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WHAT THEY REALLY THINK: RESOLVING METHODOLOGICAL ISSUES IN SUPPLY CHAIN ETHICS RESEARCH

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Purpose: The aim of this paper is to further the theory and strengthen methodological approaches to the role of ethics in buyer-seller relationships. The paper explores opportunities to enhance response rates, validity and reliability in the research context of organisations seeking to understand the ethical beliefs their suppliers hold of their buying organisations.

Design/Methodology/Approach: The research universe is a select business group, all of which are technologically literate and online. Innovative research sampling methods were selected to great effect. The method selected was saturation surveying, a process whereby all identifiable target respondents are surveyed. Instead of selecting between sampling techniques, the option of saturation surveying, cheaply available electronically, removes the focus from the decision to either sample probabilistically or not. Instead, as the entire universe can be contacted in a cost effective manner, the sampling frame becomes of paramount importance. Thus, the focus then shifts from accurately selecting respondents from the sampling frame towards enhancing the sampling frame itself. The sampling frame was improved through guidance from the literature.

Findings: The paper demonstrates that this research approach was successful in that it generated a high response rate, suggesting great involvement amongst the supplier population in the topic at hand. It also indicates a lessening of non-response bias, as the response rate is more than double that of previous research into the area.

Implications: This paper presents a comprehensive approach to researching ethics in buyer-seller relations. It further promotes the effective use of new sampling methods enabled by the Internet when directed towards selective populations.

Originality/Value: The novel approach of sampling frame enhancement twined with saturation surveying has exciting implications for business research. The expansion of the sampling frame to a wider audience of suppliers has long been noted as necessary although not actioned. Furthermore, in terms of the little-studied nature of buyer-seller relations, the verification of the scale developed by Bendixon and Abratt (2007) affirms the robustness of this measure for ethics research.

Key words and phrases: Buyer-seller relationships, supplier ethics, saturation surveying, Internet research, sampling frames.

INTRODUCTION

With the move towards closer buyer-supplier relationships to enhance organisation and industry competitiveness, organisations have increased their focus on ethical behaviour within these relationships. Although important, research into ethical practices is fraught with difficulty. The field has noted problems with social desirability, low response rates and corresponding non-response bias. Subsequently, efforts to infer findings to research populations have been problematic. Moreover, matters have been further hampered by restricted definition of units of response. Often surveys have sought the views of a few senior managers (Landeros & Plank, 1996; Razzaque & Hwee, 2002; Carter & Jennings, 2004 and O'Dwyer & Madden, 2006) and omitted those lower in the organisational hierarchy who are more likely to come into contact with suppliers on a daily basis. In order to deal with these methodological issues, some consideration must be shown to sample design, selection and means of response. In order to reduce response bias, efforts must be made to assure respondent anonymity through a medium that provides the utmost confidentiality and privacy. In addition, the independence of the researchers must be firmly established in the minds of the population at hand. A wide scope of investigation into all levels of employees and suppliers is essential. Such issues can be attended to through careful attention to research methodology, sample frame selection, survey method, and instrument development. Use of the Internet as a medium to conduct ethics surveys provides an opportunity to address many of these issues.

Despite much "bad press" towards the use of the Internet as a research medium, it has been found to be effective for select, niche markets, especially those that are hard to reach (Forrest, 2003). It has greatest promise for special populations who have great interest in the research topic, especially when a current and accurate email or web directory is available (Bradley, 1999). Moreover, the Internet provides a cost effective way of accessing large samples, provided that privacy and spam concerns are addressed. Thus, it is ideally positioned as a possible solution to longstanding methodological concerns regarding research into ethical practices.

PURPOSE

The purpose of this paper is to explore opportunities to enhance response rates, validity and reliability in the research context of organisations seeking to understand the ethical beliefs their suppliers hold of their buying organisations, and to empirically test these using an example of buyer-initiated research into the ethical beliefs of suppliers.

The literature review examines the nature of buyer-supplier relationships before focusing on the topic of buyer-supplier ethics and the method issues that present in researching this domain.

LITERATURE REVIEW

There are four main areas that require review when dealing with research into ethical considerations in buyer-seller relationships: first an exploration of changing approaches to buyer-seller relations; second, the importance of ethics in buyer-seller relations and the subsequent "grey" practices that make research into this field fraught with response and non-response bias. Third, research issues that have arisen in buyer-seller ethical research; and fourth, an assessment of the literature on the types and uses of electronic media for solving research methodological problems. Each of these is dealt with in turn below.

The Buyer-Supplier Relationship

The relationships between buyers and their suppliers have been recognised as important in providing a strategic source of efficiency and even competitive advantage if managed appropriately (Zaheer, McEvily & Perrone, 1998 and Bell, Oppenheimer & Bastien, 2002). Research into the nature of buyer-supplier relationships has explored the transformation from a more adversarial form of contracting to a higher trust obligational relationship (Morris & Imrie, 1993). The views of suppliers regarding the ethics of their customer organisations is an important factor to consider when attempting to build relationships characterised by trust, as procurement is an area of the business associated with ethical dilemmas that need to be managed (Wood, 1995 and Razzaque & Hwee, 2002).

The purchasing function in a business is important to the effective execution of its strategy and the efficient management of its operations. Mudambi and Helper (1998) also suggest that if a firm can generate competitive advantage through cooperative buyer-supplier relations, the advantage is likely to be sustainable. The benefits of a relationship of cooperation rather than of conflict in buyer-supplier relationships include: on-going cost reductions; quality improvements; increased operating flexibility; and more powerful competitive strategies (Peck, Payne, Cristopher & Clark, 2000).

Purchasing managers span the boundary between the organisation's internal functions and its external stakeholders (Carter & Jennings, 2004 and Turner, Taylor & Hartley, 1995). Given that most buyer-supplier relationships are characterised as adversarial (Mudambi & Helper, 1998), research into the nature of buyer-supplier relationships has explored the transformation from a more adversarial form of contracting to a higher trust obligational relationship (Morris & Imrie, 1993 and Zaheer *et al.*, 1998). Lamming (1989) found that the adversarial type of buyer-supplier relationship is one-sided, with little collaboration on production development and little information sharing between parties. This "dog-eat-dog" philosophy inevitably leads to wide range of unethical procedures and conflicts, which have seen the necessity of elaborating on a list of forbidden practices (Duran & Sanchez, 1999 and Emiliani, 2003).

In contrast to the adversarial type of buyer-supplier relationship, the obligational type involves a series of close ties between buyer and supplier, often leading to a long-term trust partnership and increased

interdependency (Morris & Imrie, 1993 and Turner, Le May, Hartley & Wood, 2000). Duran and Sanchez (1999) argue that the need to remain competitive requires a position of active cooperation between firms and their suppliers, which should be considered as collaborators rather than adversaries. They go on to analyse the obligational contracting model and highlight the importance of viewing suppliers as collaborators, emphasising long-term relationships, a focus on bi-directionality and richness of information flow, and the active management of suppliers.

Duran and Sanchez (1999) go further to suggest that beyond collaboration is the concept of reverse management within the buyer-supplier relationship, where the buyer takes the initiative with an active attitude, using many traditional marketing/operating tools. This new approach for procurement permits the buyer to contribute effectively to the organisation's objectives and strategy, while requiring greater cooperation from all levels and most functions of the organisation (Blenkhorn & Banting, 1991). Nevertheless, such active courting of suppliers could create a new set of forbidden practices and increased difficulty of eliciting the true nature of buyer-seller relations during research.

Not surprisingly, therefore, research has continually pointed to the role of inter-organisational trust as the overriding driver of exchange performance, negotiation, and conflict. (Luhmann, 1979; Ring & Van de Ven, 1992; Bromiley & Cummings, 1992 and Ploetner & Ehret, 2006). Zaheer *et al.* (1998) argue that the behaviour of purchasing managers and supplier contacts is nested within their respective organisations and therefore that a buyer's and a supplier's own organisational practices and the joint inter-organisational practices used to manage their relationship, collectively determine the level of trust between them. Bell *et al.* (2002) supported this view when they found that organisational structure, culture, and policies will affect the level of trust.

Trust still plays a role in the transition from a more adversarial relationship to one described as more obligational, as this requires an increased level of comprehension and cooperation. Trust is a requirement of frank and open communication, sincere dedication to shared commitments, and attention to the needs of others that the obligational model necessitates. This new outlook must therefore be based on ethical practices and may lead to increased efficiency in the productive system in general as well as permit a reduction of costs to enable greater profits for both parties (Duran & Sanchez, 1999).

Open communication is just one level where trust plays an important role. It also factors into beliefs of either party in the buyer-seller relationship to conduct themselves in ways that are both ethical and moral. Hosmer (1995) sees ethics as part of trust when he defines trust as "the expectation by one person, group or firm of ethically justifiable behaviour – that is, morally correct decisions and actions based upon ethical principles of analysis – on the part of the other person, group, or firm in a joint endeavour or economic exchange" (Hosmer, 1995:399). Spekman and Carraway (2006) echo this link between trust and ethics in their discussion of trust and opportunism vulnerability within the buyer-supplier relationship.

Apart from the requirement to be a good corporate citizen, focus on ethical issues lowers reputational risk as they tend to be given a higher profile in the media than unethical business practices occurring in other areas (Badenhorst, 1994). Although business ethics is an extensively researched domain, the area of buyer-supplier ethics has received limited attention. Buying organisations that seek to build an ethical image with their suppliers need to understand ethical perceptions of those suppliers. Inherent in the surveying of ethical perceptions is a consideration of research design issues.

Ethics and the Buyer-Supplier Relationship

Research has pointed to the importance of ethics in the buyer-supplier relationship. Companies that have embraced ethics, cooperation and joint vision in their relationship with suppliers obtain greater added value (Van den Hengel, 1995). As expressed by Duran and Sanchez (1999:280), "An improved ethical quality in dealings, generating trust, improving communication and establishing long-term relationships with added value, results in higher competitiveness and greater creation of wealth".

Successful organisations therefore understand the importance of ethical behaviour in their purchasing function. This behaviour supports the maintenance of dependable supplier relationships and consequently, satisfied customers (Haynes & Helms, 1991). Waters, Bird and Chant (1986) found that

managers dealing with supplier relationships believed that their relationships ought to be guided by standards of impartiality, openness, and respect. However, they also encountered the following moral issues:

- The extent to which the selection of suppliers was undertaken impartially and guided by strictly competitive market criteria of price and quality.
- The extent to which it was necessary or even possible to be completely candid when negotiating contracts and about the degree to which they set out to respect the special efforts and costs of suppliers.
- The degree to which gratuities offered to buyers turned out to be limited or excluded.

Thus there are a number of areas in which moral and ethical dilemmas do not present themselves in obvious ways. Often favour and partiality may manifest in insidious practices that slowly take hold over the long-term nature of a relationship between buyers and sellers. Increased co-operation of the obligational approach may serve to make such subtle changes in moral compass harder to pinpoint. Clearer cut ethical “grey” areas have been highlighted in a recent review of previous purchasing ethics studies. Here, Razzaque and Hwee (2002) highlighted the following practices considered by purchasers and suppliers as unethical:

- Revealing confidential bids and allowing the supplier to re-quote
- Preferential treatment of suppliers
- Reciprocity - buying from suppliers who in turn buy from the purchaser's company
- Exaggerations of situations to get better deals

Of all the moral issues presented by Waters *et al.* (1986) (i.e. the possibility of impartiality and candid negotiations as well as gift giving), the easier to isolate practice of gift giving has been singled out by subsequent researchers. Razzaque and Hwee (2002) discussed the practices of offering and accepting gifts and business lunches where different researchers found conflicting perceptions of whether they are ethical or unethical practices. Gundlach and Murphy (1993) viewed that practice as ethically acceptable in an industrial marketing context to assist in building relationships of trust through social bonding. But Wood (1995) highlighted the use of bribery, gift giving and entertainment to induce purchasing personnel to favour particular suppliers rather than be guided solely by factors such as price, quality and delivery. Hence many practices of the buyer-seller relationships do not offer themselves up easily to ethical scrutiny.

These “grey” areas are further compounded by the evolution of the role of purchasing in the last three decades. Increased empowerment, responsibilities and pressure have led to a situation where purchasing managers need to take actions deemed questionable from an ethical standpoint (Razzaque & Hwee, 2002). Historically, the previous low status and salaries and low regard for the purchasing function by the organisation may have been a contributory factor to unethical behaviour in purchasing (Badenhorst, 1994). Moreover, with the boundary-spanning roles that purchasing personnel now occupy, they may inevitably face situations where they must judge what is ethical and unethical (Wood, 1995). Consequently, in as much as it is often difficult to determine what is ethical in the complex network of buyer-seller relations, it has also proven difficult to conduct research into this area.

Researching Ethical Perceptions of the Buyer-Supplier Relationship

Forker and Janson (1990:26) note that, “Examination of ethical practices is a sensitive topic”, where measurement is a concern for researchers (Landeros & Plank, 1996). The tendencies of respondents to experience possible discomfort or to provide socially acceptable answers are problems inherent in any study of ethical issues (Forker & Janson, 1990). Low response rates are indicative of non-response bias (Zaheer *et al.*, 1998) and represent a problem for researchers who seek to infer their findings to research populations under question. Response rates reported in supplier ethics surveys are 14% (Forker & Janson, 1990), 34% (Landeros & Plank, 1996), 15% (Zaheer *et al.*, 1998), 55% (Mudambi & Helper, 1998), 22% (Carter & Jennings, 2004), 18% (Park & Stoel, 2005), and 14% (O’Dwyer & Madden, 2006).

In addition, the definition of the unit of response is an important consideration in researching ethical beliefs of suppliers. Supplier ethics surveys have typically focused on a few senior-level managers and above in supplier organisations (Landeros & Plank, 1996; Razaque & Hwee 2002; Carter & Jennings, 2004 and O'Dwyer & Madden, 2006). Not surprisingly, any picture that senior management produces of ethics in buyer-seller relations is often divorced from practice that occurs "on the ground". Thus, sampling frame issues further confound sample representivity. In an attempt to build a total view of the ethical beliefs held by supplier organisations, it is desirable to extend the units of response to include all employees in the supplier organisation who interact with the buying organisation (Landeros & Plank, 1996), and efforts should be made to access a complete population of supplier employees.

In a field plagued by non-response error, every effort must be made to increase response rates and improve upon sampling frames. The best response rate has long been noted to be achieved by personal face-to-face interviews, a rate of 45% on average internationally (Malhotra, Agarwal & Peterson, 1996). It is to this high watermark that research into ethics must aspire. Respondents need be assured of confidentiality and anonymity, something not always evident through personal interviews. Indeed, the highly personal nature of the research question calls for as impartial a medium as possible in order to minimise interviewer bias. Furthermore, the high cost of personal interviews makes an increased sampling frame and sample size, as desired by Landeros and Plank (1996), prohibitively expensive. One medium that presents a solution to both of these dilemmas is the Internet. The Internet allows for wide, cost effective sampling while removing interviewer bias.

The Internet and Buyer-Supplier Research

Internet research provides the advantage of low cost and wide reach, although low researcher control and the question of restricted access must be dealt with (Chipp & Ismail, 2004). As the universe is a business one, the entire population tends to be online and frequent electronic interaction forms a standard part of regular communication. Hence the opportunities offered through the selection of the Internet as a basis for the survey method. Internet surveys are known for cost effectiveness, fast distribution, good response turnaround times and, most importantly, no interviewer bias (Forrest, 2003). The problems inherent with this method lie in sample control, low response rates and privacy concerns (Bradley, 1999). Some of the drawbacks of Internet surveying can be mitigated through population selection and sampling methodology, each of which is explored below.

Internet surveys can take one of two forms: an email survey or a web-based survey. Email surveys are distributed through either embedded questions in an email, questions in an emailed attachment or through sending respondents an email directing them to an Internet address or URL (thus assuming respondents have access to the internet) on which they can click (Bradley, 1999 and Chipp & Ismail, 2004).

Web-based surveys are found in three types: open, closed and hidden (Bradley, 1999). Open surveys can be accessed and completed by any visitor who is usually directed to the site through banner ads, pop-ups and messages on other websites. Such surveys afford researchers the least control over the sample and the least representative samples stem from this methodology (Chipp & Ismail, 2004). Closed surveys are protected by passwords or some other means, such as IP addresses, which ensure that the targeted individuals who are selected complete the survey only once. Hidden surveys appear only when a "trigger" is activated, for example, to a random sample of visitors to a website (Bradley, 1999). The key benefit of web-based surveys as opposed to email surveys is anonymity: an email by its very nature contains sender details, while an Internet form does not (McDonald & Adams, 2003).

Given that preservation of anonymity is typically important in ethical surveys, the control of the URL is likely to influence response rates. Where this is controlled by a reputable third party, response rates are likely to be higher than when controlled by the buying organisation. The use of a URL survey presents the best of both worlds: the email assures the participant that the survey is conducted through a reputable third party for research sanctioned by the company under investigation. Suppliers and employees may view unsolicited emails with scepticism and thus disregard them as spam (a common problem in Internet research) (McDonald & Adams, 2003).

Email surveys depend on the use of accurate sampling databases (Chipp & Ismail, 2004). Thus the sample frame is of vital importance to ensure sample representivity. The usual concerns regarding sampling frames for email surveys lie in the accuracy, currency and availability of Internet directories (Chipp & Ismail, 2004). Generally, email directories are few and often inaccurate as they become quickly outdated. A business sample dealing with supplier relations does not have any of these concerns. The directory of email addresses used for interactions with suppliers is typically current and active.

The Internet enables the use of new techniques in surveying that optimise the wide access, low cost nature of email research and afford researchers a degree of control. The most pertinent here includes restricted, screened or recruited samples and saturation surveying (Bradley, 1999 and Miller, 2001). This enables the sampling method to move away from sampling towards surveying: saturation surveying entails attempting to survey all identifiable target respondents (Bradley, 1999). Previously prohibitively expensive due to the high cost of interviewers, administration, data management and materials, saturation surveying is an extremely viable process for email research where all possible respondents on a list are contacted. Self-selection and non-response bias is a common problem in any survey. It is compounded by the Internet as respondents have to complete the research on their own without the authoritative, persuasive presence of interviewers and face inboxes flooded with emails (Ranchod & Zhou, 2001). Those who do volunteer only do so selectively, opting to take part in studies where they find the topic interesting (Ranchod & Zhou, 2001).

The literature indicates that ethical perceptions at the supplier-buyer interface are an important aspect of business ethics but that, given the need to protect future potential revenue flows, researchers need to take into account the likelihood of suppliers seeking anonymity, being less likely to respond, or giving socially desirable responses when they do. The use of the Internet as a survey, coupled with saturation surveying in researching ethical perceptions of suppliers and survey management by an independent third party, should go some way in addressing these issues.

METHODOLOGY

The methodology employed in this survey was a single case study focused on the suppliers of a large South African MNC in the fast-moving consumer goods field. This organisation has a dominant position in the market and, as part of its corporate social responsibility campaign, wanted to monitor the beliefs held by its suppliers concerning issues with ethical content. The study represented part of a longitudinal tracking survey of supplier ethics by the MNC. The first survey was conducted eighteen months previously by an academic researcher at a South African university whose findings of that survey are documented in a working paper by Bendixen and Abratt (2007).

Instrument

In order to track ethical beliefs over time, the MNC requested minimal adaptation of the original scale items. The instrument therefore built on that of Bendixen and Abratt (2007) who developed 35 statements to discriminate ethical behaviour in the supplier–customer relationship through two qualitative research techniques (the critical incident technique and the Kelly repertory grid technique) and interactions with management of the organisation under review. These 35 questions formed the main body of their questionnaire along with demographic data, two questions on the overall perceptions of ethical behaviour and two open-ended questions where respondents could provide examples of good and bad ethical behaviour (Bendixen & Abratt, 2007). The core questions were asked on a five point Likert scale ranging from strongly agree to strongly disagree. Approximately one third of the statements were phrased in the negative so as to ensure that the full range of the scale was utilised.

The current survey employed the same questionnaire structure with the addendum of response categories to the question “What materials or services do you supply?” (Question 5 in both surveys) were expanded. Question 7 in the initial supplier survey which asked “What position do you hold?” was expanded into two questions (numbers 7 and 8) which asked “What position do you hold?” and “In which function is your position?” The organisation under review requested the introduction of an additional Likert statement (question 45 in the current survey) which stated “COMPANY X chooses price at the expense of quality”. The revised instrument was circulated to select employees in the

MNC for comment. It was not pre-tested as minimal changes had been made to the previously developed scale which had been pre-tested. The ethical items are presented in Appendix One.

The original instrument demonstrated construct validity through the results of a factor analysis (Bendixen & Abratt, 2007) where two underlying constructs were identified: *ethical standards* and *candid relationships*. Both of these constructs had predictive validity in a multiple regression where they yielded a R^2 of 0.483 in predicting an overall ethical rating. Cronbach alpha is not reported by Bendixen and Abratt (2007) for the scale as a whole; nevertheless α is reported for each factor separately: 0.88 for *ethical standards* and 0.85 for *candid relationships*.

Survey Design

Email surveys with a URL link were selected as the most appropriate survey method. The website enabled fast and efficient loading, handling and completion of the questionnaire. Unlike email surveys where the questionnaire is embedded, there was no need to find places in the text to complete answers. A questionnaire contained as an attachment in an email would require respondents to save the attachment on their hard-drives, complete and re-attach the document – all of which entails additional effort on the part of the respondent and possibly some concern regarding potential viruses and thus increased non-response bias. In contrast, the website, once loaded, required respondents simply to point and click. The survey set up enforced a degree of sample control through IP addresses: the programme only allowed a single response from a specific IP address, thereby ensuring that each respondent only completed the survey once.

Sampling Frame

The list of suppliers and their contact details formed the basis for the sampling frame. Analysis of this list indicated that only senior employees of supplier organisations were listed. In order to enhance representivity across supplier organisations, it was decided to contact the individuals on the database, furnish them with the names of contacts in the database and request them to nominate additional individuals within the organisation who had regular contact with the company under review. This resulted in two supplier sampling frames, the initial frame (which was directly comparable to the frame in the previous study to enable longitudinal analysis) which comprised 624 individuals, and the expanded frame which comprised an additional 362 respondents (an increase of 54% over the original sampling frame). To ensure that differentiation between sample source was maintained, each set of respondents were sent to a different, but identical URL. The research team tested the addresses a month before the survey was to be run and commissioned a research assistant to telephonically update any problematic contacts. The chief threats to the saturation surveying employed in this study lie in non-response bias, non-coverage bias and self selection bias. Non-coverage bias is reflected in the accuracy and range of nominated respondents in the extended sample frame, as any individuals who had contact with the organisation under investigation but were not known to the original sampling frame, were not included. Given that the expanded frame represented a 58% increase in the overall sampling frame, the authors do not believe that this played a great role in the current research.

Survey Process

Every effort was taken to minimise non-response and self-selection bias. Respondents were informed that the URL would be controlled by an independent academic institution that undertook not to release individual responses to the MNC. The URL address reflected the fact that the URL was hosted by the academic institution and not the MNC. An initial invitation from the MNC to take part in the survey was sent, followed by a series of follow up reminder e-mails sent by the academic institution that were planned on a fortnightly basis. Given the high rates of initial response, however, only one reminder was issued and the survey was closed a month after its inception.

FINDINGS

Response rates for the three sampling frames are depicted in Table 1 below. Response rates were higher than those for electronic surveys in general, which typically fall between 4% and 16% (Chipp & Ismail, 2004) in those reported in most surveys of ethical perceptions of suppliers, and the response

rates in the first phase of the longitudinal study (Bendixen & Abratt, 2007) which was 26%. Moreover, these results exceed Malhotra, Agarwal and Peterson's (1996) benchmark of 45% response rate for personal interviews. The current response rate of well over double those figures indicates high involvement in the subject matter and a corresponding decrease in non-response bias.

Table 1: Response rates

| Sampling Frame | Respondents mailed | Bounces | Respondents Replied | Response Rate* |
|--------------------|--------------------|---------|---------------------|----------------|
| Initial suppliers | 624 | 100 | 278 | 53% |
| Extended suppliers | 362 | 18 | 175 | 51% |
| Total suppliers | 986 | 118 | 453 | 52% |

*The response rate is calculated based on the number of respondents that received communication (ie. excludes bounced e-mails)

Reliability and Validity

The adapted scale in the current research reported a Cronbach's alpha for all items of 0.934, which indicates good reliability. In order to verify that each item contributed to the scale reliability, an item by item analysis was run. All items demonstrated a remarkable consistency, with no item registering less than 0.92. A validity check was also run through an examination of underlying constructs. To this end, a Principle Components Analysis was used to extract the initial factors, with the use of a correlation matrix. This was then rotated by means of the Varimax rotation method. Unlike the previous study (Bendixen & Abratt, 2007), seven constructs were selected: *company intent*, *company interactions*; *adherence to ethical policy*, *corporate approach to the macro-environment*, *negative employee behaviours*; *pricing practices* and *gift exchange*. Although the current solution has several additional categories to that of Bendixen and Abratt (2007), it should be borne in mind that owing to the development of an extended sampling frame, the sample achieved is of a broader nature and that the factors found here can be grouped according to ethical standards and candid relationship factors identified in the first study.

DISCUSSION AND CONCLUSION

The dependence of suppliers on their customers for future revenue means that researchers must be particularly sensitive to issues of method including the assurance of respondent anonymity, independence of research, and the need for a wide scope of investigation into all levels of employees in supplier organisations.

The existence of a comparable survey conducted eighteen months previously (Bendixen & Abratt, 2007) serves as a base to assess the method modifications outlined above. The primary difference between the two approaches lies in the use of a saturation survey approach to expand the population universe through the sampling frame. An innovation in the application of saturation surveying lies in where this process was performed: namely to expand the population universe through the sampling frame, rather than at the level of the sampling method.

The high response rate and good reliability and validity results are attributed to the implementation of a saturation survey, coupled with the use of a third-party hosted URL and clear communication to reassure respondents of their anonymity and encourage response. Restrictions that deterred respondents from accessing the survey more than once (they could have accessed using a different computer) are also associated with these positive results.

Supplier relationships and ethical perceptions are built across time and across functional and hierarchical levels of buyer-seller relationships. They are also often of a personal nature and any research into the field needs to ensure respondent anonymity. The method employed by this survey ensures that a wide selection of internal and external participants is provided with a forum to voice their experiences. Extending an established list of suppliers enables an increased depth of supplier

personnel to be sampled. Moreover, the large increase in the sample frame from the original to the extended frame (58%) suggests that supplier relations are far more extensive than many companies formally realise.

The method outlined here amply demonstrates the benefits of well-tailored topic and medium. The Internet as a medium has the promise to produce reliable and valid research for select populations, provided those populations have access and are computer literate and are interested in the topic at hand. Research on buyer-seller relationships along ethical lines falls into topics of interest and the population, being business and involved in ongoing relations and hence the marriage of the research area and medium has produced good results indicated by a high response rate, validity and reliability tests.

REFERENCES

- Badenhorst JA.** 1994. Unethical Behaviour in Procurement: A Perspective on Causes and Solutions. *Journal of Business Ethics*, 13(9):739-748.
- Bell GG, Oppenheimer RJ & Bastien A.** 2002. Trust Deterioration in an International Buyer-Supplier Relationship. *Journal of Business Ethics*, 36:65-78.
- Bendixen M & Abratt R.** Corporate Identify, Ethics and Reputation in Supplier-Buyer Relationships. *Journal of Business Ethics*, Forthcoming.
- Blenkhorn DL & Banting PM.** 1991. How Reverse Marketing Changes Buyer-seller Roles. *Industrial Marketing Management*, 20(3):185-191.
- Bradley N.** 1999. Sampling for Internet Surveys. *Journal of the Market Research Society*, 41(4):387-409.
- Bromiley P & Cummings LL.** 1992. *Transactions Costs in Organizations with Trust* (Discussion Paper No. 128). Minnesota: Strategic Management Research Centre, University of Minnesota.
- Carter CR & Jennings MM.** 2004. The role of purchasing in corporate social responsibility: a structural equation analysis. *Journal of Business Logistics*, 25(1):145-187.
- Chipp K & Ismail Z.** 2004. *E-commerce: A South African Perspective*. Claremont: New Africa Books.
- Duran JL & Sanchez F.** 1999. The Relationships Between The Companies and Their Suppliers. *Journal of Business Ethics*, 22:273-280.
- Emiliani ML.** 2003. The inevitability of conflict between buyers and sellers. *Supply Chain Management*, 8(2):107-115.
- Forker LB & Janson RL.** 1990. Ethical Practices in Purchasing. *Journal of Purchasing and Materials Management*, 26(1):19-26.
- Forrest E.** 2003. *Internet Marketing Intelligence*. Roseville: McGraw-Hill Australia.
- Gundlach GT & Murphy PE.** 1993. Ethical and legal foundations of relational marketing exchanges. *Journal of Marketing*, 57(4):35-47.
- Haynes PJ & Helms MM.** 1991. An Ethical Framework for Purchasing Decisions. *Management Decision*, 29(1):35-39.
- Hosmer LT.** 1995. Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review*, 20(2):379-403.
- Landeros R & Plank RE.** 1996. How Ethical are Purchasing Management Professionals? *Journal of Business Ethics*, 15(7):789-803.

- Lamming R.** 1989. *The Causes and Effects of Structural Change in the European Automotive Components Industry*. Cambridge: IMVP.
- Luhmann N.** 1979. *Trust and Power*. Wiley: Chicester.
- Malhotra N, Agarwal J & Peterson M.** 1996. Methodological Issues in Cross Cultural Marketing Research. *International Marketing Review*, 13(5):7-43.
- McDonald H & Adams S.** 2003. A comparison of online and postal data collection methods in marketing research. *Market Intelligence and Planning*, 21(2):85-95.
- Miller T.** 2001. Can We Trust the Data of Online Research? *Marketing Research*, Summer:26-32.
- Morris J & Imrie R.** 1993. Japanese Style Subcontracting - Its Impact on European Industries. *Long Range Planning*, 26(4):53-58.
- Mudambi R & Helper S.** 1998. The 'close but adversarial' model of supplier relations in the US auto industry. *Strategic Management Journal*, 19(8):775-792.
- O'Dwyer B & Madden G.** 2006. Ethical Codes of Conduct in Irish Companies: A Survey of Code Content and Enforcement Procedures. *Journal of Business Ethics*, 63(3):217-236.
- Park H & Stoel L.** 2005. A model of socially responsible buying/sourcing decision-making processes. *International Journal of Retail and Distribution Management*, 33(4):235-248.
- Peck H, Payne A, Christopher M & Clark M.** 2000. *Marketing Strategy and Implementation*. Oxford: Butterworth-Heinemann.
- Ploetner O & Ehret M.** 2006. From relationships to partnerships - new forms of cooperation between buyer and seller. *Industrial Marketing Management*, 35(1):4-9.
- Ranchod A & Zhou F.** 2001. Comparing Respondents of Email and Mail Surveys: Understanding the Implications of Technology. *Market Intelligence and Planning*, 19(4):254-262.
- Razzaque MA & Hwee TP.** 2002. Ethics and Purchasing Dilemma: A Singaporean View. *Journal of Business Ethics*, 35(4):307-326.
- Ring PS & Van der Ven A.** 1992. Structuring Cooperative Relationships Between Organizations. *Strategic Management Journal*, 13:483-498.
- Spekman RE & Carraway R.** 2006. Making the transition to collaborative buyer-supplier relationships: An emerging framework. *Industrial Marketing Management*, 35(1):10-19.
- Turner GB, Taylor GS & Hartley MF.** 1995. Ethics, Gratuities and Professionalization of the Purchasing Function. *Journal of Business Ethics*, 14(9):751-760.
- Turner GB, LeMay SA, Hartley M & Wood CM.** 2000. Interdependence and cooperation in industrial buyer-supplier relationships. *Journal of Marketing Theory and Practice*, 8(1):16-25.
- Van den Hengel J.** 1995. Purchasing Ethics: Strain or strategy. *Purchasing and Supply Management*, September:50-53.
- Waters JA, Bird F & Chant PD.** 1986. Everyday Moral Issues Experienced by Managers. *Journal of Business Ethics*, 5:373-384.
- Wood G.** 1995. Ethics at the purchasing/sales interface: an international perspective. *International Marketing Review*, 12(4):7-20.

Zaheer A, McEvily B & Perrone V. 1998. The Strategic Value of Buyer-Supplier Relationships. *International Journal of Purchasing and Materials Management*, 34(3):20-26.

APPENDIX 1: List of statements

| Statement |
|--|
| I can trust Company X; once a commitment has been made they will ensure that it is honoured. |
| Contracts are clear and precise everyone knows what is expected. |
| Giving and receiving gifts/ incentives is part and parcel of doing business with COMPANY X. |
| When there is a problem or a query I know who to contact. |
| Company X is not only concerned with what is legal but also with what is morally right. |
| Company X are tough but fair in their price negotiations. |
| When there is a problem or a query I know it will be sorted out quickly. |
| We have regular meetings with Company X , which helps to maintain a good working relationship. |
| The staff are not well trained - it is difficult to find anyone who knows what is going on. |
| Staff members are often rude. |
| Company X is concerned with protection of the environment. |
| Company X always pays accounts on time. |
| Staff members who take bribes face penalties. |
| A loyal and enduring relationship with suppliers of products and services is important to Company X. |
| Company X is highly regarded as far as business ethics is concerned. |
| Company X abuses its position of dominance. |
| Company X has a strict code of ethics. |
| Company X management and staff adhere to the code of ethics. |
| Company X will discuss proposals with our competitors in an attempt to bring down the price. |
| Family and friends are given preference when contracts are awarded. |
| Management turns a blind eye to unethical behaviour. |
| Documentation is often vague which leads to problems. |
| Company X treats its suppliers with respect. |
| Company X is socially responsible. |
| Everybody is given an equal opportunity to submit proposals for contracts. |
| Company X respects the confidentiality of supplier pricing and other information shared during negotiations. |
| Company X is a large organisation so people can get away with unethical behaviour. |
| Company X is very concerned with safety issues. |
| Company X staff is professional in their conduct. |
| Company X does not accept second-rate work. |
| Company X staff often denigrate their competitors' products. |
| Some Company X employees spend far too much on entertainment. |
| Company X expect suppliers to be transparent but are not transparent themselves. |
| Management at Company X have an open door policy. |
| Company X is concerned with the long-term health/sustainability of the supply chain. |
| Company X chooses price at the expense of quality |