The Factors Impacting Ethical Behavior
Of Malaysian Pharmacists

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Abstract

This study aims to identify the factors that impact ethical behaviour of Malaysian pharmacists and the industry practices that are deemed unethical by Malaysian pharmacists comprising mainly of hospital and community pharmacists.

123 pharmacists from independent pharmacies, chain store pharmacies, hospital pharmacies and other areas responded to this survey. The average age of respondent was 27 years of age. 77% of the respondents were female making this a radical business ethics study exploring the responses from a large group of working women in Malaysia. About half of the respondents were married.

The results of this study show that ethical behaviour of co-workers, actions of successful managers and years of pharmaceutical experience in current job have an impact on ethical decisions of employees in the pharmacy profession. The most unethical industry practice is price discrimination and unfair pricing. Race, gender and professional ethics education did not impact ethical behaviour. Overclaiming scales indicated that social desirability bias did not significantly impact the results of this study.

Implications of this study and areas of future research were discussed. Limitations of the study were also discussed.
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Real integrity is doing the right thing, knowing that nobody's going to know whether you did it or not. – Oprah Winfrey
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CHAPTER 1: INTRODUCTION

In 1999, the Gallup polls in US identified that the public rated pharmacists as the most ethical among various professionals (Baker, 1999). In fact, pharmacists have been ranked the most ethical profession for a long time and have a lot to live up to in terms of public expectation.

In its simplest form, ethical behavior involves making judgment as to right and wrong in morally complex situations and deciding on the appropriate course of action (Monga, 2007). However, ethics is seldom as easy as right versus wrong. Conflict of interest can result in harmful ethical and managerial effects in all industries. When the potential gains are large, almost anyone including the most ethical person is susceptible to temptation.

1.1 Conflicts of Interest in the Pharmaceutical Industry

According to Bell, Friedman H.H and Friedman L.W. (2005), conflicts of interest have caused a great number of problems in numerous areas and have been responsible for financial harm and injury to millions of innocent people. For example, the arthritis drug Vioxx, was denied by Merck to be associated with heart attacks for 3 years despite studies showing the magnitude of the public health problems. Prior to withdrawal, Vioxx as one of Merck’s top five most profitable drugs, generated $2.5 billion in sales per year (Cavusgil, 2007). According to Eaton (2008), GlaxoSmithKline has also been criticized for failing to publish studies that showed that its drug Paxil was no better than placebo in treating childhood depression and that it increased the suicidal risks for suicidal thinking and acts. This was a huge conflict of interest between public health and the interest of a company with a blockbuster drug. Numerous problems in the medical field are also caused by conflict of interest. The number of iatrogenic deaths in the United States was reported to be over 700000 (Null et al, 2003 cited by Bell et al, 2005) Conflict of interest is among the major obstacles confronting effective management. Unfortunately the valuable lessons regarding the effect of conflict of interest cannot be learned in business
schools or in text books as they would not cover it in much detail. A firm needs to eliminate or reduce the presence of conflict of interest in order to eliminate ethical issues.

1.2 Malaysian Pharmacists

Pharmacists do not only dispense medicine, contrary to popular belief. They can enter a variety of job roles. Pharmacists are “experts on medicines” (New Sunday Times, 2008). They have skills in chemistry of the drugs, formulating medicines and the therapeutic use of drugs to treat diseases. A pharmacist’s job includes taking medication histories, identifying goals for drug therapy, providing recommendations and education to patients regarding self-medications, providing recommendations to other healthcare providers on drug therapy, working with patients to maximize benefits and minimize adverse effects of drug therapy, maintaining patient drug profiles, counseling patients on prescribed medication, monitoring drug interactions, adverse drug reactions and patients compliance with their drug treatment (New Sunday Times, 2008). Pharmacists in Malaysia are employed by various organizations, mainly hospitals, retail pharmacies, pharmaceutical companies, clinical research organizations, universities and colleges and government regulatory bodies such as National Pharmaceutical Control Bureau (NPCB). Pharmacists in Malaysia are required to be registered with the Pharmacy Board and have an annual certificate with NPCB.

The number of pharmacists has almost doubled from 2318 in 1999 to 4292 in 2006, according to statistics from the Malaysian Health Ministry (2007). However, this number is still not sufficient and the Malaysian government supports a pharmacist to population ratio of approximately 1:2000. Therefore the job prospects for pharmacists are excellent in Malaysia, considering the shortage of pharmacists in both the public and private sectors.

Pharmacy higher education is highly regulated and pharmacy graduates have a wide range of career opportunities. The majority enter community pharmacy practice
Hospital pharmacies are also a challenging alternative for pharmacist graduates. In the pharmaceutical industry, pharmacists can enter the field of sales, marketing, production, research and quality control. There is also an accreditation process driven by the Pharmacy Board of Malaysia.

Dispensing Separation (DS) is a highly debated issue in Malaysia and it has implications in the ethical perspective as well. According to the Malaysian Community Pharmacists Association, dispensing separation is a division of labour where a doctor will focus on diagnosing a patient’s disease and prescribing appropriate treatment, while a pharmacist will audit the prescription and dispense the drug with adequate medical counseling. In 1985, the Malaysian Medical Association (MMA) had officially agreed in a memorandum of understanding (MOU) with Malaysian Pharmaceutical Society that dispensing of medicines is the professional role of the pharmacist. However, private medical doctors are still dispensing drugs to their patients 20 years later and this has caused a few problems for pharmacists from a professional as well as ethical perspective. Malaysian pharmacists are forced to compete with doctors and Chinese physicians to sell whatever they can to survive in this competitive industry. On the other hand, more and more doctors are brought to court for medical negligence and errors because they are not allowing the pharmacist profession to complement them but are competing with pharmacists instead. Patients in the end suffer the most for lack of optimal medical care. This violates the Ethical code of both Medical Doctors and Pharmacists to safeguard the health of patients above all else. The New Sunday Times on 30 March 2008 has reported that some pharmacists dispense medicines and treat patients especially after checking their glucose levels and blood pressure. This is a major violation of patient’s safety as pharmacists are not trained to prescribe medicines except poison C that do not require a doctor’s prescription. This proves that conflict of interest is the root of many ethical violations and this has trickled into the health care profession as well with very severe consequences. Public hospitals are already practicing dispensing separation but private clinics are not following suit as it is currently not enforced by the government. Perhaps as the number of pharmacists in the country increase, this issue will be dealt with and doctors will no longer need to do what the pharmacist is trained to do. Patients will
definitely benefit from additional information regarding availability of drugs from the experts in this field-the pharmacists.

1.3 Ethical Issues and Pharmacists

Traditionally, adverse effects that result from medical intervention have been called iatrogenic harm; however this term literally means harm originating with the physician (Juergens, 1999). The pharmaceutical community also needs guidelines in determining the right thing to do when faced with several possible courses of actions in their daily work. The good derived from advances in medicines can also cause major harm to some patients. Therefore all medical interventions need careful ethical considerations before decisions are made. In the pharmaceutical community as in the medical community, ethical decisions need to be made to find the course of action that will result in the most benefit (health, happiness, well-being etc) at the least cost (adverse effects, financial cost, unhappiness etc).

1.4 Ethical Issues Impacting Pharmacists

Juergens (1999) explored a wide range of ethical issues pharmacists are likely to encounter as medical technology and health care systems continue to evolve. Among them are:

- Internet prescribing that may pose difficulties such as not having direct patient contact with prescriber. These may result in less than complete and accurate background information on the prescription request form.
- Chemical abortion: there are various chemical abortifacients available and pharmacists may be faced with prescriptions for these medications. It will then
become an ethical issue and conflict of duty for the pharmacist who considers abortion an unethical and immoral act

- Assisted suicide: If assisted suicide becomes an accepted and legal practice, it is likely that the preferred method will involve the use of lethal doses of a variety of pharmaceutical agents. Pharmacists will need to decide if they will participate in this act.

- Pharmaceutical alteration of personality and lifestyle characteristics: Certain drugs such as selective serotonin reuptake inhibitors (SSRI) are able to relieve the suffering associated with depressive illness but it also alters a variety of other aspects of an individual’s lifestyle characteristics. Therefore it is questionable if this is ethically appropriate.

- Gene therapy: This is unchartered waters in the pharmaceutical industry. Gene modification can alter personality and lifestyle characteristics but should it be done? This is a controversial issue that presents differing opinions from “no use” to “unrestricted use”.

- Managed care and health care rationing: We are constantly in pursuit of a system that is stable, equitable and affordable. Until we reach that stage, health care resources are limited. Therefore there is a decision to be made on who receives care and who doesn’t, who lives and who dies.

Since a pharmacist’s job is highly regulated, the Pharmacist Code of Conduct was adapted in Malaysia in 1989. This has led to the Code of Conduct being adopted as a part of the curriculum for Pharmacy Courses in local universities from 1990ies.
1.5 **Objective of Study**

The purpose of this study is to examine factors impacting the ethical behavior of Malaysian pharmacists. This paper also explores what specific pharmaceutical practices are considered the most unethical by Malaysian pharmacists.

1.6 **Importance of This Study**

This study aims to focus on business ethics in light of the pharmacy profession. For pharmacists, ethics can be related to medical ethics, representing true ethics in the sense that it is governed by the collective opinion and behavior of the medical profession (Lim, 1998), as well as business ethics, where matters are controversial and various competing viewpoints can seem right depending on situations, experience and other factors. The field of business ethics is steadily growing both in the educational world and in the business circle (Chryssides and Kaler, 1993). As a lot of research in business ethics has been carried out in the United States, it is very important to explore ethics from an Asian perspective.

It is crucial to research the ethics of pharmacists to find out what the major ethical issues are in Malaysia and what impacts ethical behavior of this group of professionals. The interest of ethics in pharmacy is further accelerated by the increased interest in Total Quality Management in Health Care. Since a lot of hospitals are focusing on quality accreditation, two aspects are of importance from a business ethics perspective. Firstly the necessity of defining the level of quality which is to be maintained forces the
management to consider the question of what is acceptable to the consumer. Secondly, the fact that management is required to define procedures and codify them meticulously is a good cue for the introduction of codes of practice. This study will raise awareness of ethical behavior among professionals in the medical and health care industry as an additional area of focus for quality. As no prior research has been done with regards to ethical behavior among pharmacists, this study will chart the course for more research in this field. This will help pharmacists prepare to address the array of ethical issues and moral dilemmas they may encounter in professional practice.

1.7 Problem Statement

This study identifies the factors that impact the ethical behavior of Malaysian pharmacists in different areas of employment, mainly hospitals and pharmacies. This study also draws attention to the ethical issues that Malaysian pharmacists would most like to eliminate in Malaysia.

1.8 Model Development

The determinants of ethical behavior surveyed in this research model include gender, ethnicity, years of pharmaceutical experience, ethical behavior of co-workers, ethical optimism, education in ethics and overclaiming scales.
1.9 Limitations of the study

As the target sample for this study was Malaysian pharmacists, the sampling was aimed at professional pharmacists working in Malaysia. Due to time constraints and hectic work schedule of the respondents, the sampling was limited to young professional pharmacists who were requested to complete the questionnaire by their superiors. This explains why the respondents were on average 26-35 years of age. Most older pharmacists declined participation due to their busy work schedules. As the respondents were approached at their place of work rather than at home, they had very little time to deliberate over the questions and some respondents did not follow the requirement to tick only 1 answer, and selected more than 1 answer for the social responsibility scale and question regarding unethical practices the respondents would most like to eliminate. The sampling was also completed within 2 months, severely limiting a majority of the sample of respondents to the Klang Valley area and surrounding towns in the vicinity. The number of respondents who responded via e-mail was about 20% of total respondents. This was because the Malaysian Pharmaceutical Society was not authorized to share their database and a number of Malaysian pharmacists were not reached using this medium. As the respondents were busy professional pharmacists, there were a number of incomplete responses that had to be discarded (about 20%).
1.10 Organization of Study

Literature review was conducted around research on ethical conflict, ethical behavior and ethical decision making in the healthcare sector with a focus on pharmacists. This study was conducted by handing out questionnaires to Malaysian pharmacists in hospitals, retail pharmacies, organizations and government sector. The questionnaires were based on a study by Deshpande et al (2006) and Vitell et al (1991). The analysis technique was also explained and findings discussed. Finally recommendations were given before conclusion was drawn.
CHAPTER 2: LITERATURE REVIEW

2.1 Ethics Philosophies

Ethics may be viewed as either consequential or non-consequential (Baker, 1999). According to the consequential theory, an action is judged as right or good on the basis of its consequences (Weiss, 2006). The ends of an action justify the means taken to reach those ends. However, in non-consequential ethics, the ends do not justify the means of an action. According to this approach, the right thing must always be done, even though doing the right thing doesn’t do the most good for the most people. This is also known as the duty-based approach to ethics.

As an example, a doctor who practices the consequential approach, when asked by a dying patient “Am I going to be ok?” will reply “You are going to be fine”. However the non-consequential approach would have the doctor answer the dying patient with the truth. The truth may be said is a compassionate manner, but the patient must be told that he is going to die.

Some people argue that people act ethically from a point of view of rationality whereas some argue that it is from habit and some other less rational basis of decision making. (White Jr., 2002)
Social psychologists have contended for years that ethical decision making is dependent on a person’s ethical philosophy. (Stead, Worrell and Stead, 1990). There are three basic ethical philosophies, i.e. utilitarianism, individual rights, and justice. Most individuals base ethical decision making on one of these philosophies, with utilitarianism philosophy being dominant among business managers.

Stead et al mentions ethical ideologies as the difference in moral judgments among individuals. Ethical ideologies are based on 2 dimensions, firstly idealism, the degree to which an individual believes that ethical behavior always results in good outcomes (Stead at al, 1990). Second is relativism, the degree to which an individual believes that moral rules are situational. The different combinations of both dimensions of ethical ideologies bring about intuitionists, subjectivists, absolutists and exceptionists.

2.2 Moral Reasoning

The theory of moral cognition was developed by Kohlberg. (Lan et al, 2008). According to Kohlberg, there are three levels of moral development. All three levels of moral development have 2 stages, of which the second is more advanced than the first. In the first level, called preconventional level, physical consequences determine the good or bad character of an action. In this level, the central concern is to satisfy one’s own needs without understanding moral rule or social conventions. At stage two of the first level, moral judgment reflects an instrumental (means-end) achievement of self-interested goals.
The second level of moral reasoning is the conventional level. Here a person makes judgment to please others (stage three). At stage four, a law and order orientation prevails where moral reasoning follows what is thought to be a consistent set of codes and procedures applicable to all members of society. Kohlberg considered most adults in urban society to be at either stage three or stage four of moral reasoning.

The third level of moral reasoning is the post-conventional level. At this stage, individuals understand that convention and social order are both preceded and superceded by moral principles. At stage five, people behave according to a social contract that smooths the achievement of mutual social benefit that subordinate personal beliefs of morality as relativistic and immaterial to sustaining social well-being. At the sixth stage, moral reasoning depends upon the application and authority of universal ethical principles of justice, equal rights and respect for the individual’s dignity (Lan et al, 2008).

Determinants of ethical behavior has been a topic of research for a long time. In July 2003, from a study by Sergio Roman and Jose Munuera to understand determinants and consequences of ethical behavior in salespeople, it was revealed that the method of compensation, control systems and age are important determinants of ethical behavior. According to Ford and Richardson (1994), there are two broad categories of influences on an individual’s decision behavior: variables associated with the individual decision maker and variables which form and define the situation in which the individual makes decisions. Individual factors are those associated with birth (e.g. Nationality, sex, age, etc) as well as variables associated with human development and socialization process (e.g. Personality, attitudes, values, education, religion, employment etc.) According to Stead et
al (1990) a variety of organizational variables influence ethical behavior of employees. Situational variables that impact ethical behavior that have appeared in research studies are among other, ethical climate, behavior of referent others, and reinforcement practices. (Visvesvaran, Deshpande and Joseph, 1998)

The concept of ethics is not new in health care. In medical practice, several factors have had an impact on the growing frequency of ethical dilemmas in health care, such as issues involving quality of life, informed consent and resource allocation.

2.3 Ethical Decision Making Model

Cavusgil (2007) in a paper regarding the Vioxx Scandal described an ethical decision making model adapted from Ferrell, Gresham and Fraedrich (FGF). This model appears to be comprehensive, robust and not overly complex. This model is a synthesis of:

1) The Kohlberg Model of cognitive moral development (1969)
2) Ferrell and Gresham’s Contingency Model of Ethical Decision-Making (1985) and
3) Hunt and Vitell Model depicting a “General Theory of Marketing Ethics”

The stages of ethical decision making according to this model is as follows:

1) Identification of an ethical issue that has created a dilemma

2) Identification of stage of Moral Development. Employees may change their values which consequently affects their behavior throughout the process of moral development
3) Moral Evaluation. Deontological philosophies focus on moral obligation where deontological evaluation assesses the appropriateness of the actions required by each alternative; while teleological evaluation involves evaluating the consequences of various behaviors in a situation. The consequences evaluated are perceived for various stakeholders involved such as customer, stockholder or employees.

4) Intention which is the individual’s subjective probability of behavior engagement. The division-maker’s ethical beliefs and consequences of the decision alternatives both play a role here.

5) Ethical or unethical behavior

However it cannot be denied that other factors such as organizational culture, opportunity and individual factors will influence the decision making process.

2.4 The Evolution of the Pharmacist Profession

Pharmacists have been in practice since the middle ages, where they acted mainly as physicians and were fairly autonomous. However, in the 19th century, pharmacists no longer prepared medication but dispensed medication ordered by physicians. The early codes of ethics listed that the primary responsibility of a pharmacist was to the physician. When pharmacists only distributed drugs, their main duty was to follow the law by using only approved, pure ingredients and to fill the physician’s orders accurately. Interactions with patients were very limited at that time. The only information the pharmacist had of
the patient was from what was written in the prescription itself. Patients’ expectation of
the pharmacist was also limited at that time.

In today’s community, pharmacy is no longer merely a product focused
profession with its function mainly to dispense drugs. Rather, pharmacists are required to
provide pharmaceutical care and counseling to patients or customers. Today’s
pharmacists may actually know more about drug kinetics and drug interactions than
physicians. Today’s pharmacist plays a diverse role both as advisor to the physician and
educator to the patient. They have a legal and ethical duty to counsel patients, perform a
prospective drug review, and discuss with the prescriber and/or the patient when
pharmacy related questions arise. Since pharmacists now have greater access to
information concerning the patient’s medical condition, including information given by
the patient during counseling, pharmacists have a duty to use the information for the
benefit of the patient. This places the pharmacist in a position to make dynamic decisions,
often involving ethics. With this expanding role of pharmacists, opportunities for ethical
problems become more prevalent.

2.5 Pharmacy Ethics

While in the bygone days, pharmacy ethics was governed by law i.e. to fill the
prescription as ordered by the physician, the rules today are no longer black and white.
Many of the rules today are not written. When does the pharmacy counsel and when
should the pharmacist keep silent?
In 2000, Gallup polls voted pharmacists as the second most honest and ethical profession next to nurses. However, research by Barrett (1998) showed that community pharmacists are more concerned about making a sale than caring about a patient’s welfare. According to his study, pharmacists would promote and sell food supplements to healthy individuals who don’t need them predominantly because of greed and also because “if they don’t sell it, the customer will go to their competition down the street”. This clearly shows unethical behavior among pharmacists. In fact, the American Pharmaceutical Association does not state that pharmacists have a duty to prevent dubious products from lining their shelves. Therefore ethics needs more attention among the pharmacy profession.

Ironically, universities do not provide a course on ethics for pharmacists even though a pharmacist’s role does involve ethics. In performing non standardized tasks, especially in non-routine situations as in the case of provision of pharmaceutical care, individuals may find it difficult to handle ethical situations and feel that they are in “over their heads” (Latif, 2001). Latif’s research showed that, as a group, community pharmacists with greater years of tenure in community practice scored significantly lower on moral reasoning than pharmacists with fewer years of tenure. This may be explained by 4 possible explanations, namely: a) a selection of lower ethical reasoners and/or an exodus of higher ethical reasoners from the community setting; b) a retrogression in the moral reasoning skills as community pharmacists obtain tenure in this setting; c) differences between the low and high moral reasoning groups may be due to a cohort effect; and d) the obtained practitioner sample may not have been representative of the population of community pharmacists. A separate study by Latif (2000) showed that,
contrary to cognitive moral development theory, pharmacy students show greater ethical reasoning skills than their practitioner counterparts. Baseline comparison of ethical cognition abilities of other health care professionals such as physicians and nurses also reflect unfavourably on retail pharmacists. A study by Vitell et al (1991) showed that relations outside the firm such as friends, customers and physicians produce more ethical conflict than relations with those inside the firm such as employees or those closely related to the pharmacist such as family. This indicates a need for clearer ethical guidelines and codes for pharmacists to follow, especially those that involve customers.

In this study, the item that caused the most conflict between the interest of the pharmacy and the pharmacist’s personal ethics was information disclosure (for example the side effect of drugs) and the giving of gifts and kickbacks.

In August 2001, an American pharmacist named Robert Courtney was indicted for 20 felony counts of product tampering, drug adulteration and drug misbranding. (Ethics and the Profession, unk). Courtney illegally diluted Gemzar, a chemotherapy drug in order to make more money. According to the FBI, at least one cancer patient died after receiving the diluted drug. Courtney was found to be selling up to 3 times the amount of drug he was purchasing from the drug manufacturer.

The conflict between ethics and business in community pharmacy is as old as the occupation itself (Resnik et al, 2000). This is because community pharmacy is a business but community pharmacists are health care professionals. While community pharmacists
are in the business of selling medicines, they have a legal and ethical responsibility towards their patients.

2.6 Professional Codes of Ethics

There is a distinct difference between seeing the right and wanting to do right as expressed by Bruce Jenning (Larmer, 2002). Most often the problem is in getting people to do what is right and to avoid doing what is wrong. However, both situations would arise in professional practice. Professional ethics has to address the challenge of teaching professionals how to see the right and it also has to show how to motivate right conduct. Ethical conduct is very important to every profession and the pharmacy profession is no exception. Formal education, licensing and professional codes of conduct encourage, maintain and improve ethical conduct in every profession. Primarily, codes of conduct promote the public image of a profession by specifying and enforcing the ethical behavior expected of its members.

The Royal Pharmaceutical Society of Great Britain has developed the Code of Ethics for Pharmacists and Pharmacy Technicians that sets out seven principles that need to be followed by this group of professionals. The principles of this code are intended to help in decision making and in performing this job function. Making these principles part of a pharmacist’s professional life will maintain patient safety and public confidence in the profession. The seven principles are:

- Make the care of patients your first concern
• Exercise your professional judgment in the interest of patients and the public

• Show respect for others

• Encourage patients to participate in decisions about their care

• Develop your professional knowledge and competence

• Be honest and trustworthy

• Take responsibility for your working practices

These 7 principles are further broken down in order to provide guidance to support its application.

The American Pharmaceutical Association’s Code of Ethics gives high priority to the dignity and welfare of patients. According to their Code of Ethics:

• A pharmacist respects the covenantal relationship between the patient and pharmacist

• A pharmacist promotes the good of every patient in a caring, compassionate and confidential manner

• A pharmacist respects the autonomy and dignity of each patient (Resnik et al, 2000)

On 22 December 1989, the Malaysian Pharmacy Board (MPS), established under section 3 of the Registration of Pharmacist Act, 1951, during its 60th meeting, adopted the code of conduct for pharmacists and bodies corporate. The purpose of this code is to uphold the importance of the health and welfare of the public above all other considerations among pharmacists. It outlines the minimum standard of proper conduct
and professionalism for practitioners in the pharmacy profession. Moreover, in January 2006, the MPS officialized a Benchmarking Guidelines for Community Pharmacy Practice that requires pharmacy personnel to be registered with Pharmacy Board of Malaysia, follow the Code of Conduct, follow the rules and regulations in the Pharmacy Legislation of Malaysia, maintain a professional image and wear a name tag. A pharmacist would also be expected to fill not more than 150 prescriptions a day.

Most business ethics research has been conducted in developed countries with very little research done in developing countries such as Malaysia. Moreover, findings from business ethics research in developed countries may not be generalizable to developing countries. No empirical research on business ethics among pharmacists have been done previously in Malaysia.
2.7 Conceptual Framework

![Research Framework Diagram]

Figure 1: Research Framework
CHAPTER 3: RESEARCH METHODOLOGY

This section will outline the sequence of stages by which the research will be developed and also outlines the theoretical framework and the hypotheses to be tested. Then it provides the selection of measures and a description of the sampling design, research instruments, data collection techniques and data analysis techniques. Since the subject of this research is new, the availability of past data and information is very limited. Therefore, this research uses the survey technique whereby the primary data collected will be analyzed.

3.1 Hypothesis

The following Hypotheses are presented:

According to Westerman, Beekun, Stedham and Yamamura (2007), peers exert a strong influence on an individual’s ethical decision outcomes. The Asch Study (1960) showed that the desire to conform to one’s peers can sometimes overpower a person’s own belief. (White Jr., 2002). Social Learning Theory also states that referent others have a significant impact on the behavior of individuals. Deshpande et al (2006) found that peer influence is among the most significant influence on ethical behavior in health care institutions. Thus we hypothesize:

1) Ethical behavior of peers will impact ethical behavior of pharmacists
There is more than 25 years of research supporting the conclusion that ethical philosophies of management have a major impact on ethical behavior of employees. Chryssides and Kaler (1993) give four rationalizations that people use to justify questionable conduct: believing that the activity is not ‘really’ illegal or immoral; that it is in the individual’s or the corporation’s best interest; that it will never be found out; or that because it helps the company the company will condone it. (Stead et al, 1990). According to Harshman and Harshman (2008), ethical problems are almost always caused by organizational leadership. If leadership serves as a model for right action, then the behavior of employees are impacted by the leader’s behavior. Deshpande et al (2006) showed that action of successful managers impacted ethical decisions of employees in hospital institutions. A study by Koh and Boo (2001) concluded that top management has an influence on ethical behavior among managers in Singapore. Research in social learning theory support the idea that people learn appropriate behavior by modeling the behavior of persons they perceive as important (Stead et al, 1990). These people may be their parents, siblings, peers, teachers, and so on. Managers, no doubt would represent important persons to their employees. Thus we hypothesize:

2) Ethical behavior of successful managers will impact ethical behavior of pharmacists

The recent emphasis of the inclusion of ethics in business studies has given rise to the question of how aware the business student is of the subject. A study conducted to examine if students from four countries were aware of ethical conduct and if there are
any differences in awareness among the four groups of students found that each country’s students differed significantly in their perception of ethics (Agacer, Vehmanen and Valcercel, 2007). Previous research has examined a number of education related variables like level of education, type of major in college, and code of ethics with mixed results (Deshpande et al, 2006) Training in ethics has also been explored (Stead et al, 1990 and Honeycutt, Siguaw and Hunt, 1995). According to Donaldson (2008) ethics education in management schools do not make managers more ethical and in fact there are several problems with ethics education of managers namely, misdiagnosis of the causes of problems, lack of moral authority of academics, ethical philosophy, ethical dilemmas, and free choice (free will). Misdiagnosis of the causes of problems causes the true causes to be neglected and the solutions to fail. Salience of moral authority of academics is also a problem where unethical academic personnel lack moral authority to teach ethics effectively. Moreover ethical philosophy is often inconclusive as there is no right answer. This further causes ethics skepticism and quite often, unethical behavior can be rationalized. There were no studies done in Malaysia to examine Malaysian students’ perception of ethics. There is also no literature to show the impact of professional education to address ethical issues at work on ethical behavior of respondents. This is a critical issue in pharmacy because pharmacists constantly need to address issues with ethical implications. As an MBA in Health Care management is new in Malaysia, a decision was made to explore this issue with respect to ethics education at undergraduate level rather than postgraduate levels. Therefore we hypothesize:
3) **Those employees who believe that their professional education prepared them to address ethical issues at the workplace are more likely to exhibit ethical behavior**

Gender of respondent is one of the most widely researched demographic factors in ethics studies. A number of studies have shown that there are gender differences regarding ethical judgment. (Weeks, Moore, McKinney and Longenecker (1999) and Westerman et al, 2007). According to these studies, females adopt a stricter ethical stance than their male counterparts. In a meta-analysis by Lan et al (2008), gender is positively related to higher levels of moral reasoning with women exhibiting higher levels than men. However, Lan et al’s research could not prove there was a difference in level of moral reasoning between men and women.

Deshpande et al (2006) found in their study that the sex of the respondent significantly impacted ethical behavior. However there are studies that prove that there is no difference between women and men’s approach to ethics perceptions, as presented by Ford and Richardson (1994). A study by Lam and Shi (2008) did not find any relationship between gender and ethical standard among respondents in Hong Kong and China. There has been no research done to explore the effect of gender roles in the pharmacy profession. Therefore we hypothesize:

4) **Female pharmacists are more likely to behave ethically**

Since a lot of research in ethics has focused on US, most of the issues have a distinct American character (Chryssides and Kaler, 1993). Since American legal, political and
economic systems are different from those in Europe and particularly Asia, ethical dilemmas faced in US would be different as well. Conflicts of values as a result of culture clashes would be an interesting area to explore especially in a multiracial society such as Malaysia, being a part of Asia which has very little research literature focusing on ethics. According to Deshpande et al (2006) race of decision maker is a novel variable that has very little prior research done. Studies show that ethical differences do exist across cultures (Honeycutt et al, 1995, Westerman et al, 2007). Alas (2006) further proposes that culture and ethics are connected and when we know a country’s culture, we are able to predict how the society values ethics. Studies exploring nationality and religion have produced mixed results (Ford and Richardson, 1994). In a multiracial country like Malaysia, there has been little research done on the influence of culture on ethics. Therefore we hypothesize:

5) The ethnicity of the pharmacist will impact ethical behavior

Out of 8 studies exploring the effect of age on ethical decision making by Ford and Richardson (1994) only 3 found a significant relationship between older and younger respondents and their ethical beliefs. Roman and Munuera (2004) showed that older salespeople become more conservative in their ethical behavior. A study by Lam and Shi (2008) found that older people find unethical behavior more unacceptable among respondents in Hong Kong and China. Interestingly, research work by Latif (2001) showed that, as a group, community pharmacists with greater years of tenure in
community practice scored significantly lower on moral reasoning than pharmacists with fewer years of tenure. Therefore we hypothesize:

6) *Years of pharmaceutical experience will impact ethical behavior*

A study by Roman and Munuera (2005) showed that there may be a tendency for respondents who participate in ethical behavior evaluations to deny socially undesirable traits (for example, unethical behavior). Deshpande et al (2006) showed that overclaiming impacted the ethical optimism results essentially among nurses. There has been no studies measuring overclaiming among pharmacists. Therefore we hypothesize:

7) *Overclaimers report a higher level of ethical behavior*

3.2 **Selection of Measures**

Respondents were requested to provide demographic data such as age, ethnicity, gender, marital status, years of pharmaceutical experience, and years of experience in current job, job title and type of pharmacist. Gender was measured using dichotomous variable on whether the respondent was female (1= yes, 0= no).

The dependent variable, ethical behavior is measured using a 15-item instrument which has been used previously by Deshpande et al (2006). This includes 4-mirror items used to measure ethical behavior of self and ethical behavior of coworkers. For example, at the self level, respondents were asked if it is okay to by-pass established protocols in
order to be more efficient or effective at work. At the coworker level, respondents were asked if their peers felt it was okay to by-pass established protocols in order to be more efficient or effective at work. These items were measured using four items that were rated on a 4 point Likert scale (4=strongly agree, 1=strongly disagree). The Cronbach’s Alpha for ethical behavior of self and coworkers was 0.71 and 0.83 respectively (Deshpande et al, 2006).

The relationship between ethical behavior and managerial success or ‘‘ethical optimism’’ was measured using scales initially developed by Hunt et al (Deshpande et al, 2006). These scales have been used among market researchers, computer professionals, managers in non-profit organizations, Russian business students and hospital employees. Ethical optimism was measured using six items on a four-point Likert scale (4 = strongly agree, 1 = strongly disagree). A score of 4 indicates that the respondents perceive a strong link between ethics and success. Factor analysis results confirmed that there was only a one-factor solution for the two measures. Cronbach’s alpha for this scale was 0.83.

Education in ethics was measured on a four-point Likert scale (4 = strongly agree, 1 = strongly disagree) using the item,’ my professional education prepared me to address ethical issues at work.’’

In order to determine to what extent various unethical practices are common, respondents were asked:
In every industry there are generally accepted business practices. In the pharmaceutical industry are there any such practices which you regard as unethical?

Respondents were further asked to choose the unethical practice they would most like to eliminate:

a. Price discrimination and unfair pricing
b. Price collusion by competitors
c. Dishonest advertising
d. The giving of gifts, gratuities and bribes
e. Unfairness to employees
f. Unfair credit practices
g. The receiving of gifts, gratuities and bribes
h. Dishonesty in making or keeping a contract
i. Others

This portion of the questionnaire was adopted from a paper by Vitell, Rawwas and Festervand (1991).

Overclaiming scales used to control for social desirability bias in the survey was also taken from Deshpande et al (2006). The procedure to detect overclaimers in this study was initially proposed by Randall and Fernandes (1991). Respondents were asked to rate their degree of familiarity with different categories like movies, products, TV shows, and designer labels by answering yes or no. Each category has one nonexistent item.
3.3 Sampling Design

The sample for this study comes from qualified pharmacists around the Klang Valley, Negeri Sembilan, Penang and Ipoh area. To ensure a high response rate, a letter was sent to the President of Malaysian Pharmaceutical Society (MPS) to get his support and assistance in collecting data. In December 2007, a total of 200 survey forms were distributed manually and via e-mail. A total of 123 responses were received not including 30 incomplete responses. A response rate of 76.5% is higher than usually seen in survey based research.

Among the 123 pharmacists sampled, 62 of them were hospital pharmacists, 45 were retail pharmacists (comprising 32 independent pharmacists and 13 chain store pharmacists) and the rest were pharmacists working in other areas such as enforcement, regulatory, clinical research and colleges.

Table 1 presents the questions featured in the questionnaire. For a complete questionnaire, refer to the Appendix.
TABLE 1

Items used to measure various constructs

<table>
<thead>
<tr>
<th>Ethical behavior of self</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. It is acceptable for me to take office supplies home</td>
</tr>
<tr>
<td>b. In order to get ahead in their future careers, I believe</td>
</tr>
<tr>
<td>that one has to compromise personal ethical standards</td>
</tr>
<tr>
<td>c. I believe that it is acceptable on occasion to discuss</td>
</tr>
<tr>
<td>aspects of cases with friends and others not employed</td>
</tr>
<tr>
<td>within their organization</td>
</tr>
<tr>
<td>d. I believe that it is okay to by-pass established protocols</td>
</tr>
<tr>
<td>in order to be more efficient or effective at work</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethical behavior of coworkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Co-workers feel that it is acceptable to take office</td>
</tr>
<tr>
<td>supplies home</td>
</tr>
<tr>
<td>b. In order to get ahead in their future careers, my co-workers</td>
</tr>
<tr>
<td>believe that one has to compromise personal ethical</td>
</tr>
<tr>
<td>standards</td>
</tr>
<tr>
<td>c. My co-workers believe that it is acceptable on occasion to</td>
</tr>
<tr>
<td>discuss aspects of cases with friends and others not</td>
</tr>
<tr>
<td>employed within their organization</td>
</tr>
<tr>
<td>d. My co-workers believe that it is okay to by-pass established</td>
</tr>
<tr>
<td>protocols in order to be more efficient or effective at</td>
</tr>
<tr>
<td>work</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethical optimism scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Successful managers are generally more ethical than</td>
</tr>
<tr>
<td>unsuccessful managers</td>
</tr>
<tr>
<td>b. In order to succeed at work, it is often necessary to</td>
</tr>
<tr>
<td>compromise one’s ethics</td>
</tr>
<tr>
<td>c. Successful managers withhold information that is</td>
</tr>
<tr>
<td>detrimental to their self interest</td>
</tr>
<tr>
<td>d. Successful managers make rivals look bad in the eyes of</td>
</tr>
<tr>
<td>others</td>
</tr>
<tr>
<td>e. Successful managers look for a “scapegoat” when they feel</td>
</tr>
<tr>
<td>they may be associated with failure</td>
</tr>
<tr>
<td>f. Successful managers take credit for the ideas and</td>
</tr>
<tr>
<td>accomplishments of others</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education in ethics</th>
</tr>
</thead>
<tbody>
<tr>
<td>My professional education prepared me to address ethical</td>
</tr>
<tr>
<td>issues at work</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unethical practices that pharmacists would most like to</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Price discrimination and unfair pricing</td>
</tr>
<tr>
<td>b. Price collusion by competitors</td>
</tr>
</tbody>
</table>
c. Dishonest advertising  
d. The giving of gifts, gratuities and bribes  
e. Unfairness to employees  
f. Unfair credit practices  
g. The receiving of gifts, gratuities and bribes  
h. Dishonesty in making or keeping a contract  
i. Others  

Overclaiming scales  

a. How familiar are you with each of the following movies?  
   Forrest Gump  
   Katherine’s Mistake  
b. How familiar are you with each of the following products?  
   Kellogg’s Cornflakes  
   New Life Spices  
c. How familiar are you with each of the following TV programs?  
   Friends  
   Chicago Heat  
d. How familiar are you with each of the following designer labels?  
   Ocean City  
   Levis  

### 3.4 Data Analysis Technique

The questionnaire used for data collection contained scales to measure the various constructs depicted in the research model. The Likert technique presents a set of contributing elements of ethical behavior. Subjects were asked to express agreement or disagreement of a four-point Likert scale. Each degree of agreement is given a numerical value from one to four. Thus a total numerical value can be calculated from all the responses. The typical question sets using a Likert Scale might pose a statement by asking the respondents whether they strongly Agree, Agree, Disagree or Strongly Disagree. Only for social desirability portion of questionnaire, the respondents were requested to answer yes/no on the familiarity of items presented.

The final input was analysed using SPSS Version 13.
CHAPTER 4: RESEARCH ANALYSIS

4.1 Age

Figure 2 depicts the age range of respondents of this study divided by types of jobs. Half of the respondents surveyed were hospital pharmacists. The average age of respondents was 27 years of age. The reason why the average respondent was so young was because at most of the hospitals approached, the chief pharmacists were too busy with their routine work and distributed the questionnaires only to their subordinates who happened to be within this age range. Before 1996, the only university to offer pharmacy degree course was Universiti Sains Malaysia. Considering that most public universities started offering pharmacy degree in 1996, a large portion of the country’s pharmacists are young; within the 26-35 age range. It appears that some hospital pharmacists are house pharmacists who are required to work 3 years compulsory service in the hospitals before moving to other areas of interest. Since the pharmacy career is growing in popularity in Malaysia, with the country needing more pharmacists to satisfy the ratio of 1 pharmacist to 2000 individuals, a wide population of Malaysian pharmacists is young, with 26-35 years of age.
Figure 2: Age Distribution of Pharmacist Respondents

<table>
<thead>
<tr>
<th>Type</th>
<th>Independent Pharmacist</th>
<th>Chain Store Pharmacist</th>
<th>Hospital Pharmacist</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0 1 2 3 4 5 6</td>
<td>0 1 2 3 4 5 6</td>
<td>0 1 2 3 4 5 6</td>
<td>0 1 2 3 4 5 6</td>
</tr>
<tr>
<td>Frequency</td>
<td>0 10 20 30 40</td>
<td>0 10 20 30 40</td>
<td>0 10 20 30 40</td>
<td>0 10 20 30 40</td>
</tr>
</tbody>
</table>

1 = below 25yrs of age; 2 = 26-35yrs of age; 3 = 36-45yrs of age; 4 = 46-55yrs of age; 5 = above 55 yrs of age

4.2 Ethnic Group

Figure 3 below depicts the different ethnic groups of respondents. A major portion of respondents were Chinese which does not echo the country’s population which is predominantly Malay. While most pharmacists in independent pharmacies and chain-store pharmacies were Chinese, the same conclusion cannot be drawn with regards to hospital pharmacists as each hospital did not have 100% of pharmacists respond to the survey. In order to know the ethic groups within the pharmacist population, further
research would need to be done in this area. It can only be concluded that among pharmacists approached to respond to this questionnaire, a wide majority were Chinese

**Figure 3: Ethnic Groups of Pharmacist Respondents**

4.3 Gender

Figure 4 below shows the gender of the pharmacist respondents. Out of the 123 respondents, 95 of them were female. This shows that pharmacy is predominantly a female choice of profession.
4.4 Marital Status

As for marital status, 55% of respondents were single, probably because the age of respondents was on average within late twenties. 44% of respondents were married, and 1 respondent did not answer to this question in the survey.
4.5 Pharmaceutical Experience

Figure 5 below shows the normality plot of the pharmaceutical experience of respondents. The distribution is skewed to the left because most of the pharmacist respondents had less than 10 years pharmaceutical experience, consistent with their age. However, the population is normal when a plot was drawn of pharmacists experience in their current job as shown in Figure 6 below. Skewness of this plot is 0.43 which is close to normal. A majority of the respondents had 2-3 years of experience in their current job. Considering that a majority of the respondents also had total of 10 years of pharmaceutical experience or less, this means that a majority of respondents were in their first job and relatively newly qualified pharmacists.

4.6 Type of Pharmacists

50% of pharmacist respondents were hospital pharmacists and 37% of pharmacist respondents were retail pharmacists. Among the retail pharmacists, 32 of them were independent pharmacists and 13 of them were chain store pharmacists.
Figure 5: Pharmaceutical Experience of Pharmacist Respondents

- Frequency distribution of years of pharmaceutical experience
- Mean: 1.5
- Std. Dev.: 0.978
- N: 123

1 = less than 10 years; 2 = 11-15 years; 3 = 16-20 years; 4 = 21-25 years; 5 = more than 25 years
4.7 Correlation of the variables to Ethical Behavior of Self

Table 2 presents the mean, standard deviations and Pearson’s product-moment correlation for all the variables. Ethical behavior of coworkers and ethical optimism scale were significantly correlated with ethical behavior of self. The other variables appear to be not significantly correlated to Ethical behavior of self. These correlations support hypotheses 1 and 2 and do not appear to support hypotheses 3, 4, 5, 6 and 7. As indicated
in the correlation matrix, there are significant inter-correlations among the variables namely ethical optimism scale and education in ethics seemed to have correlation with ethical behavior of coworkers and years of experience in current job and overclaiming scales were correlated with females. These inter-correlations could impact the significance of the hypothesized relationships.

Regression analysis results presented in Table 3 shows stronger evidence on the significance of the proposed relationships.

<table>
<thead>
<tr>
<th>Mode 1</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.801(a)</td>
<td>.642</td>
<td>.624</td>
<td>.28662</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Overclaimed items, Ethical behavior of coworkers, Years of experience in current job, Education in Ethics, Female, Ethical Optimism scale

b Dependent Variable: Ethical behavior of self

Ethical behavior of coworkers, Education in Ethics, Ethical Optimism scale, years of experience in current job, female and overclaimed items explain 64% of ethical behavior of self, which is highly significant as explained by the F value of 34.703 in table 4 below.
Table 4: ANOVA

<table>
<thead>
<tr>
<th>Mode</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>17.105</td>
<td>6</td>
<td>2.851</td>
<td>34.703</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>9.529</td>
<td>116</td>
<td>.082</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>26.634</td>
<td>122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Overclaimed items, Ethical behavior of coworkers, Years of experience in current job, Education in Ethics, Female, Ethical Optimism scale
b Dependent Variable: Ethical behavior of self

The regression results in Table 5 show that out of these 6 variables, ethical behavior of coworkers and ethical optimism scale have a significant impact on ethical behavior of self. Even though years of experience in current job appears to have a significant relationship with ethical behavior of self, the B value at 0.05 does not show a strong relationship between these two variables.

Of these two variables, ethical behavior of co-workers most significantly impacted ethical behavior of self.

One interesting difference between the results of this study and that of Deshpande et al (2006) is that this study did not find there is a significant relationship between overclaiming responses and ethical optimism scale whereas in the study by Deshpande et al, it was found that overclaiming impacted the ethical optimism scale. There can be many reasons for this. One of the reason for this could be that the respondents were not familiar with the products mentioned in the overclaiming scale. Some respondents may also have misunderstood the scales as it was presented in a different way in this study.
than the previous study by Deshpande et al. In this study, respondents were only required to answer if the items were familiar to them or not whereas in the previous study by Deshpande et al, respondents were asked to rate the degree of familiarity with the different categories on a four-point Likert scale (4= very familiar, 1= not at all familiar). As most respondents did not spend very much time (less than 10 minutes) answering the questionnaire, the difference in presentation and inconsistency with the other portion of the questionnaire could have confused the respondents and led to inconsistencies with the answers. Therefore further research is required to change the products to Malaysian products (i.e. Malaysian movie, Malaysian product, Malaysian TV show and Malaysian designer label and to have a Likert Scale introduced (4= very familiar, 1= not at all familiar) to further explore the relationship between ethical optimism scale and overclaiming scale among Malaysian pharmacist respondents.
Table 2: Mean, standard deviation, and Pearson’s correlations for the variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ethical behavior of self</td>
<td>2.18</td>
<td>0.47</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ethical behavior of coworkers</td>
<td>2.29</td>
<td>0.48</td>
<td>0.78**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Ethical optimism scale</td>
<td>2.28</td>
<td>0.37</td>
<td>0.47**</td>
<td>0.46**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Education in ethics</td>
<td>3.06</td>
<td>0.69</td>
<td>-0.17</td>
<td>-0.19*</td>
<td>0.00</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Female</td>
<td>0.77</td>
<td>0.42</td>
<td>0.09</td>
<td>0.13</td>
<td>-0.12</td>
<td>-0.10</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Ethnicity</td>
<td>1.93</td>
<td>0.68</td>
<td>-0.16</td>
<td>-0.13</td>
<td>0.13</td>
<td>0.03</td>
<td>-0.20*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Years of experience in current job</td>
<td>2.51</td>
<td>1.16</td>
<td>0.05</td>
<td>-0.12</td>
<td>0.08</td>
<td>0.01</td>
<td>-0.26**</td>
<td>-0.07</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8 Overclaiming scale</td>
<td>0.63</td>
<td>0.95</td>
<td>0.16</td>
<td>0.08</td>
<td>0.15</td>
<td>0.16</td>
<td>-0.19*</td>
<td>0.12</td>
<td>0.16</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Table 5: Regression Results

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.115</td>
<td>0.237</td>
<td>0.485</td>
<td>0.629</td>
</tr>
<tr>
<td>Ethical behavior of coworkers</td>
<td>0.694</td>
<td>0.065</td>
<td>0.712</td>
<td>10.724</td>
</tr>
<tr>
<td>Ethical Optimism scale</td>
<td>0.156</td>
<td>0.081</td>
<td>0.125</td>
<td>1.921</td>
</tr>
<tr>
<td>Education in Ethics</td>
<td>-0.027</td>
<td>0.039</td>
<td>-0.040</td>
<td>-0.689</td>
</tr>
<tr>
<td>Female</td>
<td>0.065</td>
<td>0.066</td>
<td>0.058</td>
<td>0.983</td>
</tr>
<tr>
<td>Years of experience in current job</td>
<td>0.051</td>
<td>0.024</td>
<td>0.127</td>
<td>2.165</td>
</tr>
<tr>
<td>Overclaimed items</td>
<td>0.040</td>
<td>0.029</td>
<td>0.082</td>
<td>1.402</td>
</tr>
</tbody>
</table>

Dependent Variable: Ethical behavior of self

p ≤ 0.1

4.8 Unethical Practices Responses

In response to the question on number of practices that the pharmacist respondents regard as unethical, 66.2% responded that there are a few practices that they regard as unethical, while only 23% responded that there were many practices they regarded as unethical. Figure 7 below shows the distribution of pharmacy practices that the pharmacist respondents would most like to eliminate.
It appears that the 3 most unethical practices as viewed by the pharmacist respondents were price discrimination and unfair pricing, dishonest advertising and unfairness to employees. Unfair credit practices seemed to not be an ethical issue in Malaysia as it got very few responses. However this could also be due to the fact that only retail pharmacists would be involved with issues regarding credit practices and this would not affect hospital pharmacists. The giving of gifts, gratuities and bribes also appear to not be one of the most unethical practices in Malaysia compared to the other issues highlighted earlier. The receiving of gifts, gratuities and bribes received more
responses as an unethical issue that needed attention compared to the giving of gifts, gratuities and bribes.

4.9 Summary of Research Results

The results show that ethical behavior of peers and ethical behavior of successful managers will impact ethical behavior of pharmacists. Years of pharmaceutical experience also has a very small but significant impact on ethical behavior of pharmacists. However race, gender and professional ethics education did not appear to impact ethical behavior of pharmacists. Overclaiming scales were also not related to the ethical optimism scales in this study. Finally the 3 most unethical practices that the pharmacists would most like to eliminate were price discrimination and unfair pricing, dishonest advertising, and unfairness to employees.
CHAPTER 5: RECOMMENDATIONS AND CONCLUSIONS

From this study, there are three unique factors that impact the ethical decision making of Malaysian pharmacists. They are ethical behavior of coworkers, ethical optimism scale and years of pharmaceutical experience in current job. As believed by Lawrence Kohlberg on theories by Piaget, moral development occurs by social interaction. Most people belong to the conventional level of moral thinking, characterized by an attitude that seeks to do what will gain the approval of others and further to abide by law and responding to the obligation of duty. (Barger, 2000).

Ethical behavior of peers will impact ethical behavior of pharmacists. This is an important finding because people have long held a belief that ethics and business do not go together. Moral judgments may sometimes differ from business judgments. Lying, fraud and deception sometimes lead to greater profits than their opposites. However in the pharmacy profession, ethics plays a very important role to the job, which would safeguard the health of patients and quality of care. A pharmacist that ignores the patients’ interest can be very dangerous to the community. The results of this study show that, if a pharmacist works among a group of ethical pharmacists, it is likely that he or she would be ethical as well. One strategy that can be used to ensure ethical behavior of pharmacy employees is by involving Human Resource Departments of organizations to hire and promote ethical employees. Thus, this would promote a high ethical bent among employees in the pharmacy profession.
A pharmacist’s manager who behaves ethically would also serve as a role model
to create an ethical environment in the workplace. A further analysis of the data showed
that close to 40% of respondents disagreed that successful managers are generally more
ethical than unsuccessful managers. 40% of respondents also believed that it is often
necessary to compromise one’s ethics in order to succeed at work. Thus there is
considerable scope within the sample organizations for improvement of ethical behavior
among successful managers. As employees tend to emulate behavior of successful
managers, if they do not believe that ethical behavior leads to successful management,
there is a strong argument that employees may not be compelled to behave ethically in
order to succeed as managers. Successful managers need to indicate through their daily
actions that ethics is important to them. Some human resource intervention would also be
helpful to recruit ethical managers. Human Resource must determine what criteria are
required as an assessment component and how to assess those criteria in the selection
process of managers to lead organizations. Leadership development would also need to
focus on ethics as mentioned by Harshman and Harshman (2008) in order to cultivate a
culture of ethics in any organizations be it hospital, pharmacy or any organization for that
matter. In order to develop ethical managers, a culture that focuses on individual learning
and development, particularly experiential learning is required. Individuals do not
develop in isolation. It is unrealistic to expect individuals to develop themselves and their
ethicality in an environment that is unethical. Performance evaluation should also include
evaluation from an ethical perspective which can be subjective. If company goals involve
ethics, there is a high chance that employees will focus on ethically responsible behavior.
Finally succession planning and management must also be well focused around ethical
behavior in order to not lose the precious employees that have been trained and developed in the organization.

All health professions have some form of code of ethics or standards of practice. The ethical code would play an integral part in ensuring that the safety of patients is of foremost importance. As mentioned by S.M.Lim in his book ‘Patient’s interest first’, even though law introduces graded penalties to suit the severity of any offence, ethics is seldom enforceable with the threat of punishment. Conformity is achieved through the force of group opinion. Therefore the Malaysian Pharmaceutical Society plays an important part in ensuring that pharmacists observe ethical behavior not only for their own sakes but for the sake of their profession. The Malaysian Pharmacists Code of Conduct provides standards and dictates how care should be rendered. However, as with all codes of conduct, it would only provide general guidance and not specific guidance that is needed in organizations. Therefore organizations would need to use the code of conduct to produce a specific guidance for employees to follow to create a cultural norm of ethical behavior in organizations.

Years of pharmaceutical experience in current job also impacted ethical behavior of self among the pharmacist respondents. This supports an earlier study by Weeks et al (1999) that individuals in later career stages demonstrate higher ethical judgment than those in earlier levels. The reason for this could be that a lot of the ethical decision making that is needed in a pharmacist’s profession is learned on the job rather than from their undergraduate studies.
Therefore, not surprisingly our results show that education in ethics had no significant impact on ethical behavior. However we would require more in depth study of the curriculum of ethics education among pharmacy undergraduates to ensure it is addressing relevant ethical issues facing the pharmacy community.

Our results also show no significant relationship between gender and ethical behavior among Malaysian pharmacists. However as the sample of respondents were more female than male, with a ratio of nearly 3 to 1, it would be better to use a larger sample of male respondents in future studies. Having said that, a large portion of pharmacists are female so male pharmacist respondents in Malaysia may be a difficult sample to target.

There is also no significant relationship between race and ethical behavior of Malaysian pharmacists. The implication of this may be that while Malaysia is a diverse country with different races and cultures, this does not impact ethical behavior among this group of professionals.

Among pharmacists, the two most unethical practices identified were those that could ultimately impact patients, namely price discrimination and dishonest advertising. This is consistent with results from a previous study by Vitell et al (1991) where price discrimination was the most unethical practice identified and dishonest advertising was the third most unethical practice identified after price collusion by competitors. Both
these issues were closely related with a pharmacist’s relationship with the pharmaceutical industry. The reason for unfair pricing may be that hospitals are allowed to buy drugs using a contract from vendors and wholesalers at a fraction of the price other pharmacists pay for the same items. Although a close relationship between a pharmacist and the pharmaceutical industry is encouraged, the MPS has introduced 3 clauses in its Code of Conduct that would address these issues, namely:

- A pharmacist shall avoid a situation, whereby he, by accepting any financial or material inducement, would compromise his professional judgment on the choice of drug for his patient or client.

- A pharmacist shall not participate in the promotion of a drug which involves the supply of such drug without discrimination to his patient or client or which bypasses his professional function.

- To sustain public confidence in the profession, a pharmacist shall not only choose but also be seen to be choosing the drug which, in his professional judgment and having due regard to economy and rational drug use, will best serve the interest of his patient or client.

The Pharmaceutical Association of Malaysia (PhaMA) has a Code of Conduct that also clearly addresses the advertising issues. According to the PhaMA Code for Ethical Products 2007, there are standards for promotion of products. For example, promotional material for pharmaceutical products should be accurate, fair and objective and presented in such a way as to conform to legal requirements and to high ethical standards and to be in good taste. Claims should not be stronger than scientific evidence warrants and every effort must be made to avoid ambiguity.
It would be useful for further research to explore if the current codes of ethics adequately address these two issues. There is more that both groups can do to maintain an awareness of ethical conduct among pharmacists. Among them are workshops or continuing education programmes that address these concerns.

5.1 **Recommendation for Future Research**

Further research comparing chain pharmacists with independent pharmacists on key ethical issues outlined above would help to identify the motives behind the ethics of Malaysian pharmacists as both groups are driven by different motives. Research to determine the impact of professional codes of ethics on pharmacists is also critically needed. Substantial differences may be obtained by comparing the impact of codes of ethics on pharmacists compared to physicians. Finally, more research should also be done with regards to ethical issues concerning pharmacists and their patients/customers which were not covered in this study. This would reveal current ethical issues that impact patient care.
References


PhaMA Code for Ethical Products 2007, 13th Ed, The Pharmaceutical Association of Malaysia


Appendix: Sample of Questionnaire