

Growing Concerns over Moral and Ethical Issues in Research

Divine Mawuli Akwensivie
Lecturer, Department of Marketing, Methodist University College Ghana

ABSTRACT

Concerns over moral and ethical behaviour among researchers (both academicians and practitioners) have generated a lot of public discussions in Ghana.

In examining these concerns the author adopted a case study approach by discussing the works of a seasoned investigative journalist Anas Aremeyaw Anas together with other empirical evidences from the work of other researchers under the following headings as identified from the literature on ethics and moral behaviour in research; Informed consent, research fraud, confidentiality, anonymity, deception, right to privacy and protection from harm.

The discussions were done under two main schools of thought-Deontology and Teleology. These schools of thought notwithstanding, the role of ethics cannot be over-emphasized as the subject thrives on human involvement, trust and business referrals to arrive at reliable conclusions. Besides, any deviation from ethical standards, therefore, needs to be thought through and justified extremely carefully.

Background and introduction to the study

Concerns over moral and ethical behaviour among researchers (both academicians and practitioners), though not a new issue, have come under public discussion in recent times in Ghana. Notable is the case of a seasoned Ghanaian investigative journalist and a researcher Anas Aremeyaw Anas over his work.

This paper examines the growing concerns over moral and ethical issues that confront the research profession. In doing so the author discussed the works of Anas Ameriyaw Anas together with other empirical evidences from the work of other researchers under the following headings as identified from the literature on ethics and moral behaviour in research; Informed Consent, research fraud, confidentiality, anonymity, deception, right to privacy and protection from harm.

The author explained what marketing research is and went on further to examine the various stages within the research process where moral and ethical behavioural issues can arise. The author also discussed the key interest groups in conducting research and how a researcher's interactions with these key interest groups can raise moral and ethical issues. In the concluding part of this paper the author stressed the importance of moral and ethical behaviour in research and provided some advice and guidelines to guide researchers in pursuit of their work.

Background of study

Marketing research as defined by the Market Research Society is the systematic gathering, recording and analysis of data about issues relating to marketing products and services.

Ethics and morals in research are understood by many people as rules or guidelines for distinguishing between what is right and what is wrong. Blumberg et al (2005) defined ethics as the moral principles, norms or standards of behaviour that guide moral choices about behaviour and our relationship with others. Saunders et al (2007), defined ethics as the questions about how to formulate and clarify research topics, design research and gain access, collect data, process and store data, analyse data and write up research findings. On his part, Neuman (2007) described ethics to include the concerns, dilemmas that arise over the proper way to conduct research. Ethics he added 'helps to define what is or is not legitimate to do, or what moral procedure involves'.

There are three key interest groups that a researcher will come into contact with during the course of his work and each of these groups presents a platform for a possible unethical behaviour by the researcher; the subjects, the client and the reading publics (of the research report or those who the decisions drawn from the finding will affect directly or indirectly).

When conducting marketing research, the researcher engages primarily in four stages namely data gathering, data recording, data analysis and finally presentation of research findings. There is also some form of contact or interaction between the researcher and the research participants (subjects). At each of these stages, the researcher's conduct can be subjected to issues of ethics and morality. At the data gathering stage of research, for instance, common ethical issues border on informed consent (the respondent's right to be informed), deception and harm, intrusions on privacy, confidentiality of data, use of wrong population and sample size to gather data, etc; whilst at the data recording stage, common ethical issues border on misrepresentation of research data and maintenance of objectivity; whilst at the data presentation stages, for instance, common ethical

issues borders on bribery, misrepresentation of research results (responsible publication of results), confidentiality, and misuse of research findings.

To guard against any such unethical behaviour and encourage ethical practices among researchers most research organisations and associations have put in place codes of ethic to guide its members against unethical behaviour in the conduct of their work and to protect the integrity and image of the profession. For instance, the Marketing Research Association's Code of Marketing Research Standards was established to ensure that its members conduct research in an honest and ethical manner, instil confidence in research to encourage public cooperation; to instil confidence that research is done in a professional and fair manner; to provide its members with guidelines to ensure that research is conducted in accordance with proven scientific, statistical and practical methods; to carry out every research project in accordance with the code; and to respect the general public and its rights (The code of marketing research standards,-2007).

Theoretical discussion

Although there are many schools of thought that may be applied to explain what is appropriate behavior when conducting research, Deontology and Teleology views was used as the main philosophy to explain appropriate ethical and moral behavior in this paper.

According to Saunders et al (2007), two dominant philosophical standpoints have emerged, namely: the Deontological view which argues that the end served by the research can never justify the use of research which is unethical. Consequently, if this view is adopted, deception, for instance, can never be used no matter how effectively it will ensure that data collected and interpreted is valid and reliable.

The other philosophical view is the Teleological view. This view argues that the ends served by the research justify the means, thus the benefits of the research findings would be weighed against the costs involved in acting unethically. This view further brings to the fore an added complication as it requires the additional consideration of whether the benefits of the research are morally just.

Deontology focuses on the right of the individual and thus seeks to protect the right of an individual in research, irrespective of the benefit to society of the outcome of the research findings. If an individual's rights are violated then the behaviour of the researcher is not ethical. To the adherents of deontology the researcher should seek the consent of the research participants before engaging them in the research. On the other hand, Teleology focuses on the overall benefit of the research to the wider society .If at the end of the research there are individual costs but group benefits, the behaviour is judged to be ethical. To aid our discussions on these ethical issues, Anas Aremeyaw Anas' "Enemies of the Nation Investigation" and some other investigations and examples will be used as case studies for this paper. Below are details of the cases.

CASE 1-ENEMIES OF THE NATION INVESTIGATION

The "Enemies of the nation" investigation was conducted by Ghana's best known investigative journalist and crime-buster, Anas Aremeyaw Anas.

According to The New Crusading Guide, February 2, 2011, Anas took a total of 123 days to investigate the activities of the Customs, Excise and Preventive Service (CEPS) and allied agencies in the Tema Port. The whole investigation was captured by a secret recording on an audio-visual format.

The objectives of the investigation were sought to unearth:

- a) Why the nation Ghana has been incurring revenue losses from the operations of the Tema Harbour,
- b) The faces behind the revenue hemorrhage,
- c) The various tricks employed by clearing agents, CEPS officers and other players in the port area to milk the state.
- d) The faces of officers who take bribes from agents and other clients,
- e) The procedures for clearing goods from the port to their final destinations and any challenges and/or corrupt practices involved.

To achieve these aims, Anas set up four teams. The teams where the scorpions, they were tasked to scan the electronic systems institutions; the Spiders were asked to man the eastern gate of the harbour, spying on agents and CEPS officers, obviously with hidden cameras. The Leopard team were asked to pose as importers and also to clear a container and a car to expose the extent of fraud in the clearing of goods. The last team which was the Spice girls, were tasked to find out whether or not CEPS officials collude with criminals in the clearing of goods, including looking into GCNet as well as the numerous disappearances of goods by importers at the port.

In conclusion, the investigation exposed the scale of fraud perpetrated against the state, and the collusion of port officials. Anas and his teams uncovered how the state lost millions of Ghana cedis in the dubious auction of goods in the state warehouses; how men in CEPS uniform and various agencies and importers have either

deliberately or inadvertently milked Mother Ghana over the years of its revenues; and the alleged sexual harassment of lady clients by men in uniform and other workers. *New Crusading Guide*, February 2, 2011

CASE 2 THE GREDA STORY

The government of Ghana in 2010 proposed a Housing Project which aimed at constructing 30,000 affordable housing units for Ghanaian workers. A lot of companies bid for the housing project including Ghana Real Estate Developers Association (GREDA), STX Korea and others. After STX Korea had won the bid, GREDA was not satisfied with the deal because they claimed they had the capacity to equally execute the project. They complained about not winning the contract but later kept quiet on the issue. When contacted by a journalist from JOY FM, a private FM station in Accra, a member of GREDA alleged they were being threatened at the governmental level. When this was aired on Joy FM, the news editor at JOY FM was invited by the Ghana Police to disclose the source of the news item.

CASE 3 THE EOCO CASE

In the case of the Economic Organised Crime Organisation (EOCO) and Ghana Football Association (GFA) according to a Ghanaian newspaper, the Ghanaian Times (Sunday February 27, 2011); the EOCO had violated GFA's privacy by invading its premises and taking away some computers and documents. The court order was for EOCO to retrieve documents from GFA in an investigation, but EOCO went ahead to take away computers and mobile phones from some of the GFA officials.

CASE 4-“IN THE OSU CHILDREN’S HOME OF HELL”

According to Anas, the home that was built to accommodate and train orphans and homeless children has now become a ‘death transit camp’ where gruesome atrocities are committed against inmates. The investigative journalist said that he took seven months to conduct this undercover investigation at the orphanage and he was able to make a video recording of all the crime against humanity; how death is so rampant at the orphanage, mass burial of the inmates which had become the order of the day and how caregivers of the orphanage gleefully shared among themselves; food stuffs and other items that had been donated to the orphans while some of them also packed and set on fire clothes and toys that were to be shared among the inmates. Anas also said that he disguised himself into a woman at one point and a pastor at another point during the investigation to get his information. Thirty secret cameras hidden at vantage locations in the home were used during the exercise. Source: DAILY GUIDE 2nd September, 2010.

After airing the documentary, the caretakers came out to say they did not believe Anas used the right method and therefore disputed the findings and did not trust the findings. Even the government committee set up to investigate the Osu Children Home story by Anas also faulted Anas for the method used to collect his findings. The committee's final report stated that what Anas did was against children's protection rights, and that it violated the fundamental human rights of the children.

Discussion of Cases

The two ethical philosophical views (Deontology and Teleology) discussed earlier, have generated growing public debates on airwaves and in the newspapers in Ghana about which behaviour is ethically right or wrong. Researchers and journalists have given relatively scant attention to the debate above and hence the uses of ethically questionable research practices, such as deception and harm, the invasion of privacy and the right to be informed.

According to the Ghana Journalist Association (GJA) code of ethics, “Journalists should respect the rights of the individual, the privacy and human dignity. Enquiries and intrusions into a person's private life can only be justified when done in the public interest. A journalist should guard against defamation, libel, slander and obscenity”.

Informed Consent and Deception

There is the tendency for those being studied to fake their behaviour to positively or negatively influence the outcome of a study assuming they are made aware prior to the observation. On the outset the researcher's (Anas's) approach might sound deceitful as he carried out the investigation without the consent of the people involved at Tema port, Customs, Excise and Preventive Service (CEPS) and allied agencies. It was also alleged that he did not inform them about the objectives, procedures, the risk, discomfort and the overall benefit of the investigation. Based on the findings from the “Enemies of the Nation” investigation, the president of Ghana, Professor Evans Atta Mills, paid an unannounced visit to the Tema port, where he reprimanded officials of the Customs, Excise and Preventive Service (CEPS) for their disservice to the state and as a follow up to the

President's visit, some Customs officials were interdicted and transferred. In the example above, the Teleologist, might conclude that, although there is violation of the right to privacy, lack of informed consent and deception of those officials observed, there is a benefit to Ghanaians in reducing long-term costs to the nation, Ghana. The Teleologist would declare this research practice to be ethical because, ultimately, the benefit is shared by many more individuals than those whose privacy was invaded during the original study. Even though to the Teleologist this behaviour (Anas research approach) is ethical because of its overall benefits to Ghanaians, the Deontology school of thought and the American Academy of Management code of ethical conduct which states: **‘Informed consent means explaining to potential participants the purpose and nature of research so they can freely choose whether or not to become involved. Such explanations include warning of possible harm and providing explicit opportunities to refuse to participate and to terminate participation at any time. Because students and employees are particularly subject to possible coercion, even when unintended, special care must be taken in obtaining their informed consent’** would argue that this behavior is unethical and morally unjustified.

Whilst the importance of informed consent is unquestioned, controversy prevails sometimes over the nature and possibility of an informed consent. Indeed, there is widespread argument for and against informed consent as discussed above. However, from the above case it can be clearly argued that violation of the informed consent principle can sometimes be justified in view of the importance and urgency to get the required information or investigate certain attitudes and behaviours in an industry and this view seems to support the teleology philosophy, which analyzes a given behaviour in terms of its benefits and costs to society.

The researcher Anas, was able to achieve his aims by violating the principles of informed consent and deception. Assuming he had informed the CEPS officials about his research he might not have achieved his purpose thus justifying the use of deception at times when it comes to researching into certain crucial socio-cultural issues. However, the researcher has a duty to debrief the subjects before the findings are published. The researcher is therefore justified in using deception in this investigation because the findings of the research are in the interest of the Ghanaian public and conforms to portions of the Ghana Journalists Association code of ethics which states that; “journalists, should respect the rights of the individual, the privacy and human dignity. Enquiries and intrusions into a person’s private life can only be justified when done in public interest. A journalist should guard against defamation, libel, slander and obscenity”.

Clearly it can be argued that the researcher’s findings and exposure have benefited the nation Ghana as a whole, a benefit which far outweighs the harm done to those individuals whose rights were violated as a result of his methodology. However this is contrary to the deontology which focuses on the right of the individual and thus seeks to protect the right of an individual in research irrespective of the benefit of the outcome of the research findings to society.

Some social science researchers also maintain that deception is necessary to further the progress of science. Barnes (1979) argued that deception is an integral part of all social relations. For example, individuals do not necessarily "bare their souls" to casual acquaintances. Rather, deception by way of not revealing all details about one's self is an accepted part of human relations. Deception can be a good thing because when people are made aware of critical research issues, they may fake their response. Kidder (1981) also opined that where there is no other way of getting the information the researcher can use deception. Sagrin (1973), on the other hand, challenged researchers to respect the rights of people who do not wish to be researched.

Clearly from Case 1, considering the nature of the outcomes from the study, it is highly unlikely that the subjects of the study (in this case the officials whose alleged wrong doings were exposed) would voluntarily give their consent to take part in such a study. When researching illegal activities or behaviours that might encourage illegal acts, protection of respondents’ confidentiality and informed consent becomes difficult and challenging. Whilst researchers may want to honour their commitment of respect towards subjects' desire for confidentiality and informed consent, knowledge of such illegal activity or wrongdoing may place the research and researchers in jeopardy.

When evaluating the use of deception in the field, researchers should consider several issues. First and foremost, subjects' needs and risks should be the overriding concern in every research project. The role of researchers, according to the American Anthropological Association, is "to do everything in the researchers' power to protect their respondents' physical, social, and psychological welfare and to honour and respect their dignity and privacy" (Spradley 1980, p. 21).

The right to privacy and confidentiality

In CASE 2 above, the journalist could obey the police order and disclose the source of his information or he could refuse to comply with the police order, thus protecting the member of GREDA who made the allegation. The journalist in this case refused to disclose the source of his information because it was against the code of

ethics of the Ghana Journalist Association (GJA) which states; “journalists are bound to protect confidential sources of information”.

The very nature of research requires that the researcher (investigator) will at a point invade the individual’s privacy and this makes privacy issues very controversial especially when the research borders on uncovering alleged issues of bribery, corruption or any form of wrongdoing. A number of laws have been passed in recent years to deal with various aspects of privacy issues.

Protection from Harm

Although researchers and Journalists often find it necessary to deceive their research participants, in recent times, deception and harm are gaining more attention in public discussions. This is due to the public, some staff members and some affected companies at the port thinking that Anas and his team deceived them and did not use the right method for the investigations.

By violating informed consent, the researcher’s (Anas) work also indirectly led to social and psychological harm to the officials exposed by his work. Based on his findings, the president of Ghana paid an unannounced visit to the Tema port where he reprimanded some officials of CEPS for their disservice to the state and, as a follow up to the President’s visit some CEPS officials were interdicted and others were transferred. Psychological and social harm are manifested here to those officials involved. It damaged their interpersonal relationships and inflicted personal discomfort, and stigmatisation, public exposure that may lead to psychological, legal and social harm. This issue also led to the transfer of some and the consequences of this transfer upon their life and that of their families.

Even though to the Teleologist the researcher’s approach is ethical as it seeks to benefit the nation Ghana because of its overall benefits to Ghanaians; his action was unethical according to the deontologist which focuses on the right of the individual and thus seeks to protect the right of an individual in research irrespective of the benefit of the outcome of the research findings to society. If an individual’s rights are violated then the behavior of the researcher is not ethical. To the deontologist the researcher should seek the consent of the research participants before engaging them in the research. Arguing from this angle clearly the researcher’s approach was unethical because the subjects are stigmatised regardless of their guilt or innocence, in case they want to clear themselves.

Researchers have to protect their subjects from physical injury that is directly related to the research design. Psychological injury or harm usually refers to various forms of emotional imbalance. Social harm can include embarrassment, job loss and problems with interpersonal relationships that result from participation in a research with or without consent. This clearly cannot be ruled out from the case under review.

The issue of privacy is always linked to confidentiality and anonymity in marketing research, particularly in the context of harm to participants. For example, the BSA (British Sociological Association) code of ethical conduct states:

"The anonymity and privacy of those who participate in the research process should be respected. Personal information concerning research participants should be kept confidential. In some cases, it may be necessary to decide whether it is proper or appropriate to record certain kinds of sensitive information".

As a follow up of CASE 1, “Enemies of the nation” investigation, one of the affected companies exposed by the research, Servistar, has filed a writ at a High Court in Accra, Ghana, claiming damages in libel against Anas Aremeyaw Anas the lead researcher, for publications in print and electronic media, of the findings of some investigative work in which the researcher claimed Servistar had evaded taxes due the government. (Daily Graphic 14th March, 2011). Deception is an intentional effort to mislead people. Deception occurs for example, when a field interviewer misrepresents the true purpose of research. In some cases, a researcher tries to create a false impression by disguising the real objective of the survey in order to obtain important information (Shimp, Hyatt and Snyder 1993). Whether this is morally justifiable is a question of crucial importance because it is a way of making people act against their will and is the most common reason for distrust.

From the report of the government committee which investigated Anas’ investigation into the Osu Children’s Home, one can argue that the committee overlooked the public interest aspect of the laws on human rights. Article 5 section 2 of the Code of Ethics of the Ghana Journalist Association states clearly that enquiries and intrusion into a person’s private life can only be justified when it is done in the public interest. Article 28 clause 3 of the 1992 constitution states that, a child shall not be subjected to torture or other cruel, inhuman or degrading treatment or punishment,

Are we then saying after airing of the video footage that this investigation is not in the public interest, or that the children were not tortured? No! To the public, Anas couldn’t have come out with the true picture of affairs at the port and the Osu Children’s Home without using deception as a strategy. But the MRS (Market Research Society) code of ethics says that: "The researcher must take all reasonable precautions to ensure that respondents

are in no way directly harmed or adversely affected as a result of their participation in a marketing research project".

Conclusion

Ethics are indeed moral principles or values that generally govern the conduct of an individual or group in any field of study like investigative journalism and other research. As a researcher, in every situation ask yourself whether you would like anybody in a similar situation to act the way you are acting. If your answer is yes, then your behaviour is morally acceptable but if your answer is no, then your behaviour is morally unacceptable. To the deontologist upholding one's duty is what is considered ethically correct. Even if it is against the society, it is correct as long as the individual will benefit. In contrast, the author is in support of the Teleologist view which states that the choice yielding the greatest benefit to the greatest number of people is the choice that is ethically correct as in the Enemies of the nation and Osu Children's Home of Hell investigations and others conducted by Anas Aremeyaw Anas. The hard truth is that what is wrong will forever remain wrong even if all dispute it, and like a feather, irrespective of the pressure exerted to keep it submerged, the truth shall vindicate those who stand by it. Researchers may all not be in the position to act like Anas Aremeyaw Anas, but in their own small ways they should uphold their ethical values always by acting in such a way that their behaviour is not determined by what they get out of the research but only determined by their obedience to the ethical and moral law.

These schools of thought notwithstanding, the role of ethics cannot be over emphasized as the subject of research thrives on human involvement, trust and business referrals to arrive at reliable conclusions. Besides, any deviation from ethical standards therefore needs to be thought through and justified extremely carefully.

Lessons from the Cases-Managerial implications

By the very nature of social investigation, there is a potential for a researcher to behave unethically but that is no excuse for unethical conduct. Researchers must therefore take reasonable care by abiding by the ethical codes of their profession as set out by their employers in order to build trust.

Given the importance of following moral and ethical behaviour in conducting research, it is imperative that institutions and agencies both private and public put in place specific codes of conduct to guide their members' conduct in an attempt to protect their image and integrity. It is not always the case that these moral and ethical codes will cover every situation. The proper use of such codes requires the use of common sense in some cases to interpret and determine what kind of behaviour to display in a given circumstance. It is therefore important for researchers to learn how to interpret and apply these codes in different situations. When in doubt it is important to seek clarification from experienced colleagues.

For managers, it is not enough to give new employees a handbook on codes of ethics. Training in ethical behaviour must be seen as a process of continuous professional development. Researchers must be continuously educated on the emerging themes in the industry and the likely ethical issues that may arise from researching in the industry. Despite the above compelling evidence by Anas from both the Osu Children's Home of Hell and Enemies of the Nation investigation, it can be concluded that deception in research can have serious consequences on individuals and the researcher as evidenced by the law suit against the researcher in this case.

References

- Aaaker, Kumar, D. (2010). *Marketing Research*. John Wiley&Sons
- Barnes, J.A. (1979), *Who Should Know What? Social Science, Privacy and Ethics*. Cambridge: Cambridge University Press
- Bawah, A.A. 2002. "Spousal Communication and Family Planning Behavior in Navrongo: A Longitudinal Assessment." *Studies in Family Planning* 33, (2):185-194
- Bryman, A. and Bell, E. (2007), *Business Research Methods*, 2nd ed., (London, Oxford University Press)
- Boruch R. and Cecil G. (2000). Act-utilitarianism. In H. LaFollette (Ed.), *Ethical theory*. Oxford: Blackwell.
- Chris Spartz & Edward P. Kardas (2004) "Research Methods: Ideas, Techniques and Reports". McGraw-Hill International Edition.
- Daily Dispatch Newspaper, 3rd February, 2011. (Accra – Ghana)
- Daily Graphic Newspaper, 11th March, 2011. (Accra – Ghana)
- Daily Guide Newspaper, 2nd September, 2010. (Accra – Ghana)
- David B. Resnik, what is Ethics in Research & Why is It Important?
- Dillon, W. and Madden T.I. (1990), *Marketing Research and Marketing Environment*, 2th ed. (Boston, Irwin Inc)
- Ghana Journalist Association (1994), Code of ethics.
- Ghanaian Times (Sunday February 27, 2011); Human Rights Court To Rule On Rights Of Privacy Case: Sports Column, By Times Reporter

- Hill, R. P (1993), "A Primer for Ethnographic Research With a Focus on Social Policy Issues Involving Consumer Behavior," in *Advances in Consumer Research*, Vol. 20, ed. Mike Rothschild, Provo, UT: Association for Consumer Research.
- Kidder, L. (1981), *Research Methods in Social Relations*, Chicago, IL: Holt, Rinehart and Winston.
- Loreen Wolfer (2007). *Real Research, Conducting and Evaluating Research in the Social Sciences*: Pearson Education Inc
- Naresh K. Malhotra (2007). *Marketing Research: An Applied Orientation*, 5th Edition: Pearson International Edition
- New Crusading Guide Newspaper, February 6th 2011. (Accra – Ghana)
- Neuman, Lawrence, W. (2007) *Basics of Social Research*. Pearson Education Inc.
- Pride, W. and Ferrell, O. C. (2008), *Marketing*, 14th ed. (New York, Houghton Mifflin Co.).
- Sagrin, E (1973), "The Research Setting and the Right Not to Be Researched," *Social Problems*, 21 (Summer), 52-65.
- Sawyer, A. G. (1975), "Demand Artifacts in Laboratory Experiments in Consumer Research," *Journal of Consumer Research*, 1 (March), 20-30.
- Spradley, J. P. (1980), *Participant Observation*. Chicago, IL: Holt, Rinehart and Winston.
- Sojka J, and Spangenberg, E. R (1994), "ETHICAL CONCERNS IN MARKETING RESEARCH", in *Advances in Consumer Research* Volume 21, eds. Chris T. Allen and Deborah Roedder John, Provo, UT: Association for Consumer Research, Pages: 392-396.
- Shimp, R. L., Hyah, B. and Snyder, K. (1993). *People studying people: Artifacts and Ethics in behavioral research*. New York, NY: W. H. Freeman.
- Sekaran, U. (2003), *Research Methods for Business: A Skill Building Approach*, 4th ed. New York: Wiley.
- Sotirios Sarantakos (2005). *Social Research: 3rd Edition*: Palgrave Macmillan
- Susan. F. (2000), "Ethics in Research with Human Participants" *American Psychologist* 40 (January), 59-72
- USA. Office for Human Research Protections (2005), *Code of Federal Regulation*.
- Zikmund, W. G. (2003), *Business Research Methods*, 7th ed, Ohio-USA, Thomson, South- Western.