has not been certified by the government. However, it is legal and readily available in Canada. The doctor acquires a supply of the product in Canada and illegally brings it in to the US. The drug is then distributed to patients who the doctor thinks it will help.
B11	A company advertises a number for children to call Santa Claus. The call costs 90 cents per minute. The advertiser tells children to ask their parents before calling Santa.
B12	In order to hold down the costs for manufacturing a product, a company has moved part of the production from the United States to Mexico. The lower labour costs result in lower prices for consumers.
B13	A company advertises its product on TV by stating the brand name of a competing product then indicating a specific issue where its own product is considered to be superior to the competitor's product.
B14	A retailer of men's and women's clothing raised its prices two weeks ago. Today, prices were dropped to their original level and the retailer is advertising its sale prices.

Source: Fullerton (1993)