

**FACTORS STIFLING CRITICAL THINKING DISPOSITIONS OF THIRD YEAR STUDENTS AT
MORGENSTER TEACHERS' COLLEGE**

by

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ABBREVIATIONS

CCTDI California Critical Thinking Disposition Inventory

CTDs Critical Thinking Dispositions

MTC Morgenster Teachers' College

RCZ Reformed Church in Zimbabwe

VOA Voice of America

ZBC Zimbabwe Broadcasting Corporation

APPENDIX

APPENDIX A: Letter seeking for permission to carryout research at Morgenster Teachers' College

APPENDIX B: Interview schedule for the focus group interviews

APPENDIX C: Questionnaire-cum test

APPENDIX D: Rating scale for assessing some of the students' dispositions towards critical thinking as one presents oneself in an essay

APPENDIX E: Focus group interview transcripts of the key questions

ABSTRACT

Research has it that students in institutions of higher learning the world over evidence stifled critical thinking dispositions in their studies. Some researchers in countries like the United States of America have come up with findings about critical thinking dispositions peculiar to their contexts and hence not universally applicable. Factors that stifle critical thinking dispositions of students in Zimbabwean institutions of higher learning had not been studied *per se*. This research focuses on factors that stifle critical thinking dispositions of third year students at Morgenster Teachers' College in Zimbabwe. Both the qualitative and the quantitative research approaches were employed in this research. Focus group interviews and questionnaires were used to generate data. Third year students at Morgenster Teachers' College were studied. The research findings reveal that the factors that stifle critical thinking dispositions in the students are individualistic, structuralistic, socio-cultural and political. In this study, it is recommended that the lecturers can alleviate the effects of the factors that stifle critical thinking dispositions by exposing students to critical thinking situations.

Key terms

Critical thinking dispositions, Individualistic factors, structuralistic factors, socio-cultural factors, political factors, Morgenster Teachers' College

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CHAPTER ONE

1.1 Introduction

Interest in the development of critical thinking dispositions in learners has increased in different countries since the 1980s (Ennis, 1993; Smith 2002). The interest is both reactive and proactive. It is reactive in the sense that some stakeholders in education, namely national governments and employers argue that it is imperative that all sectors of education prepare individuals for critical thinking (Bailin, Case, Combs and Daniels 1999; Pithers 2000). The interest is proactive in that “in an increasingly complex and competitive society, it is imperative that people think critically...” (Van den Berg 2004:284). People with critical thinking dispositions are proactive in problem-finding and problem-solving (Higgs and Higgs 2001). One who is able to solve problems would have received quality education (Lipman 1998). Developing critical thinking dispositions is thus a criterion of quality education and an important goal (Nitko 2001). In the United States of America, critical thinking was urged as a goal of education in policy documents such as “The Central Purpose of American Education” of 1961 (Ennis 1993). In response to the urged goal, some formal programmes for developing critical thinking dispositions were instituted for example the ‘philosophy for children programme’. It was thought that the programme would address the low level thinking skills exhibited by university and secondary school learners (Le Buis, Caron and Daniel 1993). Critical thinking dispositions were thus strongly believed to be developed through doing philosophy (Peresuh and Nhundu 1999).

Doing philosophy to develop critical thinking disposition is contextual that is the means used in the United States to develop critical thinking dispositions in learners should not be over-generalised to every similar situation anywhere. The third year diploma students of Morgenster Teachers’ College could need means that are different in either degree or kind. It is most likely that these third year diploma students with their “ubuntu/unhu” orientations and other factors peculiar to them, could be having unique experiences that stifle their critical thinking dispositions. One should therefore firstly establish the factors that stifle critical thinking dispositions at an institutional, micro level before adopting treatments from other countries. The third year students at Morgenster Teachers’ College could have been to some extent

influenced by their institution's culture for the past two years at the institution. It could be desirable to understand the factors that are peculiar to the institution since these could be easier to control than the other factors. Any institutional factors that stifle critical thinking dispositions, should be identified then consciously controlled as early as the students enter college. By the time the students are in third year, the effects of the factors on stifling critical thinking dispositions could have been alleviated to some extent.

1.2 Background

The emphasis on the development of critical thinking dispositions by stakeholders in education was evoked by an over abundance of memorisation of information by students (Jacobs, Gawe and Vakalisa; 2000). The learners could not "judge" the advice of the "expert" with regard to information and thus became unaware pawns in written and spoken word. The situation of the learners showed that their critical thinking dispositions are being stifled.

The third year diploma students at Morgenster Teachers' College have exhibited stifled critical thinking dispositions in philosophy of education. The claim is confirmed by the Theory of Education Examinations Reports (October 2006; July 2007; October 2008; July 2009 and March 2010). The reports point out that the students tended to be too narrative instead of being critical of situations. In other words the reports claim that the students were merely recalling facts. Insights to the situation are postulated by Van den Berg (2004:285);

since recall is easy to assess, teachers may become accustomed to concentrating on this skill at the expense of higher or more complex levels of learning, learners easily get into the habit of answering questions which only require lower-order thinking skills.

The quotation implies that the lecturers could contribute to some extent to the stifling of critical thinking dispositions. They could be stifling critical thinking dispositions by concentrating on lower order thinking skills. When students are exposed to such situations, their critical thinking dispositions in the teaching-learning situation could be stifled. Thus teachers could contribute to stifling of critical thinking dispositions and there could be other factors that also stifle critical thinking dispositions.

The third year diploma students of Morgenster Teachers' College are in their own situation that is unique. Their college is a private institution and the only teachers' college of the Reformed Church in Zimbabwe (RCZ). The uniqueness is partly brought out by the extent of the evangelism being promoted at the college. Every student teacher is expected to be a model of an evangelist. Morgenster Teachers' College has a long standing history of evangelism. It was the first teachers' college in Zimbabwe, established in 1902 by the Dutch missionaries. Some of the then standing goals of the college were evangelisation and proselytising the illiterate Zimbabwean Africans to Christianity. Since then most of the undertakings of the college were guided by Christian doctrines. About fifty percent (50%) of the students are recruited into the college on the basis of the extent of their religious participation in respective RCZ congregations. Even though the recruits meet basic academic entry requirements, in instances of stiff competition, they beat their competitors because of recommendations from their ministers of religion. About eighty percent (80%) of the lecturing staff are strong church members with track records. This situation is very much likely to have lecturers as proselytising ideologues who could be indoctrinating students. Some lecturers lead church services and students are encouraged and sometimes compelled to attend these services that are held four times a week. The proselytising role of the lecturer during church services could be transferred directly into the lecture rooms and could stifle critical thinking dispositions in the student. The situation of the third year diploma students of Morgenster Teachers' College is not solely determined by their religious orientation, there could be other variables that are socio-cultural, political and/or individualistic that could stifle critical thinking dispositions.

1.3 Research question and hypotheses

1.3.1 Research question

What are the factors and extent of their contribution to stifling critical thinking dispositions of third year students at Morgenster Teachers' College?

1.3.2 Hypotheses

The research question is too complicated to be investigated objectively so it is imperative to have narrowly focused statements for investigations. The statements are the hypotheses. A hypothesis is a proposition to be tested or tentative statement of a relationship between certain independent variables and the dependent variable which is the evidenced critical thinking dispositions of third year students at Morgenster Teachers' College (Neuman 1997). The data to be collected and analysed would be there to either prove or disprove the hypotheses.

The hypotheses for the study are;

- The religious orientation of the third year students at Morgenster Teachers' College (MTC) stifles their critical thinking dispositions (CTDs).
- The narrow self-theories of the third year students at MTC stifle their CTDs.
- The femininity orientations of some third year students at MTC stifle their CTDs.
- The closeness of the prevailing political system in the country stifles CTDs of the third year students at MTC.
- The incessant employment of monologic teaching techniques contributes to the stifling of CTDs of the third year students at MTC.
- Insufficient psychological time stifles CTDs of the third year students at MTC.
- The "Ubuntuist/Unhuist" ethics like gerontocracy stifle CTDs of the third year students at MTC.

1.4 The aim of the research

The aim of the research determines the type of the research. The aim of this research is to identify and discuss the nature and intensity of factors that stifle critical thinking dispositions. The research type of this study is explanatory. "The word 'explanation' in critical rationalism always refers to the causes of something" (Higgs and Smith 2002:117) Thus the major aim of this study is to indicate causality between variables and events (Hoberg 2001). When the factors that stifle critical thinking and the intensities thereof are identified and established respectively, that could lead to thinking of effective means that could promote development of critical thinking dispositions.

1.5 Definitions of terms

For a focused study of critical thinking, it could be imperative to consider the etymology of the word “critical”. According to Mc Durmon (2009); The word ‘critical’ merely comes from the common Greek word ‘krites’ which means ‘a judge’ and appears in many related forms (‘krima’, ‘krivo’, ‘krisis’ and others). Perhaps the closest sounding equivalent to our English ‘critical’ is ‘kritikos’ – meaning able to judge (discern ...)

From the derivation of the term it can be deciphered that thinking that is regarded as critical thinking must be directed towards forming a judgement. Critical thinking thus requires strong thinking skills that are special capacities extending beyond ‘mere ability to think’ (Smith 2002). One should make up his/her mind about what to believe or do (Bailin et al. 1999). Critical thinking has been defined in a myriad of ways but the ways are focused on the forming of a judgement. The definition that is more in accordance with the contemporary conception of the term is; “Critical thinking is reasonable reflective thinking focused on deciding what to believe or do” (Ennis 1996). In an endeavour to clarify the definition Nitko (2001) lists some critical thinking dispositions and abilities that can be evidenced by the student and hence assessed by the educator. In other words, an attempt was made to develop an operational definition of critical thinking from the conceptual definition (Hoberg 2001). According to Ennis (1993) critical thinking dispositions are indispensable in guiding specificity in the study of critical thinking. “... a disposition is a tendency to do something, given certain conditions” (Ennis 1996;166). From the definition given a disposition is not observable. It is evidenced by the students in some given situations.

Critical thinking dispositions have been focused on in detail by Ennis (1993:180);

In reasonably and effectively going about deciding what to believe or do, a person characteristically needs to do most of these things (and do them interdependently);

1. Judge the credibility of sources.
2. Identify conclusions, reasons and assumptions
3. Judge the quality of an argument, including the acceptability of its reasons, assumptions and evidence.
4. Develop and defend a position on an issue.
5. Ask appropriate clarifying questions.
6. Plan experiments and judge experimental designs.

- 7 Define terms in a way appropriate for the context.
- 8 Be open-minded.
- 9 Try to be well informed
- 10 Draw conclusions when warranted, but with caution.

The interdependent list of critical thinking dispositions is to be referred to when designing a critical thinking test which is the maximal performance test. The core disposition that must be focused on is the one itemized 3, “judge the quality of an argument, including the acceptability of its reasons, assumptions and evidence.” The disposition encompasses important evidence of critical thinking dispositions. The definition given by Ennis (1993) is focused on two activities about one’s convictions and actions. The activities are; firstly, providing reasons for the convictions and actions. Critical thinking thus has some basis on critical rationalism. Critical rationalism encourages us to question what we are told and provide reasons for our convictions and actions (Higgs and Smith, 2000; Higgs and Smith 2002). The role of reason in critical thinking has been over emphasised by some theorists. Parkinson (1988:630) postulates, “Critical thinking is a rational thinking. When we employ it we listen to reason as to a father.” The overemphasis of the role of reason has resulted in a limited definition of critical thinking. However, good reasoning is a requisite skill for critical thinking (Barrow, 1981; Atkinson 1999).

The second activity in which critical thinking is involved in is reflecting on one’s convictions and actions. “Reflection is an important human activity in which people recapture their experience, think about it, mull it over and evaluate it” (Boud, Keogh and Walker 1996:33). Reflection thus is about thinking well that involves weighing alternatives in the light of some standards (Higgs and Higgs 2001). The reflective aspect lends critical thinking to have roots in hermeneutics, phenomenology and critical theory. Reflection is embedded in phenomenology in that phenomenology is a philosophy that looks on human experience as a mixture of feeling, awareness and consciousness that can be understood by looking again “reflecting” on the experience (Higgs and Smith 2002). Reflection has roots in hermeneutics in that, hermeneutics is a philosophy that views life as a process of interpretation of experience (Higgs and Smith 2002; Hoberg 2001).

Critical theory gives a theoretical framework to reflection and hence critical thinking. Critical theory is a philosophy that claims that truth about human experience is created and uncreated by human beings when they think critically. Critical thinking has roots in various philosophical meta-theories and hence is important in the philosophy of education realm. However, Lipman (1991) warns critical thinkers that criticism of “facts” in favour of “thinking” in education is pedagogically being irresponsible. Critical thinking is cognitive accountability that is done for a purpose for example improving discourse in all spheres of life. When a student has stifled critical thinking dispositions, he/she does thinking in fixed ways. He/she challenges nothing done or said in her presence and unquestioningly accepts everything (Venter and Higgs 2005). One with stifled critical thinking dispositions thus does thinking in limited simple terms.

Students with stifled critical thinking dispositions could be doing their thinking at the intuitive level. According to Parkinson (1988:629), thinking at intuitive level, “... consists in the application of generally accepted principles such as truth telling, promise keeping ...which we take as given and do not question.” The thinking done at this level is based on morals that are universally accepted in particular communities. The third year students at MTC could be vulnerable to this thinking since their community is highly evangelical and greatly emphasises on moral values. De Jager, Oberholzer, Reeler and Landman (1988:122) consider stifled critical thinking dispositions as manifested in superficial thinking. An individual who does thinking at this level is satisfied with superficiality based on prima facie opinions and consequently gives facile responses. The aspects of the contextual definitions of stifled critical thinking dispositions are condensed into an operational definition. The extent of stifled critical thinking dispositions were indicated by a score on a critical thinking disposition test. The test focused on non-sceptical and orthodox thinking and readiness of acceptance of things said or done. For a precise measurement of stifled critical thinking dispositions, “the critical thinking dispositions inventories” by Nitko (2001:228) were considered in the crafting of the rating scale for assessing the quality of some of the students’ dispositions towards critical thinking in writing an essay.

The narrow self theories of some people could stifle critical thinking dispositions. “ A person with a narrow self theory will experience life in a relatively simplified fashion. Things for him should be black or white, and he characteristically should exhibit repression and rigidity” (Epstein 1973:05). The characteristics described above bear some evidence of stifled critical thinking dispositions particularly the dispositions of open-mindedness. Epstein further postulates, “... an individual with a narrow self-theory will tend to avoid drawing inferences that disturb the stability he has achieved through limiting his ways of construing the world and himself”. Students with narrow self theories thus want to maintain the status quo.

The self concept can be redefined as self-theory (Epstein 1973). However, the term self-theory is rarely used in academic literature. Very interesting insights are reported by Myburgh, Grobler and Niehaus (1999) that the academic self-concept has a stronger effect on scholastic achievement than the intelligence quotient (IQ) of a student. Since critical thinking has become one of the major goals of education, it constitutes academic achievement. Following the reports by Myburgh et al., it follows that it may not be worth the effort to try to find out the students' IQs (in relation to CTDs) when their academic self concepts have been established. The narrow self-theory of the student was indicated by a low valuation of one's abilities and skills.

The incessant employment of monologic teaching techniques on third year students at MTC could contribute to the stifling of their CTDs. “Knowledge in monologic teaching is regarded as bodies of stable facts and theories transferred to learners, external to learners” (Gravett 2001:38). Monologic teaching fits well under the approach referred to as the banking concept of education. Freire (1972:48) posits, “The banking approach to adult education for example , will never propose to the students that they consider reality critically.” The monologic teaching technique thus has a high potential to stifle critical thinking dispositions. The extent of the incessant employment of monologic teaching techniques was indicated by a total score of ratings on responses to items (on Likert scale) about the scope of action allowed to students during lectures.

The closed political system in a country could have direct and indirect influence on the development of critical thinking dispositions. A closed political system has a

dictatorial government that tries to stay in power by perpetuating the closed system (Higgs and Smith 2002). The perpetuation of the closed political system is done by nurturing a mind set which is dogmatic, apprehensive and closed. Letseka (1995) postulates that the closeness of the political system in a country is manifested in the education system. Letseka (1995) further goes on to give the apartheid regime in South Africa as an example of the closed system. Further examples were given by Higgs and Smith (2002:40), "Idi Amin in Uganda, Mengistu in Ethiopia, Samuel Doe in Liberia ... Robert Mugabe seems to be in the process of doing the same thing." That was then about Robert Mugabe. The situation could have worsened. An editorial on the Voice of America (VOA) of the 20th of March 2009 says that a United States magazine ranks Robert Mugabe as the worst dictator of all world leaders. Dictators run closed systems. The effects of the closeness of the political system in Zimbabwe could both directly or indirectly (through the education curriculum) stifle critical thinking dispositions by making learners apprehensive. The extent of the closeness of the political system was indicated by a total score of ratings on responses to items (on a Likert scale) about one's apprehensiveness of the prevailing political situation.

The development of critical thinking dispositions has some cultural biases (Ennis 1996). Some "ubuntuist/unhuist" ethics such as gerontocracy could have some stifling effects on critical thinking dispositions. Higgs and Smith (2000:58) postulate, "The central ethical idea in traditional Africa thought is "ubuntu". The definition seems to encompass all the "Black" people of the continent. It could be more comprehensive if it could be focused on a specific people of Southern Africa. For this research the following definition was adopted; "ubuntuism/unhuism" are the central, ethnic, ethical, collective, ideas in traditional thought of 'Blacks' in Southern Africa who are of the "-ntu" and "-nhu" cultural origin. The ethnicity of "Ubuntuism/Unhuism" implies that it could be vulnerable to emasculation due to influences of other cultures. In some situations it is trivial to consider the racial dimension when dealing with issues of "Ubuntuism/Unhuism" since there are some 'Blacks' who do not subscribe to the values of "Ubuntuism/Unhuism" . One's adherence to the values of "Ubuntuism/Unhuism" is more important than the racial dimension.

Gerontocracy is the influence elders have on the lives of the young in particular societies south of the Sahara (WisegEEK 2010). In “ubuntuist/unhuist” societies, “it was important for parents and society to inculcate in children respect for age”, (Peresuh and Nhundu 1999:08). The need for respect for age is also highlighted by Coetzee and Roux (1998:43), “ The virtue of respect [is interpreted] as respect for the aged ... and the older person is more of a person than a younger one because he/she has more to offer by way of knowledge and experience, personal experience and power.” When there is power involved, there is inevitable resort to structures of the closed system. The elders could wield so much power that the critical thinking dispositions of the young about societal beliefs and practices are stifled. However, “ubuntuism/unhuism” has as one of its methods of enquiry sage or wisdom philosophy. According to the Kenyan philosopher, Odera Oruka, sage philosophy focuses on those individuals in society who are known to be wise and far-sighted and who can demonstrate their ability to think critically (Higgs and Smith 2000; Coetzee and Roux 1998). Sage philosophy has the potential to promote critical thinking dispositions but this could be done belatedly. The extent of one’s adherence to the values of “ubuntuism/unhuism” was indicated by a total score of ratings on the responses to items (on Likert scale) about one’s traditional convictions and practices.

There is gender bias of critical thinking dispositions (Ennis 1996). Since gender is culturally defined (Sankaran 2007) there could be some femininity orientations in certain cultures that stifle critical thinking dispositions. Many cultural groups in the world oppress women and inculcate in them some personality traits that are believed to be effective in oppressing them. The traits are for example; pliability, subservience and dependence (Lyons 1979). Femininity transcends the considerations of female sex organs. According to Jung (1968) cited in Higgs and Smith (2002:54), “...no man is entirely so masculine that he has nothing feminine in him.” The quotation means that the possession of female sex organs is not simply tantamount to femininity. One’s orientation in traits that are culturally considered to be feminine is more important. A further confirmation of the point is given by the description of Athena as “... a ‘masculine’ goddess” (Higgs and Smith 2002:56). Femininity could be conceptualised as the inclination one has towards the attributes that are socially constructed to oppress women. Most women accept the inferior status ascribed to them by men as primordial. According to McNell and Townley (1986:343), most

women feel that “it is far more threatening to be unfeminine than to be an under achiever”. The quotation implies that most women have been indoctrinated to the extent that they unquestioningly adopt and become well adapted to an inferior status. They may not be worried of being labelled failures when they do not evidence critical thinking dispositions.

However, some female students could be adherents to the feminist movements. They could have had exposure to the thinking of some feminist groups and could have developed the critical thinking dispositions about femininity issues. However the extent of the development of the dispositions is vulnerable to being underplayed. There is evidence to the fact that this had somehow happened. “Feminists are critical not only of society but also of the way in which female thinkers have been ignored and thus devalued within academic study ...” (Kirby, Kidd, Koubel, Barker, Hope, Kirton, Madry, Manning and Triggs 1996:757). Controversially, with reference to femininity insights discussed earlier, there could be some male students who are feminine. It would be interesting to know how they would evidence critical thinking dispositions in comparison with female students. In this research femininity is one’s social orientation to convictions and practices that promote a soft, pliable, subservient and dependent life style. The extent of femininity was indicated by a total score of ratings on responses to items (on a Likert scale) about one’s convictions about the attributes cited above.

The student teachers are most likely to evidence critical thinking dispositions when they have sufficient time to reflect on what they would be learning. The students thus experience time as experiential or psychical and to them, it is measured or restricted. “Experiential (psychical) time refers to how human beings experience time in accordance with their intentions, needs and aims” (Myburgh et al. 1999:170). The students could be placed under pressure to accomplish some learning tasks within some restricted time. In such situations, critical thinking dispositions are most likely compromised. The insufficiency of psychical time was indicated by a low total score of ratings on responses to items (on a Likert scale) about the availability of time to accomplish needs and aims. There was a further scrutiny of the timetable to find if there were times for reflections on achievement of the learning outcomes by students.

Doing philosophy is philosophizing. "To philosophize, therefore is to reflect or think critically on issues and on concrete human existential situations which may be problematic with a view to providing solutions to them" (Peresuh and Nhundu 1999:58). Doing philosophy is thus one of the effective ways learners are supposed to learn philosophy of education. A typical performance test is a test that measures behaviour. The test has no right or wrong answer but positive and negative poles regarding aspects being measured (Hoberg 2001). The items on a Likert scale constitute a form of a typical performance test. The responses to the items can be summed up to get one's attitude towards phenomenon (Louw 1993; Neuman 1997; Mellet 2004). A maximal performance test is a test that measures an individual's relative performance under certain circumstances. The responses to the item in the test can either be wrong or right (Hoberg: 2001). The maximal performance test is going to be used to measure the extent of critical thinking dispositions of the students. The extent of factors' contribution to critical thinking is the part or percentage of the total variation of the dependent variable (critical thinking) that can be explained by its relationship with the independent variable (each of the factors in the hypotheses) (Lieberg and Nicholau 1993). The coefficients of determination were calculated to help explain the extent of the contribution. A high coefficient of determination indicates a high contribution of the factor to critical thinking. Factors are the circumstances that contribute to a result. In this research, the result is critical thinking.

1.6 Description of literature

There are two ways of looking at literature review; either as study on its own which some people prefer to call a "literature study", or as a first phase of an empirical study (Mouton 2001). The literature review that was done for this research is the first phase of the empirical research. Mouton (2001:86) postulates, "The term 'literature' review does not in fact, encapsulate all we intend to convey by the term". He is contented that the term scholarship review is more appropriate. According to him it encapsulates finding how other scholars have investigated the research problem one is interested in. Mouton advises that one gets more focused when the term scholarship review is considered. For example the accumulated scholarship on the research on critical thinking refers to the following; definitions of terms, different

theories and hypotheses in the field of critical thinking research, existing data and empirical findings produced by previous researches and measuring instruments that have been developed to measure the extent of the factors stifling critical thinking dispositions. However in this research, the term “literature study” is used bearing in mind the more encapsulating term, “scholarship review”. The review of accumulative scholarship was done on information sources such as books, monographs, conference papers, journal articles, reports and the internet. The literature review for this research was organised by construct. The aims of the organisation were to ascertain; the most widely accepted definitions of key concepts and theories about the constructs being studied (Mouton 2001).

1.7 Research methodology

In this research both the quantitative and qualitative research designs were employed. The combining of qualitative and quantitative approaches is triangulation of methods (De Vos, Strydom, Fouche and Delport 2003). The purpose of triangulation is to increase the reliability of data collected. The importance of triangulation is underscored by Neuman (1997:151), “...getting identical measurements from highly diverse methods implies greater validity than if a single or similar methods have been used.”

1.7.1 The qualitative part

The research method that was used to generate data was the focus group discussions and was influenced phenomenology. “Phenomenology aims to understand and interpret the meaning that subjects give to their everyday lives” (De Vos et al. 2003:273). By the term subjects, De Vos et al. were referring to respondents. The quotation implies that the lived experiences of the respondents were to be described using the respondents’ own words. Thus the meanings that the respondents attached to their experiences were described empathetically. Subsequently the respondents’ (emic) meanings of their experiences were reduced to the central or researchers’ (etic) meanings of the experiences.

1.7.1.1 **Research instruments**

In this research, focus group interviews were used to generate data. The focus group interviews had six or seven participants per session. The focus group interviews have the potential to provide some insights in the generation of more hypotheses that can be tested by using quantitative methodologies (Hoberg 2001).

The interview guide was divided into five categories of questions in accordance with the suggestions provided by Kruger (1994) cited in Hoberg (2001:140);

- The opening question; is intended to establish characteristics that the group members share.
- The introductory question; is intended for foster conversation and interaction among the group members.
- The transition question; is intended to link the introductory question and the key questions.
- The key questions; focus on the elaboration of some factors that contribute to stifled critical thinking dispositions.
- The ending questions; are intended to wind up discussions.

The interview guide was pre-tested. Some respondents, representative of those who participated in the focus group interviews were involved in the pre-test. However, "The true pilot test is the first focus group with the participants" (De Vos et al 2003:316). The insights got from the first group were considered in the group discussions that followed.

1.7.1.2 **Trustworthiness**

At the outset, it is imperative to consider what trustworthiness entails in qualitative research. It is mainly concerned with dependability and credibility. In this research, terms that are used to characterise the various kinds of reproducibility of data amounts to concerns about dependability and terms about the scope and meaning of content and the generalizability of findings within similar contexts amount to concerns about credibility (Kidd and Parshall 2000). In the focus group interviews, in this research, trustworthiness is affected by how data were acquired.

1.7.1.3 **Population, sample and sampling procedures**

The population comprised of twenty third year students at Morgenster Teachers' College of the 2011 academic year. Three groups of six or seven students per group were interviewed. The interview probes were stopped when a point of saturation was reached. The sampling that was done is purposive or judgemental and was done by case type. "... 'case' refers to the in-depth analysis of a phenomenon and not the number of people sampled ..." (Schumacher and Macmillan 1993:382). The case type considered was the typical case – students who do not evidence critical thinking dispositions in philosophy of education.

1.7.1.4 **Data collection and analysis**

Data analysis in qualitative research begins as the interviews are progressing (Neuman 1997). The preliminary analysis gave insight in the appropriateness of questions. The preliminary analysis revealed that there was need to redesign the order of questions for the subsequent focus group interviews.

1.7.2 **The quantitative part**

The research design employed was the quantitative analytical survey. Specifically, the randomised cross-sectional survey was used.

1.7.2.1 **Research instrument**

A questionnaire was used to ascertain the extent to which some variables stifle critical thinking dispositions. The independent variables (that are in the hypotheses) were operationalized. Each independent variable was split into at least five items whose intensities were measured on a Likert scale. The researcher consulted with a data capturing unit to help with the operationalization of independent variables. The unit concurred with the researcher's propositions. The dependent variable, which is the evidence of stifled critical thinking dispositions, was measured using a maximal performance test that was designed by the researcher. The test was administered alongside a questionnaire.

1.7.2.2 **Validity and reliability**

In this research, measurement validity was considered. Focus was on the extent to which the conceptual definitions mesh with the operational definitions. For reliability, equivalence reliability was considered.

1.7.2.3 **Population, sample and sampling procedures**

The whole population was studied. That is all the twenty, third year students at Morgenster Teachers' College of the 2011 academic year were asked to complete the questionnaire

1.7.2.4 **Data collection and analysis**

The questionnaire cum-maximal performance test was group administered. Each of the respondents was issued with a questionnaire. The bivariate statistical analysis was used. Each independent variable was considered with the dependent variable (evidenced) critical thinking dispositions, to enable a description of the relationship about them. The description of the relationship followed after the calculation of the partial correlation coefficients. These quantitatively represented the extent of the influence of the independent variables on the dependent variable.

1.8 **Research ethics**

In this research, research ethics were observed in two categories. Firstly, professional ethics were considered. The results were reported fully, not misrepresenting them in any manner. There was no fabrication of data. All sources made reference to were acknowledged. What the researcher did is stipulated in the UNISA Policy on Research Ethics (2007:04), "Researchers may not commit plagiarism, piracy, falsification or the fabrication of results at any stage of the research. The findings of the research should be reported accurately and truthfully ..."

Secondly, research ethics focused on the rights of the respondents. The researcher observed that respondents have a right to refuse to be interviewed, "Participants are autonomous agents who have a right to choose whether or not to be part of the research" (UNISA Policy on Research Ethics 2007:11). The researcher was very cautious since his informants were his students. "Researchers should be concerned

particularly about the rights and interests of the vulnerable participants, such as ... students and persons in dependent relationships” (UNISA Policy on Research Ethics 2007:15). The researcher did not whatsoever impel and /or compel the students to be interviewed. UNISA Policy on Research Ethics (2007:11) hinds, “researchers should not infringe the autonomy of participants by resorting to coercion, undue influence or the promise of unrealistic benefits.” Also the respondents gave their “informed consent” (Neuman 1997). Their consent to be audio-taped was sought. “Informants have a right to remain anonymous” (Mouton 2001:242). This research ethics is enunciated in the UNISA Policy on Research Ethics (2007:13), “Measures to ensure privacy, anonymity and confidentiality of participants, as well as any risk of breach of confidentiality and anonymity should be explained.” The researcher fully respected this right. Some pseudonyms such as respondent 1, respondent 2, etc were used in the transcription and interpretation of responses.

1.9 Demarcations and limitations of the study

The research is limited to third year students at Morgenster Teachers’ College. The aims of the research are firstly to explain the extent of the influence of the factors that contribute to the stifling of critical thinking dispositions. The other aim is to generalise the factors that influence stifling of critical thinking dispositions of third year students at Morgenster Teachers’ College when doing philosophy of education. The restrictive conditions that the researcher envisaged are as follows; firstly, since the measurement scales for the factors were his own crafting, they could have had reduced validity. Secondly, the triangulation of methods of collecting data led to some repetitions of some research concepts when the two research approaches were considered separately. The triangulation of methods also led to a voluminous the data analysis and interpretation section in chapter four.

1.10 Chapter division

Chapter one

In chapter one, the researcher seeks to highlight the issues that prompted him to carry out this research focussing on the practical value to education. Major components of the whole research are shown.

Chapter two

In chapter two focus is on the scholarship review. What other researchers have found out and how they did it are explored in order to shed light on the whole research.

Chapter three

Chapter three focuses on the research design and methodology. The researcher explains the steps to craft and validate the research instruments. The researcher also looks into strategies to organise respondents, generate or collect data, analyse and interpret the data.

Chapter four

In chapter four, the researcher presents and analyses the data. The researcher also relates the findings to hypotheses and the reviewed literature in order to illuminate the whole research study.

Chapter five

In chapter five, the researcher gives a summary of the research processes, the major findings and their implications to education.

1.11 Conclusion

This chapter focussed on the overview of the whole research. The conceptual framework, the research question, the scope and the road map of the research were explored. The preliminary literature made provided a deeper understanding of the research question and the basis for a more focused literature study in chapter two.

CHAPTER TWO

2.0 LITERATURE STUDY

2.1 Introduction

Literature study has a very important role in an empirical study like this one. It inter alia sharpens and deepens understanding of constructs in the research. The theoretical framework of the research being undertaken is thus delimited and clarified. The researcher therefore develops a sound body of knowledge of the topic under investigation. The clarification of constructs that are considered in the research is indispensable. The constructs that are clarified could be taken as variables that are used to formulate hypotheses. For a comprehensive literature study of the constructs used to formulate hypotheses, a constructive critical approach is adopted. This approach requires the researcher to analyze, compare and evaluate literature rather than simply provide a catalogue of information (Hoberg 2001: 72).

2.2 Organization of literature by construct

Some authoritative theories about constructs are discovered when literature is organized by construct.

2.2.1 Critical thinking dispositions

Critical thinking dispositions are habits of the mind or tendencies to use critical thinking (Nitko 2001). Being habits of the mind, critical thinking dispositions are thus, "...not obvious by inspection... something must happen in order that the dispositions be revealed" (Ennis 1996: 66). Dispositions thus have a hidden quality that must be assessed carefully or else critical thinking abilities could be mistakenly assessed instead. According to Lipman (1991) critical thinking dispositions could best be developed through philosophical questions. Questions are philosophical when they evoke a critical spiritedness that is required in assessing reasons (Tishman and Andrade 2010). "Philosophy is critical thought" (critical thinking website 2010). Thus philosophy is the centre-piece for evidencing critical thinking dispositions through writing or talking. Students should evidence critical thinking dispositions on their own, making enquiries about what they learn without being pushed or prompted to evidence it (Ennis 1992). Evidencing critical thinking is the heart of everyday thinking

(Kuhn 1991). However, evidencing critical thinking dispositions is a 'special' quality that extends beyond the 'mere ability' to think (Smith 2002).

The construct, 'philosophy' that is referred to in the above paragraph is used as an intellectual activity which invites people to question everything they have ever been told and ever believed (Higgs and Smith 2000). It has the characteristics; method, subject matter and purpose. The method of philosophy is rational inquiry into various subjects, provided rationality is upheld. And the purpose of philosophy is a disinterested search for knowledge through reasoning and critical thinking (Mautner 1997). Thus philosophy can be applied in every subject that the students learn.

Critical thinking dispositions are best promoted and assessed in the context of each subject the student is learning (Nitko, 2001; Brookfield, 1987). That is critical thinking dispositions should not be looked at from a generalized standpoint when all subjects that the learner undertakes are considered. Empirically it has been ascertained that people who evidence a disposition in one area, might not well evidence the disposition in another area (McPeck 1990). Also even in one area of study critical thinking dispositions vary from person to person (Brookfield 1987). The reason is "...the depth of knowledge , understanding and experience persons have in a particular area of study or practice is a significant determinant of the degree to which they are capable of thinking critically in that area" (Bailin, Case, Coombs and Daniels 1999:290). Therefore there is evidence that sound knowledge and "good thinking" are inextricably bound up (Pithers 2000). The implication is that the instrument crafted for measuring critical thinking dispositions should have items that are linked to a specific subject area.

The tendency to think critically in a particular subject area is constituted of objectivity, intellectual honesty, impartiality, a willingness to conform judgment and action to principle and a commitment to seek and evaluate reasons (Tishman and Andrade 2010). The student who evidences critical thinking dispositions should thus be open minded and fair minded in evaluating reasons (Books on the subject 2010). Also one of the specific ways a student could evidence a critical thinking disposition is by being habitually inquisitive about issues brought before him/her (Facione, Facione and Carol 2000).

Barrow (1981:46) posits, “One thing that the accomplished critical thinker is, is intelligent.” However the intelligence should not be misconstrued to extremity, to mean academic giftedness. The misconception is evidenced by Weinstein, Goetz and Alexander 1988:325) who refer to a unit in their book about critical thinking thus, “This unit is designed for the gifted and academically able students”. The quotation has implications that only the gifted learners are capable of evidencing the critical thinking disposition. Intelligence is not the sole determinant in evidencing a critical thinking disposition. The intellect of the learner, though important should not be considered as the sole determinant of educability of the learner in critical thinking. Critical thinking includes more than just the intellectual domain since it is supported by other domains such as the emotional domain (Van der Horst and Mc Donald 1999). From the citation it can be implied that every learner, irrespective of his/her intellectual giftedness, should be motivated to develop critical thinking dispositions.

According to Ennis (1996:168), “People who have acquired the critical thinking disposition might then generally be motivated enough to then go on to acquire the ability”. The quotation implies that one should be cautious not to mix up the two issues, critical thinking dispositions and critical thinking abilities. In this research focus is on the critical thinking dispositions which can be evidenced when learners maintain a critical distance from the authority of communal consensus (Coetzee and Roux 1998). On the contrary, those with stifled critical thinking dispositions could be engaged in a plethora of slogans even in matters where serious intellectual discussion is supposed to take place (Barrow 1981). At a certain point in time, I thought it imperative to consider the academic level of the learners when assessing their critical thinking dispositions. My thinking was dispelled by Coetzee and Roux (1998:79) who postulate, “... literacy is not a necessary condition for philosophical reflection and exposition; ...there exists in Africa critical and independent thinkers who guide their thoughts and judgments by their power of reason and inborn insight ...”.

Critical thinking dispositions are not evidenced in academic work only in formal institutions of learning. They can be evidenced in other spheres of life outside the formal institutions especially in the cultural sphere. In fact, “... learning to think critically is one of the most significant activities of adult life” (Higgs and Smith

2002:130). The academic level of the respondents in this research is not going to be considered as a significant variable that influences critical thinking dispositions.

However, quality level of students' disposition toward critical thinking vary with respect to different contexts of the students. It is therefore imperative to consider each student's dispositions for critical thinking as the starting point to ascertain the factors that could be stifling critical thinking dispositions. According to Ennis (2002), dispositions for critical thinking that could be considered are that the critical thinkers are to;

- Seek alternative hypotheses, explanations, conclusions, plans, sources etc and be open to them.
- Endorse a position to the extent that, but only to the extent that it is justified by the information that is available.
- Be well informed.
- Consider seriously other points of view than their own.
- Be clear about the intended meaning of what is said, written, or otherwise communicated, seeking as much precision as the situation requires.
- Determine and maintain focus on the conclusion or question. Seek to offer reasons.
- Take into account the total situation.
- Be reflectively aware of their own basic beliefs.
- Discover and listen to others' views and reasons.
- Avoid intimidating or confusing others with their critical thinking prowess, taking into account others' feelings and level of understanding
- Be concerned about others' welfare.

. The above listed dispositions or habits of the mind can be assessed through checklists and rating scales. The checklists and rating scales are described in detail in chapter three. According to Alston (2001), "... both critical thinking dispositions and obstacles to successful critical thinking are most commonly found in the activities of everyday life". The context in which the learners find themselves is thus the critical contributor of either promoting or stifling critical thinking dispositions. More specifically, nurture, i.e. social and cultural contexts determine how critical thinking dispositions are evidenced (Gee, 1994; Street, 1994). The obstacles to critical

thinking dispositions are thus socio-cultural to a larger extent. What ensues is a literature study on how some socio-cultural contexts could stifle critical thinking dispositions.

2.2.2 Influence of religious orientation on critical thinking dispositions

The influence of religious orientation on critical thinking dispositions is considered generally by the critical rationalists. Karl Popper was against any form of religious ideology. He saw religious ideology as prescriptive in how people should think. According to McDurmon (2009), "Many Christians balk at the mention of critical thinking. They associate the phrase with scepticism of the Bible and religion in general; thus they want nothing to do with it." The attitude described above is most likely developed by religious orientations that are parochial and hence indoctrinating. The Christians who think that they can avoid critical thinking confuse it with unbelieving scepticism (McDurmon 2009) and do their moral thinking at the intuitive level. Moral thinking at the intuitive level could be very much related to indoctrination. Some religious orientations could be more of indoctrination during the proselytization process. The role of indoctrination in religion is confirmed by Peresuh and Nhundu (1999:24) who postulate, "The value of evangelisation and character training... were compatible with colonial aims of creating a loyal, submissive and subservient native who was not capable of challenging the masters." "Indoctrination goes hand in hand with ... intolerance of critical questions" (Griessel and Oberhozer 1994:19). There could be a tendency by students to eschew critical discourse on issues they think are religious. Even some renowned academics could be prone to the tendency. "Trethowan [a renowned academic] eschews talk about a moral argument of God's existence since he thinks that one can come to know God by virtue of ... apprehension" (Davies 1982:97). If renowned academics eschew critical thinking by confusing it (to some extent) with unbelieving scepticism, the third year students at MTC could be in worse a situation. They are under the influences of lecturers who are more of proselytizing ideologues. Proselytizing ideologues are individuals who adhere to some ideology and are in a vantage position to convert other people to their ideology through indoctrination (Brookfield 1985). Indoctrination is "... a situation where a set of beliefs or commands are being passed on as unquestioned truths to be held onto with unshakable conviction" (Letseka 1995:95). Indoctrination

creates dogmatism which is characterised by a unilateral approach to truth (Kirilenko and Korshunorva 1985).

Alongside rationalists, are existentialists like Foucault who are contented that “modern institutions” like “big churches” distort life by forcing their adherents to conform to set rules (Higgs and Smith 2000). “Modern churches could thus have some latent functions of stifling critical thinking dispositions. Peresuh and Nhundu (1999:24) posit;

The values of evangelization and character training were also considered to be of greatest importance by colonial governments because they were compatible with colonial aims of creating a loyal, submissive and subservient native who was not capable of challenging the master

Peresuh and Nhundu imply that evangelization could be having stifling effects on critical thinking. In support of Peresuh and Nhundu is Garmong (2010) who contends , “Religion’s greatest ‘benefit’ would appear to be in making subjects more malleable to control”. The extent of evangelization of the third year students of Morgenster teachers’ college could be contributing to the evidencing of stifled critical thinking dispositions. Barrow (1981:150) postulates, “To demand that the children should take part in religious services and assemblies as many schools do, though this is not in itself to indoctrinate, is to introduce non-rational means of persuasion which may contribute to indoctrination”. The third year students at Morgenster teachers’ college could be experiencing religious lives at the college that could be indoctrinating. “to indoctrinate a person is to make a person accept certain types of beliefs (doctrines and dogmas) in a way that shuts out his or her ability or freedom to ask questions or raise doubts about it” (Akinpelu 1981: 69).

Furthermore, Barrow (1981:150) postulates, “... if schools attempt to send their children out into the world with religious commitment, they are indoctrinating and that being anti-educational, is quite unacceptable”. The quotation implies that an indoctrinating orientation could be detrimental to the achievement of prime educational goals such as promotion of critical thinking dispositions in learners. Encouragement of a strong religious participation could have an ulterior motive. “Slave owners in Southern States of America often supported the conversion of slaves to Christianity believing it to be a controlling, gentling influence” (Halalambos

1985: 462). The third year diploma students at Morgenster Teachers' college could be succumbing to the inverted influence of a strong religious participation.

Griessel and Oberholzer (1994:19) posit, "Indoctrination goes hand in hand with ... intolerance of critical questions ...". The quotation implies that an indoctrinating religious orientation could be a stifling factor of critical thinking dispositions. Furthermore Griessel and Oberholzer (1994:19) posit, "Indoctrination binds the child and degrades him to just one of a mass of people who may not think for himself." In agreement with them is Lloyd (1976:38) who describes an indoctrinated person thus, "... his mind is closed, his beliefs are not open to rational scrutiny". An indoctrinated person thus most likely has stifled critical thinking dispositions. Generally it appears like religiosity and critical thinking dispositions have a counteractive relationship. Haralambos (1985:485) posits, "... a rational world view is the enemy of religion"

Marx, in Giddens (1993:434) explains the relationship between religion and stifled critical thinking dispositions thus, "...religion has been the 'opium of the people'... teaching them the resigned acceptance of existing conditions in life." The conditions that are referred to in the quotation could be dehumanizing and in spite of that they could be thought to be God's will and critical thinking about them is eschewed. Marx is supported by Haralambos (1985:461) who says, "...religion can offer the hope of supernatural intervention to solve problems on earth". The quotation implies that when some students are confronted by problems they are likely not going to think critically since they could be believing that God would intervene. Garmong (2010) supports by claiming , "some people argue that human instincts will tend to pull individuals to religiousness and critical thinking is needed to avoid this."

The situation described above is peculiar to people who practice a religion that is parochial and indoctrinating. Such people do their moral thinking at the intuitive level which is characterized by the application of generally accepted principles such as truth telling (Parkinson 1993).

Another reason why some religious people could be doing their thinking at the intuitive level is described by Nkrumah (1978:32) who posits;

With the priests securely installed as the only authorized popularizers of divine will, the only persons fitted by calling and by grace to expound mystic purposes... since their power is thought of as being rooted in the divine will, it becomes hard to contest.

The third year diploma students at Morgenster Teachers' College could be very much vulnerable to the influence described above since they are in a community that has several priests and the community's culture is puritanical.

Since many lecturers at Morgenster Teachers' College are strongly involved in religious activities, the problem of stifled critical thinking dispositions could be compounded. The lecturers could be behaving like priests referred to by Nkrumah. The complexity of the influence of the lecturers on stifling critical thinking is explained by Higgs and Smith (2002:12) who contend, "... educators cannot teach people to be critical thinkers and at the same time encourage conformity". The situation described above becomes worse if in the place of educators there are proselytizing ideologues who want their thinking to be adopted by learners (Brookfield 1985). Religious leaders by virtue of their positions, have critical thinking dispositions. The religious leaders, Moses, Mohammed and Jesus of Nazareth were all social critics, hence were critical theorists (Higgs and Smith 2000). They had a disposition to think critically. Likewise, all leaders of "modern" religious groupings have sound dispositions to think critically. However, they could be using indoctrination very often to distort life and consequently stifle critical thinking dispositions in their adherents. For example patriarchal fundamentalism is being practised in Islamic nations like Afghanistan and Iran, under the guise of Islamic ideology (Higgs and Smith, 2000). Religious orientations tend to stifle critical thinking disposition more to the lower position levels of adherents.

2.2.3 Influence of a narrow self theory/negative self concept on critical thinking dispositions

According to Higgs and Smith, (2000), phenomenologists believe that theories about oneself can be very misleading. Thus when one holds to the narrow self-theory or negative self-concept, one is likely to have a stifled critical thinking disposition to think critically about what happens in one's environment. Self concept indicates the

sum total of all possible views or ideas that enable an individual to form a picture of the type of person she/he is (Purkey 1970). The whole picture is referred to as the global self-concept. "...the global self concept could be divided into academic and non-academic self concept .. the academic self concept could be subdivided in terms of subject directed areas" (Myburgh, Gobler and Niehaus 1999:165). Thus self concept and academic achievement are mutually independent (Kobal 2001).

It is rather vague to consider the global self-concept in a study like this one. It is also vague to try to focus on the academic self concept in general. Specificity on the self concept is needed by focusing on specific subject areas like for example, philosophy of education. A student could have a positive self concept in mathematics but a negative self concept in philosophy of education. A negative self concept is having ideas about oneself that one is just not quite good enough (PTSD Guide book). The reason for the fluidity of the self concept across the subject areas partly depends on the socialization the student would have been exposed to "whether or not the self concept corresponds with the person's true potential depends on the person's early interaction with the people close to him/her" (Crous, Roets, Dicker and Sonnekus 2003:53).

The experiences of the significant others provide some sort of academic springboard for learners especially when new subjects are introduced or when there is an increase of conscious effort needed in doing a subject. If the experiences of the significant others were negative and were conveyed to learner, he/she likely feels apprehensive before and during the learning situation. "Self-concept gives a student's trust in himself/herself and his/her experience of continuity in the learning situation" (Schulze, Kamper, Mellet and Smit 2002). According to Myburgh et al. (1991:165);

...it has been consistently found that a positive realistic self-concept is related to high achievement. ...[since it] is the most important factor that motivates students in their aspirations towards higher scholastic achievements.

The scholastic achievement should not be considered from a holistic view point but from a specific subject area. Scholastic achievement is indicated by some criteria. One of these criteria is evidencing critical thinking dispositions in the disciplines concerned. Implicitly, a negative self-concept could stifle evidencing critical thinking

dispositions in a particular subject area. Myburgh et al. (1999:166) posit , “... a person who maintains a strong positive realistic self-concept will not easily be disturbed by a low test result or unfair criticism by for example a teacher”. Implicitly contrariwise, a student with a negative self-concept has his/her critical thinking dispositions stifled when a lecturer criticizes her/him. The student most likely gets stressed and could have a corresponding postulate like. “I am an incompetent, a total failure” (Epistein 1973:08).

Gouws and Kruger (1994:93) assert, “A negative self-concept is injurious to one self’s becoming since it retards progress at school, performance in all areas and career expectation and success.” The quotation implies that a negative self concept would be a contributing factor to stifled critical thinking dispositions. The effects of a negative self-concept could be like that since it is a thinking about oneself as not being intelligent enough to do some mental activities (Donald, Lazarus and Lolwana 1997). A person with a narrow self theory is less flexible and open to new experience (Epistein 1973). Thus a narrow self theory is restrictive to open mindedness. The person would thus not evidence the disposition of looking for alternatives (Nitko 2001). Epistein (1973) further postulates that a person with a narrow self theory prefers illusion to reality and avoids subjecting his concepts to testing. Such a person thus fails to evidence the disposition of trying to be well informed (Nitko 2001).

2.2.4 Influence of incessant employment of monologic techniques on critical thinking dispositions.

There is evidence that students enter higher education with undeveloped ability to think critically (Pithers 2000). One of the contributory factors is that the curriculum design influences university and college lecturers to focus on subject matter content when teaching rather than on the development of critical thinking dispositions (Sternberg 1987). “Teachers or lecturers who are simply following guidelines in curriculum documents do not seem to teach thinking well” (Pithers 2000:247). Such lecturers have a lecturer-centered orientation that incorporates misconceptions that lecturing is about imparting information or transmitting structured knowledge (Gravett 2001).

The behaviours of the lecturer who is lecturer-oriented are discussed by Pithers (2000:242);

... any [lecturer]... who simply agrees or just disagrees, just demonstrates and explains, cuts off students' responses, uses reproof rather than praise, shakes the learners' confidence in the value of new ideas or uses basically only retrieval or recall types of questions, inhibits thinking.

The behaviours of a lecturer with lecturer- centred orientation has a great potential to stifle critical thinking dispositions. The lecturer-centred orientation implies the incessant employment of monologic techniques that are manifested among other ways in the use of the presentation and demonstration methods. Content is presented as a given or some cardinal truth that has been true, and will always be so without alteration, to eternity (Jacobs, Gawe and Vakalisa 2000). Thus, "Knowledge in monologic teaching is regarded as bodies of stable facts and theories transferred to learners; external to learners" (Gravett 2001:38). The perception of knowledge in monologic teaching thus obviates the evidencing of critical thinking dispositions. Lecturers who use monologic techniques are not clear on what it is they are supposed to be helping students to develop in order to promote critical thinking dispositions (Pithers 2000).

The contradistinction of monologic teaching is critical teaching. "Critical teaching is seen as a way of assisting adults to escape from immersion in mass culture..." (Brookfield 1985:137). Immersion in mass culture implies 'moving with the flow' and being contented with the status quo. When the critical teaching techniques are appropriately used, some critical thinking disposition factors such as open-mindedness, inquisitiveness, systematicity, analyticity and truth-seeking (Ennis 1996) are addressed. Jacobs et al. (2000:164) are also in support of critical teaching. They postulate, "When we use questioning strategies in the classroom, we do not only want students to learn content but we also want to teach them to think more critically." The quotation implies that the approach that is not mainly dialogical has limited chances of promoting critical thinking dispositions.

However, monologic teaching could be necessary at certain times, that is, when students are acquiring some declarative knowledge about a discipline. Bailin et al.

(1999:90) posit, "The depth of knowledge, understanding and experience persons have in a particular area of study or practice is a significant determinant of the degree to which they are capable of thinking critically in that area." The point is consolidated by Pithers (2000) who say that there is empirical evidence that good knowledge and good thinking are inextricably bound up. With reference to the quotation, monologic teaching is not completely a vice to critical thinking dispositions.

Critical thinking has a higher potential of promoting critical thinking dispositions than monologic teaching. If monologic teaching is the dominant method at Morgenster Teachers' College, then the third year diploma students are likely to evidence stifled critical thinking dispositions. Freire (1972:48) contends, "The banking approach to adult education, for example, will never propose to the students that they consider reality critically". The banking approach implies the incessant employment of monologic teaching techniques. The employment of this technique tends to annul the student's critical thinking capacity. The lecturer tends to reward best the quiet non-thinker (Pithers 2000).

Furthermore, Freire (1972:56) posits, "Banking concept of education treats students as objects of assistance; problem posing education makes them critical thinkers", the banking education approach thus compels the students to accept implicit solutions to problems given to them by the "teacher". In support of Freire, (1972) are Jacobs et al (2000:164) who postulate, "When we use questioning strategies in the classroom we not only want students to learn content but also want to teach them to think more critically". The third year diploma students at Morgenster Teachers' College could not have been taught to think more critically because of the over employment of the banking approach. However, some researchers reveal that students who exhibit a disposition towards critical thinking rated lecture methods of instruction higher than students with lesser disposition to think critically (Ishiyama, McClure, Hart and Amico 1999). Despite the research findings, Ishiyama et al posit that traditional lecture methods of instruction cause students to fail to learn how to gather, analyze, synthesize or assess information.

2.2.5 Influence of insufficient experiential (psychical) time on critical thinking dispositions

Myburgh et al. (1999:170) have documented, "Time is inseparably associated with achievements and success". The time which these authors are concerned with is experiential time. The availability of such time and a sound management of it contribute to scholastic achievement and success, "...there is a widespread belief that effort (specifically the amount of study time) has a very strong impact on reward (grades received)" (Hill 1991).

In support of Hill, Pithers (2000:246) posits;

...there would seem to be benefits in overhauling the entire degree curriculum, so that the amount of first year discipline specific knowledge could be reduced to allow the students time to engage in activities which are likely to develop their thinking...

The quotation implies that the scarcity of experiential (psychical) time could be a factor that stifles critical thinking dispositions. Students experience time as measured and restricted. "Persons who experience time in this way are placed under pressure to meet deadlines in response to demands placed on them, which could include completing tasks and assignments" (Myburgh et al. 1999:170). If the pressure is intense, the students are likely to try to meet deadlines of assignments without having reflected seriously on what they would be writing about. Such a situation would likely stifle critical thinking dispositions. When lecturers experience time as measured and restricted, they become very much inclined to instructional methods like presentation. The presentation method, "...can be used to present a lot of content quickly... [and it]... requires little activity on the part of the learners" (Newby, Stepich, Lehman and Russel 1996:47). The two attributes of the presentation method described above adversely affect evidencing critical thinking dispositions. The learner's active intellectual involvement that could involve critical thinking is limited. However, Mouton (1996) says that a series of investigations with effort operationalized as study time could find no significant correlation between quantity of studying time and academic achievement.

2.2.6 Influence of ethics of “Ubuntu/Unhuism” on critical thinking dispositions

“Ubuntu/Unhu” cultural groups are collectivist (Higgs and Smith 2000). In collectivist cultural groups, individualistic critical thinking dispositions are socially sanctioned (Street, 1994; Gee, 1994). Individuals who exhibit individualistic tendencies in “ubuntuist/unhuist” societies are to some extent ostracized (Coetzee and Roux 1998). Thus “Ubuntu/Unhu” societies are to some extent conservative since they are gerontocratic (Peresuh and Nhundu 1999). In gerontocratic societies elders jealously guard against any thinking that refutes the established values and norms. Thus they influence the younger generations in ways they think about some cultural issues. Philosophical sagacity is underplayed. In some instances, it is conspicuously negatively sanctioned since it is believed to cause some societal turmoil (Peresuh and Nhundu 1999). Thus Higgs and Smith (2000:59) point out some weaknesses of African philosophy rooted in “ubuntuism/unhuism” and one of the weaknesses is, “It does not encourage critical thinking”. The relationship between critical thinking and ethics is emphasized in Lots-of-essays website (2010). There is a vital relationship between critical thinking and ethics that must be kept in balance if both are to be viable and useful. Ethics without critical thinking becomes unreasoning legalism, the kind of dangerous indoctrination. “Ubuntu/Unhu” societies thus have to some extent a propensity to stifle critical thinking dispositions since they stress on gerontocratic ethics. The third year students at Morgenster Teachers’ College could be succumbing to the gerontocratic ethics and thus yielding to some sort of indoctrination that impedes critical thinking dispositions.

The early socialization of the young is very important in the development of critical thinking dispositions. “...the previous educational experience of some learners will have socialized them to accept a posture of passivity and to view the role of the educator as that of ‘expert’ teacher whom learners do not question or challenge” (Gravett 2001:09). The trend of thinking by Gravett is the same as that of Coetzee and Roux (1998) when they talk about the role of elders in “ubuntu/unhu” societies. The ‘expert’ teacher referred to by Gravett could play the same role as the elder in the “ubuntu/unhu” societies. The ‘expert’ teacher and the elder are considered to be both omniscient and omnipotent (especially on issues concerning religion). They are thought to be the custodians of the values and norms that are perfect and therefore

immutable. The young are thus discouraged to challenge or question these values and norms. The posture of passivity could thus become a life-long thing. Thus gerontocracy in the “ubuntu/unhu” societies could have some contribution to stifling of critical thinking dispositions. Furthermore, Gravett (2001:08) claims , “...experience can sometimes be an obstacle to learning. Adults often have well established attitudes, convictions and thinking patterns and they may find it difficult to learn new ways of thinking and doing if these contradict their beliefs and experiences”. It is very much likely that “ubuntu/unhu” orientations of the third year students of Morgenster Teachers’ College could be stifling their critical thinking dispositions. However there is a gradual disruption of gerontocracy or loss of influence by the elderly due to the effects of globalization (Van der Geest 2001). There could be scant traces of gerontocratic influences on exhibiting critical thinking dispositions in “modern” scholars. To some extent globalization could promote critical thinking dispositions in “ubuntuists/unhuists” when they employ philosophical sagacity to challenge their once immutable traditions (Higgs and Smith 2000).

2.2.7 Influence of the closeness of the system on critical thinking disposition

Critical theorists claim that power structures actually influence the way we think (Gravett, 2001; Higgs and Smith, 2002; Brookfield, 1987; Freire, 1972). According to Higgs and Smith (2002:86);

The way we all think... is the product of society and the first society we know is the family and a little later the school. If children are brought up by very ‘strict’ parents and they go to a very ‘strict’ school they are likely to be very “well behaved” – they quickly learn that they have to do what they are told in order to survive.

‘Strict family’ and ‘strict school’ imply closeness of these institutions. The learners in such institutions are ostensibly ‘well behaved’ since they have to please people in power. They do what the power bearers tell them to do without asking questions. Letseka in Higgs (1995:295) describes learning in a closed school;

So called learning where the flow of information is one dimensional, that is where one element or subsystem plays a major or dominant role in the operation of the system as a whole cannot logically speaking be called education. Within philosophy of education discourse such an interaction qualifies as indoctrination.

The closeness of the school facilitates indoctrination. When there is indoctrination, critical thinking dispositions very likely become vulnerable to being stifled. With respect to critical thinking dispositions, there are basically two types of society, the open society and the closed society. These two types of society are contradistinctive. Higgs (1995:07) posits;

...the open society encourages open critical thinking. In an 'open society' all view points are given the opportunity to be exposed to refutation. In 'closed society' the dominant mindset is dogmatic, absolutist, authoritarian and as the name suggest – closed. Closed thinking (if indeed it can be called 'thinking' at all) in its political form devises absolute blueprint which are then imposed on other people.

The closed society has a closed political system that tries to maintain the status quo by not encouraging critical thinking dispositions about how the society is governed. Hegemonic ideology is used by the closed political system to maintain the status quo. Hegemonic ideology is the dominant or ruling set of ideas in a society which is reinforced regularly by the state as a process of legitimation, supporting the continuation of the existing political regime (Allen and Thomas 1992). For example, during the 2008 by-election campaigns in Zimbabwe, President Robert Mugabe had a campaign speech on Zimbabwe Broadcasting Corporation (ZBC) radio and TV stations; "There are some people who try to teach us a new philosophy. They want us to disagree. We would rather agree than disagree, have unity than disunity..."

Another example of a hegemonic ideology was in the editorial by the Voice of America (VOA) on 29/01/2009 about the government of Nepal which declared, "We no longer tolerate criticism since we have already been elected by the people". The editorial implies that the government of Nepal would make a deliberate effort to discourage critical thinking on how they rule the people of Nepal just like what happened in Zimbabwe to people who disagreed with the ruling party's ideology before, during and after the 2008 elections. They were brutally tortured. The memories of the tortures could be stifling critical thinking dispositions of third year students at Morgenster Teachers' College.

The beneficiaries of the closed political system use the school to stifle critical thinking dispositions. Those who wield political power determine educational policies

designed to sustain, maintain and perpetuate the political system (Chivore 1992). Moyana (1989:35) particularly posits;

The colonialists [in Zimbabwe] used the school as a processing plant for the alienation and domestication of the African Child, thus turning the child into an obedient, pliable and worshiping servant of things white and western.

The school system was thus deliberately designed to stifle critical thinking dispositions. Moyana's trends of thinking is in line with that of Kirilenko and Koshunova (1985:13) who posit ;

The oppressors suppress critical thinking in the oppressed to maintain the status quo. Representatives of the ruling class also understood even in those distant times (Socratic times) that reason and critical thinking could be a mighty weapon spearheaded against them.

Oppressors knew that critical thinkers see the future as open and malleable, not as closed and fixed (Brookfield 1987). They thus discouraged it. The deliberate effort to stifle critical thinking dispositions are also echoed by Higgs and Higgs (2001) who postulate that there is a lot of literature about how the apartheid government perpetuated rote learning and passive acceptance of the 'facts'.

The situation of third year students at Morgenster Teachers' College could be hyper critical. They could be experiencing a dual closed system – thus being under 'strict' religious lecturers who could be proselytizing ideologies and under a closed political system riddled with hegemonic ideology. Peresuh and Nhundu (1999:25) contend "...a person who successfully passed through colonial education was no different from one who underwent evangelization in that both ended up dehumanized, acculturated, subservient, loyal, uncritical and above all alienated beings who had no past. The quotation implies that the education that takes place in a closed system is aimed to stifle critical thinking dispositions. Closed systems can be avoided by engaging learners in critical thinking. Schoeman in Higgs (1995:115) posits; "...our only defense against the coercion of dictatorship, essentialism and absolutization, i.e. excessive build up of political power lies in critical thinking which recognizes and deconstructs ideological distortions, prejudices and hidden presuppositions....". the

quotation implies that closed systems have thrived by stifling critical thinking dispositions.

After an overthrow of the closed system, critical thinking dispositions are deliberately encouraged to normalize all the spheres of human life. For example, in order to redress the effects of the apartheid system on student's thinking dispositions, "...the ANC led government has incorporated critical thinking skills as an integral part of its educational programme ..." (Higgs and Higgs 2001:03). The remedy to stifled critical thinking disposition is also enunciated in the Draft White Paper (1994:12), "The curriculum and teaching methods should encourage independent and critical thought, the capacity to question, enquire and reason, to weigh evidence and form judgments ...". The proposed remedies to stifled critical thinking dispositions underscores the extent to which a closed political system could adversely affect critical thinking dispositions.

2.2.8 Influence of femininity on critical thinking dispositions

Women are generally an oppressed folk world-wide (Higgs and Smith 2000:95) posit;

In many parts of the world including Africa, men discriminate against women and pursue the oppression and the exclusion of women in society as a result of religious and cultural beliefs which regard women as subordinate to men in the hierarchy of society and the community.

In the institutions of higher learning, there are some "masculine" and "feminine" presentations of content which imply that the content and procedures are either male or female preserves (McNeill and Townley 1986). The oppression of women is thus institutionalized in order to annul the women's critical thinking dispositions in an attempt to facilitate the inculcation of the qualities of femininity. Some of the femininity qualities are; pliability, subservience, dependence (Lyons 1978). The socialization of women to attain the attributes of femininity can stifle critical thinking dispositions. "... the socialization of children towards obedience (compliance) can be a stumbling block to school progress..." (Nash, Stock and Harper 1990:328). The school progress could be any scholastic achievement, critical thinking dispositions inclusive. The female third year students at Morgenster Teachers' College could have been victims of the effects of the inculcation of the attributes of femininity in the

church activities for females at the college. The female students could also have picked the femininity attributes from the socialization by society at large.

The religious institution is very powerful in the moulding of women to femininity. “Christian ideology has contributed not a little to the oppression of women. ...[it] is used as a source of ‘social opium’ to control women”, (Kirby, Kidd, Koubel, Barter, Hope, Kirton, Madry, Manning and Trigs 1996:757). The ‘oppression’ and ‘control’ in the quotation are about making women more feminine. Lyons (1978) posits that in 1837, the congregational clergy of Massachusetts condemned some outspoken women, Sarah and Angeline Grimke by reminding its female adherents of the appropriate duties and influence of women as stated in the New Testament. The congregational clergy, according to Lyons (1978:186) posit;

When the mild, dependent, softening influence of women upon the sternness of men’s opinion is fully exercised, society feels the effect of it in a thousand forms ... but when she assumes the place and tone of a man as a public reformer ... her character becomes unnatural

The women were reminded of adapting themselves to the feminine traits. Denying one the responsibility to make societal reforms is tantamount to stifling critical thinking dispositions. The female third year students at Morgenster Teachers’ College could be victims of the indoctrination similar to the one that was perpetuated against the American women. Furthermore, Lyons (1978:186) posits, “...biblical traditions had the effects that most God fearing women unquestioningly believed that their inferior status was part of the divine plan”. Whenever fear is induced there is oppression and critical thinking dispositions are most likely stifled. The female third year students at Morgenster Teachers’ College are likely to have been indoctrinated to unquestioningly adopt an inferior status in church activities at the college. The inferior status could have been directly transferred to intellectual activities that include doing philosophy. According to Durkin (2010);

...disapproval from one’s own cultural group can act as another inhibitor to critical thinking and debate. A Chinese girl described how other Chinese students in her class criticized her for being too outspoken in the first few weeks of the course.

Female students with femininity orientations tend to negatively sanction other female students who try to evidence ‘the masculine traits’. Women in some cultures like the

Chinese one are socialized to prefer conciliatory reasoning where differences are accepted and not polarized. Being outspoken, aggressive, confrontational and individualistic is characteristic of men and is referred to as the battlefield mentality (Orr 1989). The female third year students at Morgenster Teachers' College could be stifling each other's critical thinking dispositions due to their femininity orientations. However, Orr goes on to posit that once women are allowed education, they evidence critical thinking dispositions without the femininity restraint.

The family institution is also powerful in moulding women to become feminine. "Higgs asked, 'what do men gain by oppressing women? Smith replied, '...the woman a man is married to will have to do exactly what he says'" (Higgs and Smith 2000:95). The reply given by Smith emphasizes on the feminine trait of pliability which is counteractive to critical thinking dispositions. The married third year students could be transferring their pliability from their homes to college. Men are aware that feminine traits have effects of dehumanization. "A man counts it a virtue to repress his feminine traits as much as possible just as a woman considers it unbecoming to be mannish" (Higgs and Smith 2002:54). The institutionalized socialization in the family, school and church makes most women to become feminine. The feminine people, seldom consider reality critically since the social institutions stimulate their credulity. The African women could be experiencing the worst feminine ills. They are under a triple layer of oppression brought about by colonial Western patriarchal cultures, African patriarchal cultures and the attempt on the part of Western and European feminists to speak for African women thereby denying them the ability to voice their own thoughts (Higgs and Smith 2002). The female third year students at Morgenster Teachers' College could thus be under the triple if not quadruple layer of oppression that suppresses critical thinking dispositions.

Conclusion

In this chapter, focus was on a scholastic review of the constructs used in this research. These constructs were considered as factors that contributed to the stifling of critical thinking dispositions of third year students at Morgenster teachers' college. The factors that had a scholarship review about them are; a dogmatic religious orientation, negative self-concept/narrow self theory, incessant employment of monologic teaching techniques, insufficient experiential time, "ubuntuism/unhuism" ethics like gerontocracy, closeness of the prevailing political system and femininity orientations. A constructive critical approach was employed during the scholarship review. The scholarship review illuminated the means of investigating the factors. In the next chapter, focus is to be on research methodology.

3.0 CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The research problem ultimately determines the research methodology. For this research, the research methodology is mixed. The two methodologies, quantitative and qualitative are employed. The nature of the research problem in this research requires the employment of both the qualitative and quantitative research methodologies. The research methodologies were considered to be complementary. The aim was to produce results that are reliable, valid and/or trustworthy.

3.2 The qualitative methodology

3.2.1 The strategy

For this research, the research method that was used to generate data was the focus group discussions. The contacting of the focus group discussions was guided by the principles of phenomenology. "Phenomenology aims to understand and interpret the meaning that subjects give to their everyday lives" (De Vos et al., 2003:273). The emic (respondents') interpretations are going to be the centre piece in the generation and interpretation of data. This means that the lived experiences of the respondents are going to be described using the respondents' own words.

3.2.2 Research Instrument

The focus group interview schedules were used to generate data. The focus groups had six or seven participants per session. The rationale for using the focus group interviews according to De Vos et al (2003:306), is "... they are used as a supplementary source of data in studies that rely on some other primary method such as a survey". The surveys used in this research do not portray a clear picture of the lived experiences of respondents since their situation was hypothesised. Despite support from the scholarship review made, the evidence is better evinced by the description of the respondents' lived experiences. The focus group interviews have the potential to provide some insights in the generation of more hypotheses. The role of focus group interviews is supported by Hoberg (2001:138) who says that one of the uses of focus group interviews is to develop hypotheses about a phenomenon

that can be tested by using quantitative methodologies. According to the context of the research, the phenomenon to be tested is stifled critical thinking dispositions.

The focus group interviews were conducted prior to the administration of the questionnaire. The insights got were considered in the final draft of the questionnaire.

The interview guide was to be divided into five categories of questions in accordance with suggestions provided by Hoberg (2001:140);

- The opening question; was intended to establish characteristics that group members share. "What can you say about your performance in philosophy of education assignments?"
- The introductory question; was intended to foster conversation and interaction among the group members. "What in your opinion could be the reasons for poor performance in philosophy of education assignments?"
- The transition question; was intended to link the introductory question and the key questions. "What are the common task words in philosophy of education, and what are their requirements?"
- The key questions; focus on the elaboration of some factors that could contribute to the stifling of critical thinking dispositions. The questions that were asked are;
 - How do your religious convictions influence the satiation of the requirements of the philosophical task words?
 - Do you think the requirements of the task words in philosophy of education are too demanding? Why?
 - How do "ubuntuist/unhuist ethics like gerontocracy influence satiation of the task words in philosophy of education?"
 - How do presentations of lectures influence students' satiation of the requirements of the task words in philosophy of education?
 - In what ways do femininity orientations influence satiation of the requirements of the task words in philosophy of education?
 - How do you experience time in relation to addressing the requirements of the task words in philosophy of education?

- Why would you think that there is a restraint in critically discussing freely and fully an idea by Pestalozzi that “Education should be a means to prepare man to play his part in political change?”
- Ending questions; were intended to wind up discussion. “What are the important aspects that have been discussed?” and “What other factors contribute towards stifling critical thinking dispositions?”

The interview guide was pilot tested. “The true pilot test is the first focus group with the participants” (De Vos et al. 2003:316). The first focus group interview was taken as a pilot group which shed some light on improving the efficacy of interviews.

3.2.3 Report on trustworthiness

In qualitative research, the term “trustworthiness” is preferred to the terms “reliability” and “validity”. The later terms are considered to be inclined to the quantitative methodology (Schulze 2002). Some strategies namely credibility, transferability, applicability, dependability and confirmability were considered. Credibility was attained by making some thick and accurate descriptions of the identified phenomenon. The quality descriptions facilitate transferability which is concerned with the applicability of the findings to another context. The “context” in this context is each session of focus group interviews. Each focus group interview session had some variations with the other groups. An attempt was made to account for the variations surrounding the responses. The strategy that addresses this concern is dependability. During the interviews, some ambiguous and/or ambivalent responses were given. In order to clarify the ambiguities, some probes were made. The ambiguities were explained by the respondents themselves. When the data generated reflect the opinions of the respondents, another researcher would likely come to the same conclusions when analysing the data. Thus the strategy of confirmability is realised.

3.2.4 Population, sample and sampling procedures

The population was comprised of twenty, third year diploma students of Morgenster Teachers’ College of the 2011 academic year. All the students were interviewed. They were typical cases of students with stifled critical thinking dispositions.

3.2.5 Data collection procedures

The participants in the focus group interviews were seated in a round table arrangement. The researcher was the moderator and there was an assistant moderator who wrote notes about any interesting gestures in stressing a point or not in harmony with what was said. The interviews were audio taped. The audiotape was used to capture what the respondents were discussing. The efficiency of the audiotape is mentioned by Kidd and Parshall (2000:298), "Audiotape is often easier for a transcriptionist to work with than videotape". During the interviews, the researcher took the role of moderator and kept the respondents' attention from wandering off the subject being discussed (Merton 1987). The moderating role taken by the researcher helped him to collect data he intended to collect. In order to capture all the responses, the researcher placed the audiotape strategically to enable recording of everything that was discussed. Despite the above precautions, it was evident that when the discussions got lively, some respondents talked at once obscuring what each was saying (Kidd and Parshall 2000:298). To offset the problem, I had an assistant moderator who took detailed notes of the order of speakers and any significant non-verbal behaviour. Each focus group had its own thick descriptions about how the interview had transpired. The number of focus groups was determined by the point at which information was repeated. New groups continued to be run until the point of saturation was reached, that was until the last group had nothing new to add but merely repeated previous contributions (De Vos et al 2003; Lunt, 1996). Focus group interviews were considered to be relatively efficacious in gaining insights into the respondents in different socio-cultural and political environments. The focus group members stimulated each other in motivating their experiences and perceptions about the topics that were being discussed. Consequently the researcher not only got acquainted with the language that the respondents use to describe their experiences but also their cultural values and styles of thinking and communicating (Hoberg, 2001; Merton;1987). Despite the presumed efficacy of the focus groups in generating data, the researcher was wary of some respondents who were "loud-mouths" who dominated and tried to sway the discussions (Merton 1987). In the focus groups there were also the shy participant and the rambler (Hoberg 2001). The researcher ensured that discussions flowed by encouraging all members of the group to speak, asking follow up questions and guiding the groups back to their tasks.

According to Lunt (1996:92), "... the exhaustion of the various things to be said on a given topic is part of the content validity of the method, offering a notion of reliability, related not to the identity of two runs of the method but to the rate of information gain." Basing on Lunt's inputs, reliability in this research is realised when independent focus groups eventually repeat the same content. The concern of validity is further emphasised by Kidd and Parshall (2000:300), "... the emergence of a substantively similar viewpoint on the same issue in multiple focus groups, especially if they are geographically dispersed, will tend to support content validity." The third year students of MTC have their homes in different parts of Zimbabwe so similar view points on some socio-cultural issues for example femininity orientations will tended to support content validity. The view points of the informants helped the researcher to get their picture of the phenomenon as they saw it (Dean and Whyte 1958). The focus group interviews thus helped the researcher to discover participants' meanings and ways of understanding the phenomenon under study that is critical thinking dispositions.

Dean and Whyte (1958:38) hint that it is trivial for the researcher to be obsessed by proof of informants telling the truth. The research should be concerned with the interpretation of the informants' statements about their feelings and perceptions, about their actual environment and events they are experiencing.

The group participants were informed of the tape recording at the outset. When the participants made vague comments the researcher elicited explanations by probing. Some examples of probes that were used according to Hoberg (2001:142) are; "Please tell us more", "Could you please share experiences that made you feel that way?" and "I don't quite understand. Can you explain what you mean?"

3.2.6 Data analysis

The tape recorded interviews were transcribed verbatim in order to facilitate the analysis of the data. The method of Johnson and Christenson (2000) cited in Steyn, McDonald, Van der Horst, Louber, Niekerk, Kamper, Schulze and Dreyer (2004) was used for the analysis of the transcripts. The method has the following steps; segmenting, coding, compiling a master list, checking for inter-coder and intra-coder consistency, enumeration and indicating relationships among categories.

3.3 The quantitative approach

The research design employed under this approach was the quantitative analytical survey. The design was of this nature since, "... [the] researcher asks people questions in a written questionnaire ... The researcher manipulates no situation or condition; people simply answer questions" (Neuman 1997:31). The research design is also a survey since the events undertaken also satisfy the following criterion, "... surveys gather data at a particular point in time with the intention of describing the existing nature of existing conditions, ... or determining the relationships that exist between specific events." This research meets the criterion. There was a description of the students' extent of critical thinking dispositions and the factors that contribute to them. The analytical nature of the survey is realised in that this research is theory driven and aims to test hypotheses (Mouton 2001:152). More specifically the cross sectional survey is employed. "The first step of the cross sectional survey is to identify the research population, where after interviews and questionnaires can be used to gather data" (De Vos et al. 2003:143).

3.3.1 Research instruments

The questionnaire-cum-test was formulated and administered. It had three major sections; A, B and C.

Section A

Section A focused on the bio-data of the students. The bio-data have the potential of providing interesting insights. There were ten items in this section.

Section B

Section B focused on the maximal performance tests. The extent of critical thinking dispositions was measured in two parts.

The first part

The first part was about giving the respondents a passage to read and subsequently asking them to respond to some statements. The statements about the passage were designed according to the factors focused on in the California Critical Thinking Disposition Inventory (CCTDI). The factors are; truth seeking, open-mindedness, analyticity, systematicity, critical thinking self-confidence, inquisitiveness and

maturity of judgement. The researcher designed his own test instrument. Critics could think that the CCTDI could have produced more reliable data but “when an existing instrument is used for measuring a phenomenon in another cultural group for which the instrument was not designed, the instrument must be translated in the new culture ...”(Insight assessment). The test that was designed was thought to be relevant to the situation of the respondents.

The statements that constituted the first part of the instrument focused on particular critical thinking disposition factors and were on a four-point Likert scale.

- Statements 1-4 were about truth seeking. They focused on the habit of desiring the best possible understanding of the situation. They implied an interrogation of cherished beliefs. The respondent who disagreed with the statement, was regarded as having preconceptions that stifle his/her search for knowledge.
- Statements 5-9 were about open-mindedness. “open-mindedness is the tendency to allow others to voice views with which one may not agree” (Insight assessment).The respondent who agreed with the statements, except for item 8 was considered to be intolerant for ideas of others.
- Statements 10-12 were about analyticity. Analyticity is “... the habit of striving to anticipate potential consequences or outcomes of situations” (Insight assessment). The respondent who disagreed with the statement, except for item 10 was considered not attending to what was going happen next and was placing little value to the application of reason and the use of evidence.
- Statements 13-15 were about systematicity. Systematicity is the tendency of striving to approach problems in a disciplined, orderly and systematic way. The respondent who agreed with the statements, was considered to be having the habit of approaching problems in a disorganised way.
- Statements 16-18 were about critical thinking self-confidence. Critical thinking self-confidence is “the tendency of being trustful of reasoned judgements as the means of solving problems ... and not the tendency to ... be hostile to the use of careful reason and reflection as a means ... to discovering what to do or what to believe” (Insight assessment). The respondent who agreed with the

statement, showed to some extent that he/she was hostile to reason and reflection.

- Statements 19-22 were about inquisitiveness. Inquisitiveness is the intellectual curiosity, ... the tendency to want to know things, ... to learn the explanations for things ..." (insight assessment). The respondent who agreed with the statement, showed to some extent that he/she was indifferent about some issues.
- Statements 23-26 were about maturity and judgement. "Cognitive maturity is the tendency to see problems as complex, rather than black and white. It is prudence in making ... judgement" (Insight assessment). The respondent who agreed with the statement showed to some extent that he/she considered some issues as "black and white" and was imprudent when making judgements.

The second part

The second part of assessing the extent of critical thinking dispositions was done by tasking the respondent to evaluate an ambiguous and ambivalent Shona statement; "**Murungu haasi munhu**". When translated into English, the statement could be;

- A 'white' person is not a black person; or
- A 'white' person is not a human being; or
- A 'white' person does not adhere to African traditional ethical values.

The statement is philosophical and is embedded in African philosophy. The respondent was supposed to expose the ambiguities and provide a substantiated view point. The assessment of critical thinking dispositions was focused on the following questions as suggested by Nitko (2001:228)

- Did the respondent clearly state the main point?
- Did the respondent define the key terms when necessary to do so?
- Did the respondent use sound reasoning to support the main point or thesis?
- Did the respondent use relevant facts in appropriate ways to support the thesis?
- Did the respondent portray and evaluate alternative positions very well?
- Did the respondent present a well organised argument?

The marks that were awarded for a response to a question ranged from zero to three, depending on portrayal of critical thinking dispositions.

Section C

The section was about the typical performance test. The test had seven subsections. The subsections corresponded with the factors that were used to formulate the hypotheses. Each of the factors was operationalised into items that constituted it. The items are measured on a four point Likert scale with the categories as follows; 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. A neutral category was deliberately left out. "Many researchers fear that respondents will choose non-attitude choices to evade making a choice" (Neuman 1997:242).

All the items were stated in a positive manner. "Negatively stated items should be avoided because they are easy to misinterpret. Subjects will unconsciously skip or overlook the negative word, so their answer will be opposite of the intended" (Hoberg 2001:154).

The items were categorized as follows:

- Items 1-12 were about the respondent's self concept.
- Items 13-19 were about the respondent's perception of the closeness of the political system.
- Items 20-28 were about the employment of the banking concept of education. Items 29-36 were about limitedness of experiential time.
- Items 37-42 were about "Ubuntuist/Unhuist" ethics.
- Items 43-52 were about the respondent's religious participation.
- Items 53-60 were about the respondent's inclination towards femininity.

The questionnaire was pilot tested in this semi-final form. "[This]... ensures that errors of whatever nature can be rectified immediately at little cost" (De Vos et al 2003:177). The statements that needed refinement were identified and were adjusted accordingly before the questionnaire was finally presented to the respondents.

3.3.2 Report on reliability and validity

3.3.2.1 Validity

In this report concern is with measurement validity. "Measurement validity is the degree of fit between a construct and indicators of it" (Neuman 1997:141). The quotation implies that in this research focus is on the extent to which the conceptual definitions mesh with the operational definitions.

The type of measurement validity that is focused on in this research is content validity. "Content validity addresses the question; is the full content of definition represented in a measure?" (Neuman 1997:142). The quotation means that the items that constitute an operational definition must be exhaustive as far as the definition is concerned. For example, the items (indicators) for one's femininity orientation were meant to address all the various aspects of femininity. For the achievement of content validity four colleagues, evaluated the items of each of the constructs. The inputs of these colleagues were considered in the improvement of the questionnaire in order to produce results of high validity.

3.3.2.2 Reliability

After the items had appeared to have content validity, reliability was considered. "Reliability deals with the indicator's dependability (Neuman 1997:138). If the indicator is reliable, the same result is obtained when different respondents respond to the items under the same construct. The main focus was on equivalence reliability. "Equivalence reliability addresses the question 'does the measure yield consistent results across different indicators?' (Neuman 1997: 139). The quotation implies that the same result was supposed to be obtained with several different items that measure the same construct. Equivalence reliability was estimated by computing the equivalent forms reliability coefficient. The estimate was got by using the split-halves procedure. The items that measure each construct were split randomly into equivalent halves. The half test scores were used to calculate the coefficient using the Spearman-Brown double length formula. The Spearman-Brown double length formula is given by Nitko (1997:68) as follows:

According to this research the whole-test reliability is the reliability of all the items that measure the constructs. The whole test reliability coefficient was calculated and presented in chapter four.

3.3.3 Population and sample

3.3.3.1 The Population

The population was all third year diploma students at Morgenster Teachers' college who were in the 2011 academic year. The students were twenty. All the students were studied.

3.3.4 Data collection procedures

The questionnaire cum-maximal performance test was group administered. The respondents were assembled in a lecture hall. Each respondent was issued with a questionnaire. The researcher then explained the following; how the questionnaire was to be completed, how the responses were to be used and the research ethics that were to be considered. Each respondent completed his/her own questionnaire without discussing it with anyone.

3.3.4.1 The maximal performance test

The first part

For each factor a score was awarded for a response that showed a disposition to think critically. No score was awarded for a response that showed lack of the disposition to think critically.

The second part

The scores awarded on this part were on a continuum ranging from zero (0) to three (3). The scoring was based on the rubric designed in accordance to the one designed by Nitko (2001). A total score for the two parts was computed.

3.3.4.2 The typical performance test

For each group of items a total score was obtained by adding the scores on a Likert scale. As alluded to earlier on in chapter one, the responses to the items can be summed up to get one's attitude towards a phenomenon (Louw 1993; Neuman, 1997; Mellet 2004).

3.3.5 Data analysis

The bivariate statistical analysis was used for this research. The two variables (for example, the extent of critical thinking dispositions and negative self concept) were considered together to enable a description of the relationships between them. Statistical relationships were established. The relationships were explained using measures of association. "A measure of association is a single number that expresses the strength and often the direction of the relationship" (Neuman, 1997:312). The information about a bivariate relationship was condensed into a single number referred to as a correlation coefficient. Mulder (1993:85) advises on taking caution about the correlation coefficient "... a high correlation coefficient between two variables should not necessarily be seen as cause and effect since a third variable could possibly have made an important contribution to the high correlation:..." There was therefore a dire need to eliminate the influence of the third variable. This was enabled by computing the partial correlation coefficient. The formula used according to Mulder (1993:86) is;

$$\frac{r_{12} - r_{13}r_{23}}{\sqrt{1 - r_{13}^2 - r_{23}^2}}$$

Where:

= correlation between the first and second variables with the influence of the third variable eliminated.

= Pearson's correlation between the first and second variable

= Pearson's correlation between the first and third variable

= Pearson's correlation between the second and third variable

For example;

= the correlation between extent of critical thinking disposition and femininity with the influence of the negative self concept eliminated.

= Pearson's correlation between extent of critical thinking disposition and femininity.

= Pearson's correlation between extent of critical thinking disposition and negative self concept

= Pearson's correlation between femininity and negative self-concept.

The Pearson correlation coefficients were calculated and presented in chapter four in tables 10 and 11.

For the representativeness of the product moment correlation coefficient, hypotheses tests are to be done using t -tests. The t value for the value of r is calculated as follows:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

The t -test values for the different variables were calculated and presented in chapter four in the tables 8, 9 and 12.

The product moment correlation coefficient was developed further to have the coefficient of determination. The coefficient of determination helped to explain the extent of contribution to critical thinking of each of the factors. According to Liebenberg and Nicolau (1993), the formula for the coefficient of determination is:

=

The coefficients of determination were calculated and presented in chapter four in table 12.

Conclusion

The focus of this chapter was on research methodology. Both the qualitative and quantitative designs were considered. The phenomenological strategy was used to provide insights for the analytical surveys. The data that were obtained were presented and discussed in the next chapter.

CHAPTER FOUR

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

In the chapter, focus is on; the presentation and analysis of data and the relating of the findings to the hypotheses and the scholarship review that was made in chapter two.

4.2.0 Data presentation and analysis.

The data are presented and analysed in two parts, that is the data from focus group discussions on their own and those from questionnaires on their own. Firstly focus was on the focus group discussion data.

4.2.1 Data from focus group discussions

The data from focus group discussions were presented theme by theme. The interview transcripts were read thoroughly in an attempt to identify some patterns. The patterns were identified in the messages that were conveyed in sentences or phrases. The sentences or phrases (segments) that conveyed the same messages were then extracted verbatim and put into one category. Each category of excerpts (extracts from the focus group discussion transcripts) was given one descriptive statement. The descriptive statements became subthemes or themes. The subthemes and their constituent excerpts are presented in the tables 1 to 7.

Table 1. Perceptions on the influence of religion on critical thinking dispositions.

Subtheme	Excerpts
Coercion to conform to some doctrines	<ul style="list-style-type: none"> - Try it (critical discussion on religion issues) here (Morgenster Teachers' College) and get deferred. - You will meet with problems here on earth and up in heaven.
Intuitive thinking	<ul style="list-style-type: none"> - Your little philosophy will spoil your eternal life. - Being critical about religious issues is tantamount to blasphemy. - Philosophical thinking should not be exposed to young children.
Closeness to rational scrutiny of issues	<ul style="list-style-type: none"> - ... you can't be critical about religious issues. - Who are we to evaluate God and his works. - ... in church we are taught to accept the gospel as it is. - ... religion does not encourage us to be critical. - ... the discussion was nullifying the verse, I didn't like it.

Table 2. Negative self concept with respect to critical thinking dispositions.

Subtheme	Excerpts
Self-contempt	<ul style="list-style-type: none"> - I do not see myself being capable of meeting the standards. - When I size myself against Nyerere, I am nothing intellectually to critique his ideas. - I am not yet intellectually mature to hold some philosophical debates. - Requirements are too demanding for us [students]. - I don't think I will ever become a philosopher – I don't have the intelligence. - Look at us, just "O" Level school leavers
Closeness to new information	<ul style="list-style-type: none"> - Some issues are by nature good we shouldn't waste time critiquing them - I wouldn't want to deal with antagonistic issues

Table 3. Influence of monologic approach on critical thinking dispositions.

Subtheme	Excerpts
Banking concept of education approach	<ul style="list-style-type: none"> - Presentations in lecture rooms are about the lecturers' knowledge – you have to consume the knowledge - We should be afforded opportunities to make presentations ourselves. - Some lecturers just come and read notes to us. - Presentations are biased towards the positive side.
Content regurgitation tendencies	<ul style="list-style-type: none"> -presentations are plain – so in assignments we follow suit. - Sometimes you feel that you should reproduce what the “fundis” give to you.

Table 4. Influence of lack of experiential time on critical thinking dispositions.

Subtheme	Excerpts
Experiencing shortage of time	<ul style="list-style-type: none"> - Our timetable is packed more than the primary school timetable. - I think I can think more critically when time is available. - We hand in assignments when they are still hot [we work on the assignments in the night when the due date for submission is the next day]. - There is no time to digest what you are told. - We have no time to think about the notes given to us. - In other areas we reproduce notes due to lack of time.

Table 5. Influence of gerontocratic orientations on critical thinking dispositions.

Subtheme	Excerpts
Gerontocratic closeness	<ul style="list-style-type: none"> - Whatever elders say is indisputable. - ...philosophize with age-mates not among the elders. - ...keep quiet, old people do not make mistakes - You get current information on internet but you are told that experience counts most. - Old people say, “Takabva nako kumhunga hakuna ipwa” (I have experienced a lot in this area so get it from me). - Evaluation of issues in the home is the domain of elders
Negative sanctioning of critical thinking dispositions	<ul style="list-style-type: none"> - If you want to pass be on the side of the lecturer. - Even when elders make glaring mistakes, keep it to yourself or else - One risks ostracism when one tries to philosophize on some issues with elders. - Lecturers psychologically quarantine you when you try to show philosophical prowess.

Table 6. Influence of closeness of political system on critical thinking dispositions.

Subtheme	Excerpts
Self-contempt	<ul style="list-style-type: none"> - About issues concerning politics, I am not prepared to comment. - I am afraid you may not finish the course. - Follow what you are told and have peace – be critical and philosophical and get into pieces. - That idea is potentially explosive. - You never know who is who. - Why would one dice with trouble.

Table 7. Influence of femininity orientations on critical thinking dispositions.

Subtheme	Excerpts
Reinforcement of femininity traits by other women.	<ul style="list-style-type: none"> - ... at “kitchen parties” older women advise us not to be critical in the home. - When one gets married, one’s aunts advise her not to be argumentative in the home.
Reinforcement of femininity in the home by religion	<ul style="list-style-type: none"> - ... in my religious group, women play subservient roles – they are not even allowed to preach.
Reinforcement of femininity traits by the family	<ul style="list-style-type: none"> - Your critiquing should end at college, not in the home. - Try it in the home and you are finished - Your husband would think you are big headed because you have been to college - In-laws do not like critical women - I would not like to marry a woman who would engage me in debates
Reinforcement of femininity traits by community	<ul style="list-style-type: none"> - Only old women are allowed to be critical in our culture - At times you wonder if philosophy is a woman’s domain - A good woman is one who obeys -critiquing societal issues requires a very strong and courageous woman especially if one is young. - Socialization in womanhood is at variance with task words in philosophy

4.2.2 Data from the questionnaires

The bio-data collected were analysed with respect to their contribution to the stifling of critical thinking dispositions. The extent of critical thinking dispositions was indicated by the critical thinking disposition score that was got by adding the score of the fixed choice test and the essay type test.

For all the tests that involved correlation, the Pearson Product Moment Correlation Coefficient was calculated. Firstly, the Pearson Product Moment Correlation coefficient was calculated for the scores got for the odd and even numbered items of the fixed choice test. The correlation coefficient was then used to calculate the reliability coefficient of the test. According to the findings, the fixed choice test had a whole test reliability coefficient of 0.7. The coefficient that was got indicates that the test results can highly be relied on. The test items were tested for independence. The null hypothesis stated that no significant differences exist between the means. The results are reported in table 8.

Table 8. difference between the means of odd and even numbered item scores

Items	Number	Mean	Standard deviation	t	df	P
Odd	20	19.65	3.72	0	18	p>0.01
Even	20	19.65	5.08	0	18	p>0.01

According to the t-value of 0 (zero) ($p>0.01$), the null hypothesis cannot be rejected. No significant difference exists between the means indicating that the test items are independent.

To ascertain whether significant differences existed between critical thinking dispositions and different categories of bio-data, null hypothesis were tested stating that no significant differences exist. The results are presented in table 9.

Table 9. Differences of the mean score of critical thinking dispositions between different categories of bio-data aspects

Aspect (Variable)	Category	Number	Mean	Standard deviation	t-value	Degrees of freedom	P
Sex	Male	2	44	1.414	0.27	18	p>0.1
	Female	18	41.5	12.62			
Age	Under 24	5	48.4	5.68	1.79	12	p<0.1
	30 – 34	9	41.2	7.85			
Academic qualifications	O Level	16	43.6	8.3	0.37	18	p>0.1
	A Level	4	41.3	9.5			
Marital status	Never married	5	49.4	4.04	2.12	18	P<0.05
	Married	15	41	8.43			
Location of residence	Rural	12	44.9	7.21	0.83	17	p>0.1
	Urban	7	41.7	9.59			
Academic qualification of partner	Non-graduate	9	40.6	10.16	1.21	18	p>0.1
	Graduate	11	45.1	6.33			
Frequency of religious participation	Daily	12	42.67	8.13	0.28	18	p>0.1
	At least twice per week	8	43.75	9.19			
Political participation	Complete apathy	16	42.4	7.68	1.8	17	p<0.1
	Transitional role	3	51	7			

According to the findings concerning the “sex” variable, the t-value of 0.27 ($p>0.1$) indicates that the null hypothesis cannot be rejected at 10% level of significance. No significant difference exists between the means, indicating that the female students do not differ from their male counterparts with regard to critical thinking dispositions.

For the “age” variable, the two categories were made when consideration was made about the range of the ages. The respondents in the highest age category and those in the lowest age category had their critical thinking dispositions scores compared. According to the t-value of 1.79 ($p<0.1$), the null hypothesis can be rejected at 10%

significance level. A significance difference exists between critical thinking dispositions score means of the two age categories. This indicates that third year diploma students at Morgenster Teachers' College who are under twenty-four years of age differ from their counterparts who are between 30 and 34 years of age with regard to the extent of critical thinking dispositions. An older age seems to be contributing to stifling of critical thinking dispositions.

For the "academic qualifications" variable, the two categories were "ordinary" and "advanced" levels. According to the t-value of 0.37 ($p > 0.1$), the null hypothesis cannot be rejected at 10% significance level. No significant difference exists between the means, indicating that the academic level of third year diploma students at Morgenster teachers' college does not influence the stifling of critical thinking dispositions.

The "marital status" variable had the categories "never married" and "married". According to the t-value of 2.12 ($p < 0.05$), the null hypothesis can be rejected even at 5% significance level. There is a significant difference between the means indicating that being married has some influence on stifling of critical thinking dispositions of third year diploma students at Morgenster Teachers' College. The reasons for the disparity are explained partly by the responses of the students in the focus group discussions that are presented in table 7.

The variable about the location of residence had three categories; rural, urban and military barracks. Only one respondent resided in military barracks. The scores of the respondent who resided in a military barracks were analyzed by comparing them with the scores of the other respondents. The respondent had the lowest critical thinking disposition score; one of the highest scores of open-mindedness, the lowest score about inquisitiveness and the highest score indicating consciousness of the closeness of the political system. The findings indicate that a highly restrictive residence contributes to stifling of critical thinking dispositions. However, a comparison of the two means of the critical thinking disposition scores of rural and urban residents is such that the t-value is 0.83 ($p > 0.1$). This value does not indicate that the null hypotheses can be rejected.

The variable about the academic qualifications of the partner had the categories, non-graduate and graduate. According to the t-value of 1.21 ($p > 0.1$), the null hypothesis cannot be rejected. No significant difference exists between the means indicating that the effects of the academic level of partners on critical thinking dispositions do not differ. The academic level of the partner seems to have no effects on stifling critical thinking dispositions.

The variable about the frequency of religious participation had the two categories; "daily" and "at least twice per week". According to the t-value of 0.28 ($p > 0.1$), the null hypothesis cannot be rejected at 10% significance level. No significance difference exists between the means, indicating that the effects of active religious participation on stifling critical thinking dispositions are not different from those of moderate religious participation.

The variable about political participation had the categories; "complete apathy" and "transitional role". The t-value of 1.8 ($p < 0.1$) suggests that the null hypothesis be rejected at 10% significance level. A significant difference exists between the means indicating that respondents with absolute political apathy have critical thinking dispositions that are different from those who play transitional roles in politics.

The variables that were assumed to stifle critical thinking dispositions were operationalized and the magnitude of each was established. To determine the nature of the relationship between the critical thinking disposition and the several variables, null hypotheses were formulated stating that scores representing the magnitudes of variables have no correlation with scores representing critical thinking dispositions. The alternative hypotheses were stating that scores representing the magnitudes of variables have negative correlations with scores representing critical thinking dispositions.

To test the null hypotheses, Pearson Product Moment Correlation Coefficients were calculated. The results are reported in Table 10.

Table 10. Correlation between critical thinking dispositions and other variables

	Critical thinking dispositions	
Negative self-concept		
Closeness of political system		
Employment of monologic approach		
Lack of experiential time		
“Ubuntuist/unhuist” ethics(gerontocracy)		
Active religious participation		
Femininity orientations		

There appears to be a moderate negative correlation between critical thinking dispositions and a negative self concept. The correlation is significant at 5% significance level.

A low negative correlation was found between critical thinking dispositions and closeness of the political system. The null hypothesis cannot be rejected at 5% level of significance.

There appears to be an extremely low negative correlation between critical thinking dispositions and the employment of the monologic approach by the lecturers. The null hypothesis cannot be rejected at 5% significance level.

A moderate negative correlation was found between critical thinking dispositions and lack of experiential time. The null hypothesis can be rejected at 5% significance level.

The correlation between critical thinking dispositions and “ubuntuist/unhuist” ethics (gerontocracy in particular) is moderately negative. The null hypothesis can be rejected at 5% significance level.

Active religious participation is very lowly correlated to critical thinking dispositions. The null hypothesis cannot be rejected at 5% significance level.

There appears to be a very low negative relationship between critical thinking dispositions and femininity orientations. The null hypothesis cannot be rejected at 5% level of significance.

The high correlation between two variables should not necessarily be seen as cause and effect relationship. There could be a third variable that could have contributed to the correlation to some extent (Mulder 1993). In order to eliminate the influences of the third variable (being limited to the ones that are now known) partial correlations between critical thinking dispositions and each one of the identified independent variables were calculated.

The Pearson Product Moment Correlation Coefficients for the independent variables (assumed to influence critical thinking dispositions) were calculated. The results are reported in Table 11.

Table 11. Correlations between independent variables

	Self-concept
Closeness of political system Employment of monologic approach Lack of experiential time "ubuntuist/unhuist" ethics (gerontocracy) Active religious participation Femininity orientations	
	Closeness of political system
Employment of monologic approach Lack of experiential time "ubuntuist/unhuist" ethics (gerontocracy) Active religious participation Femininity orientations	
	Employment of monologic approach
Lack of experiential time "ubuntuist/unhuist" ethics (gerontocracy) Active religious participation Femininity orientations	
	Lack of experiential time
"ubuntuist/unhuist" ethics (gerontocracy) Active religious participation Femininity orientations	
	"ubuntuist/unhuist" ethics (gerontocracy)
Active religious participation Femininity orientations	
	Active religious participation
Femininity orientations	

The correlation coefficient between the independent variables enabled the calculation of the partial correlation coefficients between the dependent variable (critical thinking dispositions) and each independent variable. In each instance, a null hypothesis was formulated stating that no correlation exists between critical thinking dispositions and each independent variable. The alternative hypothesis was that there exists a negative correlation between critical thinking dispositions and each independent variable. The results are reported in Table 12.

Table 12. Correlation between critical thinking dispositions and the independent variable without the effects of any other independent variable (currently known)

Correlation coefficient without third variable	Coefficient of determination	t-value
	6.6%	-
	29%	2.72
	7.5%	-
	8%	-
	14.5%	1.74
	16%	1.85
	4%	-
	0%	-
	2%	-
	4%	-
	3%	-
	0%	-
	1%	-
	0%	-
	0%	-
	16%	1.85
	25%	2.45
	20%	2.07
	18%	1.96
	13%	-
	0%	-
	5.8%	-
	1.4%	-
	0%	-
	16%	1.85
	25%	2.45
	29%	2.72
	8.4%	-
	13.7%	-
	20%	2.14
	8.4%	-
	1%	-
	0%	-
	1%	-
	0%	-
	0%	-
	0%	-
	1%	-
	1%	-
	5.3%	-
	3.2%	-
	1%	-

Key

Variable	Code
Critical thinking dispositions	1
Negative self-concept	2
Closeness of political system	3
Employment of monologic approach	4
Lack of experiential time	5
“ubuntuist/unhuist” ethics (gerontocratic orientations)	6
Active religious participation	7
Femininity orientations	8

There appears to be a moderate negative correlation between critical thinking dispositions and a negative self concept while eliminating the effects of the employment of monologic approach. According to the t-value of 2.72 ($p < 0.05$), the null hypothesis can be rejected. As much as 29% of the variance in stifled critical thinking dispositions can be explained by a negative self-concept without the effects of the employment of the monologic approach.

A moderate negative correlation was found between critical thinking dispositions and negative self-concept excluding the effects of active religious participation. According to the t-value of 1.74 ($p < 0.05$) the null hypothesis can be rejected. About 14.5% of the variance in stifled critical thinking dispositions can be explained by a negative self-concept excluding the effects of active religious participation. A moderate negative correlation was also found between critical thinking dispositions and negative self-concept excluding the effects of femininity orientations. A t-value of 1.85 ($p < 0.05$) indicates that the null hypothesis can be rejected. About 16% of the variance in stifled critical thinking dispositions can be explained by a negative self-concept excluding the effects of femininity orientations. A moderate negative correlation was found between critical thinking dispositions and lack of experiential time excluding the effects of “ubuntuist/unhuist” ethics (gerontocratic orientations). A t-value of 1.85 ($p < 0.05$) indicates that the null hypothesis can be rejected. About 16% of the variance in stifled critical thinking dispositions can be explained by lack of experiential time excluding effects of gerontocratic orientations.

There appears to be a moderately high negative correlation between critical thinking dispositions and lack of experiential time excluding the effects of active religious

participation. A t-value of 2.45 ($p < 0.05$) indicates that the null hypothesis can be rejected. As much as 25% of the variance in stifled critical thinking dispositions can be explained by lack of experiential time excluding effects of active religious participation. A moderate negative correlation () was found between critical thinking dispositions and lack of experiential time excluding the effects of femininity orientations. According to the t-value of 2.07 ($p < 0.05$), the null hypothesis can be rejected. About 20% of the variance in critical thinking dispositions can be explained by lack of experiential time excluding effects of femininity orientations. A moderate negative correlation was found between critical thinking dispositions and gerontocratic orientations excluding the effects of active religious participation. According to a t-value of 1.96 ($p < 0.05$), the null hypothesis can be rejected. About 18% Of the variance in stifled critical thinking dispositions can be explained by gerontocratic orientations excluding the effects of active religious participation. A t-value of 1.63 ($p < 0.05$) for the correlation between critical thinking dispositions and gerontocratic orientations without the effects of femininity orientations indicates that the null hypothesis cannot be rejected.

A moderate negative correlation was found between critical thinking dispositions and lack of experiential time without the effects of a negative self-concept. A t-value of 1.85 ($p < 0.05$) indicates that the null hypothesis can be rejected. About 16% of the variance in stifled critical thinking dispositions can be explained by lack of experiential time excluding the effects of a negative self-concept. A moderately high negative correlation was found between critical thinking dispositions and lack of experiential time without the effects of closeness of the political system. According to the t-value of 2.45 ($p < 0.05$) the null hypothesis can be rejected. About 25% of the variance in stifled critical thinking dispositions can be explained by lack of experiential time excluding the effects of the closeness of the political system.

There was found a moderately high negative correlation between critical thinking dispositions and lack of experiential time excluding the effects of employing the monologic approach. A t-value of 2.72 ($p < 0.05$) indicates that the null hypothesis can be rejected. As much as 29% of the variance in stifled critical thinking can be explained by lack of experiential time excluding the effects of employing the monologic approach.

There also appears to be a moderate correlation between critical thinking dispositions and gerontocratic orientations excluding the effects of employing the monologic approach. According to a t-value of 2.14 ($p < 0.05$), the null hypothesis can be rejected. About 20% of the variance in stifled critical thinking dispositions can be explained by gerontocratic orientations excluding the effects of employing the monologic approaches. All the other correlations between critical thinking dispositions and independent variables (excluding the effects of the third variable) not discussed above have t-values that fall within the critical t-value. The null hypotheses about them cannot be rejected at 5% significance level.

4.3 Discussions on findings

The findings from the focus group discussions about the effects of a negative self concept on critical thinking dispositions converge with those from the questionnaire. The students have negative self-concepts on their performance in philosophy of education. The students are particularly contemptuous of themselves and are closed to critical thinking. The evidence is that some students proclaimed, “When I size myself against Nyerere, I am nothing intellectually to critique his ideas”, “I don’t think I will ever become a philosopher – I don’t have the intelligence”. When one has such a conception of the self, one very much likely develops a tendency not to put some effort in academic work (Donald, Lazarus and Lolwana 1997). The findings from the questionnaire show that there is a moderate negative correlation between critical thinking dispositions and the negative self-concept. The greatest percentage of explaining stifled critical thinking dispositions by negative self-concept is twenty nine (29). This means that 29% of stifled critical thinking dispositions in a student is attributable to a negative self-concept.

A student with a negative self-concept very much likely becomes close-minded. For example, some students proclaimed, “Some issues are by nature good we shouldn’t waste time critiquing them” and “I wouldn’t want to deal with antagonistic issues.” The responses of these students are in line with the findings of Epstein (1973:05) who says, “A person with a narrow self-theory will experience life in a relatively simplified fashion. Things for him should be black or white, and he characteristically should exhibit repression and rigidity.” Students with the above described characteristics to some extent fail to evidence the disposition of trying to be well

informed (Nitko, 2001). The research findings are also in accordance with previous studies by Gouws and Kruger (1994:93) who posit, "A negative self concept is ... injurious to one self's becoming since it retards progress at school." In this research the progress being referred to is the critical thinking disposition.

There appears to be a low moderate correlation between critical thinking dispositions and perceptions on the closeness of the political situation. About 6% of the variance in stifled critical thinking dispositions can be explained by closeness of the political system in the country. The students are apprehensive to discuss any issues that have a semblance of politics. Table 6 has the excerpts from the focus group discussion transcripts. One of the respondents remarked "I am afraid, you may not finish the course." The student's remarks are in line with the findings by Higgs and Smith (2002) who posit that the perpetuation of a closed political system is done by nurturing a mindset which is dogmatic, apprehensive and closed.

According to the findings, the teaching-learning situation at Morgenster Teachers' College is closed. The closeness of the teaching-learning situation is evidenced by the following remarks by one of the respondents, "Follow what you are told and have peace – be critical and philosophical and get into pieces." The flow of information in lecture rooms is top-down. Letseka in Higgs (1995) is contented that where the flow of information is one dimensional, there is indoctrination. Thus the lecturers of the respondents (in this research) are more of proselytising ideologues than educators (Brookfield 1985).

However the coefficient of determination between critical thinking dispositions and perceptions on the closeness of the political system is relatively low in this study. The reason could be that the respondents are essentially homogeneous in the ways they experience the closeness of the systems. If the respondents were heterogeneous in this aspect, the coefficient of determination could have been larger. The presumption comes about when one considers the "striking" responses by the student who resides in military barracks. The respondent had; the lowest critical thinking disposition score, one of the highest score of open-mindedness, the lowest score of inquisitiveness and the most conspicuous score which indicates

perception of the closeness of the political system. The military barracks are extremely closed institutions. The score of the student who resides in the military barracks testifies that the closeness of the systems contributes to stifling of critical thinking dispositions.

The findings from the focus group discussions indicate that the students are exposed to the monologic approach. The student posited, "Presentations in lecture rooms are about the lecturer's knowledge" and "some lecturers just come and read notes to us". The remarks are in accordance with the previous findings by Jacobs, Gawe and Vakalisa (2000) who posit that in a closed learning situation, the lecturer presents content as a given or some cardinal truth that has been true and will always be so without alteration to eternity. The effects of the employment of the banking concept of education was pronounced by one of the respondents, "Sometimes you feel that you should reproduce what the 'fundis' give to you". The response of the student is in line with what Freire (1972:48) postulates, "The banking approach to adult education for example will never propose to the students that they consider reality critically."

However there appears to be a very low negative correlation between critical thinking dispositions and the employment of monologic methods. The highest variance in stifled critical thinking dispositions that can be explained by employment of monologic methods is a mere 1%. These findings are in accordance with those of Ishiyama, McClure, Hart and Amico (1999) who found out that students who exhibit a disposition towards critical thinking rated lecture methods of instruction higher than students with lesser dispositions to think critically. The lecture method, though considered relatively less effective than other methods in a didactic situation could be very handy when acquiring declarative knowledge. The depth of the knowledge acquired could then be used to think critically in that area. Since the research findings are not an absolute reflection of the findings by Ishiyama et al. (1999) one should be cautious when making deductions about critical thinking dispositions and employment of the monologic approach. Basing on the findings from the focus group discussions, employment of the monologic approach by lecturers at Morgenster Teachers' College contributes to stifling of critical thinking dispositions of the third year students.

The students indicated that there is insufficient experiential time. Some of them remarked, "There is no time to digest what you are told", "... our timetable is packed more than the primary school time-table" and "We hand in assignments when they are still hot." The students also indicated that insufficient experiential time has negative effects on their performance. The students remarked, "... in other areas we reproduce lecture notes (in assignments) due to lack of time." The students' responses are in accordance with what Myburgh et al. (1999:170) postulate, "Persons who experience time this way (measured and restricted) are placed under pressure to meet deadlines ... which could include completing tasks and assignments."

One student posited, "I think I can think critically when time is available." The student was implying that her critical thinking dispositions are stifled by insufficient experiential time. What the student posited was in accordance with the findings by Pithers, (2000) who claims that there would be benefit to reduce discipline specific knowledge to allow the students time to engage in activities which are likely to develop their thinking. The findings from the questionnaire converge with the findings from the focus group discussions that were discussed above. As much as 29% of the variance in stifled critical thinking dispositions can be explained by lack of experiential time. The findings are in accordance with those by Hill (1991) who posits that the amount of study time has a very strong impact on performance.

According to the findings gerontocratic orientations stifle critical thinking dispositions by nurturing close-mindedness. For example one student remarked, "... whatever elders say is indisputable". The other one gave a proverb which is often spoken by elders when the youths try to argue with them, "*Takabva nako kumhunga hakuna ipwa*", which can be interpreted that, "I have experienced a lot in this area so get it from me". What the students said is in accordance with the findings by Ennis (1996) who posits that development of critical thinking dispositions has some cultural biases. The students are obliged to take what the elders tell them since the virtue of respect is interpreted as respect for the aged (Coetzee and Roux 1998).

Philosophical sagacity is gerontocratically negatively sanctioned both in the communities of the students and at college by the lecturers. One student remarked

one risks ostracism when one tries to philosophise on some issues with the elders. What the student remarked is in accordance with the previous findings that gerontocratic societies negatively sanction individualistic critical thinking dispositions (Peresuh and Nhundu, 1999; Coetzee and Roux, 1998; Street, 1994 and Gee 1994). Some lecturers wield some gerontocratic power. One student said, "You get current information on internet but you are told that experience counts most." The other one also indicated that there are some negative sanctions that go with the tendency of being critical in lecture halls. The student remarked, "Lecturers psychologically quarantine you when you try to show philosophical prowess." What the student said confirms the findings that experience can sometimes be an obstacle to learning when the educator considers him/herself as an 'expert' whom learners should not challenge (Gravett 2001). The lecturers who consider themselves the only 'experts' promote convergent thinking. One of the students remarked, "If you want to pass be on the side of the lecturer." The student implied that the critical thinking disposition is stifled by the lecturer.

The findings from the focus group discussions converge with those from the questionnaire. At most 20% of the variance of stifled critical thinking dispositions can be explained by gerontocratic orientations. The findings are in accordance with the previous findings that when there is no balance between ethics and critical thinking dispositions there is some kind of dangerous indoctrination (Lots of essays website 2010). The response of the students about their religious experience were divided into three subthemes. One of the subthemes was "coercion to conform to some doctrines." One of the excerpts under the subtheme was "try it (critical discussion on religious issues) here (Morgenster Teachers' College) and get deferred." What the student said is in accordance with what existentialists like Foucault postulates that modern institutions like 'big churches' distort life by forcing their adherents to conform to set rules (Higgs and Smith 2000). The third year students at Morgenster Teachers' College are therefore indoctrinated and Higgs and Smith (2002:12) further posit, "... educators cannot teach people to be critical and at the same time encourage conformity." The lecturers who threaten students with deferment for lack of conformity are proselytising ideologues (Brookfield, 1985).

The other subtheme was about an indication of intuitive thinking by the respondents. Examples of excerpts that constitute the subthemes are, "Your little philosophy will spoil your eternal life" and "Being critical about religious issues is tantamount to blasphemy." The students' responses confirm previous findings that many Christians balk at the mention of critical thinking since they associate it with scepticism of the Bible and religion in general (McDurmon 2009). As such they do their thinking at the intuitive level (Parkinson 1993).

The third subtheme was "closeness to rational scrutiny of issues." One of the examples of excerpts that evidenced the subtheme is "Who are we to evaluate God and his works?" What the student remarked is in accordance with the previous findings by Davies (1982) that even some renowned academics eschew talk about a moral argument of God's existence. The other student remarked, "... in church we are taught to accept the gospel as it is." The students' response is in accordance with the postulate that an indoctrinated person has a unilateral approach to 'truth' since his/her mind is closed and his/her beliefs are not open to rational scrutiny (Letseka, 1995; Griessel and Oberhelzer, 1994; Haralambos, 1985 and Lloyd, 1976).

However the findings from the focus group discussions that are discussed above mesh weakly with the findings from the questionnaire. There is a very low negative correlation between critical thinking dispositions and active religious participation. At most 1% of the variance in stifled critical thinking dispositions can be explained by active religious participation. The reason for the weak mesh of the findings from the two instruments could probably be that the students responded to the questions about their religiosity in an almost homogeneous way. This was due to the fact that their experiences in as far as indoctrination is concerned are essentially the same. The negative correlation coefficient shows that religious participation stifles critical thinking dispositions. The effects could have been far more apparent were the students heterogeneous with respect to their religious participation.

The students' responses in the focus group discussions about femininity orientations were categorised into four subthemes. The first subtheme was, "reinforcement of femininity traits by other women". It was remarked, "...at kitchen parties, older women advise us not to be critical in the home" and "When one gets married, one's aunts advise her not to be argumentative in the home". The students' remarks are in

accordance with previous findings by Durkin (2010) who posits that disapproval from one's own cultural group can act as an inhibitor to critical thinking and debate. The older women could be behaving according to the findings by McNell and Townley (1986) that some women consider it far more threatening to be unfeminine than to be an underachiever.

The other subtheme was, "reinforcement of femininity traits by religion." An example of the excerpt under this subtheme was "... in my religious group, women play subservient roles – they are not even allowed to preach." What the student remarked is in accordance with the previous findings that the Christian ideology has and is still contributing to the mental brainwashing of women (Kirby et al., 1996; Lyons, 1978). However the tone of the responses and discussions about the issue did not show ascription of the inferiority status to women as primordial.

The family as a social institution was also found to be a reinforcer of femininity traits. Examples of excerpts that confirm to that are; "Try it (critiquing issues) in the home and you are finished" and "In-laws do not like critical women." A male student remarked, "I would not like to marry a woman who would engage me in debate." The responses are in line with some previous findings by Higgs and Smith (2000:95) when Smith posits, "... the woman a man is married to will have to do exactly what he says."

The fourth subtheme was, "reinforcement of femininity traits by the community". Some female students remarked, "A good woman is one who obeys" and "At times you wonder if philosophy is a woman's domain." The remarks are in accordance with the previous findings by Higgs and Smith (2000:95) who posit, "... men discriminate against women ... as a result of religious and cultural beliefs which regard women as subordinate to men in the hierarchy of society and community."

One of the female students remarked, "Only old women are allowed to be critical in our culture." The remark indicates that the young African women have another layer of old African women to oppress them. Higgs and Smith (2002) posit that the African women are under a triple layer of oppression brought about by colonial western patriarchal cultures, African patriarchal cultures and the attempt on the part of the

Western and European feminists to speak for them. Thus the young African women are under a quadruple layer of oppression that suppresses critical thinking dispositions.

However, there is a weak link between findings from the focus group discussions and the findings from the questionnaire. There is a low negative correlation between critical thinking dispositions and femininity orientations. At most 5% of the variance in stifled critical thinking dispositions can be explained by femininity orientations. It's very much likely that the coefficient of determination could have been higher where the sexes of the respondents balanced. There were only two male students and eighteen female students.

4.4 Conclusion

In this chapter, data were presented, analysed and interpreted. The qualitative data were presented as excerpts that constituted some subthemes that emerged from patterns of excerpts. The quantitative data were analysed to come up with coefficient of determination. Some t -tests were carried out to enable hypothesis testing. The discussion of findings included the rational linking of findings from focus group discussions, questionnaires and the scholarship review that was made and presented in Chapter 2.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter the researcher focuses on the review of the salient aspects of the research, the drawing of conclusions from the findings of the whole research and giving some recommendations based on the findings.

5.2 Summary

In this research it was found out the development of critical thinking is one of the over-arching goals of education globally. It is widely believed that the ever-changing socio-economic and political environment which is being influenced by globalisation requires critical thinkers. Some nations like the United States and Britain started to design some formal programmes meant to develop critical thinking as early as the 1960's. Since then, the educationists in these nations have been researching on critical thinking and have come up with some theories which in some cases are peculiar to their situations. Some of the theories they generated and documented were used as guidelines in carrying out this research. The high regard for the versatility of critical thinking as the panacea to most socio-economic and political problems makes it a very important mental activity but by all means not simplistic. It is a very complex activity with intertwined activities which among others are critical thinking abilities and critical thinking dispositions. For this research, critical thinking dispositions were considered with a focus on factors that stifle them among the third year diploma students at Morgenster Teachers' College. The students did not evidence the disposition to think critically in philosophy of education assignments and examinations. The examination reports of the previous years show that this is a perennial problem. The factors that were assumed to stifle critical thinking dispositions had hypotheses formed about their effects. The assumed factors were; a negative self concept, closeness of the prevailing political system, employment of monologic approach, lack of experiential time, 'ubuntuist/unhuist' ethics (particularly gerontocratic orientations), active religious participation and femininity orientations.

A scholarship review on the assumed stifling factors was done, factor by factor. To ensure a comprehensive literature study, the constructive critical approach was

adopted. The approach required the researcher to analyse, compare and evaluate literature rather than to simply provide a catalogue of relevant information. The scholarship review enlightened the researcher about critical thinking dispositions inventories and some probable factors that stifle it. Some of the information got was used in the crafting of the research instruments, administering of the instruments and analysing the data that were generated and collected. In this research mixed methodologies were employed, that is both qualitative and quantitative methods of generating/collecting data were used. For the qualitative methodology, the research strategy that was used was phenomenology. Focus group discussions were used to generate data. The respondents participated in focused discussions when they were in two groups of seven and one group of six. During the focus group discussions, the researcher played the role of the moderator. There was an assistant moderator who was taking notes about non-verbal communication. The verbal communication was audio-tape recorded. During and after the focus group discussions some strategies that address trustworthiness of the findings were attended to. These were credibility, transferability, applicability, dependability and confirmability.

The data that were generated from the focus group discussions were analysed using the following steps; segmenting, coding, compiling a master list of categories and constituent excerpts, checking for intra-coder and inter-coder consistency and indicating relationships among categories thus coming up with themes. The data were presented in tables with subthemes or themes and excerpts as the evidence.

The research design that was employed under the quantitative approach was the analytical survey. The questionnaire that was used to collect data had three sections. The first section focused on the bio-data of the respondents. The second section was the maximal performance test about critical thinking dispositions. The third section was the typical performance test with items that sought to measure the intensity of each of the factors that were assumed to have some influence on critical thinking dispositions. To address content validity concerns, four colleagues were involved in evaluating the exhaustiveness of the items that constituted operational definitions of each of the factors that were assumed to stifle critical thinking dispositions. After the test was administered, the reliability test was done. The split-halves reliability coefficient was calculated using the Spearman-Brown double length formula.

For the analysis of the data, bivariate statistics were used. Pearson Product Moment Correlation coefficients were calculated in three parts. Firstly, they were calculated between critical thinking dispositions (dependent variable) and the factors that were assumed to stifle critical thinking dispositions (independent variables). Secondly, correlation coefficients were calculated between the independent variables. Thirdly, partial correlation coefficients between the dependent variable and each independent variable were calculated. The partial correlation coefficients were further refined into coefficients of determination. The coefficients of determination helped to determine the variance in stifled critical thinking dispositions that could be explained by each one of the independent variables. The F values were calculated to test the hypotheses. The hypotheses about critical thinking dispositions and the aspects of the bio-data were tested at 10% significance level. This was the case since the aspects were exploratory. The researcher wanted to explore all aspects that had some influence on critical thinking dispositions. The hypotheses between critical thinking dispositions and the independent variables were tested at 5% level of significance. This was the case since the studies about them were confirmatory. The researcher wanted to confirm whether the independent variables were indeed making significant influences.

5.3 Conclusions and recommendations

The results showed that the split-halves reliability coefficient was 0.7. Thus the test results were very reliable. The colleagues who reviewed the test items helped a lot. It is always advisable that some colleagues be engaged to critique the test items.

According to the results, a high negative correlation was obtained between critical thinking dispositions and a negative self-concept. Students with negative self-concepts about themselves usually have their critical thinking dispositions adversely affected. The students were usually contemptuous of their intellectual abilities and consequently refrained from being engaged in critical thinking. Lecturers need to change this perception in the students by exposing them to the higher order questions with the task words such as 'discuss', 'examine', 'evaluate' and 'justify'. The student who remarked, "When I size myself against Nyerere, I am nothing intellectually to critique his ideas", is in dire need of some assistance in

philosophising. The student must be made aware of the fact that critiquing of ideas of some philosophers can be done focusing on applicability in particular contexts, starting with the context of the particular student.

The results showed that critical thinking dispositions are adversely affected by the closeness of the political system. The students were apprehensive to discuss anything that had a semblance of politics. The closeness of the political system at macro- (national) level cascades to meso-(institutional) level and finally to micro- (lecture room) level. The students showed that they were apprehensive of whoever wielded some power. The lecturers in the lecture rooms should try by all means to be bearers of authority not power. They should endeavour to evoke students' critical thinking by showing appreciation and tolerance of any thinking that is disparate from their own. The lecture room should not be a training field in which instructions are given and followed, but an education environment in which the lecturer facilitates learning by using diverse opinions and experiences of students as learning catalysts.

The empirical findings show that lack of experiential time adversely affects critical thinking dispositions. The students indicated that they did not have adequate time to reflect on the lecture notes given and they tended to regurgitate the lecture notes in the assignments. The students should be afforded some time to research on their own and to contextualise their findings. According to the results, the employment of monologic methods adversely affects critical thinking dispositions to a mild extent. It was reported that some lecturers just read out some notes to the students. The reading out of notes is a typical example of the banking concept of education. These lecturers consider knowledge as bodies of stable facts that should be transferred to the learners. The lecturers should refrain from the banking concept of education and should employ dialogical teaching techniques. For example, the lecturer can pose a problem which the students can discuss in some round table discussion sessions.

Research results also show that active religious participation adversely affects critical thinking dispositions to some extent. The students were indoctrinated during church activities. Consequently, they did their thinking at the intuitive level. To them, things were either black or white. The indoctrination of the students in the church activities at college creeps into the lecture rooms. The lecturers are more of

proselytising ideologues than educators. They are preachers of conformity in both church and academic activities. The lecturers should be aware of the fact that , being academics they should encourage critical thinking in all spheres of life. They should not eschew discussions on religious issues and should not balk at the mention of critical thinking on religious issues.

According to the research results, 'ubuntuist/unhuist' ethics (particularly gerontocracy) seems to be stifling critical thinking dispositions. The students indicated that they were oriented to think that important societal decisions are for the elderly people. The orientation was directly transferred into the lecture rooms since most lecturers were older than the students and thus wielded gerontocratic power. The students expressed that they felt somehow disrespectful when they engaged lecturers in debate . even when they engaged the lecturers in debate, they prematurely gave in. Since sage philosophy is one of the methods of inquiry in 'ubuntuist/unhuist' societies, the lecturers should try to promote philosophical sagacity in the learners. This can be done by exposing students to debate on contentious 'ubuntuist/unhuist' customs that were revoked by philosophical sagacity, for example the infanticide of twins. These once practised customs should be discussed in the wake of current information brought about by modern science and disseminated by the present day information technology. Philosophical sagacity would most likely promote critical thinking dispositions in gerontocratic societies.

The research results also show that femininity orientations have some negative influence on critical thinking dispositions. The students indicated that they were socialised to be feminine by other women, the family, religion and the community at large. The socialisation could have been readily transferred into the lecture rooms. Most of the lecturers were males so the female students could have been less inclined to be critical about the content presented in the lecture rooms. However, the female students felt that their inferior social status was not a primordial but a social construction. The lecturers could foster critical thinking dispositions in female students by exposing the students to some feminist thinking that has been documented. The lecturers should also avoid some sexist presentation of content where words like 'mankind' and 'man' (referring to human beings) are used. Though 'man' is not tantamount to 'masculine' the terms can easily be mistaken to be

interchangeable and could adversely affect critical thinking dispositions in and out of lecture rooms.

The theories generated by the educationists in the countries that spearheaded formal critical thinking promotion should not be taken as the panacea to all critical thinking disposition problems. The theories should only be used as guidelines when one carries out research on contextual critical thinking dispositions. Critical thinking dispositions are to some extent influenced by one's cultural traits. The cultural traits of the students need to be considered when attempting to foster critical thinking dispositions.

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APPENDIX A

Morgenster Teachers' College
P.O. Morgenster
Masvingo

21 June 2011

The Principal
Morgenster Teachers' College
P.O Morgenster
Masvingo

Dear Madam

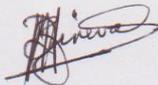
Re: Application for Permission to carry out a Research at Morgenster Teachers' College with Intake 10 Students.

Reference is made to the above mentioned subject.

I am currently registered for MEd Philosophy with University of South Africa (UNISA) and am doing a dissertation. I would like to do my research at your institution with the group of Intake 10 students. The topic am researching on is; **"What are the factors and extent of their contribution to stifling of critical thinking dispositions of third year students at Morgenster Teachers' College?"**

Thank you.

Yours sincerely



Zireva D



Appendix B

THE INTERVIEW SCHEDULE

1. **Opening question**
What can you say about your performance in philosophy?
2. **Introductory question**
What in your opinion could be the reason for such a performance?
3. **Transition question**
What are the common task words in philosophy of education and what do they require?
4. **Key questions**
 - 4.1 How do your religious convictions influence the satiation of the requirements of task words in philosophy of education?
 - 4.2 Do you think the requirements of the task words in philosophy of education are too demanding for you? Why?
 - 4.3 How do “ubuntuist/unhuist” ethics like gerontocracy influence satiation of the task words in philosophy of education?
 - 4.4 How do presentations of lectures influence student’s satiation of the requirements of the task words in philosophy of education?
 - 4.5 In what ways do femininity orientations influence satiation of the requirements of the task words in philosophy of education?
 - 4.6 How do you experience time in relation to addressing the requirements of the task words in philosophy of education?
 - 4.7 Why would you think that there is a restrain in critically discussing freely and fully an idea by Pestalozzi that “Education should be a means to prepare man to play his part in political change?”
- 5 **Ending questions**
 - 5.1 What are the important aspects that have been discussed?
 - 5.2 What other factors contribute towards stifling critical thinking dispositions?

Appendix C

QUESTIONS ON STUDENT TEACHERS' EXTENT OF CRITICAL THINKING DISPOSITIONS

Please complete the questionnaire truthfully. Your responses will be confidential and will only be used for purposes of this research. Tick (✓) in the appropriate box

SECTION A Personal information

			Tick
1	Sex	Male	
		Female	
2	I am pursuing	Early childhood development course	
		General teacher education course	
3	My age range is	Under 24 years	
		24 – 29 years	
		30 – 34 years	
		Over 35 years	
4	Indicate your highest academic qualification	"O" Level	
		"A" Level	
5	Current marital status	Never married	
		Married	
		Separated	
		Divorced	
		Widowed	
6	Indicate which one of the following best describes the place where you live	City	
		Communal area	
		Farming area	
		Industrial area(mining; Agriculture	
		Military Barracks	
7	Choose the option which indicates the highest academic qualification of your partner (spouse, girl or boyfriend)	Grade seven and below	
		Zimbabwe junior Certificate	
		Ordinary Level	
		Advanced Level	
		Degreed (Graduate)	
		Not sure	
8	Indicate your Religion	Christianity	
		Islam	
		African Traditionalism	
		Other (specify)	
		No Religion	
9	Indicate the intensity of your religiosity (participation in rituals e.g. praying)	Daily	
		Once or twice weekly	
		Thrice or six times weekly	
		Once monthly	
		Once yearly	
		Never	
		Not applicable	

10	Indicate which one of the following best describes your political participation	I am not involved in any political activities such as voting.	
		I am involved in "spectator activities" which include voting and taking part in discussions about politics.	
		I am involved in "transitional activities" which include attending a political meeting.	
		I participate in "gladiatorial activities" such as standing for and holding public and part offices	

SECTION B

Read the following passage and indicate by a tick (✓) whether you agree or disagree with given statements.

Jack: Why did you not answer my call?

Jill: I am sorry, I was praying when the phone rang. God should be put before our secular needs – since he is the one who provides for them.

Jack: So males are important in the provision of female's needs.

Jill: Why do you say so?

Jack: You implied that God is male – and provides for needs. But why do you think that God is male?

Jill: That is an age old fact. Who are we to dispute that?

Jack: If that is the case, why do women of today advocate for equal rights as men?

Jill: You want me to doubt the "fatherhood" of God.

Jack: Whenever you pray, have you thought about why you say "Our Father..."? It could be a supposition that God is male.

Jill: Let's put the issue to rest. What did you want when you phoned?

ITEM		RESPONSES			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1	I support Jack for questioning cherished beliefs				
2	I would want to know why God is considered male				
3	Information about ascribed sex of God is important				
4	I wish there was concrete evidence about God being male				
5	It was right for Jill to close the discussion				
6	I love listening to people who speak against my beliefs				
7	All people should worship God in the same way				
8	It is informative to attend religious ceremonies of other people				
9	I get offended by speeches of people who are not of my political party				
10	Jill is likely to believe that male beings are closer to God than females				
11	I hate looking for evidences about my beliefs				
12	Evidence about religious issues is of trivial importance				
13	Jack's reasoning that relates secular issues and religious issues is blasphemous				
14	Jack lacks spiritual discipline				
15	It is important that Jill maintains her belief system without seeking reasons about it				
16	I hate Jack's reasoning, it is diabolical				
17	I mistrust reasoning about religious issues				

18	Any reasoning that is at variance with the mainstream society is fallacious				
19	Faith is more valuable than knowledge				
20	It is trivial to question society beliefs				
21	About religious issues, "let sleeping dogs lie".				
22	People who raise questions about God are wasting effort				
23	Jack is not a born again Christian				
24	When Jill dies, her soul will go to heaven				
25	Equal rights have brought more harm than good				
26	Whatever people find out about God, I will always pray "Our father ..."				

SECTION C

Tick in the box that best describes how you feel about the statements below

ITEM		RESPONSES			
		Strongly Agree	Agree	Disagree	Strongly Disagree
1	I have confidence in my work				
2	My "O" level results have nothing to do with my performance in philosophy of education				
3	I ask valid questions during philosophy of education lectures				
4	I can do philosophy of education like any other student				
5	Other students respect my academic achievements in philosophy of education				
6	My sex has nothing to do with my performance in philosophy of education				
7	I am intelligent in philosophy of education				

8	I make worthy contributions in philosophy of education discussions				
9	I like to be engaged in philosophy of education discussions				
10	I am proud of my achievements in philosophy of education				
11	I am fond of giving reasons to support my standpoint				
12	When the lecturer explains something and I fail to understand but others do, I take it that the explanation is fault				
13	It is harmless to talk about politics at college				
14	I can write my philosophy of education assignments citing Zimbabwean political examples without any fear				
15	I am free to learn about politically sensitive content				
16	There is complete absence of Central Intelligence Organisation (CIO) agents among the students				
17	I can discuss political issues with anyone				
18	Being critical about facts raised by lecturers is encouraged				
19	It is safe to accept what authorities tell you				
20	Lecturers dictate notes to us				
21	The lecturers explain notes to us when they themselves feel it is necessary				
22	Lecturers create the impression of knowing everything				
23	The lecturers threaten students with failing if students are critical about certain issues				
24	The lecturers choose what they teach us				
25	Lecturers are more actively involved in the lecture hall than the students				
26	The lecturers think that the students' experiences are valueless				
27	I, as a student, am denied the opportunity to ask questions				
28	I, as a student, am denied the opportunity to express my thinking about the content presented to me				
29	My college academic time table is fully packed				
30	I lack time to reflect critically on the notes given to me by the lecturers				
31	We tend to rush over content in order to complete the syllabus before exams				
32	The timetable is devoid of time for independent study				
33	Due to lack of time I find myself accepting notes given to me as they are				
34	I write my assignments in accordance with the given notes				
35	Time for researching in the library is scarce				
36	I lack time to discuss academic issues with fellow students				
37	I feel disrespectful to challenge what the elders say				
38	In discussions, respect for age is necessary				
39	Female students' contributions in critical discussions should be treated with more caution than male students'				
40	Philosophical sagacity for societal reforms is typical of male students				
41	My conceptions of philosophical issues should be the same as other students'				
42	When a woman assumes the place and tone of a man as a public reformer, her character becomes less "ubuntuist/unhuist"				
43	Authority figures (e.g. lecturers) are mandated to transmit knowledge				
44	I prefer to ignore notes in philosophy of education that are critical about creation				
45	I get disappointed when someone questions about the existence of the supreme being				

46	Philosophy of education must support the religious values				
47	It is unholy to think critically about divine issues				
48	Some learning content, especially Marxism is blasphemous				
49	People should learn to accept things as given to them by the creator				
50	Critical thinking drives me away from the creator				
51	Communication with the supreme being (creator) solves my problems				
52	Anyone at Morgenster Teachers' College who is critical about the Bible must be transferred				
53	Doing philosophy is an exclusively male domain				
54	Women who want to show that they can reason are immoral				
55	A sister-in-law who is a critical thinker is not welcome to our family				
56	A male relative who accedes to his wife's decisions would have been dosed by efficacious love portions				
57	My brother's acceding to his wife's decisions is disgraceful				
58	A family without boys, faces decision making problems				
59	Institutions led by women face instability				
60	Women have a problem of separating reason from emotion				

SECTION D

Evaluate the statement "Murungu haasi munhu"

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Appendix D

Rating scale for assessing the quality of some of the student's dispositions towards critical thinking as the student presents him/her self in a written exercise

Disposition	Score and description of scoring			
	0	1	2	3
Explication of issues	Unaware of the main point	Mentions main point	Puts effort to try to define some terms	Seeks to explain some issues backed by some reasons
Consideration of different points of view	Acts as if own point of view is universal	Is aware that own point of view is not universal	Exposes different points of view	Expresses with tolerance different points of view
Clarity of communication of Knowledge	Does not communicate own ideas clearly	Tries but is less than adequate to communicate own ideas	Communicates own ideas clearly	Communicates own ideas enthusiastically with illustrations
Judgementality	Gives no judgement of issues at all	Gives cursory judgements based on personal convictions	Gives judgements based on some sources	Gives judgements based on credible sources

Appendix E

FOCUS GROUP INTERVIEW ONE (Transcriptions for the discussions on the key questions)

I: How do your religious convictions influence the satiation of task words in philosophy of education?

R1.6: Religion and critical discussion do not see eye to eye.

R1.3: Ya- you can't be critical about religious issues.

R1.2: That depends on the situation.

R1.3: What situation ,try it here and get deferred.

R1.4: Lets be realistic who are we to evaluate God and his works

R1.2: But there are some people who abuse religion. In such a situation we have to apply philosophical analysis.

R1.1: You are now philosophising on dangerous ground- you will meet with problems here on earth and up in heaven.

2.Do you think the demands of the task words in philosophy of education are too demanding for you?

R1.1: I can fairly address the demands of the task words

R1.2: I have problems with "critically discuss"

R1.3: You are right, people like me of low intelligence have problems. The other one is "evaluate"

R1.1: That one is quite demanding-

R1.4: We meet with problems where a critique is required- I think you demand too much from us.

R1.2: That's a challenge at university and even some lecturers can't cope with the demands- what of us.

R1.3: Look at us "o" level school leavers- you are requiring lot from us.

R1.4: Even in instances when lecturers explain the demands of the words you feel that its not you stuff

R1.5: As for myself- even when there are explanations. I have a problem.

R1.6: There could have been a hand out for addressing of the task words.

3.How do “Ubuntuist/Unhuist” ethics like gerontocracy influence the satiation of the task words in philosophy of education

R1.2: Evaluation of issues in the home is domain of elders.

R1.4: Who are you in the extended family to pass your judgements when elderly in-laws are there.

R1.3: Even when elders make a glaring mistake you keep it to your self or else -.

R1.1: In lecture halls some lectures are the age of our parents- can I stand to have an argument with them.

R1.5: (jokingly) “Standing!”- you have to crouch if you are from Binga.

R1.6: Crouching would be too much- that’s reducing someone to nothing

R1.5: In lecture halls, if you want to pass be on the side of the lecturer.

R1.3: As of now- what the lecturer says is always right.

4.How do presentations of lectures influence the satiation of the requirements of the task words in philosophy of education?

R1.1: In lectures we get the content- the discussions, evaluations and critical examinations are left to us.

R1.3: At times, lecturers do not do as they preach. They simply describe issues but they require us to be critical.

R1.2: Some just come and read notes to us.

R1.4, R1.5: (simultaneously) You are right.

R1.6: Some lecturers say that we must write essays in the way they would have presented content.

5.In what ways do femininity orientations influence students’ satiation of the task words in philosophy of education

R1.6: As a woman, culture does not encourage that I become a critic.

R1.1: You are right, what would the in-laws think about you?

R1.2: Try it in your home and you are finished.

R1.3: Your critiqueing should end at college not in the home

R1.5: Even your husband would think that you are big-headed because you have been to college.

R1.3: Even at kitchen parties, older women advise us not to be critical in the home.

6. How do you experience time in relation to address the requirements of the task words in philosophy of education?

R1.2: Time is too limited.

R1.1: As of now there are over sixty lectures hovering on twenty students- each one making his/her own demands.

R1.3: Our time table is fully packed

R1.4: We do not have time at all to research.

R1.5: The solution is to use the lecture's notes.

R1.6: The internet and the library were there for us during our first year- not now.

7. Why would you think that there is a restraint in critically discussing freely and fully an idea by Pestalozzi that "Education should be a means to prepare man to play his part in political change?"

R1.1: Am not free- you end up in trouble.

R1.2: You can end up in jail.

R1.3: You never know – who is who.

R1.6: About politics- keep things to your self.

I: Thank you very much for your participation in the discussions

FOCUS GROUP INTERVIEW 2 (Transcriptions of the discussions on the key questions)

1. Do think the requirements of the task words in philosophy of education are too demanding for you?

R2.1: We have problems in meeting the required standards- I don't see myself being capable of meeting the expected standards

R2.6: When you say I should criticise Nyerere's ideas- when I size myself with Nyerere- am nothing intellectually.

R2.5,R2.7: (simultaneously) Ya-a.

R2.4: At times you think you are not genuine- critising people like Dewey, Freire and so forth is trivial.

R2.2: But some of their ideas do not work in our context.

R2.3: But what ideas have you produced in your context?

R2.1: We are not yet intellectually mature to hold some intellectual debates.

2.How do you religious convictions influence the satiation of the requirements of the task words in philosophy of education?

R2.5: In church we are taught to accept the gospel as it is

R2.2: Yes you have to take things as given to you by the minister of religion- discussing, critically examining and evaluating are out of question

R2.3: Religion does not encourage us to be critical

R2.4: You are right, can you speak against the Lord's prayer- given to us by Jesus himself.

R2.7: I heard a minister of religion saying that philosophy of education distances people from God

R2.1: On the contrary- at some time I thought that philosophy of education is devilish- but to some extent it enlightens believers.

R2.3: You little philosophy will spoil your eternal life.

R2.1: At times you you have to be critical to avoid exploitation within the religious groupings

R2.4: No matter how you reason, being critical about religious issues is tantamount to blasphemy.

3. How do “Ubuntuist/Unhuist” ethics like gerontocracy influence the satiation of the task words in philosophy of education?

R2.4: Even when the lecturer errs- keep quiet, old people do not make mistakes
Old are now day-to-day mistake makers- their knowledge is no longer functional- in some situations.....

R2.1: You get current information from the internet but you are told that experience counts most.

R2.5: Thus the problem with traditionalists, they value their experience than anything else

R2.2: Some lecturers think that they are always right

R2.6: To some extent they want us to accept everything they say.

R2.5: If we continue to be guided by old people then the future is predictable

R2.1: Old people want to think for us- you hear them saying “Takabva nako kumhunga hakuna ipwa” (A Shona proverb that can be interpreted that “I have experienced a lot in this area- so get it from me”)

R2.4: At least we should be afforded the chance to experience what they experienced- after all experiences are interpreted differently

4. How do presentations of lectures influence students’ satiation of the requirements of the task words in philosophy of education?

R2.2: Presentations in lectures are about the lecturer’s knowledge- you have to consume the knowledge.

R2.1: It’s to regurgitate knowledge, reproduce as was given to you

R2.3: Critiquing issues is secondary- first you have to acquire the knowledge

R2.4: I feel I am restricted to the lecturer’s knowledge

R2.5: We should be afforded opportunities to make presentations our selves

R2.7: We feel freer to discuss, evaluate and critically examine each other’s presentations.

5. In what ways do femininity orientations influence your satiation of the task words in philosophy of education?

R2.3: Discussions and evaluations are only encouraged among women by themselves- evaluating men's ideas is not taken lightly by some men and other women

R2.6: A good woman is one who obeys.

R2.2: It's only old women who are supposed to be critical in our culture

R2.1; An unmarried woman who philosophizes risks negative labels which may result in her not getting married.

R2.5: In-laws do not like critical women- challenging them in their ways of doing things is the same as despising their the whole family.

R2.4: I as a man – would not like to marry a woman who would like to engage me in debates – I will be almost a father to her.

R2.1: When one gets married, one's aunts advise her not to be argumentative in the home.

R2.2; At times you wonder if philosophy is a woman's domain.

6. How do you experience time in relation to the satiation of the task words in philosophy of education?

R2.1: Our programme, the 2-5-2 does not afford us adequate time to think on our own.

R2.2: In fact lectures think for us- we always take what the think is worth taking.

R2.3: The four term at college are fully packed with content acquisition activities- there is no time to digest what you are told.

R2.4: Do know that we have no time to think about the notes given to us.

R2.5: Even assignments are a reproduction of notes.

R2.4: It's only in Theory of Education where you bother us with the critiquing of ideas. In other subject areas we reproduce notes due to lack of time

R2.7: On the timetable there is no single free period for us to cointextualize and evaluate what we are learning.

7. Why do you think there is a restraint in critically discussing freely and fully an idea by Pestalozzi that “Education should be a means to prepare man to play his part in political change?”

R2.1: About issues concerning politics- I am not prepared to comment.

I: What is the reason?

R2.1: I am afraid one may not finish the course.

R2.3: One should protect himself by refraining from that.

R2.5: I choose not to discuss that idea.

R2.6: If you want peace do not be critical about anything which has a relationship with politics.

R2.4: Follow what you are told and have peace- be critical and philosophical get into pieces.

I: Thank you very much for your participation in the discussions

FOCUS GROUP INTERVIEW 3 (Transcriptions of the discussions on the key questions)

1. Do you think the demands of the task words in philosophy of education are too demanding for you, why?

R3.6: The requirements are too demanding for us with too many demands on our time.

R3.4: Not only that, some of us have had several "O" level exam sittings – we are not intellectually strong for the demands.

R3.3: In philosophy of education you seem to have an obsession of critiquing issues. In other areas explanations are the ones we do without any problems.

R3.1: There are some issues that are naturally good – critiquing them need very sharp minds.

R3.2: I have no problems with the demands of the task words but at times I think its only out of fulfilment of philosophy requirements – rather than being rational.

R3.5: Renowned intellectuals have come up with the ideas, who are we to critique their works.

R3.7: I don't think I will ever become a philosopher – I do not have the intelligence.

2. How do your religious convictions influence the satiation of the requirements of task words in philosophy of education?

R3.2: Religion does not encourage employment of task words that imply critiquing.

R3.3: Some paragraphs in the Bible commentaries are blasphemous – I read a commentary about Jesus walking on water – the discussion was nullifying the verse.

R3.1: Philosophical thinking should not be exposed to young children. They would likely grow up not being God fearing – that's why some churches would not encourage debate on religious issues.

R3.5: And some Pentecostal churches do not promote formal education beyond Grade 7- they do not want the youngsters to be philosophical.

R3.4: But to some extent religion has critical thinking in it – break-aways ,of religious group are a result of philosophising – using philosophical task words

R3.6: But most religious groups discourage the application of philosophical task words to their beliefs and practices.

3.How do “Ubuntuist/Unhuist” ethics like gerontocracy influence satiation of the task words in philosophy of education?

R3.3: Whatever elders say is indisputable – just what lecturers say.

R3.1: The task words in philosophy of education are for academic purposes not for social purposes.

R3.4: One risks ostracism in society when one tries to philosophize issues with elders

R3.2: In lecture rooms, lecturers psychologically quarantine you when you try to show philosophical prowess.

R3.5: One should know his/her limits of philosophical sagacity – philosophize with age mates not among elders.

R3.6: It was Jesus who had supernatural authority who could philosophize among elders in church and was accepted.

R3.7: He was not accepted, in the end he was crucified by his own people.

4.How do presentations of lectures influence your satiation of the requirements of the requirements of the task words in philosophy of education?

R3.1: The presentations of lectures are plain – so in assignments we follow suit.

I: What do you mean?

R3.1: The lecturers narrate their knowledge.

R3.2: The task words need not be explained only – but exemplified during the course of lectures.

R3.4: You are dead right.

R3.5: Ya-a exemplifications are far better than explanations.

R3.6: Presentations are biased towards the positive side – so follow that as R1 has alluded to earlier on.

R3.3: Sometimes you feel that you should re-produce what the “fundis” give to you.

5. In what ways do femininity orientations influence students' satiation of the task words in philosophy of education?

- R3.1: Critiquing issues is mainly a masculine domain – since men are naturally power hungry.
- R3.7: Even some women are power hungry – Critiquing is not a characteristic of being power hungry.
- R3.3: To critique societal issues, it requires a very strong and courageous woman- especially if one is young.
- R3.5: At church, women are taught to listen and obey – in my religious group play subservient roles – they are not even allowed to preach.
- R3.4: The socialisation in womanhood is at variance with the task words in philosophy.
- R3.6: I think philosophical tasks are the only means of liberating women from femininity vices.

6. How do you experience time in relation to addressing the requirements of the task words in philosophy of education?

- R3.2: There is no time to research at all to get other academics' view points.
- R3.1: We almost always resort to write assignments using lecture notes only – the task words then become a problem in TOE
- R3.3: Our timetable is packed more than the primary school timetable – yet we are supposed to think about the theory presented to us.
- R3.4: I think I can think critically when time is available.
- R3.5: Due to lack of adequate time, we always rush on our work not being able to put some thinking ,on it.
- R3.6: We hand in assignments when they are still hot.
- I: What do you mean by that?
- R3.6: We rush wit assignments the day they are due.

7. Why do you think that there is a restraint in critically discussing freely and fully an idea by Pestalozzi that “Education should be a means to prepare man to play his part in political change?”

R3.2: I would not discuss the idea if I had the choice.

I: Why would you not?

R3.3: That idea is potentially explosive.

R3.2: Why would one dice with trouble?

R3.5: I would not want to comment about any political issues.

R3.4: Let the politicians do their own philosophy.

R3.7: It's not harmful to follow the powerful.

I: Thank you very much for your participation in the discussions