

ATTITUDES OF UNIVERSITY STUDENTS TOWARDS EUTHANASIA

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Thesis submitted in partial fulfillment of the degree

Master of Arts in Clinical Psychology

In the School of Psychology at the University of KwaZulu-Natal (PMB)

DECLARATION

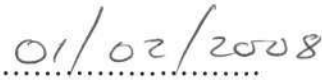
I, the undersigned, declare that the work contained in this thesis is my own work in design and execution. It is being submitted for the degree of Master of Arts (Clinical Psychology) at the University of KwaZulu-Natal, Pietermaritzburg. I have previously not submitted it at any other institution for another degree or examination.



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Date

ACKNOWLEDGEMENTS

I would like to thank the following people and organization for contributing towards the success of this thesis:

Many thanks to my wife, Tshepo, for her patience and emotional support

My lovely children, Ndhaka and Masana, for giving me the space to be away from them

My supervisors, Mrs. Viven O'Neill and Professor Douglas Wassenaar, for their continued guidance and patience.

Jenny for statistical analysis

The 2005 interns, Shelene, Sarah, Robynne, Tarryn, Bongiwe and Lauren for their emotional support

The psychology staff at the Midlands Hospital Complex

Cannon Collins Educational Trust of Southern Africa for financial support

ABSTRACT

Euthanasia has emerged as one of the leading ethical and moral issues of our time. This practice has been debated ever since ancient times. Medical and religious organizations are the front runners of this debate. At present, people of all classes have joined in and euthanasia movements have increased. Arguments in favour of euthanasia focus on the principles of self-determination and autonomy. The opponents on the other hand stress the danger of abuse of the practice and benefits of palliative care.

The objective of this study was to explore the attitudes of university students towards the practice of euthanasia. The sample comprised three-hundred and ninety-two students from the faculties of Theology (100), Human Sciences (96), Law (99) and Medicine (99). Convenience sampling method was used to select the sample. Four different scales were used to collect data. MANOVA was used to analyze data.

The results of this study showed that age and gender were not associated with the students' attitudes towards euthanasia, experiences with regards to end-of-life situations, level of religious beliefs and beliefs in autonomy. The students' year of study was also not associated with their attitudes towards euthanasia, level of religious beliefs as well as beliefs in autonomy. However, the findings showed that senior students had more experiences with regards to end-of-life situations, followed by post graduate while first-year students had the least experiences. Faculty was found to be associated with attitudes towards euthanasia, experiences with end-of-life situations as well as level of religious beliefs. Theology followed by Medical students showed the most positive attitudes towards euthanasia. Human sciences had the least positive attitudes towards euthanasia. Theology students had more experiences with regard to end-of-life situations while Human sciences showed the least experiences. Theology students were the most religious of the groups while Human sciences were the least. Medical students had the highest autonomy more than Human sciences students.

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CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 Introduction

This chapter gives a background and overview of the study. It begins with a brief background to the study, and goes on to a thorough description of the motivation for the study and ends with a discussion of the value of the research.

1.2 Background to the study

Euthanasia is not a new area under discussion. It has been argued since the time of Hippocrates (Veatch, 1999). By the 1890s, the euthanasia debate had expanded beyond the medical profession to include lawyers and social scientists (Emanuel, 1994). In modern times all levels of society are voicing their opinion concerning the subject (Csikai, 1999; Triche & Triche, 1975; Verpoort, Gastmans, De Bal & Dierckx de Casterlé, 2004). This scenario seems to confirm the 1978 prediction by the late Catholic Pope, Pope John Paul II, that euthanasia would emerge as one of the leading ethical and moral issues of the 20th century (Humphry & Wickett, 1986). Chapter 2 will give a detailed discussion on euthanasia, countries which have decriminalized it, arguments in favour and against, and public attitudes towards it.

The factors discussed below could have contributed to this euthanasia debate.

- Advances in healthcare technology that enable provision for benefits such as organ transplantation and palliative care mean that more people are living longer than ever before. Life expectancy has increased over the last few decades of human history. These changes are largely the result of improvements in public health, medicine and nutrition. In South Africa, prior to recent HIV/AIDS prevalence, life expectancy had increased from 34 up to

the level of 70 years (Development Bank of Southern Africa, 1996, as cited by Nortjé, 2001). The direct influence of these medical technological improvements is believed to account for the 9.6% increase in the South African older population (Central Statistical Services, 1996, as cited by Nortjé, 2001; Ramabele, 2004). The argument against the benefit of this medical technology focuses on quality of life. Longevity is viewed as a burden rather than a benefit (Dunnett, 1999) if quality of life is poor.

- In contrast to the benefit of medical advances, there has been a decrease in life expectancy due to the growing HIV/AIDS pandemic. It has been projected that by 2010 the life expectancy average in South Africa would be down from 70 to 48 years due to the direct result of the HIV/AIDS pandemic. As a result of the rise in HIV/AIDS deaths, the moral values surrounding medical decisions to end life become one of the debatable issues (Hessing, Blad & Pieterman, 1996, as cited by Nortjé, 2001).
- The changing nature of the medical practitioner-patient relationship. Previously, the relationship was viewed as paternalistic. The medical practitioner often took the lead in all decision-making processes. Presently, the personal autonomy of patients takes priority (Dunnett, 1999). Some patients therefore, exercise their right by choosing not to be kept alive by artificial means.
- The debate has also been made stronger by pressure groups in the form of pro-euthanasia movements. These movements have increased throughout the world as evidenced by patients and family members taking their desires for euthanasia to the court of law (Dunnett, 1999).
- Decline in the impact of religion on personal decision-making.

- The difficulty in distinguishing types of euthanasia (voluntary, non-voluntary, active and passive) represents a continuing source of difficulty for understanding the subject of euthanasia (Dunnett, 1999). Chapter 2 will give a detailed definition of these concepts.
- Related to the conceptual difficulty are the related concepts such as physician-assisted suicide, doctrine of double-effect and mercy killing which seem to create more confusion in understanding the practice of euthanasia as they are often used interchangeably (Dunnett, 1999; Fulford, Dickenson & Murray, 2002). This also, will be discussed in Chapter 2.

The arguments in support of euthanasia most often focus on self-determination and the ability of patients to decide how they want to die if their quality of life is no longer acceptable to them. In contrast, arguments against euthanasia emphasize the potential for abuse of the practice by family members and/or medical practitioners (Csikai, 1999; Dunnett, 1999; Fulford et al., 2002). A detailed discussion of the arguments in favour and against euthanasia will be presented in Chapter 2.

1.3 Motivation for the choice of the study

Firstly, the researcher was influenced by personal interest in the choice of this study. During his work as a hospital social worker in a rural community he developed an interest in thanatology. During his daily interaction with in-patients he observed that some neglected terminally ill patients, those who were not visited by their relatives, were hopeless and wished they could die soon. The researcher also observed that the relatives of some in-patients displayed varying attitudes towards admission, medication and illness. Some of them accused the nursing staff of ending the lives of

their loved ones. Others were overwhelmed by the unchanging state of misery of their loved ones. On a daily basis they had to spend their dwindling savings to come and visit their relatives. Those who were employed had to apply for leave of absence. This was a major problem when the condition was perceived to be getting worse rather than showing improvement. Based upon the above information the researcher intended to explore this observation further, by focusing on the attitudes of students towards euthanasia.

Secondly, the researcher was influenced by the lack of adequate research on the attitudes of people towards euthanasia in Africa. According to the National Research Foundation (NRF) database, one South African study (Seele, 1962) has been conducted to investigate attitudes (of medical students) towards euthanasia.

Euthanasia as a phenomenon has been researched in depth in developed countries and the literature has been increasing steadily. In response to this increase, and because of the scarcity of data on the attitudes of African people on the subject of euthanasia, the present work was considered.

Lastly, the researcher was mainly influenced by four studies conducted to investigate the attitudes of university students towards euthanasia. Weiss conducted the first study to identify the attitudes of university students towards euthanasia and to investigate factors that influence these attitudes (Weiss, 1996). The sample consisted of two hundred (200) fourth-year students from the Faculty of Arts. The second study conducted by Karnik, Kamel and Harper (2002) was a cross-sectional study that surveyed the attitudes of undergraduate students towards euthanasia. Their sample consisted of two hundred and forty-eight (248) students. Fekete, Osvath and Jegesy (2002) conducted the third study with a sample of two hundred and forty-two (242)

students consisting of nurses, medical and social sciences students. The fourth study conducted by Hagelin, Nilstun, Hau and Carlsson (2004) explored whether the phrasing of the questions and the response alternatives would influence the answers to questions about legalisation of euthanasia. Their sample comprised four undergraduate student groups (engineering, law, medicine, and nursing). Detailed methodology and findings will be discussed in Chapter 2.

1.4 The main aim of the study

Findings of some previous studies (Fekete et al., 2002; Karnik et al., 2002; Weiss, 1996) have indicated a significant relationship between attitudes towards euthanasia and the participant's age (younger participants were in favour of euthanasia compared to older participants), gender (female participants were more opposed to euthanasia than male participants), religious beliefs (participants who were higher in religious belief scores were more likely to disapprove of euthanasia), belief in autonomy (participants who placed more value on autonomy were more likely to approve) and educational stream (Human Sciences students were more likely to be in favour of euthanasia than students from other courses of study).

The present study seeks to explore the attitudes of university students in South Africa (University of KwaZulu-Natal) towards the practice of euthanasia. This will be achieved by comparing the attitudes of the students from four faculties (Theology, Medicine, Law and Human Sciences). The factors that influence these attitudes will also be investigated.

1.5 The value of the research

Chapter 2 will show how public surveys conducted to investigate public attitudes towards euthanasia in some countries played a pivotal role in influencing politicians to change the policies of such countries. Countries such as the Netherlands, the State of Oregon, and Belgium changed their legislation to decriminalise the practice of active euthanasia as a result of the findings of these public surveys. It is therefore hoped that the present study with the student population will help to understand the views of African people on the practice of euthanasia and thereby influence legislation.

1.6 Summary

The debate for and against euthanasia has been ongoing. This debate comprises religious, moral, medical and ethical arguments. The researcher has been motivated by previous studies with the student population.

The present study will cover the following areas: Chapter 2 will review studies done on attitudes towards euthanasia. Chapter 3 discusses the objectives of the study, hypotheses, sampling, data gathering method, research procedure and analysis of data. Chapter 4 will report the results of the study and discussion of these results will be done in Chapter 5. Chapter 6 will give a summary of the study, highlight the limitations of the study and also make recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews studies done on attitudes towards euthanasia. The main topics for this chapter are definitions, origin, euthanasia criteria, positions on euthanasia and factors that influence attitudes of people.

2.2 Definition of euthanasia

The word euthanasia has its origin from the Greek. It emerged from two component parts, namely *eu* (happy, painless, and easy) and *thanatos* (death). The obvious meaning was an easy, happy and painless death (Horan & Mall, 1980; Seele, 1962).

Whilst acknowledging that euthanasia is a very complicated word to define because it has attracted so much sensitive terminology and ambiguity (Triche & Triche, 1975), various authors concur with regard to the current definition of euthanasia (Csikai, 1999; Csikai & Manetta, 2002; Darley, Loeb & Hunter, 1996; Emanuel & Fairclough, 1996; Fulford et al., 2002; Triche & Triche, 1975). Euthanasia refers to the intentional killing by action or omission of a person for his or her alleged advantage (Csikai, 1999; Humphry & Wickett, 1986). An official Dutch terminology provided by Van der Arend (1998, p. 308) refers to euthanasia as intentionally ending the life of a person, upon his or her request with the act being performed by someone other than the person concerned. A standard medical definition is provided by Dunnett (1999) who referred to euthanasia as the intentional killing of patients by action or omission as part of their medical management. For the purpose of the present study, the legal definition (Verpoort et al., 2004, p. 350) that refers to euthanasia as the administration of deadly drugs with the clear intent of shortening a patient's life at that person's explicit request, is adopted. The researcher has adopted

this definition because the patients' right of self-determination is considered. Things are never imposed on the patients.

2.3 Types of euthanasia

There are three types of euthanasia: voluntary, non-voluntary and involuntary.

2.3.1 Voluntary euthanasia

Voluntary euthanasia is provided to a competent person on his or her informed request (Csikai, 1999; Fulford et al., 2002; Humphry & Wickett, 1986). Dunnett (1999) defined competent patients as those who are able to appreciate the information about their condition and make an informed decision. In contrast, incompetent patients are unable, whether temporarily or permanently, to make decisions about their medical care. Perhaps a clearer definition of competency is that provided by Fulford et al. (2002). According to these authors, competency refers to a legal yardstick regarding a person's soundness of mind.

2.3.2 Non-voluntary euthanasia

Non-voluntary euthanasia refers to the provision of euthanasia to a patient who is not in a situation to comprehend his or her circumstances; he or she may be mentally debilitated, and therefore unable to apply his or her judgement to requesting or withholding consent (Dunnett, 1999; Fulford et al., 2002). According to Ryynanen, Myllykangas, Viren and Heino (2002), non-voluntary euthanasia has been considered as benevolent and should be distinguished from murder.

2.3.3 Involuntary euthanasia

Involuntary euthanasia is performed without a competent person's consent. This kind of euthanasia is ethically unacceptable (Dunnett, 1999; Fulford et al., 2002; Gillett, 1994, as cited by Ramabele, 2004).

2.4 Forms of euthanasia

Euthanasia can take two forms: active and passive.

2.4.1 Active euthanasia

Active euthanasia can be defined as any treatment initiated by a medical practitioner with the intent of hastening the death of another person who is terminally ill and in severe pain or distress with the motive of relieving that person from great suffering (Caddell & Newton, 1995, as cited by Ramabele, 2004, p. 5; Dunnett, 1999; Humphry & Wickett, 1986). A famous example of this form of euthanasia was the killing of a patient with ALS (Lou Gehrig's Disease) by Dr. Jack Kevorkian, a Michigan medical practitioner. Dr Kevorkian's patient was scared that the advancing disease would cause him to die a horrifying death in the near future and he wanted a quick and painless death instead. He died after Dr. Kevorkian injected him with controlled substances (Csikai, 1999; Dunnett, 1999).

2.4.2 Passive euthanasia

Passive euthanasia appears to cause much debate because of the fine line between it and the doctrine of double-effect, which will be discussed later in this chapter (Dunnett, 1999; Fulford et al., 2002; Veatch, 1999). It refers to speeding the death of a person by altering some form of support and letting nature take its course. For example, removing life support equipment (turning off a respirator, stopping medical procedures, or stopping food and water and allowing the person to dehydrate or starve

to death (Csikai, 1999). Passive euthanasia is presently widely practiced utilizing advance directives of patients such as living wills and powers of attorney for health care or decisions of surrogates (Csikai, 1999, p. 50). According to Ryynanen et al. (2002), some ethicists have condemned the subtle distinction between active and passive forms of euthanasia because the ultimate goal and result are the same; that is, death.

2.5 Related concepts

Euthanasia seems often confused with other concepts such as physician-assisted suicide, mercy killing and the doctrine of double-effect (Dunnett, 1999; Fulford et al., 2002; Veatch, 1999).

2.5.1 Physician-assisted suicide

Physician-assisted suicide happens when a medical practitioner facilitates a patient's death by providing the necessary means and information to enable the patient to execute the life-ending act (Csikai, 1999). An example of this practise is when a medical practitioner provides sleeping pills and information about the lethal dose while aware that the patient may commit suicide (Fulford et al., 2002). According to these authors, physician-assisted suicide gives a patient a more independent way of ending his or her life than does euthanasia. They also argued that this process would allow patients the opportunity to change their minds and stop their suicides up until the last moment. In contrast, several authors have argued that the ethical objections to physician-assisted suicide are similar to those of euthanasia, since both are essentially interventions aimed to cause death (Dunnett, 1999; Humphry & Wickett, 1986; Rachels, 1986; Veatch, 1999).

2.5.2 Mercy killing

According to Fulford et al. (2002), euthanasia is commonly defined as the act of causing the death of a hopelessly ill and suffering person in a relatively quick and painless way for reasons of mercy. Three examples of mercy killing are provided. The first example concerned King Saul and an Amalekite, who was his armour-bearer. This Amalekite soldier eventually killed King Saul at his request, as he was badly wounded in the battle (Horan & Mall, 1980). In contrast to this, Humphry and Wickett (1986) referred to the King Saul incident as a form of homicide and not euthanasia.

Secondly, Lesley Martin (an intensive care nurse) who founded the New Zealand Euthanasia Movement, wrote a book in which she described injecting her mother with morphine. Her 69 year-old mother died the next day. She had cared for her for five months before she died. She stated she twice tried to kill her to ease her suffering by injecting her with morphine and then by trying to suffocate her with a pillow. She was found guilty and sentenced to 15 years in jail for the attempted murder of her dying mother (Marker & Hamlon, 2004).

The third example concerned a general practitioner who injected two hundred milligrams of morphine into her mother's veins. Her mother had had a cerebral haemorrhage, was partly paralysed and had trouble speaking. She had incessantly pleaded with her daughter to help her by ending her life. Previously, she had tried to commit suicide without success. Eventually, her daughter injected the lethal dose (Humphry & Wickett, 1986).

2.5.3 The doctrine of double-effect

Fulford et al. (2002) rejected the use of the term passive euthanasia in favour of the doctrine of double-effect. The intent of this doctrine is to relieve pain and suffering, not to end the patient's life, but the patient's death is a foreseeable potential effect of the treatment. Veatch (1999) refers to the doctrine of double-effect as unhurried euthanasia. Similarly, Dunnett (1999) refers to it as passive euthanasia. An example of this doctrine would include gradually increasing the morphine dosage for a patient to alleviate relentless pain, knowing that large enough doses of morphine may depress respiration and cause death earlier than it would otherwise have happened. Such doses of morphine have a dual effect of relieving pain and hastening death (Dunnett, 1999). According to Csikai (1999), administering such medication is regarded as ethical in most political jurisdictions and by most medical societies. These procedures are mostly performed on terminally ill patients so that 'natural' death will occur.

According to Rachels (1986), the doctrine of double-effect should satisfy the following four conditions.

- The act itself, deemed apart from its results, must be of a kind that is allowed.
- The bad effect may not be aspired to; only the good result may be the intended objective of the act.
- The bad outcome must not be employed as a means of achieving the good result.
- The amount of good accomplished in the good result must be great enough to be more important than the bad outcome.

2.6 The early practices of euthanasia

According to various authors (Seele, 1962; Triche & Triche, 1975; Zucker 1999), the Spartans carried out the earliest practice of euthanasia during 631 B.C.E. in Greece. The Greeks neither believed that all human life was precious nor that it should be preserved at all costs. In Sparta, for example, it was required by law that deformed infants be put to death as this was considered better than an unhappy life for them and their parents (Rachels, 1986). Philosophers such as Plato and Aristotle maintained the same freedom to die that they had in life and voluntary death steadily became part of their system of thought (Nortjé, 2001). These philosophers also supported the belief that in cases of incurable disease accompanied by great pain, a person has the right to choose an earlier death. The role of the medical practitioner was seen as not only to reinstate health, but also to cause death where necessary (Rachels, 1986; Ryynanen et al., 2002). It is reported that some of the early philosophers asked for euthanasia in the last hours of their lives (Rachels, 1986; Seele, 1962). According to various authors (Nortjé, 2001; Rachels, 1986; Seele, 1962), the Romans shared many of the Greek attitudes, such as destroying deformed children.

In more modern times, similar practices emerged in Nazi Germany. Burleigh (1994) stated that Hitler ordered widespread killing of sick and disabled people in 1939. The Nazi Euthanasia Programme initially targeted newborns and very young children. The programme later expanded to include older children and adults (Seele, 1962).

Highlighting the magnitude of the problem, Burleigh (1994) reported that in the winter of 1938-1939, the parents of a malformed infant called Knauer requested Hitler to bring about its death. The child's grandmother had encouraged them to do so.

Requests for euthanasia were also received from a middle-aged woman dying of

cancer and from a Labour Service official who had been blinded and severely injured after falling into a cement mixer (Burleigh, 1994).

2.7 International trends in euthanasia legislation

The controversy surrounding the practice of euthanasia is such that only few countries in the world have passed legislation supporting it.

2.7.1 The Netherlands

Netherlands law has allowed voluntary euthanasia from 2002. For the past 20 years it had been criminalized but was not a punishable offence if medical practitioners followed specific guidelines (Verpoort et al., 2004), described by Van der Arend (1998, p. 309) below:

- The patient is suffering intolerably and has an incurable disease.
- The patient has requested, verbally or in writing, euthanasia after being fully told about his or her medical condition and prognosis.
- There is no reasonable therapeutic hope. With respect to psychiatric cases, there is no sufficient treatment option to relieve the suffering.
- The medical practitioner has assured him or herself that the patient has an ongoing desire to die and has willingly requested this after careful consideration of all available options.
- The medical practitioner has consulted one or more autonomous colleagues.
- The medical practitioner has kept a diary describing the course of the disease and the deliberations and decisions in the medical management.

Additional standards as discussed by Humphry and Wickett (1986) include that the suffering and the desire to die must be lasting (i.e. not temporary), the time and manner of death will not cause avoidable misery to others, and lastly, the person receiving assistance-in-dying need not be a dying person. Paraplegics can also request and get assistance-in-dying.

2.7.2 Belgium

The Belgian Act on euthanasia was passed in 2002, thus making Belgium the second country in the world after the Netherlands to have decriminalized euthanasia (Verpoort et al., 2004).

2.7.3 The State of Oregon

The Oregon Death with Dignity Act was first passed in 1994 but implementation was delayed awaiting the outcome of legal challenges (Csikai, 1999; Csikai & Manetta, 2002). A measure to revoke the above Act went before the Oregon voters and was defeated in 1997. The State of Oregon allows physician-assisted suicide but not voluntary euthanasia (Csikai & Manetta, 2002)

2.7.4 The Northern Territory in Australia

The Northern Territory that has a population in the region of 150,000 promoted the Euthanasia Bill in 1996. A parliamentarian, who experienced a number of personal tragedies, decided to introduce a Bill to legislate voluntary euthanasia. The measure was opposed by different organizations, but was endorsed in 1996. The Australian Parliament reversed the Bill after eight months of operation in 1997 (Marker & Hamlon, 2004; Veatch, 1999).

2.7.5 Switzerland

Switzerland allows physician-assisted suicide and outlaws euthanasia (Marker & Hamton, 2004). The practice of physician-assisted suicide is accepted if the patient self-administers the drug overdose. His or her decision to die is regarded as rational and the medical practitioner assisting the death is considered to have a “merciful” motivation. The guidelines to be followed by medical practitioners are similar to those in place in the Netherlands. However, these guidelines include that the patient should be close to dying, within days or weeks, and that the patient self-administers the lethal drugs (Marker & Hamlon, 2004).

2.7.6 Finland

Active voluntary euthanasia is illegal and condemned by the majority of medical professionals in Finland. However, passive euthanasia is accepted because in practice it is often disguised as a medical decision (Ryynanen et al., 2002).

2.7.7 Colombia

The Constitutional Court has legalized euthanasia for terminally ill people who have clearly given their consent. Judges are, however, required to write guidelines and consider each case separately (Religious Tolerance Organization, 2004).

2.7.8 Japan

According to Asai et al. (2001) and Religious Tolerance Organization (2004), a medical practitioner was found guilty of murdering a terminally ill cancer patient who was expected to die within a few days in 1995. He was given a two-year prison term, which was later suspended. The court then listed four stipulations under which euthanasia would be permitted in Japan. These stipulations are:

- The patient is experiencing intolerable physical pain.
- Death is unavoidable and looming.
- All possible measures to get rid of the pain with no other treatment left open have been taken.
- The patient has evidently expressed his or her will to endorse the shortening of his or her life.

2.7.9 England and the United States of America

Both these countries have laws that criminalize the practice of euthanasia. However, they allow the withdrawal of nutrition and hydration and the doctrine of double-effect that according to many proponents of euthanasia are forms of euthanasia (Dunnett, 1999).

2.7.10 South Africa

South Africa currently criminalizes euthanasia and physician assisted-suicide. A survey conducted by the Medical Association in 1998 (cited in Religious Tolerance Organization, 2004) discovered that 12 percent of medical practitioners had previously helped terminally ill patients die, 60 percent had carried out passive euthanasia by withholding medication or procedures with the intention of hastening death, and 9 percent had engaged in physician-assisted suicide (cited in Religious Tolerance Organization, 2004). A Draft Bill on Euthanasia and the Artificial Preservation of Life was passed for discussion (Landman, 2001; South African Law Commission, 1999). The discussion of the bill focused on:

- How mentally competent people might turn down medical management and thereby hasten their death.

- How medical practitioners could administer pain control medication, even though it has a double effect of killing pain and hastening death.
- How a competent person could get help in committing suicide from a medical practitioner under certain circumstances.
- How a person could produce a living will beforehand that would order what medical management they would prefer to avoid.
- The conduct of a medical practitioner in withholding medical treatment.

2.8 Criteria for euthanasia

An overview of the literature (Emanuel, 1994; Ganzini et al., 1994; Ryynanen et al., 2002) has shown that a wide range of views exists among health care professionals, the general public, the patient population and the legal criteria for euthanasia.

2.8.1 Health care professionals' views

According to Meier et al. (2003) and Peretti-Watel et al. (2003), medical practitioners considered performing euthanasia when their patients suffered from severe pain or discomfort and a terminal illness with a life expectancy of less than one month. While supporting the criterion of terminal illness, several authors questioned the one-month duration period (Csikai, 1999; Emanuel, 1994; Ganzini et al., 1994; Meier et al., 1999). These authors debated that the patient should be an adult with a terminal illness and a life expectancy of six months. Lee et al. (1996) however, found difficulty with regard to the practicality of assessing patients who had less than six months to live. These authors therefore rejected the whole concept of a six-month life expectancy.

2.8.2 The public view

The request for euthanasia from family members and the public in general seems to be influenced by the patient's functional dependency, burden, social isolation, depression, hopelessness and issues of control and autonomy (Darley et al., 1996; Emanuel, 1994; Meier et al., 1999; Veatch, 1999).

2.8.3 The patient's view

There is scarce data on euthanasia criteria from the patient's perspective (Emanuel & Fairclough, 2000; Yi Wood & Glyn, 2005). The findings from terminally ill cancer patients who requested euthanasia demonstrated a depth of reasons ranging from physical and functional concerns to psychosocial and existential needs. Questions of burden were prevalent in their studies (Yi Wood & Glyn, 2005). Some dependent participants felt a sense of burden (Yi Wood & Glyn, 2005). In support of the above, several authors (Chochinov et al., 2005, Ganzini et al., 1994; Ganzini et al., 2003; Van der Maas, Van Delden, Pinjnenborg & Looman, 1991) found that some terminally ill patients would choose euthanasia for reasons of hopelessness, severe depression, feeling unappreciated, a sense of the meaninglessness of continued existence, readiness to die, and fear of loss of independence and control.

2.8.4 Legal criteria

The legal criteria for euthanasia (Verpoort et al., 2004, p. 350) focus on four aspects:

- The patient has reached the age of majority (18 years) or is a liberated minor.
- The patient is lawfully competent and aware at the moment of making the request.

- The request is deliberate and repeated, and is not the outcome of any external pressure.
- The patient is experiencing a terminal illness.

2.9 Positions on euthanasia

Arguments for and against euthanasia, both active and passive, appear to be gaining increasing world-wide attention. This debate comprises religious, medical, ethical, moral, and legal arguments (Csikai, 1999; Humphry & Wickett, 1986; Nortjé, 2001; Seele, 1962).

2.9.1 Religious arguments

Death appears to be one of the central things that most religions deal with. All faiths seem to offer meaning and explanations for death and dying. For those left behind when someone dies, religions afford rituals to be a sign of death, and rituals to remember those who have died (Marker & Hamlon, 2004; Veatch, 1999).

Research confirmed that participants' level of religious activity had a significant influence on their views relating to euthanasia (Baumeister, 1996, as cited by Nortjé, 1996; Darley et al., 1996; Wise, 1996).

In support of euthanasia, some eastern religions tolerate euthanasia (Humphry & Wickett, 1986; Rachels, 1986). In China, Confucian ethics allowed voluntary death in the case of a hopeless disease. Shintoism, Hinduism and Buddhism took a similar attitude. In contrast to this argument, the Religious Tolerance Organization (2004) stated that Buddhists are not unanimous in their view of euthanasia and the teachings of the Buddha do not explicitly deal with it. There are several Hindu points of view on

euthanasia. Most Hindus would say that a medical practitioner should not accept a patient's request for euthanasia since this will cause the soul and the body to be separated at an unnatural time. The result would then damage the karma of both the medical practitioner and the patient. Other Hindus, on the other hand, believe that euthanasia cannot be allowed because it breaches the teaching of ahimsa, which is doing no harm (Ganga, 1994).

In contrast, Christianity, Judaism and Islam condemn any form of euthanasia (Rachels, 1986). According to these religions, people who become vulnerable through illness or disability deserve special care and protection, and that proper end of life care is better than euthanasia. Some of the arguments for opposing euthanasia include the doctrine that God has forbidden it and that human life is sacred and special (Humphry & Wickett, 1986; Religious Tolerance Organization, 2004). According to Humphry and Wickett (1986), supported by Veatch (1999) and Sowle (2005), the view of the Catholic Church is the most clearly articulated of any faith, especially since the Vatican's 1980 Declaration on euthanasia (Humphry & Wickett, 1986; Sowle, 2005; Veatch, 1999). This declaration emphasized that no one can make an effort against the life of an innocent person without opposing God's love for that person. Everyone has the responsibility to guide his or her life in accordance with God's plan and deliberately causing one's own death is therefore just as wrong as murder.

Pope John Paul II was strongly opposed to euthanasia (Sowle, 2005). In one of the addresses to experts from around the world attending the International Congress on Life-Sustaining Treatments and Vegetative State in 2004, he opposed the usage of the word "vegetative", which seemed humiliating to him. According to him, a person

should be treated with dignity even if he or she is seriously ill and that he or she will never become a vegetable. The sick person awaiting recovery still has the right to basic health care (nutrition, hydration, cleanliness and warmth). The Pope maintained that the administration of water and food, even when provided by artificial means represented a natural means of preserving life (Marker & Hamlon, 2004; Zucker, 1999).

2.9.2 Medical arguments

The ideas and laws concerning euthanasia confront medical practitioners with serious decision-making dilemmas.

In support of euthanasia, the proponents of euthanasia have argued that competent terminally ill patients wishing to choose euthanasia may feel abandoned by medical practitioners who refuse to assist (Csikai, 1999; Veatch, 1999). The condemnation that medical practitioners agreeing to perform euthanasia would be violating the Hippocratic Oath is disproved on the ground that the original Oath prohibiting killing also prohibited abortions, surgery, and charging teaching fees, all of which have been adapted to meet contemporary realities in many countries (Veatch, 1999).

There are several medical practitioners who have performed euthanasia on several of their patients. One of them is Dr Jack Kervorkian. He was a Michigan medical practitioner and was also nicknamed Doctor Death. During his practice as a medical practitioner he took part in the deaths of more than 130 people before he was convicted of murder in 1999. He is known for the videotape made when he was assisting a man with a lethal injection (Csikai, 1999; Csikai & Bass, 2000).

In contrast, several authors (American Psychological Association, 2000; Dunnett 1999; Fulford et al., 2002) raised the possibility of misdiagnosis, the potential availability of new treatments, and the probability of incorrect prognosis. Incorrect diagnosis may result from the fact that medicine is fallible and research that could contribute to the introduction of a new treatment that could prolong life is ongoing. Other medical arguments against euthanasia are improved palliative care, aggressive pain management, and better psychosocial support (Fulford et al., 2002). In their study with Sudanese medical practitioners, Ahmed, Kheir, Abdel Rahman, Ahmed and Abdalla (2001) emphasise the importance of palliative care. Two-thirds of requests for euthanasia were withdrawn, often as the result of palliative intervention.

2.9.3 Ethical and moral arguments

The principles of autonomy and self-determination form the base of the ethical and moral arguments.

In support of euthanasia, ethical and moral arguments emphasise the principle of autonomy and self-determination and place the quality at the end of life above the sanctity of life (American Psychological Association, 2000; Dunnett, 1999; Rachels, 1986; Veatch, 1999). Other factors (Chochinov & Wilson, 1995; Coleman, 1996, as cited by Nortjé, 2001) include the desire to preserve dignity and personhood in the dying process as opposed to prolonging life by using complicated medical technology when it is recognized that care is futile.

In contrast, ethical and moral arguments against euthanasia raise concerns about people who are disadvantaged by poverty or in stigmatised groups such as women, people with disabilities and sick older people (American Psychological Association, 2000). Various authors argue that these people may be forced into requesting

voluntary euthanasia (American Psychological Association, 2000; Chochinov & Wilson, 1995; Hendin & Klerman, 1993). These authors debated whether the desire for euthanasia is really voluntary. From this view point, it is feared that decisions about care at the end of life would be made by medical practitioners and some family members, thus undermining the principle of self-determination by the patients themselves (American Psychological Association, 2000; Wennberg, 1989, as cited by Nortjé, 2001).

2.9.4 Legal arguments

In support of euthanasia, the legal points of view state that it would be in the best interest of dying patients to be able to control practices that are presently being utilised in euthanasia. Such regulations, it is hoped, would also give protections for medical practitioners who are currently complying illegally with patient requests out of mercy (American Psychological Association, 2000; Humphry & Wickett, 1986; Nortjé, 2001).

In contrast, legal arguments against euthanasia include concerns about civil suits resulting from unnecessary ending of life following both misdiagnosis and or incorrect prognosis (American Psychological Association, 2000; Csikai, 1996; Nortjé, 2001). There are also concerns about enforcement of legal measures planned to prevent the misuse, abuse, and improper application of euthanasia (Csikai, 1999; Nortjé, 2001).

2.9.5 The safeguards arguments

In support of euthanasia, arguments concerning safeguards hold that people can be protected from abuse through appropriate regulation (American Psychological Association, 2000; Dunnett, 1999; Veatch, 1999). Some of the approaches for safeguards include confirmation of diagnosis and prognosis, assessment for alternative means of alleviating suffering, nondirective counselling, education of medical practitioners and the public. The safeguards argument speculates that the quality of care could be improved by involving mental health professionals to provide appropriate and comprehensive treatment planning (American Psychological Association, 2000; Dunnett, 1999; Nortjé, 2001).

In contrast, the arguments against euthanasia regarding safeguards maintain that once euthanasia is accepted as an available option for competent terminally ill patients, it may lead to a slippery slope, thereby applying it when not warranted. There is, therefore, a fear that euthanasia might happen too often among people from disadvantaged social groups (American Psychological Association, 2000; Angel, 1988; Nortjé, 2001).

2.9.6 Good medical practice

In support of euthanasia, the proponents of euthanasia argue that the withdrawal of nutrition (food and hydration) to a terminally ill patient is a form of euthanasia. The provision of nutrition and hydration through whatever means is part of basic nursing care and could not be withdrawn unless the patient is close to death (Dunnett, 1999; Fulford et al., 2002). As mentioned earlier, Pope John Paul II maintained that the administration of water and food, even when provided by artificial means, always

represented a natural means of preserving life (Marker & Hamlon, 2004; Zucker, 1999). Similarly, the doctrine of double-effect is also considered a form of euthanasia (Dunnett, 1999; Veatch, 1999).

In contrast, the opponents of euthanasia hold the belief that not all possible steps have to be taken to keep a patient alive. The withdrawal or withholding of treatment and care that includes nutrition and hydration is acceptable where persistent treatment would be of no benefit to the patient. This practice therefore is viewed as morally acceptable and as good medical practice (Dunnett, 1999; Fulford et al., 2002). In support, Materstvedt and Kaasa (2002) referred to the Netherlands approach that considered withholding and withdrawing of treatment normal medical practice (Dunnett, 1999). A case that has caused a lot of debate in Britain is the Tony Bland judgment. The above judgment refers to the verdict by the House of Lords in Britain, which gave permission to medical staff to withdraw food and water from Tony Bland, who was in a permanent vegetative state resulting from an injury sustained in a football tragedy in 1989. After the judgment the proponents of euthanasia viewed this action as a form of euthanasia whereas the opponents of euthanasia saw it as good medical practice (Dunnett, 1999). Related to the above case is the Schiavo case in the United States of America. Terri Schiavo died in 2005 after she had been in a persistent vegetative state for 15 years (Lefevre & McClory, 2005). After years of court cases and appeals, Terri's feeding tube was ultimately removed in 2005. She died few weeks later (Lefevre & McClory, 2005; McCarthy, 2005).

2.10 Public attitudes towards euthanasia

The literature on euthanasia suggests that people of different ages, from different ethnic, religious and educational backgrounds have different attitudes towards

euthanasia (Nortjé, 2001). Related to this, Weiss (1996) saw religious belief as the main predictor of the attitudes of people towards euthanasia. Religion and additional factors that influence the attitudes of medical practitioners and the public are discussed below.

2.10.1 Religious factors

A study conducted by Lee et al. (1996) showed that religious beliefs strongly influence a person's willingness to participate in euthanasia. Similar associations have been demonstrated by other studies (Essinger, 2003; Ryyanen et al., 2002). Catholic medical practitioners were least likely, and Jewish medical practitioners and those with no religious affiliation, were most likely to be willing to participate in euthanasia. Lee et al. (1996) also found that medical practitioners who prayed less often were more willing to provide assistance than medical practitioners who prayed more frequently, except that frequency of prayer was not associated with deadly injection. In their study with Sudanese medical practitioners, Ahmed et al. (2001) found that Muslim medical practitioners not only opposed euthanasia, but encouraged Muslim patients to consider pain and suffering as a potential blessing. Similar findings of religious influences were found by different studies conducted to survey the attitudes of religious people towards euthanasia (Ahmed et al., 2001; Emanuel and Fairclough, 2000; Verpoort et al., 2004).

2.10.2 Legal and medical ethics

A study conducted by Ganga (1994) on medical practitioners in Durban found that religious belief was only one of the factors that influenced their views on euthanasia. To a large extent, their views were influenced by legal and medical ethics. These findings were supported by other studies (Askar et al., 2000; Harris, 1994; Lee et al.,

1996; Ramabele, 2004). Some medical practitioners in South Africa would be willing to perform euthanasia at the request of their patients once the practice of euthanasia was decriminalized in the country (Landman, 2001, as cited by Ramabele, 2004).

2.10.3 Age of medical practitioners

A significant association between the increasing age of medical practitioners and their willingness to participate in euthanasia was reported in some studies. In a study conducted by France et al. (2003), medical practitioners who were 45 years of age or older were more willing to give a lethal injection under legal constraints and were more likely to have received such requests than younger medical practitioners. In contrast, Emanuel and Faircloud (1996) found that non-religious medical practitioners less than 50 years of age supported euthanasia more often than the older ones. In contrast, within the general public population, people between 60 and 80 years were found to be opposed to any form of euthanasia (Ahmed et al., 2001; Nortje, 2001; Verpoort et al., 2005).

2.10.4 Gender

The relationship between gender and attitude towards euthanasia appeared significant in various studies. Male medical practitioners and non-professionals were significantly more likely than females to administer a lethal dose of medication or support laws legalizing the practice of euthanasia (Emanuel and Fairclough, 2000; Lee et al., 1996).

2.10.5 Ethnicity

A study by Nortjé (2001) to investigate the views towards euthanasia by older people in South Africa did not find statistically significant differences in the opinions of people from different ethnic backgrounds (Nortjé, 2001).

2.10.6 Urban / Rural factors

Various authors (Lee et al., 1996; Hessing, Blad & Pieterman, 1996, as cited by Nortjé, 2001) have argued that attitudes towards euthanasia are socio-culturally based and influenced by a person's ethno-cultural identity. For example, Lee et al. (1996) found that the location of medical practitioners' practices predicted their desires to participate in euthanasia. Medical practitioners practicing in small towns or rural communities were less likely to be interested in participating in euthanasia than those practicing in cities.

2.10.7 Financial factors

Ganga (1994) found a significant relationship between financial resources and attitudes towards euthanasia amongst family members of terminally ill patients. The less privileged participants felt that it would be foolish to spend one's life savings on a hopeless case. In support, Emanuel (1999) argued that the financial cost associated with end-of-life care is substantial. Under-resourced families are often concerned with rising costs associated with costly procedures and treatments and would be more likely to choose euthanasia because of this financial burden. Economically deprived patients may feel forced to choose euthanasia that presents limited costs, such as the funeral (Emanuel, 1999).

2.11 Attitudes of students

Internationally, there is increasing literature on studies done to explore the attitudes of students. In contrast, relatively little literature refers to attitudes towards euthanasia amongst students in Africa. According to the studies conducted with students on other continents, the factors or characteristics that determined the students' attitudes towards euthanasia are age, gender, religious belief, course of study, belief in autonomy and experiences with terminally ill patients (Weiss, 1996).

2.11.1 Age and gender

Fekete et al. (2002) conducted a study to investigate the attitudes of medical students, nurses and social science students. A twelve-item euthanasia scale was used to gather data. Back-translation of the scale into Hungarian was done. The items were presented as an opinion scale with Likert-like response options. The number of participants was 242, consisting of 175 females and 67 males. Their mean age was 26 years with a standard deviation of 7.3. Medical students were in the majority (86), followed by nurses (85) and social science students (71). This study found that age and gender were significant in determining the students' attitudes towards euthanasia. Their study showed that younger students (65%) tended to be more in favour of legalising euthanasia than older students (35%). Male and younger students (54%) in particular showed more favourable attitudes toward euthanasia.

In contrast, a study conducted by Karnik et al. (2002) with undergraduate college students in 1997 found a different result. Their sample consisted of two hundred and forty eight (248) students from the faculties of Medicine and Human Sciences. Structured questionnaires were randomly mailed to the sample. The study surveyed the attitudes of undergraduate students toward DNR (Do Not Resuscitate) orders. The

results showed no significant difference between male and female respondents in their frequency of support of DNR orders. Both genders showed a similar frequency of support for DNR orders with regard to illness severity. Weiss (1996) also found no age and gender differences in a study of 200 four-year students from the Faculty of Arts.

2.11.2 Personal experiences with terminally ill patients and attitudes towards euthanasia

A study conducted by Fekete et al. (2002), as previously discussed, found a strong relationship between attitudes and experiences with terminally ill patients. The results indicated that the majority of students favoured euthanasia (60%). All three groups (medicine, social sciences and nurses) favoured laws to make euthanasia legal (56-65%). Social science students, who had the fewest personal experiences with terminally ill patients, favoured euthanasia more frequently for elderly and ill patients than nurses and medical students (66%). Nurses were the least supportive of euthanasia (21%). The attitudes of medical students were between those of nurses and social science students (44%).

2.11.3 Race and attitudes toward euthanasia

Karnik et al. (2002) conducted a cross-sectional survey of attitudes of undergraduate students toward end-of-life care using a structured questionnaire. One hundred and three (103) students from the history of medicine class and one hundred and ten (110) students from the sociology classes completed the questionnaire. Students were Whites, African-Americans, Hispanics, and Asians. Their participation was voluntary and anonymous. The study instrument had questions on whether the participants would prefer one or more of five medical interventions in case they become seriously

2.11.5 Religious belief and attitudes towards euthanasia

Various authors (Goldie, Schwartz & Morrison, 2004; Mangus et al., 1999; O'Neill, Feenan, Hughes & McAlister, 2003) found that the strength of religious belief was a significant determinant of opposition to legalization of euthanasia. Religious denomination was found to be marginally significant in relation to euthanasia. Other studies also found religious belief to be a significant determinant of attitudes toward euthanasia (Essinger, 2003; Ryynanen et al., 2002).

A study conducted by Weiss (1996) with a student population also found a link between religious beliefs and attitudes. The study comprised 200 full time students at a liberal arts college. Data was gathered over a two-week period. Participation was voluntary. Participants rated their responses on attitude statements. They were asked whether they strongly agreed, agreed, disagreed, strongly disagreed or were unsure about the right of patients to die or to be permitted to die from withdrawal of life-sustaining devices including feeding tubes for a person with a terminal illness, withdrawal of life-sustaining devices including feeding tubes when requested by a family member for a person in an irreversible coma, the right of a person with a terminal illness to take action to end his or her life and the right of a medical practitioner to assist in ending the life of a patient if requested. Weiss (1996) found that the majority of participants believed that medical practitioners should be able to help perform euthanasia when requested to do so. Students with strong religious beliefs viewed euthanasia as inappropriate. They believed in the sanctity of life and the prospect of medical miracles (Weiss, 1996).

2.11.6 Patients' health condition and attitudes towards euthanasia

The health condition of patients may influence the attitudes of some students. In their study with undergraduate college students, Karnik et al. (2002) found that the majority (54%) of participants supported ordering DNR for terminally ill patients compared to patients in a coma, and patients who were 60 years or older compared to the younger. These findings were supported by a survey conducted by Wise (1996) who found that the public supported euthanasia in the most desperate cases. Responses varied according to individual situations. Judgment tended to be made about a patient's prospect of recovery, pain levels and quality of life. A small percentage of responses (5 %) agreed with euthanasia if the person was lonely and tired of life (Karnik et al., 2002).

2.11.7. Education on euthanasia and attitudes of students

Ozkara, Civane, Oglak and Mayda (2004) investigated the impact of euthanasia education on the opinions of health science students in Turkey. The study was performed with 111 final year students at the College of Health Sciences. These students were training to become paramedical professionals and health technicians. Fifteen hours of training regarding moral values and euthanasia was planned and the students' opinions about euthanasia were sought before and after the course. The findings showed that, after the course, the number of students proposing that no one could decide on euthanasia on behalf of an unconscious patient went down, the percentage of students who believed that everyone has the right to decide about his or her own life and health rose, the percentage of students agreeing that a medical practitioner who performed euthanasia should not be punished rose, whereas those who thought that a medical practitioner who performed euthanasia should be punished

decreased. These results suggest that education can significantly change a person's approach to euthanasia.

2.11.8 Belief in autonomy and attitudes of students

Weiss (1996) found that the belief in autonomy was one of the significant predictors of students' attitudes towards euthanasia. Students who placed more emphasis on autonomy showed a willingness to support euthanasia.

2.12. Summary

Studies show some differences with respect to the views of people who agree and oppose the practice of euthanasia. Factors such as age, religion, gender, belief in autonomy and personal experiences seem to have a significant association with people's attitudes towards euthanasia. Arguments exist both in favour and against the legalization of euthanasia. Most often the arguments in favour of the practices focus on self-determination and the ability of patients to decide how they want to die if their quality of life is no longer acceptable to them. Discussion in opposition to the utilization of euthanasia revolves around religious objections, belief in the possibilities offered by palliative care and the potential for abuse. This study will explore some of these variables in a South African student sample. The methodology is described in the following chapter.

CHAPTER 3: METHOD OF RESEARCH

The main aim of the study, research design, sampling method, data collection, procedures for conducting the study and data analysis are presented in this chapter.

The methodology of the present study was similar to the methodology used by other researchers in the field of euthanasia and attitudes of students (Fekete et al., 2002; Hagelin et al., 2004; Karnik et al., 2002; Weiss, 1996).

3.1 Aim of the study

The initial aim of the study was to investigate the attitudes of African black students towards euthanasia. The researcher however, decided to expand the sample by including students from different racial groupings. The sample was also expanded from one hundred to four hundred students. The main aim of the present study was thus, to explore the attitudes of university students towards euthanasia.

3.1.1 Objectives of the study

- The present study aimed to explore and compare the attitudes of students towards euthanasia.
- The second objective was to investigate whether age, gender, year of study and faculty were associated with attitudes of students towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy.

3.1.2 Hypotheses for the study

Below are the four hypotheses that were tested.

Hypothesis 1: Students from different age groups will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy.

Hypothesis 2: Male and female students will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy.

Hypothesis 3: Students from different years of study will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy.

Hypothesis 4: Students from different faculties will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy.

3.2. Sampling method

The student population of the University of KwaZulu-Natal was chosen for the present study. It was convenient to conduct the study because the researcher was at the time of the study receiving his training at the institution. Initially, the researcher intended to limit the sample to one hundred African black students. However, a bigger and more varied sample consisting of four hundred students from the Faculties of Medicine, Human Sciences, Law and Theology was later considered. One hundred students from each faculty were selected using the non-probability sampling technique of convenience sampling. Convenience sampling means, "testing whoever it is convenient to test" (Loewenthal, 2001, p. 44). There was a very small difference between the sample (size and composition) of the present study and the samples of studies conducted by various authors (Fekete et al., 2002; Hagelin et al., 2004; Karnik et al., 2002; Weiss, 1996).

3.3 Data gathering instrument

The researcher did not develop an instrument for the present study. The instruments from Weiss (1996) and Rogers (1996) were found suitable and were adopted for the present study. Apart from the biographic information questionnaire that the researcher developed, experience with regard to end-of-life situations scale, levels of religious beliefs and beliefs in autonomy scales were adopted from Weiss's (1996) instrument. The euthanasia attitude scale was adopted from Rogers (1996).

3.3.1 Biographic information questionnaire: This questionnaire asked participants' ages, gender, marital status, year of study, course of study, religious affiliation and nationality (see Appendix 2). However, data from marital status, religious affiliation, nationality, and racial groupings were excluded from the final analysis (see Section 4.2.5).

3.3.2 Euthanasia Attitude Scale: Participants were asked to indicate whether they strongly agree, agree, disagree, strongly disagree or are unsure to the questions on the Euthanasia Attitude Scale (EAS). The scale was originally developed by Tordella and Neutens (1979) and comprised 21 attitude items (see Appendix 2) designed to explore some of the attitudes of college students towards euthanasia. It is not intended to test what they knew about euthanasia. The scale statements have religious, spiritual, moral and legal components. Reverse scoring is necessary for items 2, 4, 6, 11, 13, 16, 17 and 21. A mean score of 70 and above shows a strong support for euthanasia. The scale has a reliability estimate of .84 and is reliable in terms of internal consistency and test-retest reliability (Rogers, 1996).

The first criticism of the above scale was that its instructions did not give a definition of euthanasia. However, the researcher decided to insert a definition of euthanasia ("Euthanasia refers to the administration of deadly drugs with the intention of shortening a patient's life at that person's request") in the present study in order to guide the students when completing the questionnaire. Secondly, the scale does not differentiate between the types and forms of euthanasia. Thirdly, three statements (2, 16 and 21) were considered by some religious organizations to be measures of spiritual conviction or world-view rather than of euthanasia. Fourthly, the scale was not standardised for the South African population (Rogers, 1996).

3.3.3 Experiences with regard to end-of-life situation scale: On a five-point scale ranging from 1 (not at all) to 5 (very much), participants rated their experiences with regard to having had interaction with a family member, close friend, or acquaintance who was terminally ill. This included exposure to issues regarding end-of-life situations either in books, newspapers, and magazines or in movies and television and amount of discussion about end-of-life situations in high school and university classes, with family members and with friends. Weiss's study produced a Cronbach alpha of .72 for the experience with regard to end-of-life situation scale (Weiss, 1996).

3.3.4 Religious belief scale: Similar to the above scale, participants indicated whether they considered themselves very religious, active in religious activities, had belief in life after death and whether they thought on moral issues frequently. Cronbach's alpha produced in a study by Weiss was .84 (Weiss, 1996).

3.3.5 Belief in autonomy scale: Again, participants rated themselves on whether they believed that every person has a right to do as he or she pleases, as long as no one else is harmed and if they believed it was important to them that other people respect their right to make their own decisions. Weiss's study produced a Cronbach's alpha of .54, which is rather low suggesting that its reliability is unacceptable (Weiss, 1996).

3.4 Research procedure

The researcher first drafted the questionnaire and consent form for the present study. This questionnaire began with an introductory section outlining the purpose of the study, introduction of the researcher and providing a definition of euthanasia (see Appendix 2). The low response rate (52 %) of using an e-mail method to gather data discouraged the researcher from using this method (Coolican, 1996). Instead, questionnaires were handed to the students before and after attending their classes. They were immediately collected after completion. Participation in this study was voluntary and each participant's anonymity was ensured as no names were requested. They were also made aware that should they experience any distress or discomfort whilst completing, they were free to stop at any time. All the participants were also expected to sign the consent form (see Appendix 1) before completing. All four hundred questionnaires were completed and immediately collected by the researcher. This procedure was similar to a study conducted by Hagelin et al. (2004). In their study with undergraduate students from four faculties (engineering, law, medicine and nursing), questionnaires were distributed towards the end of lectures and were anonymously completed. All students returned the questionnaires.

3.5 Analysis of data

Data was analysed using the Statistical Package for the Social Sciences (Coakes & Steed, 1999). Mean scores replaced missing values as recommended by various authors (Loewenthal, 2001; Tredoux & Durrheim, 2002). Scores were reversed for certain items in the Euthanasia Attitude Scale. According to Haslam and McGarty (2003), reverse scoring refers to the practice of having some of the items worded so that a higher score is associated with a lower level of the construct being measured. Prior to the calculation of an overall score for the construct, scores on these particular items are transposed so that on all measures a higher score is associated with a higher level of the construct. This procedure is done by subtracting the participants' response from the scale mid-point and adding the resulting score to the scale mid-point to provide a new score (Haslam & McGarty, 2003). Frequencies were run to explore demographic variables of the sample. Multivariate analysis of variance (MANOVA) was performed to analyze data. According to Coakes and Steed (1999) and Aron and Aron (1994, as cited by Ramabele, 2004), MANOVA is used to see the main and interaction effects of categorical variables on multiple dependent interval variables. The four dependent variables for this present study were Euthanasia Attitudes Scale, Experiences with End-of-life situations, Levels of Religious beliefs and Beliefs in Autonomy. MANOVA also uses one or more categorical independents as predictors. Age, Gender, Year of study and Faculty of students were the four independent variables for this study. Pillai's Trace or Wilks' Lambda tests were used to identify significant findings. Tukey's Honestly Significantly Difference (HSD) post hoc tests were done to perform all pair wise comparisons between group means. The HSD test is used more frequently in the social sciences (Tredoux & Durrheim, 2002). Chapter 4 will discuss the results from this study.

CHAPTER 4: RESULTS

The chapter will present the results obtained after the collected data was analysed.

4.1 Aim of the study

This present study aimed to investigate the attitudes of university students towards the practice of euthanasia.

4.2 Descriptive Statistics of the characteristics of the sample

The study sample comprised four hundred (400) university students from four different faculties. Eight (8) participants' data were incomplete and were excluded from the final analysis. The analysis is based on data from three hundred and ninety-two (392) participants. The characteristics of the sample are presented in Table 1 below.

TABLE 1: Characteristics of the sample

		Value Label	N
Age	1	18-24	130
	2	25-31	196
	3	32-39	60
	4	40+	6
		Total	392
Gender	1	Male	175
	2	Female	217
		Total	392
Year of Study	1	First	111
	2	Senior	218
	3	Post	63
		Total	392
Faculty	1	Human	94
	2	Law	99
	3	Theology	100
	4	Medicine	99
		Total	392

4.2.1. Age groupings

Participants indicated their age by checking boxes ranging from eighteen (18) years to forty (40) years and over. The results from the age distribution are discussed below.

4.2.1.1 18-24 years

As shown in Table 1 above, the total number of participants falling within the 18-24 age group was one hundred and thirty (130). The number of female participants (71) was slightly higher than males (59). First-year students (65) and post-graduate students (36) were higher than senior students (29). Human Sciences students (65) were in the majority, followed by Theology (32) and Law (24). Only nine (9) students were from the Medical Faculty.

4.2.1.2 25-31 years

Table 1 shows that the number of participants within 25-31 age category was one hundred and ninety-six (196). In comparison to male participants (88), female participants (108) were in the majority. Senior students (142) were predominant as compared to first-year (42) and post-graduate participants (6). The number of medical students (87) was higher than Law (61), Theology (36) and Human Sciences (12).

4.2.1.3 32-39 years

The number of participants was sixty (60). The majority of participants were females (37) as compared to males (23). Numbers of senior students (41) and post-graduate (15) were higher than the first-year students (4). Theology students (27) were predominant, followed by Human Sciences (16), Law (14) and Medicine (3).

4.2.1.4 40 years and over

There were only six (6) participants who were aged forty (40) years and over. Five (5) male participants came from the Faculty of Theology while the only female student was from Human Sciences. Analysis based on this age category has been ignored due to the small size.

4.2.2 Gender of the participants

Table 1 shows that female participants were slightly in the majority (217) as compared to males (175). As shown previously, female students were in the majority in all the age categories with the exception of those who were forty (40) years and over.

4.2.3 Year of study of the participants

The breakdown of the year of study of the participants (see Table 1) shows that senior students (218) were in the majority, followed by first-year students (111) whilst post-graduate students (63) were few. Many of the first-year students fell within the 18-24 age groups while senior students were in the majority in the 25-31 and 32-39 age groups.

4.2.4 Faculties of the participants

The results show that the students were evenly spread with minor differences across faculties. Thus Theology had 100, both Law and Medicine had 99, while the Human Sciences students were ninety-four (94) in total. Human sciences students were predominant in the 18-24 age group, Medical students in the 25-31 age group and Theology students in the 32-39 age group.

4.2.5 Excluded characteristics

As mentioned in the previous chapter (see Section 3.3.1), marital status, racial groupings, nationality, and religious affiliations were excluded from the analysis because they did not form part of the research hypotheses. The national composition of the participants was 75.8 percent South Africans, 22.3 percent African Others, 1.5 percent Europeans and 0.5 percent Americans. A majority (80.5 %) of the participants were Africans, followed by 10.8 percent Asians, 5 percent Whites and 3.8 percent Coloureds. The three main religious affiliations were 36.8 percent Other Protestant, 24.8 percent Catholics and 13 percent African Religion.

4.3 Descriptive statistics of the results from the Euthanasia Attitude Scale (EAS)

As mentioned in Chapter 3, the Euthanasia Attitude Scale (EAS) comprised twenty-one (21) attitude questions and participants rated their responses on a five-point scale ranging from strongly agree to strongly disagree. According to Rogers (1996), the total score ranges between 21 to 105 and a score of 70 and above indicates acceptance of euthanasia. A score of less than 70 thus shows a neutral or negative attitude towards euthanasia. The results show that the mean of the sample increased with age. The mean for the entire sample was 64.21 with a standard deviation of 6.47. A Chronbach alpha of .56 was obtained on the EAS. The results of the study (see Appendix 3) based on the estimated marginal means are discussed below.

4.3.1 Ages of the participants

In analyzing the EAS data by age, it is clear that the most age groupings are neutral about euthanasia. Only a few age groupings have means of 70 or above, while the rest are between 59 and 79. This is described below.

4.3.1.1 18-24 age group

In contrast to the 25-31 (mean: 64.18; SD: 6.35) and 32-39 (mean: 66.18; SD: 6.21) age groups, the results showed that the 18-24 age groups had the least mean (mean: 63.38; SD: 6.73). This shows marginal or neutral support for euthanasia. With regard to gender, male participants (mean: 64.05; SD: 7.39) showed more positive attitudes towards euthanasia than female participants (mean: 62.81; SD: 6.11). The breakdown of the year of study showed more positive attitudes for senior students (mean: 65.79; SD: 6.73), followed by post-graduate students (mean: 64.36; SD: 7.10) while the first-year students had the least positive attitudes towards euthanasia (mean: 61.75; SD: 6.16). Theology students (mean: 70.63; SD: 4.75) in this group showed the most positive attitudes towards euthanasia. Human Sciences students (mean: 61.46; SD: 5.11) and Medical students (mean: 61.11; SD: 9.92) showed similar levels of support while Law students (mean: 59.71; SD: 4.15) showed the least positive attitudes towards euthanasia.

4.3.1.2 25-31 age group

In comparison with the 18-24 age group (mean: 63.38; SD: 6.73), the 25-31 age group (mean: 64.17; SD: 6.35) showed slightly more positive attitudes towards euthanasia. Male students (mean: 64.25; SD: 6.67) were more supportive than female students (mean: 64.12; SD: 6.11). Post-graduate students (mean: 70.00; SD: 8.49) showed the most positive attitudes, followed by senior students (mean: 64.31; SD: 6.23) while first-year students (mean: 62.88; SD: 6.08) had the least positive attitudes. Again, in this age group Theology students (mean: 70.61; SD: 6.02) showed the most positive attitudes towards euthanasia while Human Sciences students (mean: 60.41; SD: 4.80) had the least positive attitudes.

4.3.1.3 32-39 age group

The 32-39 age group (mean: 66.18; SD: 6.21) showed the most positive attitudes towards euthanasia compared with the other age groups. Female students (mean: 64.76; SD: 5.95) were less positive than males (mean: 68.48; SD: 6.04). First-year students (mean: 69.75; SD: 2.50) were more positive compared to senior (mean: 66.73; SD: 6.04) and post-graduate students (mean: 63.73; SD: 5.74). Similar to other age groupings, Theology students (mean: 70.74; SD: 3.44) showed the most positive attitudes towards euthanasia while Human Sciences students (mean: 61.06; SD: 4.32) had the least positive attitudes.

4.3.2 Gender of the participants

4.3.2.1 Male participants

The overall mean on the EAS for male participants was 64.74 (SD: 6.89). The results showed that male participants' scores peaked in the 32-39 age group (mean: 68.48; SD: 6.04). The youngest age group for the males (mean: 64.05; SD: 7.39) as compared to females (mean: 63.75; SD: 6.29) showed that male students had more positive attitudes towards euthanasia than females in this age group.

4.3.2.2 Female participants

The overall mean for female participants on the EAS was 63.78 (SD: 6.09). The results showed that female participants' scores peak younger in 25-31 age group (mean: 64.12; SD: 6.11) and then fall. Therefore, in contrast to male students, young females were more supportive towards euthanasia than men.

4.3.3 Year of study of the participants

4.3.3.1 First-year students

The results showed that support for euthanasia increased with age. First-year students' scores peaked in the 32-39 age group (mean: 69.75; SD: 2.50), although there were only four participants in this group.

4.3.3.2 Senior students

Similar to the first-years, senior students' scores also rose in the 32-39 age group (mean: 64.31; SD: 6.32) thus showing support for euthanasia.

4.3.3.3 Post-graduate students

In contrast to the other groups, post-graduate scores peaked early in the 25-31 age group (mean: 70.00; SD: 8.49) and then fall.

4.3.4 Faculty

The results showed that Theology students (mean: 70.33; SD: 5.04) showed the most positive attitudes towards euthanasia in all the age groupings. In contrast, both Human Sciences students (mean: 61.24; SD: 4.88) and Law students (mean: 61.45; SD: 5.21) were found to be less supportive than Medical students (mean: 63.60; SD: 6.06).

4.4 Descriptive statistics of the results from experiences with regard to end-of-life situation scale

Participants rated their experiences on a five-point scale ranging from 1 (not at all) to 5 (very much). The total score ranges between 5 and 25 and a score of 16 and above shows more experiences with regard to end-of-life situations. The mean for the

sample was 14.89 with a standard deviation of 4.16. There was significant difference between the groups and this difference will be presented later in the chapter. The results (see Appendix 4) based on the estimated marginal means are presented below.

4.4.1 Age of the participants

The results showed the 18-24 age group (mean: 13.38; SD: 3.99) had the least experience with end-of-life situations. In contrast, both the 25-32 (mean: 15.14; SD: 3.65) and 32-39 (15.03; SD: 4.97) age groups had more experiences.

4.4.2 Gender of the participants

The results showed that in the 18-24 age group, male students (mean: 15.50; SD: 4.77) had more experiences with end-of life situations than female students (mean: 13.38; SD: 3.99). Both male (mean 15.55; SD: 3.66) and female students (mean: 15.14; SD: 3.65) showed similar level of experiences in the 25-31 age group. However, for the 32-39 age group men (mean; 16.87; SD: 4.82) had more experiences than women (mean: 15.03; SD: 4.97).

4.4.3 Year of study

The results showed that both first-year (mean: 14.30; SD: 4.30) and senior students (mean: 15.39; SD: 3.92) had more experiences with end-of-life situations than post-graduate students (mean: 14.06; SD: 4.51).

4.4.4 Faculty

The results showed that each faculty was significantly different from each other in terms of end-of-life experiences. Thus, Theology students (mean: 19.18; SD: 3.01)

reported the most experiences with end-of-life situations, then Medicine (mean: 15.24; SD: 3.28) and Law (mean: 13.64; SD: 2.95) students, with Human Sciences (mean: 11.22; SD: 2.74) students experiencing the least end-of-life experiences.

4.5 Results from religious belief scale

The religious belief scale had five statements and participants rated their responses on a five-point scale similar to the experience scale. The total score ranges from 5 to 25. A mean score of 16 and higher indicates a high level of religious belief. The mean for the whole sample was 16.15 with a standard deviation of 4.23. The results (see Appendix 5) based on the estimated marginal means are indicated below.

4.5.1 Age of the participants

The results showed that the 25-31 age group (mean: 17.07; SD: 3.48) had a higher level of religious belief, followed by the 32-39 age group (mean: 15.33; SD: 4.26) while the 18-24 age group had a lower level of religious belief (mean: 15.18; SD: 4.95).

4.5.2 Gender of the participants

Male students had a higher mean (mean: 16.99; SD: 4.07) than female students (mean: 15.46; SD: 4.24). Thus male students showed a higher level of religious belief than female students.

4.5.3 Year of study

The results showed that senior students (mean: 17.06; SD: 3.73) were the most religious group compared to both first-year (mean: 14.98; SD: 4.14) and post-graduate (mean: 15.01; SD: 5.19) students who had a wide range of beliefs.

4.5.4 Faculty

The results showed that Theology students (mean: 19.69; SD: 3.36) unsurprisingly were the most religious group. Both Law (mean: 16.26; SD: 3.17) and Medical students (mean: 16.48; SD: 3.41) were less religious while the Human Science group (mean: 11.89; SD: 2.91) was the least religious.

4.6 Results from belief in autonomy scale

The autonomy scale comprised two statements and participants rated their experiences on a five-point scale similar to the previous two scales. The total score ranges from 2 to 10 and a score of 6 and more shows a higher autonomy. The mean for the whole sample was 5.9 (SD: 2.1). The results (see Appendix 6) based on the estimated marginal means are presented below.

4.6.1 Age of the participants

The results showed that the 25-32 age group (mean: 6.36; SD: 2.11) had the highest autonomy, followed by 32-39 (mean: 5.62; SD: 1.86) age group, while the 18-24 age group (mean: 5.45; SD: 2.03) had the lowest autonomy.

4.6.2 Gender of the participants

The results showed that the male group (mean: 5.40; SD: 1.93) had lower autonomy than the female group (mean: 5.49; SD: 2.11) in the 18-24 age group. In the 25-31 age group, male students (mean: 6.57; SD: 2.20) had a slightly higher autonomy than female students (mean: 6.36; SD: 2.11). In the 32-39 age group, male students (mean: 6.26; SD: 1.91) also showed a higher autonomy than female students (mean: 5.21; SD: 1.73).

4.6.3 Year of study

The results showed that senior students (mean: 6.21; SD: 2.04) had the highest autonomy compared to both post-graduate (mean: 5.25; SD: 2.17), and first-year groups (mean: 5.75; SD: 2.09).

4.6.4 Faculty

The results showed that the Medical students (mean: 6.84; SD: 2.17) had the highest autonomy, followed by Theology students (mean: 6.10; SD: 2.18) while Human Sciences (mean: 5.27; SD: 2.03) and Law (mean: 5.47; SD: 1.55) students' scores were similar.

4.7. Tests of Significance

The MANOVA tests (Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root) were performed. The results, based on the Wilks' Lambda scores, revealed significant differences in the dependent variables across Year of study ($p < .05$), Faculty ($p < .01$), Age and Faculty ($p < .05$) and Year of study and Faculty ($p < .05$) The results are reported in Table 2 below.

TABLE 2: MULTIVARIATE TESTS

	Effect	Value	F	Hypothesis df	Error	Sig.
Intercept	Pillai's Trace	.979	3887.962 (a)	4.000	336.000	.000
	Wilks' Lambda	.021	3887.962 (a)	4.000	336.000	.000
	Hotelling's Trace	46.285	3887.962 (a)	4.000	336.000	.000
	Roy's Largest Root	46.285	3887.962 (a)	4.000	336.000	.000
Age	Pillai's Trace	.036	1.023	12.000	1014.000	.425
	Wilks' Lambda	.964	1.021	12.000	889.264	.427
	Hotelling's Trace	.037	1.020	12.000	1004.000	.428
	Roy's Largest Root	.025	2.103 (b)	4.000	338.000	.080
Gender	Pillai's Trace	.004	.308 (a)	4.000	336.000	.873
	Wilks' Lambda	.996	.308 (a)	4.000	336.000	.873
	Hotelling's Trace	.004	.308 (a)	4.000	336.000	.873
	Roy's Largest Root	.004	.308 (a)	4.000	336.000	.873
Year of study	Pillai's Trace	.049	2.096	8.000	674.000	.034*
	Wilks' Lambda	.952	2.093 (a)	8.000	672.000	.034*
	Hotelling's Trace	.050	2.089	8.000	670.000	.035*
	Roy's Largest Root	.034	2.835 (b)	8.000	337.000	.025*
Faculty	Pillai's Trace	.585	20.458	12.000	1014.000	.000**
	Wilks' Lambda	.449	26.185	12.000	889.264	.000**
	Hotelling's Trace	1.152	32.134	12.000	1004.000	.000**
	Roy's Largest Root	1.085	91.669 (b)	4.000	338.000	.000**

TABLE 2 CONTINUED

	Effect	Value	F	Hypothesis is df	Error	Sig.
Age* Gender	Pillai's Trace	.041	1.748	8.000	674.000	.084
	Wilks' Lambda	.960	1.747 (a)	8.000	672.000	.085
	Hotelling's Trace	.042	1.745	8.000	670.000	.085
	Roy's Largest Root	.030	2.545 (b)	4.000	337.000	.039*
Age* Year of study	Pillai's Trace	.055	1.181	16.000	1356.000	.276
	Wilks' Lambda	.946	1.183	16.000	1027.135	.275
	Hotelling's Trace	.057	1.183	16.000	1338.000	.274
	Roy's Largest Root	.040	3.394 (b)	4.000	339.000	.010*
Gender * Year of study	Pillai's Trace	.010	.406	8.000	674.000	.917
	Wilks' Lambda	.990	.406 (a)	8.000	672.000	.917
	Hotelling's Trace	.010	.405	8.000	670.000	.918
	Roy's Largest Root	.008	.705 (b)	4.000	337.000	.589
Age* Gender & Year of study	Pillai's Trace	.038	.803	16.000	1356.000	.683
	Wilks' Lambda	.963	.801	16.000	1027.000	.685
	Hotelling's Trace	.038	.779	16.000	1338.000	.668
	Roy's Largest Root	.024	2.076 (b)	4.000	339.000	.084
Age * Faculty	Pillai's Trace	.139	2.034	24.000	1356.000	.002**
	Wilks' Lambda	.865	2.071	24.000	1173.374	.002**
	Hotelling's Trace	.151	2.103	24.000	1338.000	.001**
	Roy's Largest Root	.111	6.287 (b)	6.000	339.000	.000**

TABLE 3: TESTS OF BETWEEN SUBJECTS EFFECTS

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	EAS	7174.527 (a)	52	137.972	5.095	.000
	End of life	3885.270 (b)	52	74.717	8.755	.000
	Religious	3890.600 (c)	52	74.819	8.155	.000
	Autonomy	373.254 (d)	52	7.178	1.796	.001
Intercept	EAS	290836.319	1	290836.319	10739.660	.000
	End of life	15112.379	1	15112.379	1770.801	.000
	Religious	17776.050	1	17776.050	1937.577	.000
	Autonomy	2359.986	1	2359.986	590.542	.000
Age	EAS	17.300	3	5.767	.213	.887
	End of life	17.704	3	5.901	.691	.558
	Religious	46.702	3	15.567	1.697	.167
	Autonomy	17.647	3	5.882	1.472	.222
Gender	EAS	27.461	1	27.461	1.014	.315
	End of life	.323	1	.323	.038	.846
	Religious	.031	1	.031	.003	.954
	Autonomy	.888	1	.888	.222	.638
Year of study	EAS	91.488	2	45.744	1.689	.186
	End of life	85.952	2	42.976	5.036	.007**
	Religious	7.202	2	3.601	.393	.676
	Autonomy	10.376	2	5.188	1.298	.274
Faculty	EAS	2676.475	3	892.158	32.945	.000**
	End of life	1417.260	3	472.420	55.356	.000**
	Religious	1020.695	3	340.232	37.085	.000**
	Autonomy	11.445	3	3.815	.955	.414
Age & Gender	EAS	139.977	2	69.989	2.584	.077
	End of life	3.526	2	1.763	.207	.813
	Religious	41.129	2	20.565	2.242	.108
	Autonomy	14.453	2	7.227	1.808	.166
Age & Year of Study	EAS	349.873	4	87.468	3.230	.013*
	End of life	11.244	4	2.811	.329	.858
	Religious	21.638	4	5.410	.590	.670
	Autonomy	10.441	4	2.610	.653	.625

TABLE 3 CONTINUED

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender & Year of study	EAS	47.415	2	23.708	.875	.418
	End of life	3.530	2	1.765	.207	.813
	Religious	3.668	2	1.834	.200	.819
	Autonomy	4.292	2	2.146	.537	.589
Age & Gender & Year of study	EAS	55.697	4	13.924	.524	.725
	End of life	20.638	4	5.159	.605	.660
	Religious	62.535	4	15.634	1.704	.149
	Autonomy	10.623	4	2.656	.665	.617
Age & Faculty	EAS	294.423	6	49.071	1.812	.096
	End of life	127.698	6	21.283	2.494	.022*
	Religious	121.510	6	20.252	2.207	.042*
	Autonomy	58.756	6	9.793	2.450	.025*
Gender & Faculty	EAS	61.807	3	20.602	.761	.517
	End of life	4.928	3	1.643	.192	.901
	Religious	21.865	3	7.288	.794	.498
	Autonomy	3.333	3	1.111	.278	.841
Age & Gender & Faculty	EAS	43.994	4	10.999	.406	.804
	End of life	33.814	4	8.454	.991	.413
	Religious	18.067	4	4.517	.492	.741
	Autonomy	10.465	4	2.616	.655	.624
Year of study & Faculty	EAS	512.859	5	102.572	3.788	.002**
	End of life	14.885	5	2.977	.349	.883
	Religious	91.542	5	18.308	1.996	.079
	Autonomy	25.224	5	5.045	1.262	.280
Age & Year of Study & Faculty	EAS	96.737	4	24.184	.893	.468
	End of life	4.603	4	1.151	.135	.969
	Religious	18.437	4	4.609	.502	.734
	Autonomy	4.992	4	1.248	.312	.870

TABLE 3 CONTINUED

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender & Year of study & Faculty	EAS	208.411	5	41.682	1.539	.177
	End of life	8.040	5	1.608	.188	.967
	Religious	35.747	5	7.149	.779	.565
	Autonomy	10.592	5	2.118	.530	.753
Age & Gender & Year of study & Faculty	EAS	222.804	3	74.268	2.742	.043*
	End of life	18.536	3	6.179	.724	.538
	Religious	1.685	3	.562	.061	.980
	Autonomy	2.602	3	.867	.217	.885
Error	EAS	9180.320	339	27.081		
	End of life	2893.095	339	8.534		
	Religious	3110.112	339	9.174		
	Autonomy	1354.746	339	3.996		
Total	EAS	1632500.000	392			
	End of life	93455.000	392			
	Religious	109185.000	392			
	Autonomy	15506.00	392			
Corrected Total	EAS	16354.847	391			
	End of life	6778.365	391			
	Religious	7000.712	391			
	Autonomy	1728.000	391			

* Significant at .05

** Significant at .01

a R Squared = .439 (Adjusted R Squared = .353)

b R Squared = .573 (Adjusted R Squared = .508)

c R Squared = .556 (Adjusted R Squared = .488)

d R Squared = .216 (Adjusted R Squared = .096)

4.9 Year of study

4.9.1 Year of study and Euthanasia Attitude Scale

There was no significant difference between the groups (see Table 3). However, the results from the post hoc tests show that both senior and post-graduate students had significantly less negative attitudes towards euthanasia compared to first-year students who had more neutral attitudes towards euthanasia. These results are presented in Table 4 below.

TABLE 4: Year of study and Euthanasia Attitude Scale

Tukey HSD

Year of Study	N	Subset	
		1	2
First	111	62.4685	
Post	63		64.6667
Senior	218		64.9633
Sig.		1.000	.913

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 27.081

a Uses Harmonic Mean Sample Size = 101.801

b Alpha = .05

4.9.2 Year of study and Experiences with end-of life situations

There was a significant difference ($F = 5.036$; $p < .01$) in terms of end-of-life experiences due to year of study. This finding is in Table 3 above and the post hoc test is presented in Table 5 below.

TABLE 5: Year of study and Experiences with end-of-life situations

Tukey HSD

Year of Study	N	Subset	
		1	2
Post	63	14.0635	
First	111	14.2973	
Senior	218		15.3945
Sig.		.836	1.000

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 8.534

a Uses Harmonic Mean Sample Size = 101.801

b Alpha = .05

Table 5 above shows that senior students had significantly more experiences with end-of-life situations than both first-year and post-graduate students.

4.9.3 Year of study and Level of religious belief

There was no significant difference between the groups (see Table 3). However, the results of the post hoc tests (presented in Table 6 below) show that senior students were the most religious of the three groups.

TABLE 6: Year of study and Level of religious beliefs**Tukey HSD**

Year of Study	N	Subset	
		1	2
First	111	14.9820	17.0642 1.000
Post	63	15.0159	
Senior	218		
Sig.		.996	

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 9.174

a Uses Harmonic Mean Sample Size = 101.801

b Alpha = .05

4.9.4 Year of study and Belief in autonomy

The results did not indicate any significant difference between the groups. However, the post hoc results show that senior students had higher autonomy as compared to the other two groups. These results are presented in Table 7 below.

TABLE 7: Year of study and Belief in autonomy**Tukey HSD**

Year of Study	N	Subset	
		1	2
Post	63	5.2540	5.7477 6.2156 .218
First	111	5.7477	
Senior	218		
Sig.		.184	

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 3.996

a Uses Harmonic Mean Sample Size = 101.801

b Alpha = .05

Again, Table 7 shows that senior students had the highest autonomy compared to first-year and post-graduate students.

4.10 Faculty

The results show significant differences between faculties in all the dependent variables. Theology students showed the most positive attitudes towards euthanasia in all the age groupings. They also reported the most experiences with end-of-life situations and were the most religious group. Medical students on the other hand, had the highest autonomy. The post hoc results are presented in Tables 8-11.

TABLE 8: Faculty and Euthanasia Attitudes Scale

Tukey HSD

Faculty	N	Subset		
		1	2	3
Human	94	61.2447	63.5960	70.3300
Law	99	61.4545		
Medicine	99			
Theology	100			
Sig.		.992	1.000	

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 27.081

a Uses Harmonic Mean Sample Size = 97.942.

b Alpha = .05

Table 8 above shows that Theology students had mildly positive attitudes towards euthanasia, while Medical students were neutral and both Law and Human Sciences had the most negative attitudes towards euthanasia.

TABLE 9: Faculty and End-of-life experiences

Tukey HSD

Faculty	N	Subset			
		1	2	3	4
Human	94	11.2234			
Law	99		13.6061		
Medicine	99			15.2424	
Theology	100				19.1800
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 8.534

a Uses Harmonic Mean Sample Size = 97.942.

b Alpha = .05

Table 9 shows that each faculty was significantly different from each other in terms of their end-of life experiences. Theology students showed the most experiences with regard to end-of-life situations. Human Sciences students showed the least experiences.

TABLE 10: Faculty and Level of religious beliefs**Tukey HSD**

Faculty	N	Subset		
		1	2	3
Human	94	11.8936		19.6900
Law	99		16.2626	
Medicine	99		16.4848	
Theology	100			
Sig.		1.000	.956	

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 9.174

a Uses Harmonic Mean Sample Size = 97.942.

b Alpha = .05

Table 10 above shows that Theology students were the most religious of the groups while Human Sciences students were the least religious.

TABLE 11: Faculty and Belief in autonomy**Tukey HSD**

Faculty	N	Subset		
		1	2	3
Human	94	5.2660		6.8384
Law	99	5.4747	5.4747	
Theology	100		6.1000	
Medicine	99			
Sig.		.885	.128	

Means for groups in homogeneous subsets are displayed

Based on Type III Sum of Squares

The error term is Mean Square (Error) = 3.996

a Uses Harmonic Mean Sample Size = 97.942.

b Alpha = .05

As shown in Table 11 above, Medical students had the highest autonomy followed by Theology and Law while Human Sciences showed the least autonomy.

4.11 Summary of the results

The study sample came from four faculties (Human Sciences, Law, Theology and Medicine). The data of eight (8) participants were incomplete and as a result, the final data analysis was derived from three hundred and ninety two (392) participants. Students were evenly spread with minor differences across faculties. The participants fell into four age groups (18-24 years; 25-31 years; 32-39 years and 40 years and over). There were more females (219) than males (175) in the sample. In terms of year of study, senior students (218) comprised more than half the sample, while there were 111 first-year students and 63 post-graduate students.

The participants completed the Euthanasia Attitude Scale, an End-of-Life Experiences Scale, a Religious Belief Scale, and an Autonomy Scale. In terms of the EAS, there was no strong support for euthanasia as the majority of the groupings had means below 70. However, in comparing across faculties, Theology students were most supportive of euthanasia. Theology students also had the most experience with end-of-life situations, and they were more religious than Human Science, Law, or Medical students. Senior students reported more experiences with end-of-life situations compared to both first-year and post-graduate students.

Several MANOVA tests were performed and Wilks' Lambda test was used to identify significant findings. Year of study, faculty, age and faculty and year of study and faculty brought significant findings on the dependent variables. There were no

significant differences due to age and gender. Significant findings based on the tests of between subjects effects can be reported as follows. In the attitudes scale, the results show significant differences in the dependent variable due to faculty, age and year of study, year of study and faculty, and age, gender, year of study and faculty. In the experience with end-of-life scale, significant differences were due to year of study, faculty and age and faculty. In the religious scale, significant differences were due to faculty and age and faculty. Lastly, age and faculty showed significant differences on the belief in autonomy scale. The four hypotheses will be discussed in the discussion chapter.

CHAPTER 5: DISCUSSION

5.1 Introduction

The purpose of this chapter is to interpret and discuss the findings of this study. This will be done by comparing the findings of this present study with previous research on the attitudes of university students towards euthanasia.

The aim of this study was to investigate the attitudes of a sample of university students (University of KwaZulu-Natal) towards euthanasia. In addition to attitudes towards euthanasia, the students' experiences with end-of-life situations, level of religious belief and belief in autonomy were also explored.

5.2 Study sample

The literature on students' attitudes towards euthanasia showed that previous studies frequently included medical and social science students in the samples. As mentioned previously, a study sample by Weiss (1996) comprised arts students, Karnik et al. (2002) compared attitudes of medical and human sciences students, Fekete et al. (2002) compared the attitudes of nurses, medical and social science students, and Hagelin et al. (2004) sampled undergraduate students from four faculties (law, medicine, engineering and nursing). Similarly, the present study investigated the attitudes of students using a more varied sample. In addition to medical and human science students, law and theology students were included in the sample. This sample (comparing students from four faculties) is similar to a study done by Hagelin et al. (2004) although the faculties studied were different. Medical and female students were predominant in various studies. In a study by Fekete et al. (2002) there were eighty-six (86) Medical students and seventy-one (71) Social Science students, and

one hundred and seventy-five (175) females and sixty-seven (67) males. In contrast, the present study had an almost equal number of students for Theology (100), Law (99), Medicine (99) and Human Sciences (94) faculties. The gender difference was also very small with two hundred and seventeen (217) females and one hundred and seventy-five (175) males.

With regard to year of study, senior students were in the majority, followed by first-years and post-graduates. The participants' ages ranged from eighteen (18) to forty (40) years and over. A majority of the participants fell within the age range of 25-31 age group, followed by 18-24 and 32-39 groups. In contrast, various studies (Hagelin et al., 2004; Weiss, 1996) targeted undergraduate students.

5.3 Significant findings

As mentioned in Chapter 3, the present study aimed to test four hypotheses. These will be discussed one by one in sections 5.3.1-5.3.4. The MANOVA tests (Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's Largest Root) were performed using SPSS version 14.0. Below is the discussion of the results of the MANOVA tests as per the four hypotheses.

5.3.1 Hypothesis 1: Students from different age groups will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy

The results of the MANOVA Test (Wilks' Lambda) for the above hypothesis as presented in Table 2 and the Tests of between subject effects (Table 3) indicated that age was not statistically significant, $F > .05$, with regard to the students' attitudes

towards euthanasia. The findings of this study, with a non-significant association between the ages of students and attitudes towards euthanasia, are supported by a study conducted by Weiss (1996), who also did not find any significant association between the age of students and attitudes towards euthanasia.

However, the results also show that based on the estimated marginal means, support for euthanasia increased with age. The older students showed the most positive attitudes towards euthanasia, more so than the younger students who had the least positive attitudes. These findings contradict those of various authors. The study conducted by Fekete et al. (2002) demonstrated that younger students tended to be more in favour of legalizing euthanasia than older students. In contrast with the present study, Verpoort et al. (2004) found the relationship between age and attitude to euthanasia to be highly significant in their study. Like Fekete et al. (2002), these authors found that students who were younger than 40 years of age were more in favour of legalisation of euthanasia and willing to help in euthanasia than older students. One of the major limitations of Verpoort's study was that the age distribution was not even. The 40 year age group actually was excluded from their analysis.

With regard to experiences with end-of-life situations, the 25-31 age group had more experiences with end-of-life situations compared to both the younger and older students. Again, the 25-31 age group were more religious compared to both young and old students. With regards to beliefs in autonomy, the same 25-31 age group had the highest autonomy. This is not surprising as the 25-31 age group was in the majority. During his training the researcher observed that younger first-year students

tended to pay a lot of concentration to their studies whereas senior students were more relaxed and focused more on general life topics such as marriages, politics and careers. Senior students are more active in student affairs such as the Student Representative Council (SRC) than both first year and post-graduate students.

The results also showed that there were some strong positive correlations on the dependent variable, attitudes towards euthanasia, between age and year of study as well as age, gender, year of study and faculty.

5.3.2 Hypothesis 2: Male and female students will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy.

The effect of gender of students on attitudes towards euthanasia, experiences with regard to end-of-life situations, level of religious beliefs and beliefs in autonomy, was found not to be statistically significant (see Tables 2 and 3). The findings of the study are similar to studies conducted by Karnik et al. (2002). Their results showed no difference between male and female participants with regard to their attitudes towards euthanasia. Both gender groups only showed support for euthanasia with regard to terminally-ill patients. Weiss (1996) also did not find the gender of students to be significant.

However, based on the estimated marginal means, male students were found to be slightly more supportive of euthanasia. The findings are supported by Fekete et al. (2002) who found that male students showed more favourable attitudes towards euthanasia than female students. The researcher had speculated that female students

would be more in favour of euthanasia due to their social roles as carers, but this was not supported by the results.

Younger and older male students had more experiences with regards to end-of-life situations more than female students. Male students also showed to have a slightly higher level of religious belief than female students. Older male students also had a slightly higher autonomy than female students. The findings of the present study contradict a study conducted by Weiss (1996) who found women to have more experiences with end-of-life situations, and to be more religious and autonomous than men. The findings of this study thus breaks social stereotypes of women being religious and carers, but agrees with stereotype of men being more autonomous.

5.3.3 Hypothesis 3: Students from different years of study will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy

The findings did not indicate any association between year of study of the groups and attitudes towards euthanasia, level of religious belief and belief in autonomy. Based on the estimated marginal means, both senior and post-graduate students showed more positive support for euthanasia than first-year students. These findings contradict a study conducted by Hagelin et al. (2004), where first-year students were found to be more likely to accept euthanasia than senior students.

However, the effect of year of study on experiences with end-of-life situations was significant (see Table 3). Senior students had more experiences with end-of-life situations. In contrast, both first-year and post-graduate students showed the least experiences with end-of-life situations. The researcher had speculated that post-

graduate students would have more experiences due to having witnessed a lot of events in their lives. Senior students were also the most religious group compared to both first-year and post-graduate students. They also had the highest autonomy compared to both post-graduate and first-year students.

As mentioned previously (see Section 4.3.3.1), support for euthanasia increased with age. Regardless of their huge majority senior students are often able to openly express their opinions more than first-year students who are easily overwhelmed by situations.

5.3.4 Hypothesis 4: Students from different faculties will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, levels of religious beliefs and beliefs in autonomy

The results of the MANOVA Tests indicated that faculty was statistically significant with regards to the students' attitudes towards euthanasia, experiences with regard to end-of-life situation and level of religious beliefs. However, faculty was found not to be associated with beliefs in autonomy. On the Euthanasia Attitudes Scale, there was a strong positive correlation between year of study and faculty as well as age, gender, year of study and faculty. Theology students showed the most support for euthanasia, followed by Medical students while both Law and Human Sciences had the least positive attitudes. The findings of the study are mainly the views of students from one religion. Majority of the students came from a Christian background, and the only difference was in denomination (see Section 4.2.5).

The findings of the present study contradict a study conducted by Hagelin et al. (2004). When compared with students from the Faculties of Engineering, Medicine,

and Nursing, Law students showed the most positive attitudes towards euthanasia compared to Engineering and Nursing students. Again, studies conducted by Fekete et al. (2002) and Mangus et al. (1999) found that Human Sciences students were more in support of euthanasia than Medical students. These authors also found that Human sciences students who had the fewest personal experiences with terminally ill people showed the most positive attitudes towards euthanasia compared to Medical students who had the most personal experiences.

With regard to experiences to end-of-life situations, age and faculty had a strong positive correlation. Each faculty was significantly different from each other in terms of end-of-life experiences. Theology students showed the most experiences with regard to end-of-life situations compared with Medicine and Law, while Human Sciences experienced the least. The researcher had witnessed that students prefer to share their problems mainly with the trusted priests.

As expected, Theology students were the most religious of the groups. Both Medical and Law students were similarly less religious while Human Sciences group the least religious of the groups. Again, age and faculty had a positive correlation on the level of religious belief scale.

Medical students had the highest autonomy followed by Theology and Law, while Human Sciences showed the least autonomy. The findings are supported by Mangus et al. (1999) who found that Medical students had higher autonomy than Social Science students. The researcher speculates Medical students are guided by the ethical codes, Bill of rights as well as the Constitution in their execution of duties.

5.4 General comments by students

This present study gave the students the opportunity to make additional comments. Sixty students (15%) took advantage of this opportunity (see Appendix 4). This might imply reluctance to express their views about this issue. The major themes are discussed below. Thirty-four students commented that euthanasia should be legalized. Eleven students recommended the provision of more information on the practice of euthanasia. Ten students commented that euthanasia should be against the commandments of God. No comment responses were received from three students. Two participants commented that they were not aware of the practice of euthanasia. The above comments suggest that University students would benefit from euthanasia education.

5.5 Summary

The findings of this study showed some significant differences in the dependent variables (Euthanasia Attitude Scale, Experiences with regard to end-of-life situations, Level of religious belief and Beliefs in autonomy) due to the independent variables (year of study, faculty, age and faculty and year of study and faculty). An examination of the between-subjects tests for each dependent variable indicates some significant differences. In the Euthanasia Attitude Scale, where the significant differences were due to faculty, age and year of study, year of study and faculty as well as age, gender, year of study and faculty. With regard to experiences with end-of-life situations, the significant differences were due to year of study, faculty and age and faculty. Faculty and age and faculty brought significant differences in the level of religious scale. There was a strong positive correlation between age and faculty in the belief in autonomy scale. Chapter 6 will provide a summary of the study as well as

implications for future research. With the exception of Hypothesis 4 (students from different faculties will not differ with regard to their attitudes towards euthanasia, experiences with end-of-life situations, level of religious beliefs and beliefs in autonomy), the other three hypotheses were not supported.

CHAPTER 6: CONCLUSION

6.1 Aim of the study

As previously mentioned in Section 3.1, the main aim of the study was to explore the attitudes of university students towards euthanasia.

6.2 Results

The results of this study showed that age and gender were not associated with students' attitudes towards euthanasia, experiences with regards to end-of-life situations, level of religious beliefs and beliefs in autonomy. The students' year of study was also not associated with their attitudes towards euthanasia, level of religious beliefs as well as beliefs in autonomy. However, the findings showed that senior students had more experiences with regards to end-of-life situations, followed by post graduate while first-year students had the least experiences. Theology followed by Medical students showed the most positive attitudes towards euthanasia. Human sciences had the least positive attitudes towards euthanasia. Theology students had more experiences with regard to end-of-life situations while Human sciences showed the least experiences. Theology students were the most religious of the groups while Human sciences were the least. Medical students had the highest autonomy more than Human sciences students.

6.3 Limitations of the study

- The findings of the present study are mainly the views of the Black South African students as they were in the majority (see Section 4.2.5).
- The sample of the present study was not representative of the entire student population of the University of KwaZulu-Natal, but the researcher estimate to

represent the South African demographics especially for Black South Africans (also see Section 4.2.5).

- The convenience sampling method used to gather data, had limitations as it allowed only students who were interested and available to participate at a particular time.
- The time frame for data collection was also not convenient. Data was gathered in the third-term (September-October 2004). This term is the busiest in the students' lives as they prepare the examination around this time.
- The concept of euthanasia was not adequately addressed. Only the definition was provided in the questionnaire, but the different types and forms of euthanasia were not indicated.
- The instruments used to gather data were not validated and standardized for the South African population. They were adopted from previous international studies.

6.4 Implications for future research

The present study provides some insight as to the perceptions of the attitudes of university students towards euthanasia, experiences with regard to end-of-life situations, level of religious beliefs and belief in autonomy. The researcher managed to gather data from a large sample and also incorporated more than one dependent variable.

However, future research should involve an evenly spread sample with regard to racial groupings. Education or prior discussion on the concept of euthanasia should be done before any undertaking of the research project. It would be interesting to also

investigate and compare the attitudes of lecturers and students. The increasing HIV/AIDS epidemic has shortened life expectancy and its influence on attitudes towards euthanasia should also be explored.

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APPENDIX 1: CONSENT FORM

P.O. BOX 101377

SCOTTSVILLE

3209

2004 JULY 15

CEL: 073187 4765

E-mail: 204503623@ukzn.ac.za

Dear Sir/Madam

Re: Request to participate in the study: Attitudes of university students towards euthanasia.

Euthanasia has been debated for decades. Pro-euthanasia movements have been established in many countries of the world. Legislation to decriminalise it has been passed despite protests in a few countries in the world. The situation in South Africa is that euthanasia is still considered illegally. However, a bill has been passed and any person is free to raise his or her opinion on the subject.

It is against the above background that this present work has been considered. In addition, I have developed an interest in end-of-life issues due to my previous work in a government institution. Some of the questions in this questionnaire may seem sensitive to you, but you are not forced to answer all questions. Participation is entirely voluntary and no form of identification of names is required in the questionnaire. For the sake of ethical and professional issues, I request you to sign this form to indicate that you fully understand the nature of this study and that you agree to take part in it. If any time you feel distress due to some of the questions, you are at liberty to discontinue. There is also no monetary reward for participating in this study.

Faithfully

.....

Khazamula T. Nkwinika

(Registered social worker and Psychometrist)

.....

Signature

Date:

APPENDIX 2: QUESTIONNAIRE

ATTITUDES TOWARDS EUTHANASIA

Purpose: *This questionnaire is intended to investigate the attitudes of university students toward the practice of what is called "euthanasia". Euthanasia refers to the administration of deadly drugs with the intention of shortening a patient's life at that person's request.). The study is part of my work towards a Masters Degree in clinical psychology. I would be grateful if you could take your time to complete this questionnaire. Please do not write your name to ensure the confidentiality of your responses. Participation is entirely voluntary.*

1. BACKGROUND INFORMATION

Please indicate your response by ticking the appropriate answer.

1.1 How old are you?	Tick one
Below 18 years	
18-24 years	
25-31 years	
32-39 years	
Above 40 years	

1.2 What is your gender	Tick one
Male	
Female	

1.3 What year of study are you currently in?	Tick one
First year	
Senior year	
Post-graduate	

1.4 What program of study are you currently enrolled in?	Tick one
Human sciences	
Law	
Commerce & Management	
Theology	
Health sciences	
Education	
Engineering	
Science	
Other....	

1.5 What is your marital status?	Tick one
Not married	
Married	
Widowed	
Separated	
Divorced	

1.6 What is your nationality?	Tick one
South African	
African (Other)	
European	
American	
Other....	

1.7 To which racial grouping do you belong?	Tick one
African	
White	
Asian	
“ Coloured”	
Other...	

1.8 What is your religious affiliation?	Tick one
Catholic	
Methodist	
Anglican	
Baptist	
Other protestant	
Muslim	
Hindu	
Jewish	
Buddhist	
African religion	
None	

2. EUTHANASIA ATTITUDES SCALE

Directions: The following scale is meant to explore some of your attitudes toward euthanasia.

It is not meant to test what you know. There are no right or wrong answers. Please read each item carefully and make a cross in one box alongside each statement using this response

scale: **SA=Strongly Agree, A=Agree, NS=Not Sure, D=Disagree, SD=strongly disagree.**

NB. Remember, euthanasia refers to the intentional killing by act or omission of a dependent human being for his or her alleged benefit.

2.1. A person with a terminal illness has the right to decide to die.	SA	A	NS	D	SD
2.2. God gave us life and should be the only one to end it.	SA	A	NS	D	SD
2.3. Euthanasia is acceptable if the person is old.	SA	A	NS	D	SD
2.4. Inducing death for merciful reasons is wrong.	SA	A	NS	D	SD
2.5. Euthanasia should be acceptable in today's society.	SA	A	NS	D	SD
2.6. There are never cases when euthanasia is appropriate.	SA	A	NS	D	SD
2.7. Euthanasia should be allowed only if the family consents.	SA	A	NS	D	SD
2.8. Death should be allowed but not induced in cases of terminal illness.	SA	A	NS	D	SD
2.9. Euthanasia is helpful at the right time and place (under the right circumstances).	SA	A	NS	D	SD
2.10. Euthanasia is a humane act.	SA	A	NS	D	SD
2.11. Euthanasia should be against the law.	SA	A	NS	D	SD
2.12. The question of euthanasia should be left up to the entire family and not the individual.	SA	A	NS	D	SD
2.13. There are very few cases when euthanasia is acceptable.	SA	A	NS	D	SD
2.14. A person should not be kept alive by a machine.	SA	A	NS	D	SD
2.15. Euthanasia should only be used when the person has a terminal illness.	SA	A	NS	D	SD
2.16. Natural death is a cure for suffering.	SA	A	NS	D	SD
2.17. The taking of life is wrong no matter what the circumstances.	SA	A	NS	D	SD
2.18. Euthanasia is acceptable in cases when all hope of recovery is gone.	SA	A	NS	D	SD
2.19. Euthanasia gives a person a chance to die with dignity.	SA	A	NS	D	SD
2.20. Euthanasia should be practiced only to eliminate physical pain and not emotional pain.	SA	A	NS	D	SD
2.21. One's job is to sustain it and preserve life, not to end it.	SA	A	NS	D	SD

3. EXPERIENCES WITH REGARD TO END-OF LIFE SITUATIONS AMONG STUDENTS

DIRECTIONS: Please rate your personal experiences on a scale of 1 (not at all) to 5 (very much) to the following items:

3.1 PERSONAL INTERACTION WITH A TERMINALLY ILL PERSON	1	2	3	4	5
3.1.1 With a close friend					
3.1.2 With a family member or relative					
3.1.3 With an acquaintance					
3.1.4 With a community member					
3.1.5 No experience					
3.2 AMOUNT OF EXPOSURE TO END- OF-LIFE SITUATIONS IN MEDIA	1	2	3	4	5
3.2.1 In books, newspapers, and magazines					
3.2.2 In movies or on television					
3.3 AMOUNT OF DISCUSSION OF END-OF-LIFE SITUATIONS	1	2	3	4	5
3.3.1 In high schools or at university classes					
3.3.2 With family members					
3.3.3 With friends					
3.3.4 None					

4. LEVEL OF RELIGIOUS ACTIVITIES	1	2	3	4	5
<i>4.1 Consider self very religious.</i>					
<i>4.2 Active in religious activities.</i>					
<i>4.3 Believe in life after death.</i>					
<i>4.4 Think on moral issues frequently.</i>					
<i>4.5 Not religious or spiritual</i>					
5. AUTONOMY	1	2	3	4	5
<i>5.1 Every person has a right to do as he or she pleases, as long as no one else is harmed.</i>					
<i>5.2 It is very important to me that other people respect my right to make my own decisions</i>					

Any comments you might have on euthanasia or the above items would be appreciated.

Thank you for your assistance.

Researcher's name: Thomas Nkwinika

Supervisor: Viven O'Neill

Contact details: 0731874765

Contact details: 033 260 5853

APPENDIX 3: Results from Euthanasia Attitudes Scale (EAS)

	Age	Gender	Y. Study	Faculty	Mean	Std. Dev	N
EAS	18-24	Male	First	Human	60.6000	5.87272	10
				LAW	61.1667	3.18852	6
				theology	65.7500	3.68556	4
				Medicine	45.0000	.	1
				Total	61.0000	6.12372	21
			Senior	Human	57.0000	.	1
				LAW	59.5556	3.84419	9
				theology	71.8182	3.45885	11
				Medicine	73.0000	.	1
				Total	66.1818	7.28100	22
			Post	Human	61.6000	9.96494	5
				LAW	57.5000	4.94975	2
				theology	68.7778	5.84760	9
				Total	65.1250	8.13941	16
			Total	Human	60.6875	6.95432	16
				LAW	59.8824	3.67223	17
				theology	69.6667	4.90489	24
				Medicine	59.0000	19.79899	2
				Total	64.0508	7.39390	59
		Female	First	Human	61.9032	4.69294	31
				LAW	57.6000	5.59464	5
				theology	72.2500	3.20156	4
				Medicine	59.2500	10.01249	4
				Total	62.1136	6.22155	44
			Senior	Human	59.5000	3.53553	2
				LAW	65.0000	.	1
				theology	72.0000	.	1
				Medicine	65.3333	3.05505	3
				Total	64.5714	4.82553	7
			Post	Human	61.6250	4.04763	16
				LAW	62.0000	.	1
				theology	75.6667	1.52753	3
				Total	63.7500	6.29013	20
			Total	Human	61.7143	4.40170	49
				LAW	59.2857	5.46852	7
				theology	73.5000	2.87849	8
				Medicine	61.8571	7.98809	7
				Total	62.8169	6.11394	71
		Total	First	Human	61.5854	4.95972	41
				LAW	59.5455	4.59050	11
				theology	69.0000	4.72077	8
				Medicine	56.4000	10.76104	5
				Total	61.7538	6.16449	65
			Senior	Human	58.6667	2.88675	3
				LAW	60.1000	4.01248	10
				theology	71.8333	3.29830	12

25-31	Male	Post	Medicine	67.2500	4.57347	4
			Total	65.7931	6.72617	29
			Human	61.6190	5.66989	21
			LAW	59.0000	4.35890	3
			theology	70.5000	5.91608	12
			Total	64.3611	7.09589	36
		Total	Human	61.4615	5.10538	65
			LAW	59.7083	4.15440	24
			theology	70.6250	4.75021	32
			Medicine	61.2222	9.92192	9
			Total	63.3769	6.72640	130
		First	Human	61.8333	5.11534	6
			LAW	61.5000	4.50925	4
			theology	71.0000	6.78233	5
			Medicine	63.3333	3.78594	3
			Total	64.5556	6.40976	18
		Senior	LAW	60.4000	5.48483	25
			theology	69.8462	4.25923	13
			Medicine	64.8276	6.76160	29
			Total	64.1493	6.74931	67
		Post	theology	64.6667	9.07377	3
			Total	64.6667	9.07377	3
		Total	Human	61.8333	5.11534	6
			LAW	60.5517	5.30220	29
			theology	69.3810	5.69628	21
			Medicine	64.6875	6.51270	32
			Total	64.2500	6.67169	88
	Female	First	Human	59.0000	4.42719	6
			LAW	63.6250	4.27409	8
			theology	77.0000	.	1
			Medicine	59.8889	4.56740	9
			Total	61.6250	5.63230	24
		Senior	LAW	62.5833	5.05549	24
			theology	71.0909	6.75951	11
			Medicine	63.8261	4.88219	46
			Total	64.4444	5.81378	81
		Post	theology	75.3333	3.51188	3
			Total	75.3333	3.51188	3
		Total	Human	59.0000	4.42719	6
			LAW	62.8438	4.82674	32
			theology	72.3333	6.25262	15
			Medicine	63.1818	5.01143	55
			Total	64.1204	6.10916	108
	Total	First	Human	60.4167	4.79504	12
			LAW	62.9167	4.27377	12
			theology	72.0000	6.54217	6
			Medicine	60.7500	4.49495	12
			Total	62.8810	6.08157	42
		Senior	LAW	61.4694	5.33894	49
			theology	70.4167	5.45270	24

32-39	Male		Medicine	64.2133	5.65994	75
			Total	64.3108	6.23448	148
		Post	theology	70.0000	8.48528	6
			Total	70.0000	8.48528	6
		Total	Human	60.4167	4.79504	12
			LAW	61.7541	5.14670	61
			theology	70.6111	6.02982	36
			Medicine	63.7356	5.62068	87
			Total	64.1786	6.35156	196
		First	theology	70.0000	.	1
			Total	70.0000	.	1
		Senior	LAW	64.5714	8.18244	7
			theology	72.5000	2.39046	8
			Medicine	66.6667	2.08167	3
			Total	68.4444	6.40057	18
	Female	Post	LAW	61.0000	.	1
			theology	70.6667	4.16333	3
			Total	68.2500	5.90903	4
		Total	LAW	64.1250	7.67998	8
			theology	71.8333	2.79068	12
			Medicine	66.6667	2.08167	3
			Total	68.4783	6.04430	23
		First	theology	69.6667	3.05505	3
			Total	69.6667	3.05505	3
		Senior	Human	61.5556	5.12619	9
			LAW	62.5000	6.40312	4
			theology	70.0000	3.91578	10
			Total	65.3913	6.21391	23
		Post	Human	60.4286	3.30944	7
			LAW	60.5000	2.12132	2
			theology	69.5000	6.36396	2
			Total	62.0909	4.94883	11
	Total	Total	Human	61.0625	4.32772	16
			LAW	61.8333	5.15429	6
			theology	69.8667	3.75817	15
			Total	64.7568	5.94608	37
		First	theology	69.7500	2.50000	4
			Total	69.7500	2.50000	4
		Senior	Human	61.5556	5.12619	9
			LAW	63.8182	7.31872	11
			theology	71.1111	3.47916	18
			Medicine	66.6667	2.08167	3
			Total	66.7317	6.40322	41
		Post	Human	60.4286	3.30944	7
			LAW	60.6667	1.52753	3
			theology	70.2000	4.38178	5
			Total	63.7333	5.73793	15
		Total	Human	61.0625	4.32772	16
			LAW	63.1429	6.58503	14
			theology	70.7407	3.44844	27

40+	Male	Post	Medicine	66.6667	2.08167	3
			Total	66.1833	6.20686	60
			theology	64.2000	3.03315	5
			Total	64.2000	3.03315	5
			theology	64.2000	3.03315	5
			Total	64.2000	3.03315	5
		Female	Post	Human	60.0000	1
			Total	60.0000	.	1
			Total	Human	60.0000	1
			Total	60.0000	.	1
			Total	Human	60.0000	1
			Post	Human	60.0000	1
	Total	Post	theology	64.2000	3.03315	5
			Total	63.5000	3.20936	6
			Total	Human	60.0000	1
			theology	64.2000	3.03315	5
			Total	63.5000	3.20936	6
			First	Human	61.0625	16
Total	Male	First	LAW	61.3000	3.52924	10
			theology	68.8000	5.65292	10
			Medicine	58.7500	9.67385	4
			Total	62.8250	6.45254	40
		Senior	Human	57.0000	.	1
			LAW	60.9268	5.82834	41
			theology	71.1875	3.67588	32
			Medicine	65.2424	6.51935	33
			Total	65.2897	6.93638	107
		Post	Human	61.6000	9.96494	5
			LAW	58.6667	4.04145	3
			theology	67.3000	5.76833	20
			Total	65.3571	7.05121	28
		Total	Human	61.0000	6.40684	22
			LAW	60.8704	5.35546	54
			theology	69.5484	5.01041	62
			Medicine	64.5405	7.05374	37
			Total	64.7371	6.88823	175
	Female	First	Human	61.4324	4.71723	37
			LAW	61.3077	5.51339	13
			theology	71.8750	3.60307	8
			Medicine	59.6923	6.25013	13
			Total	62.2676	6.08031	71
		Senior	Human	61.1818	4.79204	11
			LAW	62.6552	5.05877	29
			theology	70.6364	5.35898	22
			Medicine	63.9184	4.78207	49
			Total	64.6486	5.80697	111
		Post	Human	61.2083	3.72978	24
			LAW	61.0000	1.73205	3
			theology	74.0000	4.20883	8
			Total	64.1143	6.56090	35
		Total	Human	61.3194	4.36318	72

Total	First	LAW	62.1556	5.01795	45
		theology	71.6053	4.89092	38
		Medicine	63.0323	5.35607	62
		Total	63.7834	6.08992	217
		Human	61.3208	4.90202	53
		LAW	61.3043	4.65574	23
		theology	70.1667	4.97346	18
		Medicine	59.4706	6.85673	17
		Total	62.4685	6.19357	111
		Human	60.8333	4.72582	12
	Senior	LAW	61.6429	5.55091	70
		theology	70.9630	4.39967	54
		Medicine	64.4512	5.54700	82
		Total	64.9633	6.37959	218
		Human	61.2759	5.06315	29
	Post	LAW	59.8333	3.06050	6
		theology	69.2143	6.12437	28
		Total	64.6667	6.75612	63
		Human	61.2447	4.88070	94
	Total	LAW	61.4545	5.21824	99
		theology	70.3300	5.04135	100
		Medicine	63.5960	6.05573	99
		Total	64.2092	6.46748	392

APPENDIX 4: Results from experiences with End-of-life situations

End-of-life	Age 18-24	Gender Male	Y. Study First	Faculty	Mean	Std. Dev	N
			Senior	Human	12.3000	2.79086	10
				LAW	15.1667	4.16733	6
				Theology	22.0000	.81650	4
				Medicine	14.0000	.	1
				Total	15.0476	4.63116	21
				Human	11.0000	.	1
			Post	LAW	13.2222	4.32371	9
				Theology	20.0000	1.84391	11
				Medicine	11.0000	.	1
				Total	16.4091	4.75754	22
				Human	11.0000	2.12132	5
				LAW	15.0000	5.65685	2
	Total	Theology	18.2222	4.73756	9		
		Total	15.5625	5.15065	16		
		Human	11.8125	2.50915	16		
		LAW	14.1176	4.21133	17		
		Theology	19.6667	3.34491	24		
		Medicine	12.5000	2.12132	2		
	Female	First	Total	15.6949	4.77513	59	
			Human	12.2581	3.02178	31	
			LAW	15.2000	2.58844	5	
			Theology	21.2500	.50000	4	
			Medicine	13.0000	3.36650	4	
			Total	13.4773	3.85486	44	
Senior		Human	12.0000	4.24264	2		
		LAW	15.0000	.	1		
		Theology	23.0000	.	1		
		Medicine	13.0000	4.00000	3		
		Total	14.4286	4.85994	7		
		Human	11.6250	2.96367	16		
	Post	LAW	11.0000	.	1		
		Theology	19.6667	3.51188	3		
		Total	12.8000	4.12438	20		
		Human	12.0408	2.98579	49		
		LAW	14.5714	2.63674	7		
		Theology	20.8750	2.23207	8		
	Total	Medicine	13.0000	3.31662	7		
		Total	13.3803	3.99774	71		
		Human	12.2683	2.93278	41		
		LAW	15.1818	3.37100	11		
		Theology	21.6250	.74402	8		
		Medicine	13.2000	2.94958	5		
Senior	Total	13.9846	4.15140	65			
	Human	11.6667	3.05505	3			
	LAW	13.4000	4.11501	10			
	Theology	20.2500	1.95982	12			

			Medicine	12.5000	3.41565	4
			Total	15.9310	4.77292	29
		Post	Human	11.4762	2.74989	21
			LAW	13.6667	4.61880	3
			Theology	18.5833	4.35803	12
			Total	14.0278	4.74785	36
		Total	Human	11.9846	2.85861	65
			LAW	14.2500	3.76771	24
			Theology	19.9688	3.11587	32
			Medicine	12.8889	2.97676	9
			Total	14.4308	4.50140	13
						0
25-31	Male	First	Human	9.0000	.89443	6
			LAW	14.5000	2.08167	4
			Theology	18.8000	1.48324	5
			Medicine	18.0000	1.00000	3
			Total	14.4444	4.46189	18
		Senior	LAW	13.3200	2.47857	25
			Theology	19.8462	2.15430	13
			Medicine	16.2069	2.73051	29
			Total	15.8358	3.44479	67
		Post	Theology	15.6667	3.21455	3
			Total	15.6667	3.21455	3
		Total	Human	9.0000	.89443	6
			LAW	13.4828	2.42930	29
			Theology	19.0000	2.52982	21
			Medicine	16.3750	2.66095	32
			Total	15.5455	3.66690	88
	Female	First	Human	9.5000	1.37840	6
			LAW	14.0000	3.38062	8
			Theology	21.0000	.	1
			Medicine	15.7778	2.81859	9
			Total	13.8333	3.90837	24
		Senior	LAW	13.4167	2.26345	24
			Theology	19.1818	1.99089	11
			Medicine	14.8043	3.55040	46
			Total	14.9877	3.49819	81
		Post	Theology	18.0000	2.64575	3
			Total	18.0000	2.64575	3
		Total	Human	9.5000	1.37840	6
			LAW	13.5625	2.53921	32
			Theology	19.0667	2.08624	15
			Medicine	14.9636	3.43707	55
			Total	14.8148	3.61758	10
						8
	Total	First	Human	9.2500	1.13818	12
			LAW	14.1667	2.91807	12
			Theology	19.1667	1.60208	6
			Medicine	16.3333	2.64002	12
			Total	14.0952	4.11309	42

32-39	Male	Senior	LAW	13.3673	2.35136	49
			Theology	19.5417	2.06375	24
			Medicine	15.3467	3.31048	75
			Total	15.3716	3.48813	148
		Post	Theology	16.8333	2.92689	6
			Total	16.8333	2.92689	6
		Total	Human	9.2500	1.13818	12
			LAW	13.5246	2.46716	61
			Theology	19.0278	2.32362	36
			Medicine	15.4828	3.23089	87
			Total	15.1429	3.64867	196
		First	Theology	22.0000	.	1
			Total	22.0000	.	1
		Senior	LAW	12.4286	4.35343	7
			Theology	20.0000	3.07060	8
			Medicine	15.3333	3.78594	3
			Total	16.2778	5.00359	18
		Post	LAW	13.0000	.	1
			Theology	20.0000	2.00000	3
			Total	18.2500	3.86221	4
		Total	LAW	12.5000	4.03556	8
			Theology	20.1667	2.65718	12
			Medicine	15.3333	3.78594	3
			Total	16.8696	4.81762	23
	Female	First	Theology	21.3333	2.88675	3
			Total	21.3333	2.88675	3
		Senior	Human	10.0000	1.50000	9
			LAW	13.2500	.95743	4
			Theology	18.3000	3.09300	10
			Total	14.1739	4.45842	23
		Post	Human	9.2857	1.60357	7
			LAW	13.5000	4.94975	2
			Theology	16.0000	1.41421	2
			Total	11.2727	3.52394	11
		Total	Human	9.6875	1.53704	16
			LAW	13.3333	2.33809	6
			Theology	18.6000	3.18030	15
			Total	13.8919	4.77717	37
	Total	First	Theology	21.5000	2.38048	4
			Total	21.5000	2.38048	4
		Senior	Human	10.0000	1.50000	9
			LAW	12.7273	3.43776	11
			Theology	19.0556	3.11490	18
			Medicine	15.3333	3.78594	3
			Total	15.0976	4.76343	41
		Post	Human	9.2857	1.60357	7
			LAW	13.3333	3.51188	3
			Theology	18.4000	2.70185	5

			Total	13.1333	4.71876	15
		Total	Human	9.6875	1.53704	16
			LAW	12.8571	3.32490	14
			Theology	19.2963	3.01043	27
			Medicine	15.3333	3.78594	3
		Total		15.0333	4.97099	60
40+	Male	Post	Theology	14.6000	3.36155	5
		Total		14.6000	3.36155	5
		Total	Theology	14.6000	3.36155	5
		Total		14.6000	3.36155	5
	Female	Post	Human	10.0000	.	1
		Total		10.0000	.	1
		Total	Human	10.0000	.	1
		Total		10.0000	.	1
	Total	Post	Human	10.0000	.	1
			Theology	14.6000	3.36155	5
		Total		13.8333	3.54495	6
		Total	Human	10.0000	.	1
			Theology	14.6000	3.36155	5
		Total		13.8333	3.54495	6
Total	Male	First	Human	11.0625	2.76812	16
			LAW	14.9000	3.34830	10
			Theology	20.4000	2.01108	10
			Medicine	17.0000	2.16025	4
		Total		14.9500	4.59068	40
		Senior	Human	11.0000	.	1
			LAW	13.1463	3.22150	41
			Theology	19.9375	2.24237	32
			Medicine	15.9697	2.87755	33
		Total		16.0280	3.99400	107
		Post	Human	11.0000	2.12132	5
			LAW	14.3333	4.16333	3
			Theology	17.2000	4.14983	20
		Total		15.7857	4.47509	28
		Total	Human	11.0455	2.51618	22
			LAW	13.5370	3.30073	54
			Theology	19.1290	3.21617	62
			Medicine	16.0811	2.80256	37
		Total		15.7429	4.21234	175
	Female	First	Human	11.8108	2.98922	37
			LAW	14.4615	3.04454	13
			Theology	21.2500	1.58114	8
			Medicine	14.9231	3.14806	13
		Total		13.9296	4.10687	71
		Senior	Human	10.3636	2.06265	11
			LAW	13.4483	2.09738	29
			Theology	18.9545	2.64534	22
			Medicine	14.6939	3.56022	49

		Total	14.7838	3.77890	111
	Post	Human	10.8750	2.75543	24
		LAW	12.6667	3.78594	3
		Theology	18.1250	2.85044	8
		Total	12.6857	4.11433	35
	Total	Human	11.2778	2.81456	72
		LAW	13.6889	2.50293	45
		Theology	19.2632	2.67808	38
		Medicine	14.7419	3.45432	62
		Total	14.1659	3.99654	217
Total	First	Human	11.5849	2.91834	53
		LAW	14.6522	3.11315	23
		Theology	20.7778	1.83289	18
		Medicine	15.4118	3.02198	17
		Total	14.2973	4.29502	111
	Senior	Human	10.4167	1.97523	12
		LAW	13.2714	2.79711	70
		Theology	19.5370	2.43956	54
		Medicine	15.2073	3.34346	82
		Total	15.3945	3.92679	218
	Post	Human	10.8966	2.62331	29
		LAW	13.5000	3.67423	6
		Theology	17.4643	3.79553	28
		Total	14.0635	4.51832	63
	Total	Human	11.2234	2.73627	94
		LAW	13.6061	2.95137	99
		Theology	19.1800	3.00968	100
		Medicine	15.2424	3.27667	99
		Total	14.8699	4.16365	392

APPENDIX 5: Results from level of Religious Beliefs

	Age	Gender	Y. Study	Faculty	Mean	Std. Dev	N
Religious	18-24	Male	First	Human	13.4000	3.33999	10
				LAW	18.5000	3.39116	6
				Theology	21.2500	1.25831	4
				Medicine	11.0000	.	1
				Total	16.2381	4.48224	21
			Senior	Human	13.0000	.	1
				LAW	15.0000	4.38748	9
				Theology	21.7273	2.86674	11
				Medicine	13.0000	.	1
				Total	18.1818	4.97265	22
			Post	Human	14.2000	3.03315	5
				LAW	16.5000	6.36396	2
				Theology	18.6667	5.72276	9
				Total	17.0000	5.18973	16
			Total	Human	13.6250	3.05232	16
				LAW	16.4118	4.30202	17
				Theology	20.5000	4.15985	24
				Medicine	12.0000	1.41421	2
				Total	17.1695	4.85355	59
		Female	First	Human	12.2581	2.58157	31
				LAW	16.6000	3.20936	5
				Theology	21.5000	3.00000	4
				Medicine	10.5000	2.38048	4
				Total	13.4318	3.95555	44
			Senior	Human	14.0000	.00000	2
				LAW	16.0000	.	1
				Theology	25.0000	.	1
				Medicine	14.3333	4.50925	3
				Total	16.0000	4.79583	7
			Post	Human	10.9375	3.64177	16
				LAW	20.0000	.	1
				Theology	20.6667	1.52753	3
				Total	12.8500	5.11216	20
			Total	Human	11.8980	2.98081	49
				LAW	17.0000	2.94392	7
				Theology	21.6250	2.55999	8
				Medicine	12.1429	3.71612	7
				Total	13.5211	4.40733	71
		Total	First	Human	12.5366	2.78476	41
				LAW	17.6364	3.29462	11
				Theology	21.3750	2.13391	8
				Medicine	10.6000	2.07364	5
				Total	14.3385	4.30580	65
			Senior	Human	13.6667	.57735	3
				LAW	15.1000	4.14863	10
				Theology	22.0000	2.89200	12

			Medicine	14.0000	3.74166	4
			Total	17.6552	4.93729	29
		Post	Human	11.7143	3.71676	21
			LAW	17.6667	4.93288	3
			Theology	19.1667	5.00606	12
			Total	14.6944	5.48671	36
		Total	Human	12.3231	3.06751	65
			LAW	16.5833	3.90002	24
			Theology	20.7813	3.81622	32
			Medicine	12.1111	3.25747	9
			Total	15.1769	4.94538	13
						0
25-31	Male	First	Human	11.5000	1.64317	6
			LAW	14.7500	3.30404	4
			Theology	20.4000	3.78153	5
			Medicine	12.0000	2.00000	3
			Total	14.7778	4.58329	18
		Senior	LAW	16.3200	2.68825	25
			Theology	20.9231	2.21591	13
			Medicine	16.2759	2.92644	29
			Total	17.1940	3.24849	67
		Post	Theology	19.0000	1.00000	3
			Total	19.0000	1.00000	3
		Total	Human	11.5000	1.64317	6
			LAW	16.1034	2.76902	29
			Theology	20.5238	2.52228	21
			Medicine	15.8750	3.09787	32
			Total	16.7614	3.64201	88
	Female	First	Human	13.1667	1.72240	6
			LAW	17.1250	3.31393	8
			Theology	21.0000	.	1
			Medicine	17.6667	2.17945	9
			Total	16.5000	3.17600	24
		Senior	LAW	16.0833	2.82715	24
			Theology	20.3636	3.10718	11
			Medicine	17.5435	3.22288	46
			Total	17.4938	3.32838	81
		Post	Theology	19.6667	4.16333	3
			Total	19.6667	4.16333	3
		Total	Human	13.1667	1.72240	6
			LAW	16.3438	2.93598	32
			Theology	20.2667	3.08143	15
			Medicine	17.5636	3.05968	55
			Total	17.3333	3.33209	10
						8
	Total	First	Human	12.3333	1.82574	12
			LAW	16.3333	3.36650	12
			Theology	20.5000	3.39116	6
			Medicine	16.2500	3.27872	12
			Total	15.7619	3.88750	42

32-39	Male	Senior	LAW	16.2041	2.73084	49
			Theology	20.6667	2.61545	24
			Medicine	17.0533	3.15326	75
			Total	17.3581	3.28470	148
		Post	Theology	19.3333	2.73252	6
			Total	19.3333	2.73252	6
		Total	Human	12.3333	1.82574	12
			LAW	16.2295	2.83663	61
			Theology	20.4167	2.72947	36
			Medicine	16.9425	3.16359	87
			Total	17.0765	3.47729	196
		First	Theology	19.0000	.	1
			Total	19.0000	.	1
		Senior	LAW	15.0000	4.39697	7
			Theology	19.0000	3.20713	8
			Medicine	16.3333	1.52753	3
			Total	17.0000	3.86538	18
		Post	LAW	20.0000	.	1
			Theology	20.3333	1.15470	3
			Total	20.2500	.95743	4
		Total	LAW	15.6250	4.43807	8
			Theology	19.3333	2.67423	12
			Medicine	16.3333	1.52753	3
			Total	17.6522	3.65076	23
	Female	First	Theology	16.6667	1.52753	3
			Total	16.6667	1.52753	3
		Senior	Human	10.4444	2.06828	9
			LAW	15.2500	.95743	4
			Theology	17.8000	1.87380	10
			Total	14.4783	3.85969	23
		Post	Human	9.2857	2.13809	7
			LAW	18.0000	.00000	2
			Theology	15.0000	1.41421	2
			Total	11.9091	4.13412	11
		Total	Human	9.9375	2.11246	16
			LAW	16.1667	1.60208	6
			Theology	17.2000	1.93465	15
			Total	13.8919	4.00544	37
	Total	First	Theology	17.2500	1.70783	4
			Total	17.2500	1.70783	4
		Senior	Human	10.4444	2.06828	9
			LAW	15.0909	3.44832	11
			Theology	18.3333	2.54374	18
			Medicine	16.3333	1.52753	3
			Total	15.5854	4.01855	41
		Post	Human	9.2857	2.13809	7
			LAW	18.6667	1.15470	3
			Theology	18.2000	3.11448	5

40+	Male	Post	Total	Total Human	14.1333	5.19432	15
				LAW	9.9375	2.11246	16
				Theology	15.8571	3.41619	14
				Medicine	18.1481	2.49158	27
			Total	Total	16.3333	1.52753	3
	Female	Post	Theology	Total	15.3333	4.26124	60
			Total	Total	15.8000	3.42053	5
				Total	15.8000	3.42053	5
				Total	15.8000	3.42053	5
				Total	15.8000	3.42053	5
Total	Male	First	Total	Total Human	10.0000	.	1
				Total	10.0000	.	1
				Total	10.0000	.	1
				Total	10.0000	.	1
				Total	10.0000	.	1
	Female	Post	Theology	Total	10.0000	.	1
			Total	Total	10.0000	.	1
				Total	10.0000	.	1
				Total	10.0000	.	1
				Total	10.0000	.	1
Total	Male	Senior	Total	Total Human	15.8000	3.42053	5
				Total	14.8333	3.86868	6
				Total	10.0000	.	1
				Total	15.8000	3.42053	5
				Total	14.8333	3.86868	6
	Female	Post	Theology	Total	15.8000	3.42053	5
			Total	Total	14.8333	3.86868	6
				Total	10.0000	.	1
				Total	15.8000	3.42053	5
				Total	14.8333	3.86868	6
Total	Male	First	Total	Total Human	12.6875	2.91476	16
				LAW	17.0000	3.71184	10
				Theology	20.6000	2.71621	10
				Medicine	11.7500	1.70783	4
			Total	Total	15.6500	4.50384	40
	Female	Post	Theology	Total	13.0000	.	1
			Total	Total	15.8049	3.39278	41
				Total	20.7188	2.83110	32
				Total	16.1818	2.82239	33
				Total	17.3645	3.74768	10
Total	Male	Senior	Total	Total Human	14.2000	3.03315	5
				LAW	17.6667	4.93288	3
				Theology	18.2500	4.35135	20
				Total	17.4643	4.35024	28
				Total	13.0455	2.86983	22
	Female	Post	Theology	Total	16.1296	3.50765	54
			Total	Total	19.9032	3.51908	62
				Total	15.7027	3.04471	37
				Total	16.9886	4.07119	17
				Total	12.4054	2.46598	37
Total	Male	First	Total	Total Human	16.9231	3.14806	13
				LAW	19.6250	3.24863	8
				Theology	15.4615	4.05412	13
				Medicine	14.6056	3.90779	71
			Total	Total	11.0909	2.34327	11
	Female	Post	Theology	Total	15.9655	2.59784	29
			Total	Total	19.4091	3.04973	22
				Total	17.3469	3.34509	49
				Total	17.3469	3.34509	49
				Total	17.3469	3.34509	49

		Total	16.7748	3.71651	111
	Post	Human	10.4167	3.22917	24
		LAW	18.6667	1.15470	3
		Theology	18.8750	3.44083	8
		Total	13.0571	5.02314	35
	Total	Human	11.5417	2.84302	72
		LAW	16.4222	2.75919	45
		Theology	19.3421	3.09556	38
		Medicine	16.9516	3.55485	62
		Total	15.4654	4.24482	217
Total	First	Human	12.4906	2.58414	53
		LAW	16.9565	3.32317	23
		Theology	20.1667	2.91548	18
		Medicine	14.5882	3.93794	17
		Total	14.9820	4.14286	111
	Senior	Human	11.2500	2.30119	12
		LAW	15.8714	3.06888	70
		Theology	20.1852	2.96568	54
		Medicine	16.8780	3.17937	82
		Total	17.0642	3.73494	218
	Post	Human	11.0690	3.46339	29
		LAW	18.1667	3.25064	6
		Theology	18.4286	4.05909	28
		Total	15.0159	5.19147	63
	Total	Human	11.8936	2.90520	94
		LAW	16.2626	3.17704	99
		Theology	19.6900	3.35958	100
		Medicine	16.4848	3.41176	99
		Total	16.1454	4.23139	392

APPENDIX 6: Results from belief in autonomy

	Age	Gender	Y. Study	Faculty	Mean	Std. Dev	N
autonomy	18-24	Male	First	Human	5.9000	2.51440	10
				LAW	4.5000	1.04881	6
				Theology	5.0000	1.41421	4
				Medicine	6.0000	.	1
				Total	5.3333	1.95789	21
			Senior	Human	8.0000	.	1
				LAW	4.7778	1.30171	9
				Theology	6.0909	2.07145	11
				Medicine	4.0000	.	1
				Total	5.5455	1.87025	22
			Post	Human	5.6000	2.30217	5
				LAW	4.0000	.00000	2
				Theology	5.4444	2.29734	9
				Total	5.3125	2.12034	16
			Total	Human	5.9375	2.35142	16
				LAW	4.5882	1.12132	17
				Theology	5.6667	2.03591	24
				Medicine	5.0000	1.41421	2
				Total	5.4068	1.93977	59
		Female	First	Human	5.5161	2.42034	31
				LAW	5.0000	1.00000	5
				Theology	5.5000	2.08167	4
				Medicine	6.0000	2.30940	4
				Total	5.5000	2.21517	44
			Senior	Human	6.0000	.00000	2
				LAW	6.0000	.	1
				Theology	10.0000	.	1
				Medicine	5.3333	1.52753	3
				Total	6.2857	1.88982	7
			Post	Human	5.1250	2.09364	16
				LAW	4.0000	.	1
				Theology	6.0000	1.73205	3
				Total	5.2000	1.98945	20
			Total	Human	5.4082	2.25387	49
				LAW	5.0000	1.00000	7
				Theology	6.2500	2.25198	8
				Medicine	5.7143	1.88982	7
				Total	5.4930	2.11710	71
		Total	First	Human	5.6098	2.41742	41
				LAW	4.7273	1.00905	11
				Theology	5.2500	1.66905	8
				Medicine	6.0000	2.00000	5
				Total	5.4462	2.12155	65
			Senior	Human	6.6667	1.15470	3
				LAW	4.9000	1.28668	10
				Theology	6.4167	2.27470	12

25-31	Male	Post	Medicine	5.0000	1.41421	4
			Total	5.7241	1.86885	29
			Human	5.2381	2.09535	21
			LAW	4.0000	.00000	3
			Theology	5.5833	2.10878	12
		Total	Total	5.2500	2.01955	36
			Human	5.5385	2.27127	65
			LAW	4.7083	1.08264	24
			Theology	5.8125	2.07034	32
			Medicine	5.5556	1.74005	9
		First	Total	5.4538	2.03120	130
			Human	5.1667	.75277	6
			LAW	5.7500	2.06155	4
			Theology	7.2000	2.28035	5
			Medicine	8.3333	1.52753	3
		Senior	Total	6.3889	1.97451	18
			LAW	5.4400	1.55671	25
			Theology	6.9231	2.66025	13
			Medicine	7.3448	2.27213	29
			Total	6.5522	2.26491	67
	Post	Theology	8.0000	2.00000	3	
		Total	8.0000	2.00000	3	
	Female	Total	Human	5.1667	.75277	6
			LAW	5.4828	1.59510	29
			Theology	7.1429	2.41424	21
			Medicine	7.4375	2.21341	32
			Total	6.5682	2.19611	88
		First	Human	5.3333	1.03280	6
			LAW	4.5000	1.19523	8
			Theology	5.0000	.	1
			Medicine	8.2222	1.48137	9
			Total	6.1250	2.07076	24
	Senior	LAW	5.7917	1.38247	24	
		Theology	6.1818	2.52262	11	
		Medicine	6.4348	2.20758	46	
		Total	6.2099	2.04154	81	
		Post	Theology	6.0000	2.00000	3
	Total		6.0000	2.00000	3	
	Total	Total	Human	5.3333	1.03280	6
			LAW	5.4688	1.43649	32
			Theology	6.0667	2.28244	15
			Medicine	6.7273	2.19810	55
			Total	6.1852	2.02853	108
		First	Human	5.2500	.86603	12
			LAW	4.9167	1.56428	12
			Theology	6.8333	2.22860	6
			Medicine	8.2500	1.42223	12
			Total	6.2381	2.00985	42
	Senior	LAW	5.6122	1.46936	49	
		Theology	6.5833	2.56933	24	

32-39	Male		Medicine	6.7867	2.26187	75
			Total	6.3649	2.14492	148
		Post	Theology	7.0000	2.09762	6
			Total	7.0000	2.09762	6
		Total	Human	5.2500	.86603	12
			LAW	5.4754	1.50118	61
			Theology	6.6944	2.38830	36
			Medicine	6.9885	2.21776	87
		First	Total	6.3571	2.10859	196
			Theology	4.0000	.	1
			Total	4.0000	.	1
			LAW	7.1429	1.57359	7
		Senior	Theology	5.8750	2.03101	8
			Medicine	6.3333	.57735	3
			Total	6.4444	1.72259	18
			LAW	6.0000	.	1
	Female	Post	Theology	6.0000	3.46410	3
			Total	6.0000	2.82843	4
		Total	LAW	7.0000	1.51186	8
			Theology	5.7500	2.26134	12
			Medicine	6.3333	.57735	3
			Total	6.2609	1.91210	23
		First	Theology	6.0000	2.00000	3
			Total	6.0000	2.00000	3
		Senior	Human	4.5556	1.23603	9
			LAW	7.2500	2.06155	4
			Theology	6.1000	1.19722	10
			Total	5.6957	1.66337	23
		Post	Human	3.8571	1.21499	7
			LAW	5.0000	.00000	2
			Theology	3.5000	2.12132	2
			Total	4.0000	1.26491	11
	Total	Total	Human	4.2500	1.23828	16
			LAW	6.5000	1.97484	6
			Theology	5.7333	1.62422	15
			Total	5.2162	1.73422	37
		First	Theology	5.5000	1.91485	4
			Total	5.5000	1.91485	4
		Senior	Human	4.5556	1.23603	9
			LAW	7.1818	1.66242	11
			Theology	6.0000	1.57181	18
			Medicine	6.3333	.57735	3
		Post	Total	6.0244	1.71008	41
			Human	3.8571	1.21499	7
			LAW	5.3333	.57735	3
			Theology	5.0000	3.00000	5
		Total	Total	4.5333	1.92230	15
			Human	4.2500	1.23828	16
			LAW	6.7857	1.67233	14
			Theology	5.7407	1.89316	27

			Medicine	6.3333	.57735	3
			Total	5.6167	1.86030	60
40+	Male	Post	Theology	5.6000	3.50714	5
			Total	5.6000	3.50714	5
		Total	Theology	5.6000	3.50714	5
			Total	5.6000	3.50714	5
	Female	Post	Human	4.0000	.	1
			Total	4.0000	.	1
		Total	Human	4.0000	.	1
			Total	4.0000	.	1
	Total	Post	Human	4.0000	.	1
			Theology	5.6000	3.50714	5
			Total	5.3333	3.20416	6
		Total	Human	4.0000	.	1
			Theology	5.6000	3.50714	5
			Total	5.3333	3.20416	6
Total	Male	First	Human	5.6250	2.02896	16
			LAW	5.0000	1.56347	10
			Theology	6.0000	2.16025	10
			Medicine	7.7500	1.70783	4
			Total	5.7750	2.00624	40
		Senior	Human	8.0000	.	1
			LAW	5.5854	1.65794	41
			Theology	6.3750	2.29656	32
			Medicine	7.1515	2.22375	33
			Total	6.3271	2.12699	107
		Post	Human	5.6000	2.30217	5
			LAW	4.6667	1.15470	3
			Theology	5.9500	2.70429	20
			Total	5.7500	2.48886	28
		Total	Human	5.7273	2.05129	22
			LAW	5.4259	1.62064	54
			Theology	6.1774	2.38523	62
			Medicine	7.2162	2.16198	37
			Total	6.1086	2.16680	175
	Female	First	Human	5.4865	2.24378	37
			LAW	4.6923	1.10940	13
			Theology	5.6250	1.76777	8
			Medicine	7.5385	1.98391	13
			Total	5.7324	2.15113	71
		Senior	Human	4.8182	1.25045	11
			LAW	6.0000	1.51186	29
			Theology	6.3182	2.07906	22
			Medicine	6.3673	2.17652	49
			Total	6.1081	1.95565	111
		Post	Human	4.7083	1.89918	24
			LAW	4.6667	.57735	3
			Theology	5.3750	1.99553	8
			Total	4.8571	1.83340	35
	Total		Human	5.1250	2.02058	72

Total	First	LAW	5.5333	1.48630	45
		Theology	5.9737	1.99305	38
		Medicine	6.6129	2.17553	62
		Total	5.7834	2.04217	217
		Human	5.5283	2.16265	53
		LAW	4.8261	1.30217	23
		Theology	5.8333	1.94785	18
		Medicine	7.5882	1.87279	17
		Total	5.7477	2.09097	111
		Human	5.0833	1.50504	12
		LAW	5.7571	1.60105	70
		Theology	6.3519	2.19052	54
	Senior	Medicine	6.6829	2.21598	82
		Total	6.2156	2.03977	218
		Human	4.8621	1.95894	29
		LAW	4.6667	.81650	6
	Post	Theology	5.7857	2.49974	28
		Total	5.2540	2.17736	63
		Human	5.2660	2.03293	94
		LAW	5.4747	1.55408	99
	Total	Theology	6.1000	2.23607	100
		Medicine	6.8384	2.17925	99
		Total	5.9286	2.10225	392

APPENDIX 7: GENERAL COMMENTS FROM STUDENTS

Comment	Frequency	Percent
1. Euthanasia should be legalized	34	8.5
2. More information on euthanasia should be provided	11	2.7
3. Euthanasia is against the commandments of God	10	2.5
4. No comment	3	0.75
5. Never heard of practice of euthanasia	2	0.5
6. Nil	340	85