

**POST PURCHASE BEHAVIOUR (COGNITIVE  
DISSONANCE) AMONGST STUDENTS AT A SELECTED  
HIGHER EDUCATION INSTITUTION**

**BY**

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Dissertation submitted in compliance with the requirements for the  
Masters Degree in Technology in the Department of Marketing  
at the Durban University Of Technology

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**APPROVED FOR FINAL SUBMISSION**

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# ACKNOWLEDGEMENTS

I would like to thank God for being my pillar of strength and for His guidance through the years of my studies. I would also like to thank Him for making it possible for me to reach this far, for if it was not for him this would not have been possible. And the following people:

- Mr Peter Raap (HOD Department of Marketing) for being like a true father to all, for his willingness to listen to all our grumbles
- Dr JP Govender, my supervisor for his guidance and patience that has contributed very much to the successful completion of this study.
- The Lesotho Government for the financial support.
- Special thanks to my family, especially my brothers (Thabo Mosala, Tshepo Mosala and Tebesi Mosala) for their encouragement, financial support, and having faith in me.
- Numerous people helped in various ways in conducting the research and compiling the dissertation – Jones Moji, Peete Marakabei, Lawrence Lekhanya, Moshitiri Sepoqpane, Mr Gavin Storrie and Mrs Gill Hendry.
- Lastly to Mr Charles Falatsi for always being by my side, giving me a shoulder to cry on through the hard times of completing this study. And thanks to my friends for encouraging as well as assisting me during the course of my studies especially Miss Palesa Mofoka for her understanding and undying support. Mr Mandla Twala for always being there for me.

Thank you all, I dedicate this dissertation to you.

# DECLARATION

I, Palesa Mosala, hereby declare that the work represented in this dissertation represents my own work and findings except where indicated and that all references, to the best of my knowledge are accurately reported.

Palesa Mosala

# **ABSTRACT**

According to postpurchase behaviour theory, there is a tendency for individuals to seek consistency among their cognitions (i.e., beliefs, opinions). When an inconsistency between attitudes or behaviours (dissonance) occurs, some change must be made in order to eliminate this behaviour. In the case of a discrepancy between attitudes and behaviour, it is most likely that the attitude will change to accommodate the behaviour.

The objective of this study is to determine the extent of post purchase behaviour amongst tertiary students, with specific reference to the Durban University of Technology. In order to accomplish the objectives of the study, a quantitative study was conducted at the Durban University of Technology by means of a self-administered questionnaire. A sample of 400 respondents was asked questions pertaining to the study. The respondents were selected by using non-probability sampling within which quota sampling was applied. Conclusions and recommendations were thereafter drawn from the literature and the findings of the study.

The results of this study show that students experience cognitive dissonance. It was found that accommodation, lecturers, course of study, the institution itself and finances are the major causes of this discomfort. Therefore, it is recommended that management should attend to those areas and see to it that necessary strategies are implemented to help students where there is a need.

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# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND TO THE STUDY

Each person has many cognitions (beliefs or opinions) about himself or herself, other people, and the decision he or she makes. Any two cognitions can be either related or unrelated. If they are related, their relationship can be described as either consonant or dissonant. That is, elements are consonant cognitions if one follows logically from the other, whereas they are dissonant cognitions if there is a logical inconsistency between them. For any consumer decision, we are likely to have many cognitions. The thrust of cognitive dissonance theory is that dissonance is likely to occur after a choice has been made, and will reflect a natural occurrence because the choice has been made (Gilbert, 2003: 60).

In terms of postpurchase processes, it is the total amount of dissonance that we experience that is important. The more dissonant cognitions we have about the decision, and the more important these are to us, the higher our dissonance will be; and since dissonance produces unpleasant feelings, we will be motivated to act to reduce the amount of dissonance we are experiencing. Cognitive dissonance theory suggests that consumers experience tension following a difficult decision and may behave in some strange ways in an effort to reduce the dissonance (Fill, 2002: 62).

## **1.2 RESEARCH PROBLEM**

The selection of an institution for higher education or the selection of a particular degree programme within that institution is a decision of considerable importance for most individuals. The choice of any institution, such as the Durban University of Technology (DUT), over an alternative institution can cause the decision-maker, in this case a student, some psychological discomfort i.e., post purchase behaviour or cognitive dissonance as he struggles with the relative correctness of the decision. The same can be said for the selection of a particular discipline of study (e.g. business, education, the arts, sciences, or communication) as other options are rejected.

Given the level of involvement of the institutional decision, some students may experience psychological discomfort at some point in their academic careers. The challenge with marketing tertiary institutions, including the Durban University of Technology, is to deal effectively with this phenomenon in order to achieve the highest levels of customer satisfaction. According to Mitchell (2003: 1), in an institutional setting, the presence of this phenomenon is vital to student retention efforts. Some students may act upon this level of discomfort by removing themselves from the institute in favour of other institutions or other opportunities for employment/training.

## **1.3 RESEARCH OBJECTIVES**

The main objective of the study was to determine whether cognitive dissonance occurs amongst DUT students and if so, to what extent it occurs.

## **Sub-Objectives**

The following sub-objectives were drawn from the main objective of the study.

- To determine the causes of postpurchase behaviour amongst students.
- To determine how students deal with postpurchase behaviour.
- To determine what action students believe the institution should take to deal with postpurchase behaviour.

## **1.4 RATIONALE**

The researcher has taken an interest in this research problem, as it is believed that postpurchase behaviour is relevant at the DUT, in that it causes students to have unpleasant feelings created by rival thoughts, which could lead them to deregister and perhaps enroll with other universities. It is therefore very important for DUT strategists to be made aware of this factor, especially when a variety of tactics or options are available to students who wish to reduce the unpleasant feelings. There may be no more significant influence on communication effectiveness and students' own capabilities to hear and learn, than postpurchase behaviour. This important concept shapes how they approach information, what they hear, what they ignore, and what they reinterpret, solely to make themselves feel more comfortable. How closed are they to alternative viewpoints? How threatened are they by the thoughts and opinions of others? Mass communicators, such as the DUT, ought to be aware of this concept. Anyone dealing with consumers should be aware of the influence of postpurchase doubts.

## **1.5 RESEARCH METHODOLOGY**

A self-administered questionnaire was designed and distributed to four hundred students around four DUT Campuses: ML Sultan, Steve Biko, City, and Ritson Campus. The questionnaire was designed in a manner that made it easy to read and understand. Non-probability sampling method, in the form of quota sampling was used in order to obtain the desired sample. The data were analyzed by means such as frequencies, and chi-square tests using the statistical programme, SPSS.

## **1.6 LIMITATIONS**

The study focused only on tertiary students at the Durban University of Technology. Some individuals refused to respond to the research questionnaire, as they were unwilling to participate. There was over representation of students from a particular department based on site of respondents.

## **1.7 CHAPTER OUTLINE**

The report on this study is made up of five chapters. These chapters cover the following areas:

### **1.7.1 CHAPTER 1: INTRODUCTION**

This chapter introduces the study and provides an overview of the research problem, the research objectives, the rationale behind the study and the research methodology and limitations thereof.

## **1.7.2 CHAPTER 2: LITERATURE REVIEW**

The literature review gives an overview of cognitive dissonance or postpurchase doubt theory. It also discusses how and what consumers do to reduce the effects of cognitive dissonance and also what marketers can do to help their customers to better overcome this phenomenon.

## **1.7.3 CHAPTER 3: RESEARCH METHODOLOGY**

The research methodology chapter shows how the research has been collected and gathered. It provides insight into the sampling methods used, the questionnaire, and various other techniques used to analyze the results. It also contains a review of the validity and reliability of the research investigation, indicating areas where errors might have occurred.

## **1.7.3 CHAPTER 4: ANALYSIS AND RESULTS**

The purpose of this chapter is to present the statistical analyses of the data obtained through the questionnaires. The data have been processed into meaningful results that the reader is able to interpret and understand.

## **1.7.4 CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

This final chapter of the dissertation contains the conclusions that are drawn from the findings in chapter four and also from chapter two. Recommendations and suggestions for further research in the field are made.

# CHAPTER 2

## LITERATURE REVIEW

### 2.1 INTRODUCTION

Once customers or prospects are motivated to satisfy their needs and wants, the purchase process begins. Based on certain standards they have established in their own minds, they evaluate various alternative products or services. If none of the alternatives meets their evaluation criteria, they may experience cognitive dissonance in the form of postpurchase doubt and concern or anxiety about the wisdom of the purchase. This is known as postpurchase dissonance/cognitive dissonance. It is most likely to occur among individuals with a tendency to experience anxiety, after an irrevocable purchase, when the purchase was important to the consumer, and when it involved a difficult choice between two or more alternatives. An important role of marketers is to help people cope with dissonance by reinforcing the wisdom of their purchase decision.

When customers feel abandoned, cognitive dissonance surfaces and repeat sales decline. Today this issue is more pertinent than ever because customers are far less loyal to brands and sellers than in the past, because buyers are more inclined to look for the best deal, especially in the case of poor after-the-sale follow-up. More and more buyers favour building a relationship with sellers. The literature review includes the literature on postpurchase behaviour, postpurchase evaluation and the purchase process for services, cognitive consistency theories, personal development and cognitive dissonance, methods of reducing dissonant cognitions, cognitive view, and marketing implications of cognitive dissonance.

Cassel et al. (2001: 2) report that the process by which students move from secondary to higher education has been called “the great sorting”. It is a process



of great complexity, not fully understood by the students, their parents or advisors, or the educators who participate in it. According to cognitive dissonance theory, individuals faced with decisions in which they are trying to satisfy multiple objectives will use certain cognitive strategies to alleviate their stress resulting from not having perfect information about available alternatives, not completely understanding their own goals, and not being able to satisfy all of their objectives in choosing one option.

The purpose of this chapter is to consider the theory behind the problem that is being researched, that is, to investigate the effects of cognitive dissonance on customers. It will thus serve to identify the theoretical basis of the study.

## **2.2 POSTPURCHASE BEHAVIOUR**

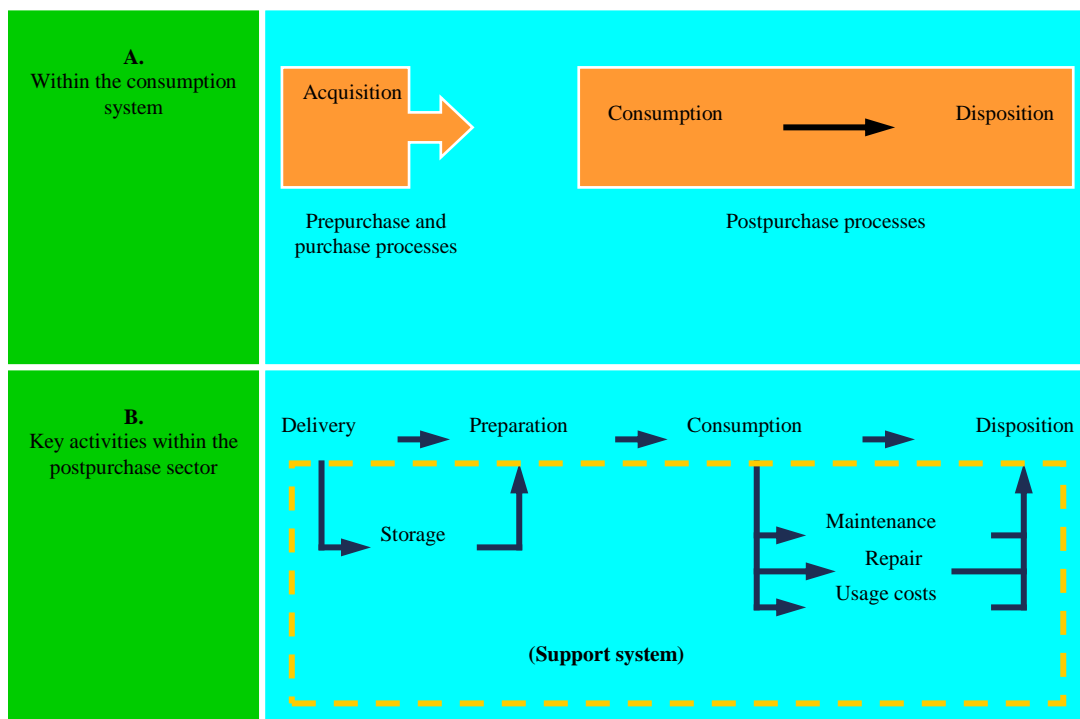
According to Strydom et al. (2000: 79), after purchasing the product, the buyer will experience some level of satisfaction or dissatisfaction. The marketer's job does not end when the product is bought but continues into the postpurchase period. Marketers must monitor postpurchase satisfaction, postpurchase actions and cognitive dissonance. The buyer's satisfaction or dissatisfaction will influence future behaviour. A satisfied buyer will purchase the product again and recommend it to others. Dissatisfied buyers will respond differently. They may stop using the product, return it, or take some form of public action.

In support, Lamb et al. (2004: 77) state that when buying products, consumers expect certain outcomes or benefits to accrue from the purchase. How well these expectations are met determines whether the consumer is satisfied or dissatisfied with the purchase.

Figure 2-1 illustrates the relationships among the postpurchase processes. As the figure indicates, some purchases are followed by a phenomenon called postpurchase dissonance. This occurs when a consumer doubts the wisdom of

a purchase he or she has made. Other purchases are followed by non-use. The consumer keeps or returns the product without using it. Most purchases are followed by product use, even if postpurchase dissonance is present (Hill and O'Sullivan, 1999: 96). Product use often requires the disposal of the product package and/or the product itself. During and after use, the consumer evaluates the purchase process and the product.

Figure 2.1 **A Framework for Postpurchase Behaviour**



Source: Singh (2003: 2)

Unsatisfactory evaluations may produce complaints by those consumers. Appropriate responses by the firm may reverse the initial dissatisfaction among those who complained. The result of all these processes is a final level of satisfaction, which in turn can result in a loyal, committed customer: one who is

willing to repurchase, or a customer who switches brands or discontinues using the product category (Singh, 2003: 4).

Hasty and Reardon (1997: 154) believe that when people recognize inconsistency between their values or opinions and their behaviour, they tend to feel an inner tension or anxiety called cognitive dissonance (postpurchase doubt). For example, suppose a consumer spends half his monthly salary on a new high-tech stereo system. If he stops to think how much he has spent, he will probably feel dissonance. Weitz et al. (2001: 363) point out that customers like to believe they have chosen intelligently when they make a decision. After important decisions, they may feel a little insecure about whether the sacrifice is worth it. Such feelings are called buyer's remorse or postpurchase dissonance.

Hawkins et al. (2001: 629) highlight that the probability of a consumer experiencing postpurchase dissonance, as well as the magnitude of such dissonance, is a function of the following.

- The degree of commitment or irrevocability of the decision. The easier it is to alter the decision, the less likely the consumer is to experience dissonance.
- The importance of the decision to the consumer. The more important the decision, the more likely dissonance will result.
- The difficulty of choosing among the alternatives. The more difficult it is to select from among the alternatives, the more likely the experience and magnitude of dissonance. Decision difficulty is a function of the number of alternatives considered, the number of relevant attributes associated with each alternative, and the extent to which each alternative offers attributes not available with the other alternatives.

- The individual's tendency to experience anxiety. Some individuals have a higher tendency to experience anxiety than do others. The higher the tendency to experience anxiety, the more likely the individual will experience postpurchase dissonance.

### **2.2.1 Causes of Cognitive Dissonance**

Strydom et al. (2000: 79) furthermore state that some of the alternatives not chosen may have attractive features, so that the correctness of the choice is not obvious. Cognitive dissonance is most likely to occur for major purchases that are difficult to select and undo. People tend to resolve the discomfort or buyer's remorse by seeking information to support their decision and by becoming more critical of the alternatives they rejected. Marketers can help consumers feel good about major purchases by providing reassurance after the sale is complete. In addition, Singh (2003: 4) points out that because consumers are uncertain of the wisdom of their decisions, they rethink their decisions in the postpurchase phase. This stage serves several functions; it serves to broaden the consumer's set of experiences stored in memory, it provides a check on how well the consumer is doing in selecting products, the feedback received from this stage helps the consumer to make adjustments in future purchasing strategies.

Etzel et al. (2001: 100) state that cognitive dissonance is a state of anxiety brought on by the difficulty of choosing from among alternatives. Unfortunately for marketers, dissonance is quite common, and if the anxiety is not relieved, the consumer may be unhappy with the chosen product even if it performs as expected. Post purchase cognitive dissonance occurs when each of the alternatives seriously considered by the consumer has both attractive and unattractive features. Czinkota et al. (2000: 164) point out that after purchase is made, the unattractive features of the product purchased grow in importance in the consumer's mind, as do the attractive features offered by the rejected alternatives. As a result, we begin to doubt the wisdom of the choice and

experience anxiety over the decision. Dissonance typically increases the greater the importance of the purchase decision and the greater the similarity between the items selected and item(s) rejected.

According to Singh (2003: 13), it appears that dissonance is likely to occur under the following conditions.

- A minimum threshold of dissonance tolerance is passed. That is, consumers may tolerate a certain level of inconsistency in their lives until this point is reached.
- The action is irrevocable. For instance, when a consumer purchases a new car, there is little likelihood of reversing this decision and getting the money back.
- There are several desirable alternatives. Today's car buyer, for example, has an abundance of choices among similar attractive models. In fact, research indicates that those consumers who experience greater difficulty in making purchase decisions, or who consider a wider range of store and brand options, are more likely to experience greater magnitudes of postpurchase dissonance.
- Available alternatives are quite dissimilar in their qualities (there is little 'cognitive overlap'). For instance, although there are many automobile models, each one may have some unique characteristics.
- The buyer is committed to a decision because it has psychological significance. A large and important living-room-furniture purchase is likely to have great psychological significance to the buyer because of its dramatic reflection of the buyer's decorating tastes, philosophy and lifestyle. Ego involvement will be quite high.

- There is no pressure applied to the consumer to make the decision. If consumers are subject to outside pressure, they will do what they are forced to do without letting their own viewpoints or preferences really be challenged. In other words, when pressure is applied, consumers will externalize the source of their dissatisfaction rather than allow any mental unease or discomfort regarding their own cognition.

According to Berman and Evans (1998: 222), cognitive dissonance occurs because making a relatively permanent commitment to a chosen alternative requires one to give up the attractive features of the un-chosen alternatives. This is inconsistent with the desire for those features. Thus, nominal and most limited decision making will not produce postpurchase dissonance, since these decisions do not consider attractive features in an un-chosen brand that do not also exist in the chosen brand. In addition, Hill and O'Sullivan (1999: 96) point out that because most high-involvement purchase decisions involve one or more of the factors that lead to postpurchase dissonance, these decisions often are accompanied by dissonance. And, since dissonance is unpleasant, consumers generally attempt to avoid or reduce it. Avoiding dissonance involves actions taken before the purchase is made by either avoiding/delaying the decision or using a purchase decision rule that will minimize regret.

In making a final choice the buyer not only had to forgo other attractive options but also had to part with (perhaps a great deal of) money, which could have been used for other purposes. It is no wonder, therefore, that the buyer often begins to doubt the wisdom of the decision (Foxall et al. 2001: 130). This negative feeling of doubt and uncertainty in the postpurchase period is referred to as cognitive dissonance, a negative emotion stemming from a psychological inconsistency in the cognition (the things that a person knows). Dissonant buyers will try to correct these psychological inconsistencies by attempting to convince themselves that the original decision was correct and very judicious. In order to

do so, they may rationalize by putting forward logical reasons for decisions taken and may also turn to others for approval and reassurance (Strydom et al. 2000: 80).

Cognitive dissonance occurs because the person knows the purchased product has some disadvantages as well as advantages. In the case of the stereo, the disadvantage of cost battles the advantage of technological superiority. In other words, dissonance is post purchase uncertainty or anxiety (Etzel et al. 2001: 528). Consumers try to reduce dissonance by justifying their decision. They might seek new information that reinforces positive ideas about the purchase (confirming that it was the right decision), avoid information that contradicts their decision, or revoke the original decision by returning the product (Czinkota et al. 2000: 163).

People who have just bought new cars often read more advertisements of the car they have just bought than of other cars in order to reduce dissonance and reinforce the correctness of the decision. In some instances, people deliberately seek contrary information in order to refute it and reduce dissonance. Dissatisfied customers sometimes rely on word-of-mouth to reduce cognitive dissonance by letting friends and family know they are displeased (Lamb et al. 2004:78).

People usually experience cognitive dissonance only when buying high involvement products. Cognitive dissonance is the inner tension that a consumer experiences after recognizing a purchased product's disadvantages. When a purchase creates cognitive dissonance, consumers tend to react by seeking positive reinforcement for the purchase decision, avoiding negative information about the purchase decision, or revoking the purchase decision by returning the product (Kinicki and Williams, 2003: 350).

Dissonance theory began by postulating that pairs of cognitions (elements of knowledge) can be relevant or irrelevant to one another, they are either consonant or dissonant. Two cognitions are consonant if one follows from the other, and they are dissonant if the opposite of one cognition follows from the other. The existence of dissonance, being psychologically uncomfortable, motivates the person to reduce the dissonance and leads to avoidance of information likely to increase the dissonance. The greater the magnitude of the dissonance, the greater is the pressure to reduce dissonance (Harmon-Jones and Mills, 2003: 1).

Festinger (2003: 1) notes that the magnitude of dissonance between one cognitive element and the remainder of the person's cognitions depends on the number and importance of cognitions that are consonant and dissonant with the one in question. Formally speaking, the magnitude of dissonance equals the number of dissonant cognitions divided by the number of consonant cognitions plus the number of dissonant cognitions. This is referred to as the dissonance ratio. Harmon-Jones and Mills (2003: 7) add that holding the number and importance of consonant cognitions constant, as the number or importance of dissonant cognitions increases, increases the magnitude of dissonance. Holding the number and importance of dissonant cognitions constant, as the number or importance of consonant cognitions increases, decreases the magnitude of dissonance.

Jones and Ince (2001: 5) argue that the thrust of cognitive dissonance theory is that dissonance is likely to occur after a choice has been made, and will reflect a natural occurrence because the choice has been made. In terms of post purchase processes, it is the total amount of dissonance that we experience that is important. The more dissonant cognitions we have about a decision, and the more important these are to us, the higher our dissonance will be. And, since dissonance produces unpleasant feelings, we will be motivated to act to reduce the amount of dissonance we are experiencing.



### **2.2.2 Results of Cognitive Dissonance**

Wells and Prensky (1996: 320) comment that a person will experience feelings of discomfort, known as cognitive dissonance, when he or she has knowledge, holds attitudes, or takes actions that conflict with one another. When dissonance occurs the individual will seek to reduce it by changing the inconsistent cognitive elements. Dylan (2003: 1) shows that cognitive dissonance is a theory of human motivation that asserts that it is psychologically uncomfortable to hold contradictory cognitions. The theory is that dissonance, being unpleasant, motivates a person to change his cognition, attitude, or behaviour.

Dissonance and consonance are relations among cognitions, that is, among options, beliefs, knowledge of the environment, and knowledge of one's own actions and feelings. Two opinions, or beliefs, or items of knowledge are dissonant with each other if they do not fit together; that is, if they are inconsistent, or if, considering only the particular two items, one does not follow from the other (Jones and Ince, 2001: 10).

According to McGinn and Depasquale (2004: 1), the long list of worries mothers and fathers have when a child goes to college/university include homesickness, partying, and there's a new issue: the apparent rise in mental illness on campuses. More than 1 100-college students commit suicide each year. And even when students are not in acute distress, they are suffering in surprisingly large numbers. Parents are starting to ask tough questions about just what kind of mental-health services they can expect from schools. Those inquiries can become loudest at colleges that suffer high-profile suicides. Although the literature is talking about American colleges and universities, this may also be the case in South African higher education institutions, where cases have been reported of students committing suicide. This study could give insight into the reasons why this is happening.

Wilson (1997: 3) states that students often procrastinated taking the steps necessary to apply to colleges and make a final choice of where to attend. Some made their decisions quickly in order to avoid what they anticipated would be a stressful year-long experience, while others avoided the anxiety by using a single criterion to choose a single school to which they applied (and fortunately were admitted). There is not a college in the nation that has not noticed a dramatic increase in demand on its personal counselling office.

In addition Dehne (2004: 1) indicates that when asked, counsellors reported that the greatest topic of conversation is the handling of modest issues related to relationships with a roommate, a teacher, a course or a significant other. These are issues that past generations would probably have handled on their own. Most of these students never had to share a room with a sibling, thus having a roommate creates tension. Because many have not had to share attention with more than one brother or sister, they demand more attention from professors, administrators and upper-class peers.

In support, McGinn and Depasquale (2004: 2) state that this dependency also results in more interference in the educational process. Professors and administrators at nearly every college talk about the increasing number of calls from parents concerned about their child's progress, or lack thereof. Instead of the student talking to a professor about what seems to be an unfair grade, parents are more likely to intervene on their child's behalf – an activity that happened only rarely a decade ago. In other words, parents are actively involved in the lives and education of their children even as colleges and universities stress the importance of young people becoming more independent thinkers and problem solvers.

This generation is very money-minded. They live in a material world and they are comfortable in that world. They not only control a great deal of spending, they are savvy beyond their years. This is already having an impact on higher

education. Students have become as sensitive as and, often more so than, their parents to the cost of a college education and what they are willing to pay. Often it is the student who determines to go to a less expensive institution or the college that offers the greatest discount (Mitchell, 2003: 3).

Gone, apparently are the joyful and carefree college years. This generation is less than confident about the environment. Nor do they naturally trust people or institutions including higher education. Additionally, they don't feel safe. They are aware of date rape and that their best friend can turn on them abuse or rob them. Higher education has added to their anxiety. High school students indicated that they were 'very worried' or 'somewhat worried' about the rising cost of a college education, paying for college, and being accepted by the college of their choice (Wilson, 1997: 2).

Czinkota et al. (2000: 163) believe that the consumer's decision process does not end with the purchase. Rather, the experience of buying and using the product provides information that the consumer will use in future decision making. In some cases, the consumer will be pleased with the experience and will buy the same product from the same supplier again. In other cases, the consumer will be disappointed and may even return or exchange the product. In general, the postpurchase process includes four steps: decision confirmation, experience evaluation, satisfaction or dissatisfaction, and future response (exit, voice, or loyalty).

After a consumer makes an important choice decision, he or she experiences an intense need to confirm the wisdom of that decision. The flip side is that he or she wants to avoid the disconfirmation. One of the processes that occur at this stage is cognitive dissonance: a postpurchase doubt the buyer experiences about the wisdom of the choice. Methods of reducing dissonance and confirming the soundness of one's decision are seeking further positive information about

the chosen alternative and avoiding negative information about the chosen alternative (Phipps and Simmons, 2000: 152).

Weitz et al. (2001: 363) indicate that following purchase, the product is actually consumed. Marketers need to know whether purchasers consume the product routinely without much thought, or if they are consciously evaluating it. This depends on the level of enduring involvement in the product and the finality of the preference that caused this purchase. Kurtz and Clow (1998: 418) add that also, consumers buy some products on a trial basis, without making their preference final yet. These products, even if not of enduring involvement, are the ones that the consumer is likely to be using with an eye to appraisal. Often, when consumers receive free samples, they are not necessarily in an evaluative mode; therefore, they use them routinely, without consciously trying to register the product performance.

Burnett (2002: 81) argues that all the behaviour determinants and the steps of the buying process up to this point are operative before or during the time a purchase is made. However, a consumer's feeling and evaluations after the sale are also significant to a marketer, because they can influence repeat sales and also influence what the customer tells others about the product or brand. Keeping the customer happy is what marketing is all about. Nevertheless, consumers typically experience some postpurchase anxiety after all but the most routine and inexpensive purchases. This anxiety reflects a phenomenon called cognitive dissonance. According to this theory, people strive for consistency among their cognitions (knowledge, attitudes, beliefs, values). When there are inconsistencies, dissonance exists, which people will try to eliminate.

According to Etzel et al. (2001: 101), in some cases, the consumer makes the decision to buy a particular brand already aware of dissonant elements. In other instances, disturbing information that is received after the purchase arouses dissonance. The marketer may take specific steps to reduce postpurchase

dissonance. Advertising that stresses the many positive attributes or confirms the popularity of the product can be helpful. Providing personalized reinforcement has proven effective with big-ticket items such as automobiles and major appliances. Salespeople in these areas may send cards or may even make personal calls in order to reassure customers about their purchase.

Peter and Donnelly (2004: 52) point out that in general, if the individual finds that a certain response achieves a desired goal or satisfies a need, the success of this cue-response pattern will be remembered. The probability of responding in a like manner to the same or similar situation in the future is increased. In other words, the response has a higher probability of being repeated when the need and cue appear together again, and thus it can be said that learning has taken place. Frequent reinforcement increases the habit potential of the particular response. Likewise, if a response does not satisfy the need adequately, the probability that the same response will be repeated is reduced.

For some marketers this means that if an individual finds a particular product fulfils the need for which it was purchased, the probability is high that the individual will repurchase the product the next time the need arises. The firm's promotional efforts often act as a cue. If an individual repeatedly purchases a product with favourable results, loyalty can result in habitual purchases, and such habits are often extremely difficult for competing firms to alter. Although many studies in the area of buyer behaviour centre on the buyer's attitudes, motives, and behaviour before and during the purchase decision, emphasis has also been given to study of behaviour after the purchase. Specifically, studies have been undertaken to investigate postpurchase dissonance, as well as postpurchase satisfaction.

Hawkins et al. (2001: 312) state that the occurrence of post decision dissonance is related to the concept of cognitive dissonance. This theory states that there is often a lack of consistency or harmony among an individual's various cognitions,

or attitudes and beliefs, after a decision has been made – that is, the individual has doubts and second thoughts about the choice made. Further, it is more likely that the intensity of the anxiety will be greater when any of the following conditions exist:

- The decision is an important one psychologically or financially, or both.
- There are a number of forgone alternatives.
- The forgone alternatives have many favourable features.

The decision process does not end with the purchase - not for the buyer at least! A product, once purchased, yields certain levels of satisfaction and dissatisfaction. Purchase satisfaction comes from receiving benefits expected, or greater than expected, from a product. If buyers' experiences from the use of a product exceed expectations, they are satisfied, but if experiences are below expectations, customers are dissatisfied (Futrell, 2004: 126).

Gilbert (2003: 60) shows that the buyer can experience purchase dissonance after the product's purchase. Dissonance causes tension over whether the right decision was made in buying the product. Some people refer to this as buyer's remorse. Dissonance increases with the importance of the decision and the difficulty of choosing between products. If dissonance occurs, buyers may get rid of a product by returning it or by selling it to someone else. Alternatively, they may seek assurance from the salesperson or friends that the product is a good one and that they made the correct purchase decision (positively reinforcing themselves).

Jeroen and Timmers (2002: 5) believe that the mass media have a way of forcing a person into a state of dissonance by constantly depicting one idealistic view of college/university after another. Once an individual attends college, he/she soon realizes that, yes it is a time of fun, parties, and friendships, but first and foremost, the reason for attending school is for education. When students are hit

with the reality that college life is not just a party, they may experience emotional dissonance. Emotional dissonance is the same feeling of unease that occurs with postpurchase behaviour; it is driven by an emotional experience, which occurs as a threat to one's identity.

### **2.2.3 Motivational Nature of Cognitive Dissonance**

Dylan (2003: 1) notes that postpurchase behaviour/cognitive dissonance is a theory of human motivation that asserts that it is psychologically uncomfortable to hold contradictory cognitions. The theory is that postpurchase doubt, being unpleasant, motivates a person to change his belief/cognition, attitude, or behaviour. In support, Schiffman and Kanuk (2000: 219) state that postpurchase behaviour is a psychological phenomenon which refers to the fact that people seek out information which supports their currently held views, and seek to avoid information which challenges them. If they cannot avoid doubtful viewpoints, they tend to hear selectively only that part of the information that supports them and/or reinterpret what they are hearing, so that it does match their current opinions.

Cognitive dissonance is also relevant to marketing when there are conflicting claims associated with a product. Marketers need to take into account any areas associated with their offerings likely to produce cognitive dissonance and attempt to reduce them as much as possible in their communications and the products themselves (Zikmund and d'Amico, 2002: 119).

According to Fuller (1999: 329), for a customer to want to repeat a purchase or recommend one to someone else, he or she has to have a positive experience the first time around. In the decision process model, the positive/negative influence of customer satisfaction is shown as a feedback loop that fuels or aborts repeat purchase behaviours. When a purchase is less than satisfactory for whatever reason(s), it creates a state of tension called postpurchase

dissonance. The author describes this as a form of behaviour that occurs because of a discrepancy between benefits expected and benefits actually delivered by a product.

Boyd et al. (2002: 119) argue that whether a particular consumer feels adequately rewarded following a purchase depends on two things: the person's aspiration or expectation level – how well the product was expected to perform (delivery of a quality pizza while it is hot) – and the consumer's evaluation of how well the product actually did perform (the pizza arrived cold). Consumers' expectations about a product's performance are influenced by several factors. These include the strength and importance of each person's need and the information collected during the decision-making process. Even with services there is a danger for marketers in using exaggerated claims in product advertising. Such claims can produce inflated expectations the product cannot live up to – resulting in dissatisfied customers.

Because purchase decisions often require some amount of compromise, postpurchase dissonance is quite normal. Nevertheless, it is likely to leave consumers with an uneasy feeling about their prior beliefs or actions – a feeling that they tend to resolve by changing their attitudes to conform to their behaviour. Thus in the case of postpurchase dissonance, attitude change is frequently an outcome of an action or behaviour. The conflicting thoughts or dissonant information that follows a purchase are prime factors that induce consumers to change their attitudes so that they will be consonant with their actual purchase behaviour (Schiffman and Kanuk, 2000: 220).

People try to make sense of the world they encounter. In effect, they do this by looking for some consistency amongst their own experiences and memories and by turning to other people for comparison and confirmation. If all factors check out, then all is well and good, but what if there is some inconsistency and supposing the inconsistency is amongst the person's own experiences, beliefs or



actions (Rudolph, 2003: 1). Many social psychologists believe that this will trigger some general trend to restore cognitive consistency: to reinterpret the situation so as to minimize whatever inconsistency there may be. This is because any perceived inconsistency amongst various aspects of knowledge, feelings and behaviours brings up an unpleasant internal state (postpurchase dissonance) which people try to reduce whenever possible (Harmon-Jones and Mills, 2003:10).

Zikmund and d'Amico (2002: 148) state that consumption naturally follows the purchase. If the decision maker is also the user, the matter of purchase satisfaction (or dissatisfaction) remains. In some cases, satisfaction is immediate, as when the buyer chews the just-bought gum or feels pleased that the decision-making process is over. We are telling ourselves that we are pleased with the purchase because our expectations have been confirmed. In this case, marketing has achieved its goal of consumer satisfaction.

Czinkota and Kotabe (2000: 31) point out that the opposite can occur – a consumer can feel uneasy about a purchase. Second thoughts can create an uneasy feeling, a sensation that the decision-making process may have yielded the wrong decision. These feelings of uncertainty can be analyzed in terms of the theory of cognitive dissonance. In the context of consumer behaviour, cognitive dissonance is a psychologically uncomfortable postpurchase feeling. More specifically, it refers to the negative feelings, or buyer's remorse, that can follow a commitment to purchase. Hill and O'Sullivan (1999: 97) point out that cognitive dissonance results from the fact that people do not like to hold two or more conflicting beliefs or ideas at the same time. Dissonance theory describes such feelings as a sense of psychic tension, which the individual will seek to relieve. Each alternative has some advantages and some disadvantages.

According to Gilbert et al. (1997: 147), buyers reduce cognitive dissonance by focusing on the advantages of the purchase – by carrying out post purchase

evaluation in a way that supports the choice made. Buyers may seek reinforcement from friends or from the seller. They may mentally downgrade the unselected alternatives and play up the advantages of the selected brand to convince themselves that they made the right choice. In addition, Sheth et al. (1999: 405) state that effective marketers do not want dissatisfied customers. When marketers understand that any choice can create cognitive dissonance, they can seek to support their customers' choices. Fulfilling customer expectations, which leads to satisfaction, is the purpose of many marketing activities (Zikmund and d'Amico, 2002: 148).

#### **2.2.4 Perspectives on Cognitive Dissonance**

Cognitive Dissonance Theory, developed by Leon Festinger (1957), is concerned with the relationships among cognitions. Cognition, for the purpose of this theory, may be thought of as a piece of knowledge. The knowledge may be about an attitude, an emotion, behaviour, a value, and so on. For example, the knowledge that you like the colour red is cognition; the knowledge that you caught a touchdown pass is a cognition; the knowledge that the Supreme Court outlawed school segregation is a cognition. People hold a multitude of cognitions simultaneously, and these cognitions form irrelevant, consonant or dissonant relationships with one another (Rudolph, 2003: 2).

In support, Sticky-Marketing (2002: 5) notes that cognitive dissonance occurs when a person experiences conflicting ideas, states of emotion, or feelings. They will be driven to reduce this state of tension and will take action to reduce this state of tension and will take action to return to consonance (the opposite of dissonance). Dissonance is when you have internal conflict; it is cognitive when you recognize it. The action you are driven to take to reduce or eliminate dissonance is called dissonance-reducing behaviour.

Consider a consumer who bought a high value item but whose expectations have not been met. They had high expectations but their experience of the reality of the item is disappointing, they are in a state of dissonance and it is cognitive. What do they do? Well they may be able to return the goods in which case they can perhaps rest content with the new belief they have about that item and at least they get their money back. Assuming returning the item is not possible, they can still take action to reduce the conflict between their expectations and their initial perception of the reality of the offering. They may seek out others who have bought the item and try to get support for their decision to boost their belief in the item back to a level nearer their expectation.

Hawkins et al. (2001: 312) comment that consequently the theory can be expanded, that if asked about their views on the item they may effectively tell a more positive tale, more in keeping with their expectations than the reality they initially found on actually getting the item. This may be a good reason to beware of other buyers' recommendations!

According to Boyd et al. (2002: 121) two cognitions are said to be dissonant if one cognition follows from the opposite of another. What happens to people when they discover dissonant cognitions? The answer to this question forms the basic postulate of Festinger's theory. A person who has dissonant or discrepant cognitions is said to be in a state of psychological dissonance, which is experienced as unpleasant psychological tension. In support, Arnould et al. (2004: 638) state that this tension state has drive like properties that are much like those of hunger and thirst. When a person has been deprived of food for several hours, he/she experiences unpleasant tension and is driven to reduce the unpleasant tension state that results. Reducing the psychological state of dissonance is not as simple as eating or drinking however.

Burnett (2000: 81) highlights that to understand the alternatives open to an individual in a state of dissonance, we must first understand the factors that

affect the magnitude of dissonance arousal. First, in its simplest form, dissonance increases as the degree of discrepancy among cognitions increases. Second, dissonance increases as the number of consonant cognitions held by an individual increases. Third, the relative weights given to the consonant and dissonant cognitions may be adjusted by their importance in the mind of the individual. Czinkota and Kotabe (2000: 31) indicate that if dissonance is experienced as an unpleasant drive state, the individual is motivated to reduce it. Now that the factors that affect the magnitude of this unpleasantness have been identified, it should be possible to predict what we can do to reduce it.

Festinger (2003: 1) states that according to cognitive dissonance theory, discomfort or dissonance occurs when a consumer holds conflicting thoughts about a belief or an object. For instance, when consumers have made a commitment – made a down payment or placed an order for a product, particularly an expensive one such as a motor vehicle or a personal computer – they often begin to feel cognitive dissonance when they think of the unique, positive qualities of the brands not selected (left behind). When cognitive dissonance occurs after a purchase, it is called post purchase dissonance.

According to Czinkota et al. (2000: 164), because purchase decisions often require some amount of compromise, postpurchase dissonance is quite normal. Nevertheless, it is likely to leave consumers with an uneasy feeling about their prior beliefs or actions – a feeling that they tend to resolve by changing their attitudes to conform to their behaviour. Thus, in the case of postpurchase dissonance, attitude change is frequently an outcome of an action or behaviour. The conflicting thoughts or dissonant information that follows a purchase are prime factors that induce consumers to change their attitudes so that they will be consonant with their actual purchase behaviour.

Arnould et al. (2004: 638) add that dissonance theory proposes that when a consumer's beliefs and behaviours do not agree, discomfort is produced and the

person is motivated to alter something in order to bring them into alignment. There is a lot of evidence to support the view that if there is sufficient discrepancy between a belief and a behaviour, consumers experience discomfort and negative feelings. In addition, Burnes (2004: 597) points out that the theory of cognitive dissonance states that people try to be consistent in both their attitudes and behaviour. When they sense an inconsistency either between two or more attitudes or between their attitudes and behaviour, people experience dissonance; that is, they feel frustrated and uncomfortable – sometimes extremely so – with the situation. Therefore, individuals will seek a stable state where there is minimum dissonance.

This latter point is important. It is unlikely that dissonance can ever be totally avoided, but where the elements creating the dissonance are relatively unimportant, the pressure to correct them will be low. However, where the issues involved are perceived by the individual to be significant, the presence of such dissonance will motivate the person concerned to try to reduce the dissonance and achieve consonance, by changing their attitudes or behaviour to bring them into line (Burnes, 2000: 452).

## **2.3 POSTPURCHASE EVALUATION**

After buying a product, consumers formally or informally evaluate the outcome of the purchase. In particular, they consider whether they are satisfied with the experience of making the purchase and with the good or service they bought. A consumer who repeatedly has favourable experiences may develop loyalty to the brand purchased. Also, consumers may tell their family, friends, and acquaintances about their experiences with buying and using products. Cognitive dissonance/postpurchase dissonance may result because of the difficulty or even impossibility of fully considering every possible alternative course of action (Gilbert et al. 1997: 147).

Moreover, Schiffman and Kanuk (2004: 570) show that as consumers use a product, particularly during a trial purchase, they evaluate its performance in light of their own expectations. There are three possible outcomes of these evaluations as shown in Figure 2.2: actual performance matches expectations, leading to a neutral feeling; performance exceeds expectations, causing what is known as positive disconfirmation of expectations (which leads to satisfaction); and performance is below expectations, causing negative disconfirmation of expectations and dissatisfaction. For each of these three outcomes, consumers' expectations and satisfaction are closely linked; that is, consumers tend to judge their experience against their expectations when performing a postpurchase evaluation.

Post-buying assessment involves a customer's evaluation of the performance of the product or service, in relation to the criteria, once it has been bought, i.e. it is the customer's perception of the outcome of the consumption process. The post-buying phase involves different forms of psychological processes that customers can experience after buying something. After buying something, the customer discovers something about a product or service, stores this new knowledge in long-term memory, modifies relevant attitudes, and is ready for the next decision process with an improved base of knowledge (Cant et al. 2002: 182)

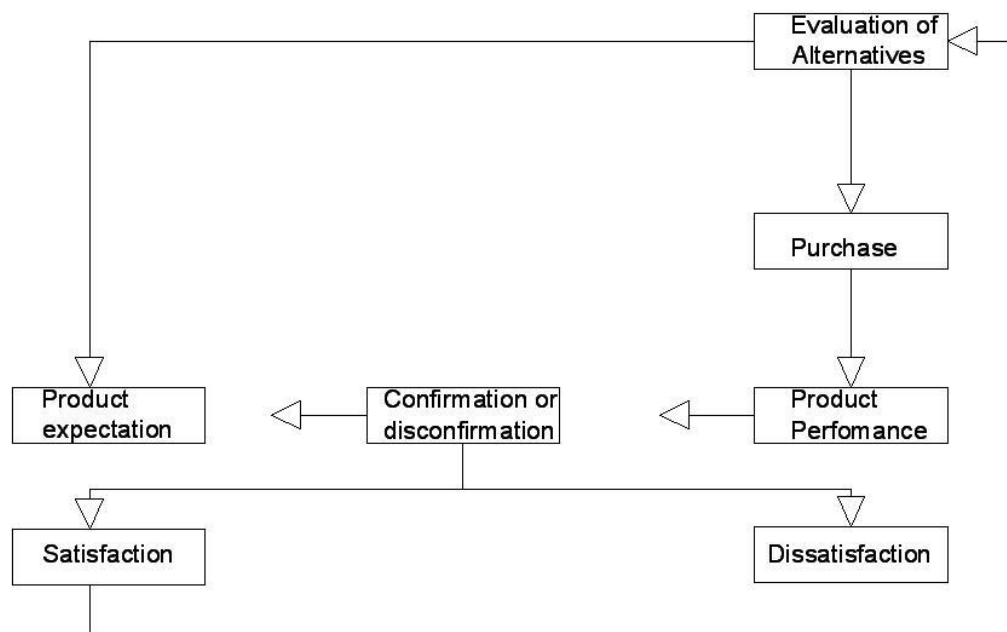
Kurtz and Clow (1998: 418) point out that an important component of postpurchase evaluation is the reduction of any uncertainty or doubt that the consumer might have had about the selection. As part of their postpurchase analysis, consumers try to reassure themselves that their choice was a wise one; that is they attempt to reduce postpurchase cognitive dissonance.

Peter and Donnelly (2004: 52) believe that the degree of postpurchase analysis that consumers undertake depends on the importance of the product decision and the experience acquired in using the product. When the product lives up to expectations, they probably will buy it again. When the product's performance is

disappointing or does not meet expectations, however, they will search for more suitable alternatives. Thus, the consumer's postpurchase evaluation "feeds back" as experience to the consumer's psychological field and serves to influence future related decisions.

According to Arens (2004: 164), the customer's decision process does not end with the purchase. Rather, the experience of buying and using the product provides information that the customer will use in future decision making. In some cases, the customer will be pleased with the experience and will buy the same product from the same supplier again. In other cases, the customer will be disappointed and may even return or exchange the product. In general, as shown in Figure 2.2, the postpurchase process includes four steps: decision confirmation, experience evaluation, satisfaction or dissatisfaction, and future response (exit, voice, or loyalty).

Figure 2.2 The Purchase Evaluation Process

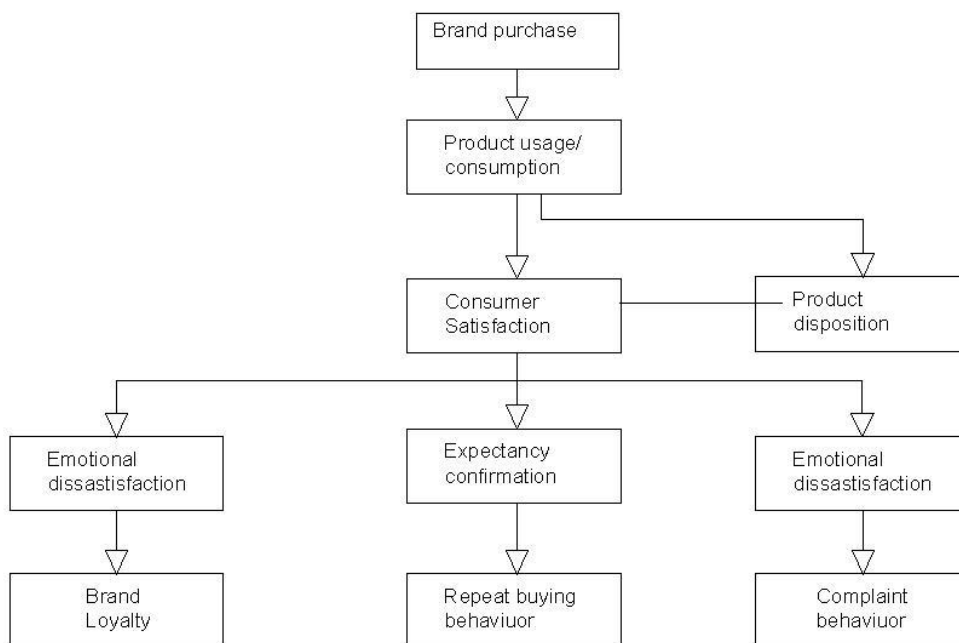


Source: Singh (1988:102)

### 2.3.1 Decision Confirmation

After a customer makes an important choice decision, he or she experiences an intense need to confirm the wisdom of that decision. The flip side is that he or she wants to avoid the disconfirmation. One of the processes that occur at this stage is cognitive dissonance (Schiffman and Kanuk, 2000: 220).

Figure 2.3 A Model of Consumer Postacquisition Process



Source: Singh (1988:104).

### 2.3.2 Experience Evaluation

Following purchase, the product or service is actually consumed. Marketers need to know whether customers consume it routinely or while consciously evaluating it. This depends on the level of enduring involvement in the product or



service and the finality of the preference that caused this purchase (Sheth et al. 2000: 548).

### **2.3.3 Consumer Satisfaction/Dissatisfaction**

According to Cant et al. (2002: 183), a positive assessment of the purchase decision results in post-buying satisfaction. Satisfaction occurs when the outcome, which may be a product, brand or store, and the conditions surrounding its purchase, are matched with the customer's expectations. Lee et al. (2000: 217) found that perceived quality determines satisfaction, rather than vice versa. During shopping, customers reach their final choices with quite different decision goals in mind. Shiv and Huber (2000: 203) believe that while some customers' goals could be choice oriented (deciding on which alternative to buy from a set of choices), the goal of others may be value oriented (evaluating each alternative with the aim of obtaining good value for money), and the goal of a third category may be anticipated satisfaction (where customers assess the likely satisfaction with each alternative before making the final choice).

Singh (2003: 5) indicates that satisfaction refers to the buyer's state of being adequately rewarded in a buying situation for the sacrifice he or she has made. Adequacy of satisfaction is a result of matching actual past purchase and consumption experience with the expected reward from the brand in terms of its anticipated potential to satisfy the consumer's motives. Satisfaction is a kind of stepping away from an experience and evaluating it. One could have a pleasurable experience that caused dissatisfaction because even though pleasurable, it wasn't as pleasurable as it was supposed or expected to be. So satisfaction/dissatisfaction is not an emotion, it is the evaluation of an emotion. Arnould et al. (2004: 758) state that dissatisfaction can be defined as an unpleasant level of consumption-related fulfilment. Although this definition makes sense, keep in mind that factors that contribute to higher levels of

satisfaction may sometimes differ from those that contribute to higher levels of dissatisfaction.

Arnould et al. (2004: 757) furthermore show that customer satisfaction is the key outcome of the marketing process. It is an end in itself, but it is also the source of word-of-mouth recommendations and thus can stimulate further purchases. There is considerable evidence to suggest that buying service represents a major risk to the consumer, and this makes word-of-mouth recommendation very valuable. But how is this satisfaction created? Several approaches have been suggested, but perhaps the simplest and most powerful is the formation of a consumer satisfaction/dissatisfaction model.

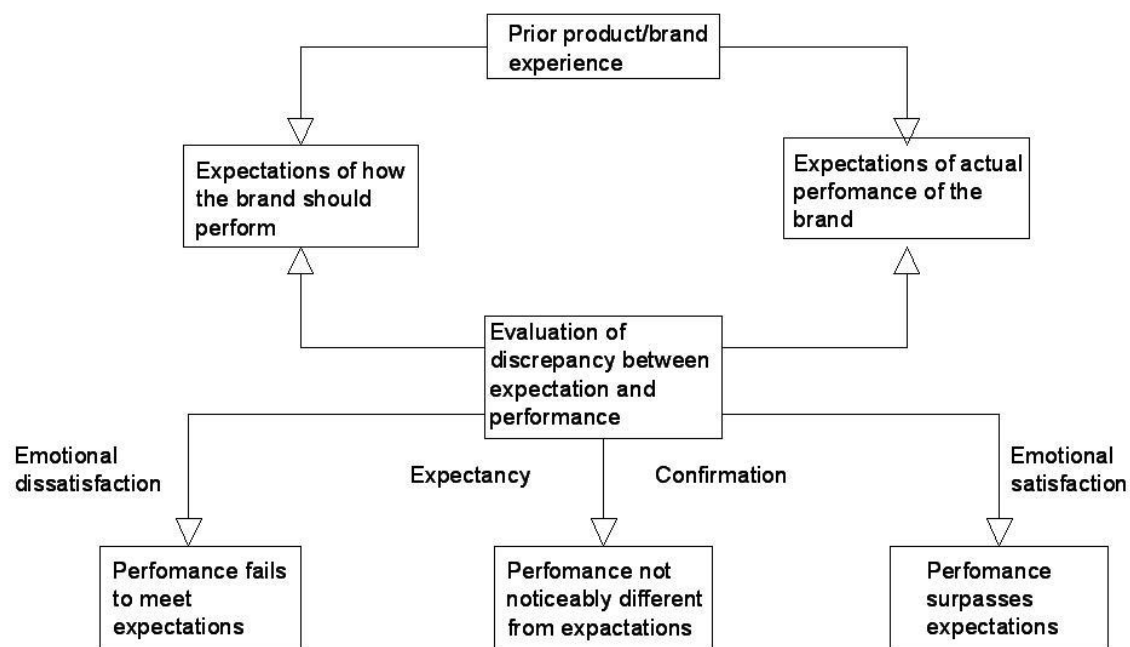
From Figure 2.3, it is clear that providing a quality product or service is all about meeting or exceeding customer expectations. Where expectations are met then the customer is satisfied. If expectations are not met then the customer experiences dissatisfaction. This logic is even more applicable to service provision where there are fewer tangibles. The customer has certain expectations of the level of service that they will receive based, perhaps, on advertising, past experiences or hearsay. When the customers actually consume the service, they will consciously or unconsciously, evaluate the performance of the company against their expectations. If their expectations and evaluations do not match then there will be a gap leading to satisfaction or dissatisfaction depending on the direction and extent of the gap. Dissatisfaction, so the theory goes, will lead to a perception of poor quality and vice versa.

Whether or not they actively evaluate a product during product use or consumption, users do experience the usage outcome. This outcome is characterized as satisfaction or dissatisfaction. What is more challenging is to understand why consumers feel the way they do (Griffin, 1997: 25). Research indicates that consumers do not evaluate the performance of a product on an absolute basis, but compare it to the expected performance. Thus, if the product

fulfils prepurchase expectations, then satisfaction results. On the other hand, if the prepurchase expectations are not met, dissatisfaction results. This makes intuitive sense in our everyday experience (Sheth et al. 1999: 549).

Kerin et al. (2006: 122) indicate that following the experience of satisfaction or dissatisfaction, consumers have three possible responses: exit, voice, or loyalty. If consumers are dissatisfied with their experience with a brand, they may decide never again to buy the brand. This place them back to the start of the decision process the next time the problem recognition arises.

Figure 2.4 The Formation of Consumer Satisfaction/Dissatisfaction Model



Source: Singh (2003: 4)

Some dissatisfied consumers may complain, and then decide either to give the brand or marketer another chance, or simply to exit (Wilkie, 2000: 621). According to Kotler and Keller (2006: 199), dissatisfied consumers may abandon

or return the product. They may take public action by complaining to the company, going to a lawyer, or complain to other groups. Private actions include making decisions to stop buying (exit option) the product or warning (voice option) friends.

In today's competitive marketing environment, delivering high quality service and having satisfied customers are indispensable if a firm wants to gain a sustainable competitive advantage. Customer satisfaction and maintenance of customer relationships are, in fact, dependent on how well a service measures up to customers' expectations of quality, as can be seen in figure 2.4.

#### **2.3.4 Customer expectations and future expectations**

According to Cant et al. (2002: 239), customer expectations serve as a benchmark against which present and future service encounters are compared. Customer expectations are what customers think they will receive in the service encounter, and they can be divided into at least three levels:

- The predicted service level is the customer's anticipated level of performance
- The desired service level reflects the ideal level of service that the customer wants or hopes to receive compared to the predicted service level
- The adequate level represents the minimum level of service that the customer will still tolerate and accept without being dissatisfied.

Factors that could influence customers' expectation levels, as well as their zone of tolerance, include personal needs, self-perceived service roles, implicit service promises, word-of-mouth communication and past experiences. For this reason, it is extremely important to ensure that the organisation's promises to its customers reflect what the organisation is actually able to deliver (Van Birgelen et al. 2002: 44).

Snipes et al. (2005: 1336) believe that customer satisfaction/dissatisfaction is the end result of the service experience. In cases where customers' expectations exceed the perceived service delivery they will be dissatisfied, and where the perceived service exceeds their expectations they will be satisfied. Total satisfaction can therefore be seen as consistently exceeding customer expectations. Achieving this demands some basic prerequisites, such as:

- Allowing customers to define service value,
- Exceeding customers' expectations in key areas, not all areas,
- Differentiating the customer base and investing in serving profitable customers,
- Investing in training, education and systems, because quality service may be defined by customers, but it is delivered by employees.

Customer satisfaction is created through a combination of responsiveness to customers' expectations and views, continuous improvement of the organisation's offering, as well as the continuous improvement of the overall customer relationship. The cornerstone is that quality is a fundamental customer requirement, and if customers are not satisfied, the opportunities for creating loyalty will cease to exist (Keh and Lee, 2006: 129).

### **2.3.5 Exit, voice, or loyalty**

What happens when consumers experience dissatisfaction? Consumers may exhibit unfavourable word-of-mouth communication, that is, they tell others about their problem. Consumers may also not repurchase the brand. Another course of action is to complain. Following the complaint, negative word-of-mouth is less likely, and repatronage more likely, if the complaint is successfully redressed (Levine, 2003: 202). If the complaint is not successfully redressed, the negative word-of-mouth might in fact be further intensified beyond what it would have been had the consumer not made the complaint in the first place. Research has

found that consumer complaints may actually be good for marketers-complainers care enough to complain. Noncomplainers simply walk out, taking their patronage to a competitor (Baker, 2000: 55).

The third response is, of course, loyalty. Consumer loyalty means the consumer buys the same brand repeatedly. It is reasonable to assume that loyal consumers are more likely to be satisfied. However the converse is not necessarily true, as some researchers have found that not all satisfied consumers are loyal. Some consumers will still exhibit a switching behaviour despite being satisfied with the current brand (Czinkota et al. 2000: 164).

Belch and Belch (2001: 152) state that this theory of satisfaction has important implications for shaping expectations. If marketing communications and other elements of the marketing mix (e.g., advertising, salespersons, price, appearance of the store, and so on) promise too much, they may create expectations that the product or service would almost surely fail to fulfil, thus risking customer dissatisfaction. Of course, if the expectations are too low, the sale may not result. The right strategy therefore ought to be to create realistic expectations and not over-promise, and to design the product or service so that the realistic expectations imply a performance level that the target market finds attractive enough to select the brand.

Postpurchase evaluation focuses on whether customers have received good value. Customers may weigh the benefits received by purchasing against the costs of making the purchase. When the benefits significantly outweigh the costs, customers perceive high value and are satisfied (Swartz and Iacobucci, 2000: 230). The more satisfied customers are, the more likely they will become loyal to the brand and the seller, and the more likely the seller is to establish a long-term relationship with the customer. In other words, customer value and satisfaction influence future buying decisions (Arens, 2002: 235).

According to Arens (2004: 164), a key feature of the postpurchase evaluation is cognitive dissonance. During the postpurchase period, the consumer may enjoy the satisfaction of the purchase and thereby receive reinforcement for the decision. Or the purchase may turn out to be unsatisfactory for some reason. In either case, feedback from the postpurchase evaluation updates the consumer's mental files, affecting perceptions of the brand and similar purchase decisions in the future.

An important component of postpurchase evaluation is the reduction of any uncertainty or doubt that the consumer might have had about the selection. As part of their postpurchase analyses, consumers try to reassure themselves that their choice was a wise one; that is, they attempt to reduce postpurchase cognitive dissonance (Schiffman and Kanuk, 2000: 457). Dissonance also poses problems for those trying to assess customer satisfaction post-purchase – as occurs during the measurement of service quality. Dissonance theory would suggest that post-purchase dissonance might affect the size of the customer satisfaction gap because of the positive attitude that arises from the desire to reduce dissonance (Phipps and Simmons, 2000: 237).

Lamb et al. (2000: 353) highlight that almost all major purchases result in cognitive dissonance, or discomfort caused by postpurchase conflict. After the purchase, consumers are satisfied with the benefits of the chosen brand and are glad to avoid the drawbacks of the brands not bought. However, every purchase involves compromise. Consumers feel uneasy about acquiring the drawbacks of the chosen brand and about losing the benefits of the brands not purchased. Thus, consumers feel at least some postpurchase dissonance for every purchase.

Why is it so important to satisfy the customer? Such satisfaction is important because a company's sales come from two basic groups – new customers and retained customers. It usually costs more to attract new customers than to retain

current ones, and the best way to retain current customers is to keep them satisfied. Satisfied customers buy a product again, talk favourably to others about the product, pay less attention to competing brands and advertising, and buy other products from the company (Armstrong and Kotler, 1999: 156).

Although post-buying assessment is the final stage in the customer decision-making process, it is not necessarily the end of the process. The information gained as a result of buying and post-buying evaluation is stored in individuals' memories as part of their experience. Customers remember this information when starting another buying decision-making process. In other words, regardless of the outcome, postpurchase evaluation is a learning process that provides feedback to the customer and is stored as information for future reference (Cant et al. 2000: 185).

## **2.4 THE PURCHASE PROCESS FOR SERVICES**

When customers decide to buy a service to meet an unfilled need, they go through what is often a complex purchase process. This process has three separate stages: the prepurchase stage, the service encounter stage, and the postpurchase stage, each containing two or more steps (Lovelock and Wright, 2002:88). Gilbert (2003: 94) has developed a model of service quality, which claims that the consumer evaluates the quality of a service experience as the outcome of the difference (gap) between expected and perceived service as indicated in Figure 2.5.

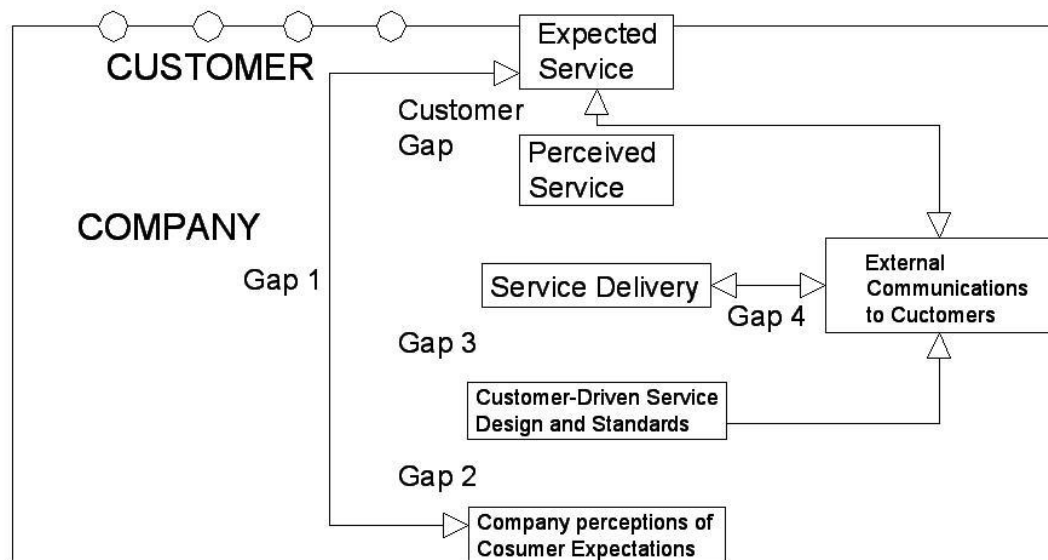
The model highlights the main requirements for a service provider delivering the expected service quality. From the model five gaps may be identified that could lead to unsuccessful service delivery. By understanding this model, it is possible to provide greater management control over customer service relationships. This should lead to an improved realization of the key points at which the marketer



can influence the satisfactions of the consumer. The marketer is then in a better position to be able to reduce or close the gaps.

Bateson and Hoffman (1999: 170) point out that buyers form their expectations on the basis of messages received from sellers, friends, and other information sources. If the seller exaggerates the benefits, the buyer's expectations will be disconfirmed; this leads to dissatisfaction. The larger the gap between expectations and performance, the greater the buyer's dissatisfaction. Here the buyer's coping style comes into play. Some buyers magnify the gap when the product is not perfect, and they are highly dissatisfied. Other buyers minimize the gap and are less dissatisfied.

Figure 2.5 Gaps Model of Service Quality



Source: Gilbert (2003: 96).

### **2.4.1 Prepurchase Stage**

According to Bateson and Hoffman (1999: 34), the decision to buy and use a service is made in the prepurchase stage. Individual needs and expectations are very important here because they influence what alternatives customers will consider. If the purchase is routine and relatively low risk, customers may move quickly to selecting and using a specific service provider. In addition, Futrell (2004: 126) states that when more is at stake or a service is about to be used for the first time, they may conduct an intensive information search (contrast how one approaches the process of applying to college versus buying a pizza or a hamburger!). The next step is to identify potential suppliers and then weigh the benefits and risks of each option before making a final decision.

Gilbert (2003: 60) indicates that this element of perceived risk is especially relevant for services that are high in experience or credence attributes and thus difficult to evaluate prior to purchase and consumption. Perceived risk is defined as the uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions. First-time users are especially likely to face greater uncertainty. Fitzsimmons and Fitzsimmons (2004: 135) point out that risk perceptions reflect customers' judgments of the probability of a negative outcome. The worse the possible outcome and the more likely it is to occur, the higher the perception of risk. One strategy to help reduce the risk perceived by customers is to educate them about the features of the service, describe the types of users who can most benefit from it, and offer advice on how to obtain the best results.

The degree of risk that consumers perceive and their own tolerance of risk taking are factors that influence their purchase strategies. It should be stressed that consumers are influenced by risks that they perceived, no matter how real or how dangerous would not influence consumer behaviour (Schiffman and Kanuk, 2004: 197).

According to Fitzsimmons and Fitzsimmons (2004: 136), the following are types of perceived risk.

- Functional risk is the risk that the service or product will not perform as expected.
- Physical risk is the risk to self and others that the product or service may pose.
- Financial risk is the risk that the product will not be worth its cost.
- Social risk is the risk that a poor product or service choice may result in social embarrassment.
- Psychological risk is the risk that a poor product or service choice will bruise the consumer's ego.
- Time risk is the risk that the time spent in product search may be wasted if the product does not perform as expected.

#### **2.4.2 Service Encounter Stage**

Lovelock and Wright (2002: 89) report that after deciding to purchase a specific service, customers experience one or more contacts with their chosen service provider. The service encounter stage often begins with submitting an application, requesting a reservation, or placing an order. Contacts may take the form of personal exchanges between customers and service employees, or impersonal interactions with machines or computers. Berman and Evans (1998: 221) point out that in high contact services, such as restaurants, health care, hotels, educational institutions, and public transportation, customers may

become actively involved in one or more service processes. Often, they experience a variety of elements during service delivery, each of which may provide clues to service quality.

The intangibility of services together with other service characteristics, inseparability, ownership, heterogeneity and perishability, create challenges for retailers, especially to deliver over time, clear customer expectations and experience of service quality. These can be used for purposes of organisation or store brand differentiation in an intensely competitive market facing slow growth of the customer base.

Service environments include all of the tangible characteristics to which customers are exposed. The appearance of building exteriors and interiors, the nature of furnishings and equipment; the presence or absence of dirt, odour, or noise; and the appearance and behaviour of other customers can all serve to shape expectations and perceptions of service quality (Hasty and Reardon, 1997: 155).

Service Personnel are the most important factor in most high-contact service encounters, where they have direct, face-to-face interactions with customers. But they can also affect service delivery in low-contact situations like telephone-based service delivery. Knowledgeable customers often expect employees to follow specific scripts during the service encounter; excessive deviations from these scripts can lead to dissatisfaction. Handling service encounters effectively on the part of the employee usually combines learned skills with the right type of personality (Weitz et al. 2001: 362).

Support services are made up of the materials and equipment plus all of the backstage processes that allow front stage employees to do their work properly. This element is critical, because many customer-contact employees cannot

perform their jobs well without receiving internal services from support personnel (Kurtz and Clow, 1998: 419).

Consumers evaluate services by comparing the service they perceive they have received with their expectations. If the perceived service is equal to or better than the expected service, then the consumer is satisfied. It is crucial to point out that this entire process takes place in the mind of the consumer. It is perceived service that matters, not the actual service. Once this simple idea is established, two subsidiary questions emerge: What is it that drives expectations, and what is it that drives perceptions? (Bateson and Hoffman, 1999: 25).

### **2.4.3 Postpurchase stage**

Wilkie (2000: 620) argues that during the postpurchase stage, customers continue a process they began in the service encounter stage – evaluating service quality and their satisfaction/dissatisfaction with the service experience. The outcome of this process will affect their future intentions, such as whether or not to remain loyal to the provider that delivered service and whether to pass on positive or negative recommendations to family members and other associates.

Lovelock and Wright (2002: 88) indicate that customers evaluate service quality by comparing what they expected with what they perceive they received. If their expectations are met or exceeded, they believe they have received high-quality service. If the price/quality relationship is acceptable and other situational and personal factors are positive, then these customers are likely to be satisfied. In addition, Futrell (2004: 126) states that as a result, they are more likely to make repeat purchases and become loyal customers. However, if the service experience does not meet customers' expectations, they may complain about poor service quality, suffer in silence, or switch providers in the future.

The consumer's evaluation of a purchase feeds back into memory where the information can be recalled for a similar purchase decision. Stored information about one or more negative past experiences with a brand or supplier will reduce the odds that the consumer will make the same purchase again (Cassel et al. 2001: 4). Consistent positive experiences can ultimately lead to brand loyalty – the routine repurchase of the same brand with little consideration of any alternatives (Peter and Donnelly, 2004: 53). Some experts argue that consumers more often develop loyalty to service providers than to physical products because of the difficulty of evaluating alternatives before actually experiencing the service. Also, repeated patronage can bring additional benefits, such as discounts, or more customized service as the provider gains more insights into the customer's preferences (Burnett, 2002: 81).

Direct experience of the product is an important part of the decision process. Feedback from use helps learning and attitude development and is the main contributor to long-run behaviour. Communication activity must continue to provide satisfaction and prevent the onset of cognitive dissonance. Marketing communications, at this stage, should be aimed at reinforcing past decisions by stressing the positive features of the product or by providing more information to assist its use and application (Fill, 2002: 92).

#### **2.4.4 Service Quality and Customer Satisfaction**

Fernie et al. (2004: 119) point out that service quality has been defined as the ability of the organisation to meet and exceed customer expectations. If the main difference between service quality and customer satisfaction is that the former relates to managing the quality of the service and the latter to customers' expectation and experience of the quality of service delivery, then improving customer service means delivering service quality improvements which are customer defined.

Customers' perception of the quality of service provided by firms depends upon the level of satisfaction they experience in the process of shopping. Their satisfaction is affected by both their expectations of the shopping experience and the actuality of the experience (Fernie et al. 2004: 226). In addition Cant et al. (2002:239) state that if customers experience higher levels of service than expected over time, then they will perceive the company as offering a high quality service. If the level of service is lower than expected over time, the company will be perceived as offering a low level service quality.

Dwyer and Tanner (2006: 450) highlight that the main difference between service quality and customer satisfaction is that the former relates to managing the quality of the service and the latter to customers' expectation and experience of the quality of service delivery. Therefore, improving customer service means delivering service quality improvements which are customer defined.

## **2.5 COGNITIVE CONSISTENCY THEORIES**

According to Sheth and Parvatiyar (2000: 180) the general concept of cognitive consistency theories is that the various cognitions people hold have to be consistent with one another. Inconsistency among ideas causes tension or drive, which people are moved to reduce by bringing the inconsistent cognitions into consistency. Sheth et al. (1999: 405) highlight the view that people accomplish this by changing one of the cognitions in order to make it consistent with another. One specific theory based on the cognitive consistency principle is Festinger's cognitive dissonance theory.

Zikmund and d'Amico (2002: 148) point out that cognitive irrelevance probably describes the bulk of the relationships among a person's cognitions. Irrelevance simply means that the two cognitions have nothing to do with each other. Two cognitions are consonant if one cognition follows from, or fits with, the other. Berman and Evans (1998: 222) believe that people like consonance among their

cognitions. We do not know whether this stems from the nature of the human organism or whether it is learned during the process of socialization, but people appear to prefer cognitions that fit together to those that do not. It is this simple observation that gives the theory of cognitive dissonance its interesting form.

Sometimes consumers experience postpurchase conflict or discomfort about the wisdom of a particular purchase decision. They might then hold illogical views about the brand or service they have bought. In such cases, consumers might wish to reduce such dissonance through cognitive and attitudinal changes. They will find a balance in their psychological field by seeking supportive information or distorting contradictory information regarding the product or service (du Plessis and Rousseau, 2003: 121).

## **2.6 PERSONAL DEVELOPMENT AND COGNITIVE DISSONANCE**

Chow and Thompson (2003:3) report that personal development is paramount in sustaining and improving the functions of societies of any form. Maturity, as a function of personal development, is that state or time of life at which a person is considered fully developed socially, intellectually, emotionally, physically, and spiritually. Full personal development, if it can be defined, is the ultimate goal of human development of self-actualization. Mitchell (2003: 2) points out that through education at home, at school, and at work the collective efforts have been to ensure that citizens learn to live and grow together in peace and harmony in such a way that every one stands to benefit from each other's full participation in upholding the values deemed important for the betterment of human living. Hence significant emphasis is placed on school, on living in a socially acceptable fashion, and on being law-abiding citizens.

According to Kaplan and Krueger (1999: 179), the education and legal systems play significant roles in teaching and enforcing society's rules and garnering the cooperation and support of the people. The interweaving of living and education



brings about personal development and thus maturity. Cognitive Dissonance, on the other hand, strews obstacles along the path of personal development because it causes pain and it hinders growth. An environment that is relatively free from cognitive dissonance should foster personal development and enhance growth (Chow et al. 2002: 167). Cognitive dissonance has been definitively shown to alter beliefs or perceptions of an individual (Jones and Ince, 2001: 1). A person can have cognitions about behaviours, perceptions, attitudes, beliefs, and feelings. Cognitions can be about oneself, another person or group, or about things in the environment.

Bozzi (2002: 3876) shows that people today, getting much of their personal identity from where they stand on issues, do not want to admit error in opinions. This would require that they admit to being wrong; who they are is threatened. As a result, many choose to avoid differing views entirely. This may be the case with students, who after registering for a certain course or after registering with a certain institution may begin to experience this behaviour and undertake ways of reducing the feeling. This study therefore, will look into how students reduce this feeling of uncertainty when faced with such.

Bearden et al. (2004: 2) state that self-perception theory proposes that attitudes develop as consumers look at and make judgements about their own behaviour. The influence tools of commitment and consistency relate specifically to people's desire to explain their own behaviour in a consistent way. Foxall et al. (2001: 130) point out that inconsistency in beliefs, words, and deeds is viewed as indecisive, weak-willed, flighty, or even signs of mental illness. Consistency is also economical. Once a person has decided about an issue, he or she doesn't have to think about it any more; once a person has learned a particular route to work, it is easiest to just automatically go that same way each day.

Yeon et al. (2006: 654) state that self-consistency is based on the idea that situations that evoke dissonance do so because they create inconsistency

between the self-concept and a behaviour. Because most persons have a positive self-concept, persons are likely to experience dissonance when they behave in a way that they view as incompetent, immoral, or irrational. Self-affirmation theory proposes that dissonance effects are not the result of cognitive inconsistency, self-inconsistency, or feeling personally responsible for producing aversive consequences, but of behaving in a manner that threatens one's sense of moral and adaptive integrity (Harmon-Jones and Mills, 2003: 11).

## **2.7 REDUCING COGNITIVE DISSONANCE**

Boyd et al. (2002: 120) argue that what makes postpurchase dissonance relevant to marketing strategists is the premise that dissonance propels consumers to reduce the unpleasant feelings created by the rival thoughts. A variety of tactics are open to consumers to reduce postpurchase dissonance. The consumer can rationalize the decision as being wise, seek out advertisements that support the choice, try to “sell” friends on the positive features of the brand, or look to known satisfied owners for reassurance.

In addition to such consumer-initiated tactics to reduce postpurchase uncertainty, a marketer can relieve consumer dissonance by including messages in its advertising specifically aimed at reinforcing consumers' decisions by “complimenting their wisdom,” offering stronger guarantees or warranties, increasing the number and effectiveness of its services, or providing detailed brochures on how to use its products correctly (Elliot and Devine, 1998: 383). Beyond these dissonance-reducing tactics, marketers increasingly are developing affinity or relationship programmes designed to reward good customers and to build customer loyalty and satisfaction (Schiffman and Kanuk, 2004: 281).

Consumers try to reduce their postpurchase anxieties. They avoid information that is likely to increase the dissonance. And they seek out information that

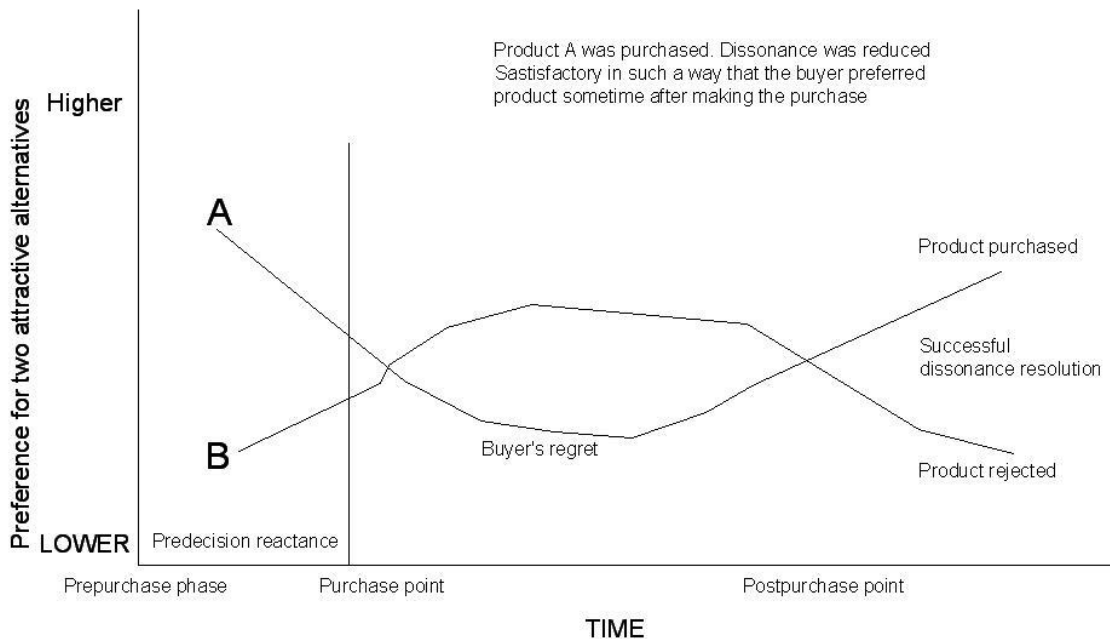
supports their decision, such as reassurance from friends. Post sale service reduces the customer's post purchase cognitive dissonance – the anxiety that usually occurs after a person makes a buying decision (Wilkie, 2000: 619). In this final stage of the selling process, a sales person can minimize the customer's dissonance by summarizing the product's benefits after the purchase, repeating why the product is better than alternatives not chosen, describing how satisfied other buyers have been with the product, and emphasizing how satisfied the customer will be with the product (Etzel et al. 2001: 528).

According to du Plessis and Rousseau (2003: 325), the consumer might purchase the product on the basis of a recommendation by some non-media source and then attempt to support the decision by developing a positive attitude toward the brand and perhaps negative feelings toward the rejected alternative(s). This reduces postpurchase dissonance and involves selective learning, whereby the consumer seeks information that supports the choice made and avoids information that would raise doubts about the decision. In these situations the main effect of communication is not the promotion of original choice behaviour and attitude change, but rather the reduction of dissonance by reinforcing the wisdom of the purchase or providing supportive information.

### **2.7.1 Changing Product Evaluations**

One of the ways consumers seek to reduce dissonance is to re-evaluate product alternatives. This is accomplished by the consumers' enhancing the attributes of the products selected while decreasing the importance of the unselected products' attributes (Aronson et al. 2001: 302). Another approach is for the consumer to re-evaluate product alternatives to view them as being more alike than was thought at the purchase stage; this is, to establish or imagine that cognitive overlap exists (Bahk, 2001: 4).

Figure 2.6 The Effect of Reactance and Dissonance Before and After Purchase



Source: Singh (2003: 6)

### 2.7.2 Seeking New Information

Consumers may reduce dissonance by seeking additional information in order to confirm the wisdom of their product choice (Beauvois and Joul, 1999: 202).

### 2.7.3 Changing Attitudes

As a result of dissonance, consumers may change their attitudes to make them consonant with their behaviour (Sappenfiled, 2002: 6). By re-evaluating a product and adopting a positive attitude toward it, attitudes and behaviour become consistent and consonance is achieved (Aronson et al. 2001: 304). Changing Cognitions - if two cognitions are discrepant, we can simply change one to make it consistent with the other. Or we can change each cognition in the direction of the other (Kaplan and Krueger, 1999: 196). Adding Cognitions - if

two cognitions cause a certain magnitude of dissonance, adding one or more consonant cognitions can reduce that magnitude (Baumeister et al. 1999: 127). Altering Importance - since the discrepant and consonant cognitions must be weighed by importance, it may be advantageous to alter the importance of the various cognitions (Levine, 2003: 204).

While postpurchase dissonance may be reduced by internal re-evaluations, searching for additional external information that serves to confirm the wisdom of a particular choice is also a common strategy. Naturally, information that supports the consumer's choice acts to bolster confidence in the correctness of the purchase decision (Hawkins et al. 2001: 629).

Peter and Donnelly (2004: 52) define cognitive dissonance as a condition reflecting a tendency toward mental unease, which occurs when an individual holds two attitudes, ideas, beliefs (or other cognitions) that are not in harmony with each other. In this situation, the person tries to reduce dissonance – perhaps by dropping a cognition, perhaps by strengthening one – in an effort to make beliefs and attitudes consistent. Dissonance may thus be a factor in motivation because it leads the individual to change an opinion, attitudes or behaviour in order to reach a state of consonance or harmony.

The more effort a person exerts to attain a goal, the more dissonance is aroused if the goal is less valuable than expected. Dissonance is reduced as the individual increases his liking for a goal, and therefore it is thought that the higher the price paid by the consumer, the greater is the tendency to like the brand and become loyal to it (Foxall et al. 2001: 123). There are several major ways in which consumers strive to reduce dissonance.

According to Harmon-Jones and Mills (2003:2), dissonance can be reduced by removing dissonant cognitions, adding new consonant cognitions, reducing the importance of dissonant cognitions, or increasing the importance of consonant

cognitions. The likelihood that a particular cognition will change to reduce dissonance is determined by the resistance to change of the cognition. Cognitions that are less resistant to change will change more readily than cognitions that are more resistant to change. Wilkie (2000: 621) indicates that resistance to change is based on the responsiveness of the cognition to reality and on the extent to which the cognition is consonant with many other cognitions. Resistance to change of a behavioural cognitive element depends on the extent of pain or loss that must be endured and the satisfaction obtained from the behaviour.

Marketing managers can help reduce dissonance through effective communication with purchasers. Advertising that displays the product's superiority over competing brands or guarantees can also help relieve the possible dissonance of someone who has already bought the product (Lamb et al. 2004:101). What makes postpurchase dissonance relevant to marketing strategists is the premise that dissonance propels consumers to reduce the unpleasant feelings created by the rival thoughts. A variety of tactics are open to consumers to reduce postpurchase dissonance. The consumers can rationalize the decision as being wise, seek out advertisements that support the choice (while avoiding dissonance-creating competitive advertisements), try to sell friends on the positive features of the brand, or look to known satisfied owners for reassurance (Etzel et al. 2001: 100).

Festinger (2003: 3) reports that the concept of cognitive dissonance is an important feature of attitude theory for marketers because of the emphasis it places on consumers' need to maintain cognitive consistency. That is, this theory tells marketers that consumers seek to reduce mental discomfort or dissonance that could arise from the presence of conflicting or inconsistent attitudes. Consumers do this by changing their behaviours and attitudes, or by distorting the messages they receive in order to maintain a balance or consistency across the whole system of beliefs, attitudes, intentions and

behaviours. Marketers have found that consumers frequently use advertising and the information it contains to justify or reinforce prior behaviours such as product purchase and that targeted efforts to support consumer decisions may prove to influence future buying behaviour (Foxall et al. 2001:130).

Chow and Thompson (2003: 5) believe that the special contribution of cognitive dissonance theory rests in its explicit stress on the consumer's motivation to reduce tension following an important purchase decision.

- Attitude Spread. One likely outcome is that consumers will strive to see their chosen brand as significantly better than the rejected ones.
- Selective Information Seeking. Promotional materials and ads provide very favourable information about a brand, as do satisfied owners of the product. For this reason we would expect consumers to seek out such information as a means of reducing their dissonance. Some marketers believe that consumers read more ads (for the brand they've chosen) after they purchase than they had before they bought (Rudolph, 2003: 1).
- Motivated Opinion Giving. More acceptances by others can also serve to reduce dissonance. Thus - especially for innovations, which most consumers haven't yet accepted – we would expect to see early adopters wanting to bring about further acceptance. One way to do this is to engage in favourable influence attempts on their friends (Harmon-Jones and Mills, 2003: 12).

Much of the research in dissonance theory has been conducted on the paradigm of induced compliance. A person is persuaded to behave in ways contrary to his or her private beliefs. Research has shown that attitudes are likely to change in order to restore consistency between attitudes and behaviour. Generally, the magnitude of attitude change is inversely proportional to the amount of justification which is provided to engage in the attitude-discrepant behaviour.

Induced compliance leads to dissonance arousal when the behaviour is engaged in freely, the actor feels committed to his attitude-discrepant stance, the behaviour results in unwanted consequences, and the actor feels personally responsible for bringing about the unwanted consequences.

Cognitive dissonance theory links actions and attitudes. It holds that dissonance is experienced whenever one cognition that a person holds follows from the opposite of at least one other cognition that the person holds. The magnitude of dissonance is directly proportional to the number of discrepant cognitions and inversely proportional to the number of consonant cognitions that a person has. The relative weight of any discrepant or consonant element is a function of its Importance (Harmon-Jones and Mills, 2003: 3).

## **2.8 COGNITIVE VIEW**

Schiffman and Kanuk (2004: 281) state that consumers frequently are pictured as either receptive to or actively searching for products and services that fulfil their needs and enrich their lives. The cognitive model focuses on the processes by which consumers seek and evaluate information about selected brands and retail outlets. Within the context of the cognitive model, consumers are viewed as information processors. Information processing leads to the formation of preferences and, ultimately, to purchase intentions.

According to Wells and Prensky (1996: 230), the cognitive view also recognizes that the consumer is unlikely to even attempt to obtain all available information about every choice. Instead, consumers are likely to cease their information-seeking efforts when they perceive that they have sufficient information about some of the alternatives to make a satisfactory decision. As this information-process viewpoint suggests, consumers often develop shortcut decision rules (called heuristics) to facilitate the decision-making process. Strydom et al. (2000: 78) point out that the cognitive, or problem-solving, view describes a consumer



who falls somewhere between the extremes of the economic and passive views, who does not (or cannot) have total knowledge about available product alternatives and therefore cannot make perfect decisions, but who nonetheless actively seeks information and attempts to make satisfactory decision.

## **2.9 MARKETING IMPLICATIONS**

According to du Plessis and Rousseau (2003: 121), postpurchase responses are very important to marketers and businesses. Positive responses confirm successful marketing strategies. Negative responses provide guidelines for corrective action. Most important, however, is the fact that postpurchase responses might indicate consumers' levels of involvement with their purchases. High involvement decision-making implies commitment to a brand or service, thus creating potential for loyalty to it. Postpurchase responses are also influenced by economic demand factors, in that the higher the price of the product, the greater the economic risk involved in the decision and the more intense the level of postpurchase satisfaction or dissatisfaction.

Lamb et al. (2004: 78) highlight that one can help the buyer to be satisfied with the product and lower the level of dissonance in several ways. First, if necessary, show the buyer how to use the product properly. Second, be realistic in making claims for the product. Exaggerated claims may create dissatisfaction. Third, continually reinforce buyers' decisions by reminding them how well the product actually performs and fulfils their needs. In addition, Rudolph (2003:2) points out that in some situations buyers can return the product to the seller after purchase. This cancels sales and hurts one's chances of making future sales to this customer. Fourth, follow up after the sale to determine if a problem exists. If so, help correct it. This is a great way to increase the likelihood of repeat business.

Jones and Ince (2001: 8) add that after a purchase has been made the product is consumed or used. During and after this process, cognitive dissonance may have an interesting effect on consumer behaviour. According to cognitive dissonance theory, if there were conflicting elements in the original decision to buy (the negative aspects of the product purchased versus the positive elements of the alternatives not purchased), there will be postpurchase tension in the consumer's mind. McGinn and Depasquale (2004: 3) also indicate that buyers tend to read promotional material even more avidly after the purchase than before, in order to justify their decisions and to displace the dissonant elements by concentrating on those aspects of the promotion that stress the good points of the product purchased.

Thus marketers need to recognize the role of their promotion in general, and of their advertising in particular, in the postpurchase period. Whether the buyer's expectations have been met and whether the consumer is satisfied are the crucial issues. Clearly the experiences after the purchase process become part of the future evaluation of buyers in similar decision processes (Hill and O'Sullivan, 1999: 97). This ongoing feedback loop after the purchase is what motivates suppliers to check on the satisfaction of consumers and to try to rectify any problems that may lead to dissatisfaction. That is why marketers should keep in touch with consumers after the sale and build a relationship that goes beyond the sales transaction (Burris, 1997: 18).

### **2.9.1 Confirming Expectations**

Where a product fails to measure up to the consumer's expectations or guidelines for evaluation, the result may be no initial sale, no repeat sale or unfavourable word-of-mouth communication (Fill, 2002: 592). Marketers should first design products that will fulfil consumers' expectations as far as possible (Davies and Ward, 2002: 297). Marketers should not build up expectations unrealistically. They should develop promotions that are consistent with what the

product can reasonably deliver (Jones, 1999: 225). Companies should take regular measurements of the quality of their products and services as perceived by customers (Sticky-Marketing, 2002: 3).

### **2.9.2 Inducing Attitude Change**

Promotional tools including free samples and cents-off coupons are frequently used by the marketer to induce behaviour changes in consumers (Arens, 2004: 164).

### **2.9.3 Reinforcing Buyers**

Much of the regular advertising may be sufficient to reinforce buyers about their decision (Davies, 2002: 296). Ads more specifically tailored to reinforce recent buyers may also be necessary (Jones, 1999: 226). Marketers should supply sufficient dealer literature; instruction manuals should seek to convince the buyer of the wisdom of the selection; they should provide information about warranties, guarantees, and where and how to secure service; and marketers should promote the availability and quality of their after-sale service (Gilbert, 2003: 60).

Mitchell (2003: 2) points out that the ultimate outcome of a postpurchase marketing plan is to make customers so pleased about their experience with a company, product, or service that they recommend it to other people. The customers should be so proud of their choice that they become unpaid spokespeople or 'apostles'. Apostles generally are not made with one postpurchase action, but it often takes only one bad experience to turn a customer into a critic. Suppose a customer chooses a dry cleaner because it is the most convenient location, has a friendly staff, and has always done a good job with the customer's clothes. If the cleaner ruins the customer's favourite wool jacket, it won't matter if the manager apologizes and reimburses him for the cost

of a new jacket. The customer is likely to tell all his friends and co-workers about the bad experience.

Dylan (2003: 6) states that people are more likely to share a negative experience than they are a positive one and negative messages typically carry more weight with other potential customers and even some customers who have otherwise been pleased with the product or service. Negative word of mouth can quickly destroy positive feelings that marketers worked hard to create, and it often is more difficult to rebuild those positive feelings. Companies use a variety of methods to reduce cognitive dissonance and create apostles for their brands. The ways a company addresses these challenges can be the difference between long-term success and failure.

One way to reduce cognitive dissonance is to make using the product or service as enjoyable as possible. Companies can address this by providing a detailed overview at the point of sale or creating a useful user's manual. Warranties and free service at given intervals can reassure customers that they made the right choice. Toll-free telephone assistance and web sites that provide all the information customers need can be a great comfort, provided the information is easy to retrieve. A more proactive approach would be to call customers a short time after the sale and ask them if they have any questions or suggestions for improvements (Arens, 2002: 90).

Companies that inspire repeat business have taken a big step toward making apostles. Frequent-flyer and other rewards programmes are designed with this goal in mind. Some companies provide customers with 'free membership' to their user clubs. Suggestive selling is a strategy in which a salesperson would recommend similar recordings or books based on what a customer has already selected. Some companies offer their products at huge discounts or even free with the promise or hope that a customer will then purchase their service plan or product accessories (Shultz and Lepper, 1999: 220).

Sheth and Paravatiyar (2000: 181) point out that referral programmes directly encourage customers to be apostles. Other common goals of postpurchase marketing are cross-selling and customer upgrades. Many companies send direct-mail reminders of routine service and announcements of new accessories. Some companies analyze sales records and send promotions for an upgrade model around the time when there is a high probability of repurchase. Arens (2004: 164) states that customers have different preferences regarding how and how much communication and support are provided. Companies need to ask customers what they want and how they want it. It is also a good idea to survey customers who take their business elsewhere. Identifying why customers defect can reveal weaknesses in a postpurchase strategy (Bearden et al. 2004: 2).

Belch and Belch (2001: 123) indicate that consumers experiencing cognitive dissonance may use a number of strategies to attempt to reduce it. They may seek out reassurance and opinions from others to confirm the wisdom of their purchase decision, lower their attitudes or opinions of the un-chosen alternative, deny or distort any information that does not support the choice they made, or look for information that does support their choice. An important source of supportive information is advertising; consumers tend to be more attentive to advertising for the brand they have chosen. Thus, it may be important for companies to advertise to reinforce consumer decision to purchase their brands.

According to Arens (2004: 164), marketers must recognize the importance of the postpurchase evaluation stage. Dissatisfied consumers who experience dissonance not only are unlikely to repurchase the marketer's product but may also spread negative word-of-mouth information that deters others from purchasing the product or service. The best guarantee of favourable postpurchase evaluations is to provide consumers with a quality product or service that always meets their expectations. Marketers must be sure their

advertising and other forms of promotion do not create unreasonable expectations their products cannot meet.

Marketers have come to realize that postpurchase communication is also important. Some companies send follow-up letters and brochures to reassure buyers and reinforce the wisdom of their decision. Many companies have set up toll-free numbers for consumers to call if they need information or have a question or complaint regarding a product. Marketers also offer liberalized return and refund policies and extended warranties and guarantees to ensure customer satisfaction (Bateson and Hoffman, 1999: 383).

Mitchell (2003: 3) indicates that certainly, most educators have noticed a change from generations of the past. Many lament it, but few have articulated what makes this current and rising generation of students so different and difficult. Whether we like the differences or not, colleges and universities have a responsibility to meet students where they are, rather than wish for another kind of student. Institutions must respond to the kinds of students they are dealing with now, be aware of who they are, how they think, and how they feel. Knowing more about this new generation is crucial for student recruitment and delivering the kinds of educational and social services they need. Institutions should also find ways of teaching problem solving and abstract thinking skills rather than relying on traditional courses.

To succeed with this group, an active learning environment will be a necessity, not a luxury. Energetic teachers who educate and entertain will be crucial if colleges are to reach and educate this generation. Faculty members must understand that reaching this group is not going to be nearly as easy as it was to deal with the more active and open generations of the past. The need for more exciting and entertaining admissions materials will also create an added burden on institutions looking to attract these students (Dehne, 2004: 5).

## **2.10 CONCLUSION**

In summary, marketers should seek to sell a product that satisfies the buyer's needs. In doing so, it should be remembered that the sale is made only when the actual purchase is complete and marketers should continue to reinforce the buyer's attitudes about the product at all times, even after the sale. This practice reduces the perceived risk of making a bad buy, which allows buyers to listen to and trust seller's sales messages even though some of marketers' proposals may be out of line with their purchase plans. It also can reduce the buyers' postpurchase dissonance. Buyers who have developed a trust in company product claims believe that the seller will help them properly use the product.

As any other customers, students also go through the same experience for many different reasons. For most students, selection of an institution for higher education or selection of a particular degree programme within that institution is a decision of considerable involvement, which can cause major changes in one's life. Given the level of involvement of the decision about the institution/degree program, some students may feel this discomfort at some point in their academic careers. Many services firms teach their customer-contact people how to resolve problems and diffuse customer anger. Some companies go to extremes to see things the customer's way and to reward complaining, seemingly without regard for profit impact.

The chapter discussed the effects of cognitive dissonance on consumers. The literature review shows that when consumers are faced with cognitive dissonance they seek ways in which to reduce this phenomenon. It also shows that marketers can develop ways in which they can help reduce the effects of cognitive dissonance as these can also affect their products. It also shows that consumers will seek advice from friends or family when faced with cognitive dissonance. The next chapter will discuss the research methodology employed in this study.

# **CHAPTER 3**

## **RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

This chapter discusses the research methodology employed to collect the primary data. Research design is covered in the first part of this chapter followed by sampling method, data collection, data analysis, validity and reliability testing. Exploratory research was used to conduct the study and quantitative data were collected in order to gain an insight into the factors that cause cognitive dissonance amongst student at a higher education institution.

### **3.2 STUDY TYPE**

Primary data were collected which were of a quantitative nature and the survey method was utilized. A questionnaire was designed and pre-tested in order to obtain the necessary information. The data were collected through a self-administered questionnaire. A closed ended questionnaire in which a number of alternative answers are provided for respondents to choose from was used to collect primary data.

### **3.3 SAMPLING FRAME**

According to Hair et al. (2003: 211), a sampling frame is a comprehensive list of elements from which the sample is drawn, for example, the telephone directory listing of individuals, and a company's internal database listing its employees and/or customers. A sampling frame, therefore, is as complete a list as possible of all the elements in the population from which the sample is drawn (Blumberg et al. 2005: 211). In the case of this study, the sampling frame was students



from the four faculties at the DUT namely, the Faculty of Commerce, the Faculty of Engineering, Science and the Built Environment, the Faculty of Arts, and the Faculty of Health Sciences.

### **3.4 SAMPLE SIZE**

A quota sample of 400 students was drawn from DUT students. According to 2005 statistics supplied by the Information Technology Department at DUT, the Faculty of Commerce has 56% of the overall number of students at DUT. Engineering, Science and the Built Environment has 27%, Arts has 9%, and Health 8%. Therefore, 224 of the respondents were drawn from the Faculty of Commerce, 108 were from the Faculty of Engineering, Science and the Built Environment, 36 were from the Faculty of Arts, and the final 32 were from the Faculty of Health Sciences. In support of this number, Leedy and Ormrod (2001: 221) point out that beyond a certain point (about  $N = 5,000$ ), the population size is almost irrelevant and therefore a sample size of 400 should be adequate.

### **3.5 SAMPLING METHOD**

A nonprobability sampling method was used to select respondents. This was in the form of quota sampling. This method does not use chance selection procedures but rather relies on the personal judgement of the researcher. With quota sampling, the researcher takes explicit steps to obtain a sample that is similar to the population. Also the researcher starts with the knowledge of how the universe is divided by strata (Proctor, 2000: 95). According to Blumberg et al. (2005: 223), the logic behind quota sampling is that certain relevant characteristics describe the dimensions of the population.

### **3.6 QUESTIONNAIRE DESIGN**

The questionnaire was in the form of closed-ended (or structured) questions in which respondents were asked to make one or more choices from a list of possible responses and also a rating scale where the respondents were given a continuum of labelled categories that represented the range of responses. The questions were designed in a manner that provided answers to the objectives of the study.

The Likert scale was used to structure some of the questions and the other questions were in the form of multiple choices. This is because Likert scales and multiple choices are easy to code and easy to analyse. Clear and simple words were used to construct the questions, in an effort to make them easier to understand and answer. The questionnaire consisted of questions developed from reviewing the relevant literature on this research area.

The questionnaire (Appendix B) was pre-tested before it was used to gather information in order to determine if the content and sequencing of questions were correct. Any alterations that needed to be made were then done before the research was conducted. Secondary information was gathered from books, journals, and the Internet before the questionnaire was designed, and also to determine what questions needed to be asked.

### **3.7 DATA COLLECTION**

Primary data were collected in the form of a self-administered questionnaire, which was distributed to respondents around the institution. The researcher used the main entrances of the four main DUT campuses: ML Sultan, City, Ritson and Steve Biko in order to reach students. The researcher spent two days at each campus, distributing questionnaire. The researcher also requested assistance from students, who were offered an incentive for their help.

### **3.8 DATA ANALYSIS**

The data were coded and edited to reduce errors, thus making it easier to capture the data into the SPSS computer package. The questionnaires were counted and re-counted to ensure that all the respondents had answered and completed the questions satisfactorily. The data capture was double checked in order to ensure that there were no capturing errors. Once this had been done, a number of analyses were run on the data. The analysis was broken down into descriptive statistics whereby frequencies and inferential statistics were used in order to test the chi-square and also to explain the relationship between data, as well as to identify how significant the relationship was. Then the statistical analysis computer program, SPSS Version 13, was applied in order to describe and interpret the data that were obtained from the questionnaire.

#### **3.8.1 Frequencies**

Frequencies were used to determine the number of responses that each question received, and were also used to cross check the coding of the data. If the responses did not equal the sample total then it meant that the data were not correctly captured (Riley et al. 2000: 163). According to Sekaran (2003: 395), frequencies are the simplest way of determining the empirical distribution of the variable. A frequency distribution organizes data into classes, or groups of values, and shows the number of observations from the data set that falls into each of the classes (Aaker et al. 2003: 438). The information gathered from the frequencies thus allowed for a comparison between faculties, ages, gender, and year of study.

### **3.8.2 Chi-Square Tests**

The Chi-square test is a statistical measure, which is used to measure the extent to which the observed and expected frequencies differ. This method is used to identify variables that are strongly associated with the dependent variables of the study. It is used to establish whether two nominal variables are dependent or not, but it does not show the strength of the association between the variables (Sudman and Blair, 1998: 477). In terms of the Chi-square tests, any relationships are considered to be significant if the significance level is less than 0.05. There are two main types of error that can occur, Type 1, and Type 2. The level of significance of a test refers to the maximum probability with which a Type 1 error would be at an acceptable risk (Cooper and Schindler, 2003: 525).

### **3.9 VALIDITY**

In an ideal situation, the observed score should correspond perfectly with the true score. However, because research does not occur in a perfect situation, measurement error is not usually zero. The real issue then is not whether there is error, rather the issue is what potential is there for error, and what has the researcher done in order to reduce error in the study, and therefore to increase the validity and reliability of the findings.

According to Leedy and Ormrod (2001: 31), validity is the extent to which the instrument measures what it is supposed to measure. In addition, Hair et al. (2003: 303) state that validity, in its simplest form, refers to the extent to which the conclusions drawn from the experiment are true. However, because research does not occur in a perfect situation, measurement error is not usually zero. Validity is concerned with the question: Are we measuring what we think we are measuring?

According to Aaker et al. (2003: 327), the purpose of a pre-test is to ensure that the questionnaire meets the researcher's expectations in terms of the information that will be obtained. Pre-tests were administered to a sample of ten respondents, under field conditions, in order to identify questions that may not be useful and also to reveal any problems in questionnaire design, hence enabling the researcher to correct errors before conducting the field work.

When conducting a research study, the results might appear to be accurate, but may contain errors therefore it is important that while conducting research precautions should be taken in order to minimize the possibilities of errors. Numbers were used to code the data in order to eliminate errors while recording data into the computer. The questionnaire was designed to be brief and easy so that the questions were easy to understand to avoid errors. The interviewers were well briefed about the aim of the study and it was made sure that they understood the questionnaire and were in a position to explain any questions if need be.

### **3.9.1 Face Validity**

McDaniel and Gates (2005: 268) point out that face validity is the degree to which a measurement seems to measure what it is supposed to measure. The questionnaire was developed with the needs of the subjects, students, in mind. The attributes and language used in the instrument were uncomplicated and the terminology was explained thereafter. Furthermore, face validation was done by evaluating the questionnaire in a pilot test using an expert marketer from the Department of Marketing (DUT) and a statistician. The overall questionnaire was evaluated in the pilot test from the perspective of the respondent by assessing the cover letter instruction, scaling and the logical consistency and flow of the instrument.

### **3.9.2 Content Validity**

Marczyk et al. (2005: 107) state that content validity is the representativeness or sampling adequacy of the content of the measurement instrument. In other words, does the scale provide adequate coverage of the topic under study? In addition, Partington (2003: 103) indicates that for a scale to have content validity, its components must encompass all the pertinent aspects of the domain to be assessed. To ensure this requires a systematic assessment of the domain at the outset of the scale's development. A thorough review of the literature and extensive qualitative interviewing of a sample of participants drawn from the target population are essential precursors to the development of a scale for use in quantitative research and are vital to ensure its content validity (Wright and Crimp, 2000: 382).

In order to increase content validity, before the questionnaire was designed, a thorough examination of literature on cognitive dissonance was done. This included looking at a number of questions used in studies conducted in America on the effects of cognitive dissonance amongst American college/university students. This helped in the definition of the sample, as well as helping determine the types of questions that needed to be put into the questionnaire.

Interviewers were thoroughly briefed about what was required of them, and the research topic was explained to them in order to ensure that they could answer any questions that may be asked. Pre-tests were conducted on the original questionnaire in order to determine if the respondents would understand the questions being asked, and if they had any difficulty in reading the instructions given. The sample needed to be adequate in size in order for the groups to be large enough to be representative of the behaviour being measured. If the sample size is too small, then the findings are not representative of the population. For this reason, four hundred respondents were interviewed (see section 3.4).

### **3.10 RELIABILITY**

According to Hair et al. (2003: 681) reliability is the extent to which the measurements taken with a particular instrument are repeatable. Reliability of data refers to data structures that are consistent across observations or interviews. In addition, Cant (2003: 123) states that reliability is the extent to which the measurement process is free from random errors. Reliability is concerned with the consistency, accuracy, and predictability of the research findings. However, if a measure is not reliable, it cannot be valid, and if it is reliable, then it may or may not be valid. Reliability is a necessary but not sufficient condition for validity. Consequently, the validity of a measure is of main concern since it deals with both systematic and random error (Denzin and Lincoln, 2003: 277).

In order to increase the reliability of the findings, the sample was fairly large with four hundred respondents participating. In order to standardise the conditions under which the questionnaire was conducted the interviewers were well trained, and briefed on the topic. To increase all respondents' abilities to answer the questionnaire a number of instructions were written throughout the questionnaire and the interviewers were at hand to explain any parts of the questionnaire that the respondents did not understand. To prevent inconsistency in coding, all questionnaires were pre-coded.

It was very important to select a sample that would not bias the results of the study and that was representative of the population with respect to the characteristics or variables of interest. Each respondent was presented with an introduction to the research and the questionnaire thereafter. The same order of questions was used for each respondent.

### **3.11 CONCLUSION**

This chapter discussed the methodology adopted during the study as well as the aspects of reliability and validity of data. In order for the study to be reliable and valid, information gathered must be related to the objectives and sub-objectives of the study. All attempts were made to ensure that errors were minimized and that the appropriate sample was obtained by the interviewers and thus the findings of the study can be accepted with a reasonable degree of confidence. The researcher also took part in conducting the interviews, which helped to determine if there were any major problems. Once the data had been collected, analyses were conducted on the data. These will be covered in the following chapter.



# **CHAPTER 4**

## **RESEARCH FINDINGS AND ANALYSIS**

### **4.1 INTRODUCTION**

This chapter provides a detailed analysis of data that provide an insight into the findings of the study, and interpretation of the results. The purpose of the study was to determine whether cognitive dissonance occurs amongst DUT students and to what extent, the causes of cognitive dissonance amongst students, how students deal with this phenomenon, and what students think DUT should do to help overcome the effects of cognitive dissonance.

The analysis entails the use of descriptive analysis in the form of frequencies and bi-variate analysis in the form of Chi- Square tests. The descriptive statistics, that is frequencies and percentages, provide an initial general overview of the results and are illustrated by bar charts. Chi-square tests were used to provide a more precise analysis of each objective. This section addresses each of the sub-objectives identified and is broken down to sub-topics. Each topic includes the analysis and results. Some information is presented in the form of graphs extracted from Microsoft Excel to clarify the findings.

### **4.2 FREQUENCIES**

These are presented in the form of bar charts and pie charts.

According to Hawkins et al. (2001: 629), some individuals have a higher tendency to experience anxiety than do others. The higher the tendency to experience anxiety, the more likely the individual will experience cognitive

dissonance. Therefore, age, gender, level of study, and the faculty variables (see 4.2.1, 4.2.2, 4.2.3, and 4.2.4) were used in this regard.

#### 4.2.1 Faculty of registration

As illustrated in Figure 4.1, 56% of respondents were from the faculty of Commerce, 27% were from the faculty of Engineering, Science and Built Environment, 9% were from the faculty of Arts and 8% were from the faculty of Health Sciences.

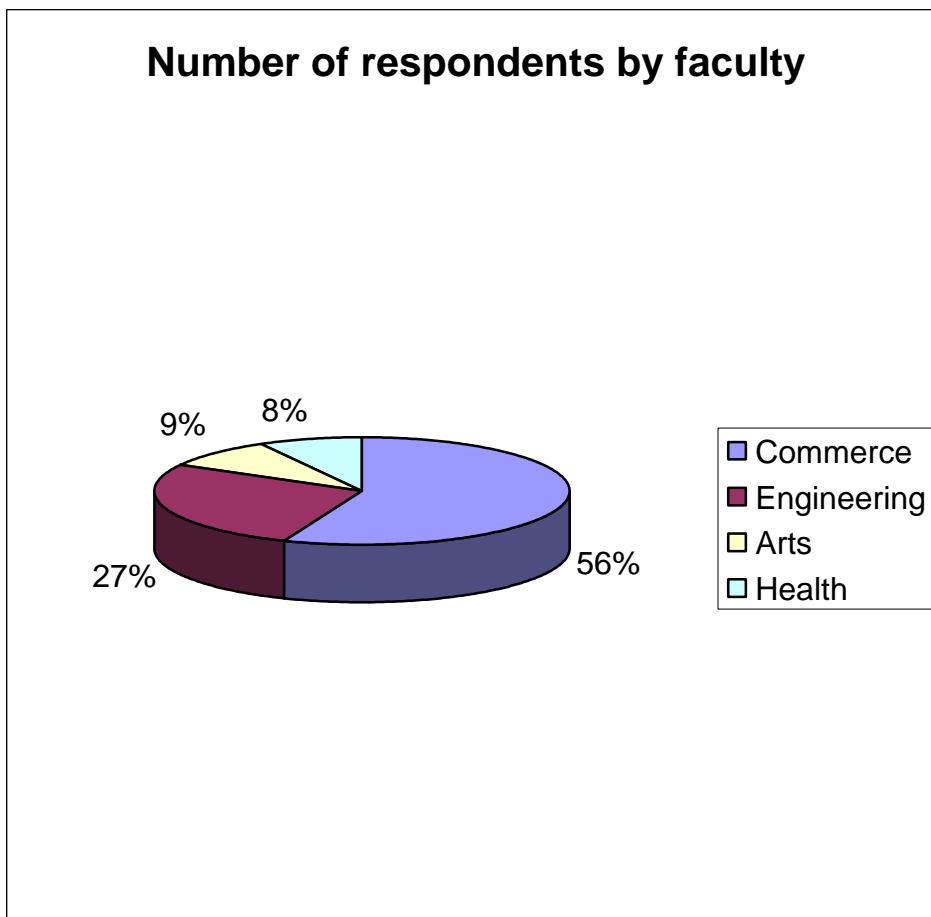


Figure 4.1: The number of respondents by faculty

#### 4.2.2 Year of study

Of the 400 respondents who answered the questionnaire, 13% of respondents were first year students, 19% of respondents were second year students, 50% were third year students, 17% of respondents were B-tech students, and 1% of respondents were M-tech students as indicated in Figure 4.2.

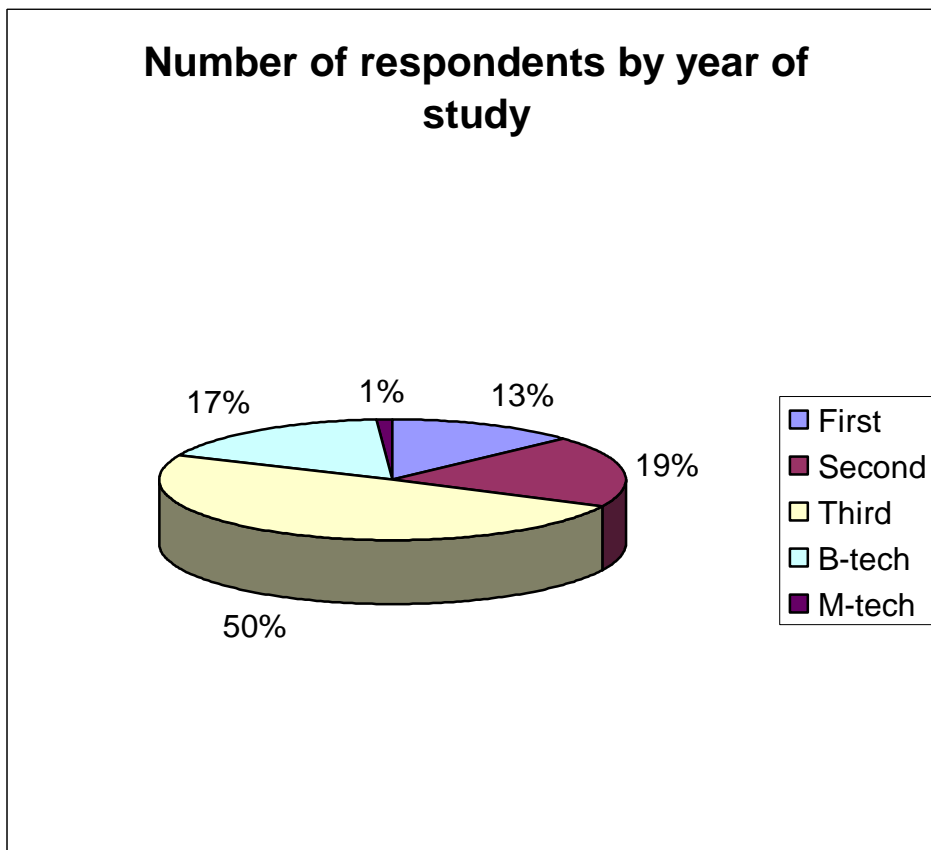


Figure 4.2: The number of respondents by year of study

#### 4.2.3 Gender of respondents

As indicated in Figure 4.3, 58% of the respondents were male and 42% were female respondents.

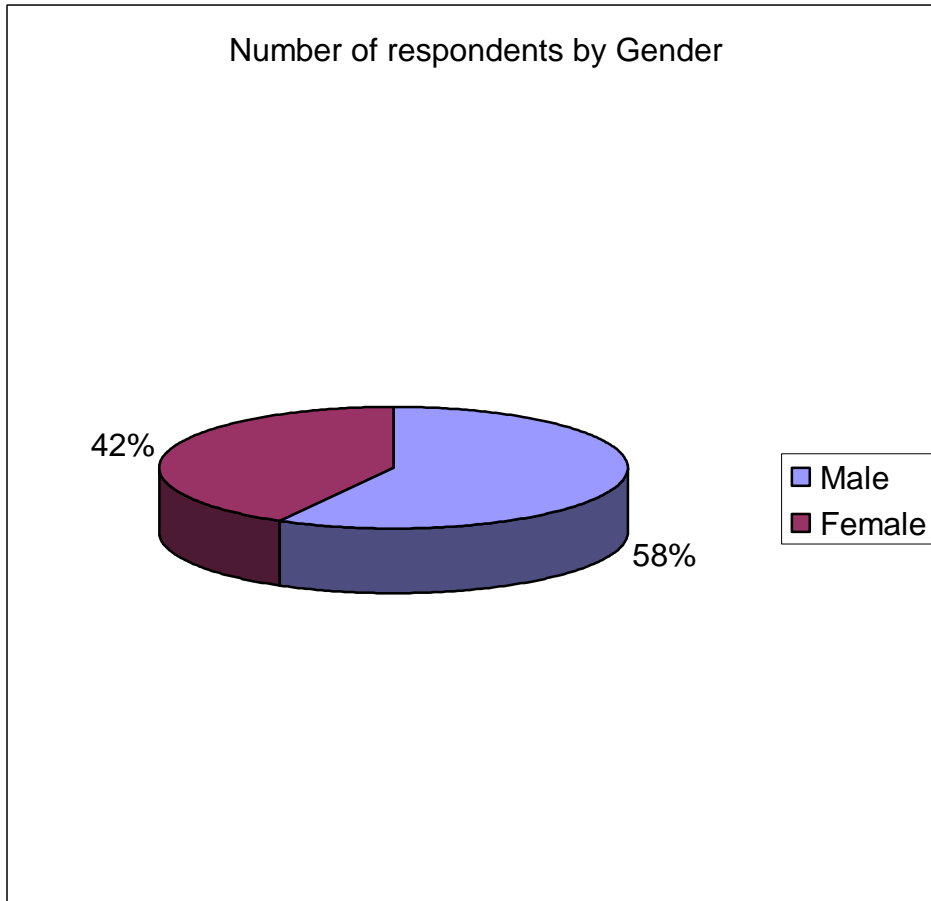


Figure 4.3: The number of respondents by gender

#### 4.2.4 Age of respondents

Figure 4.4 presents the number of respondents by age. Thirty nine percent of the respondents were between the ages of 22 and 24, 31% of the respondents were between the ages of 19 and 21, 24% of the respondents were aged 25 and above, and 6% of the respondents were between the ages of 16 and 18.

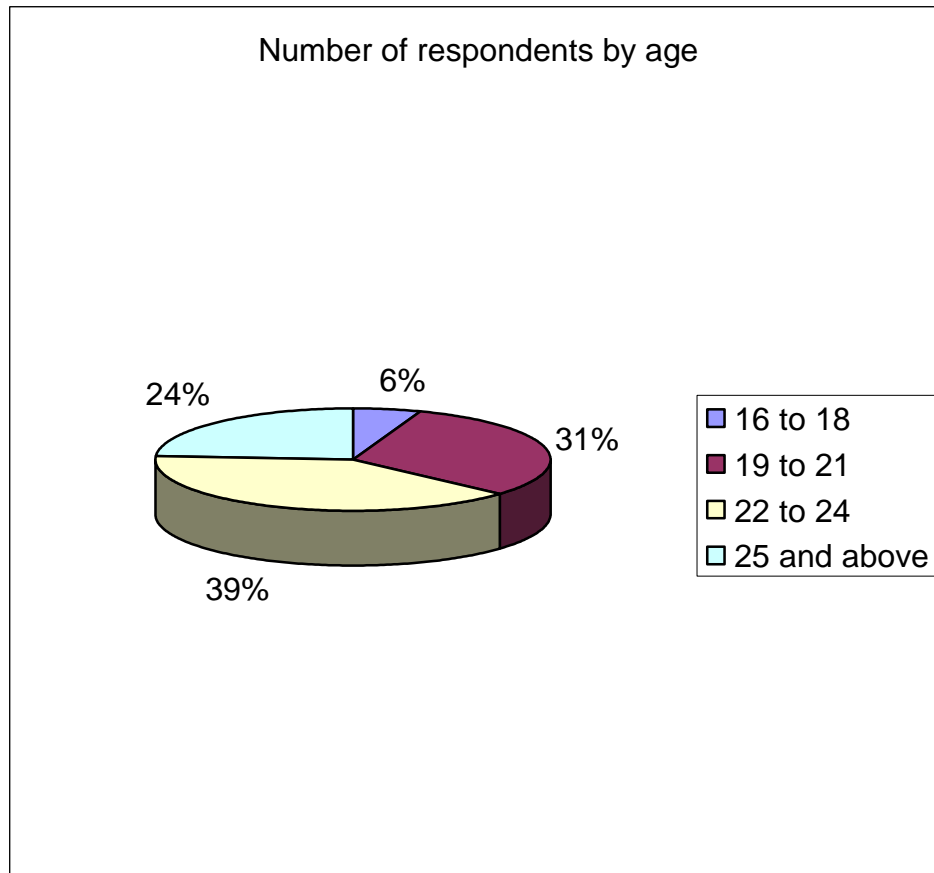


Figure 4.4: The number of respondents by age

#### 4.2.5 Causes of postpurchase behaviour or cognitive dissonance

Figure 4.5 presents the number of respondents by faculty and their responses to the factors that might have caused cognitive dissonance. Seventeen percent of respondents indicated that the university was the cause of their discomfort, 12% of the respondents indicated that the course was the source of their discomfort, 26% of the respondents indicated lecturers as the source of their discomfort, 16% of the respondents indicated finances as the source of their discomfort, 22% of the respondents indicated accommodation as the source of their discomfort, and 4% of the respondents indicated that their discomfort resulted from other issues such as safety and the environment. It is worth noting that Wilson (1997: 4) points out that when asked, counsellors report that the greatest topic of

conversation is the handling of modest issues related to relationships with a roommate, a teacher, course, or a significant other. Therefore, the results tend to agree with the literature.

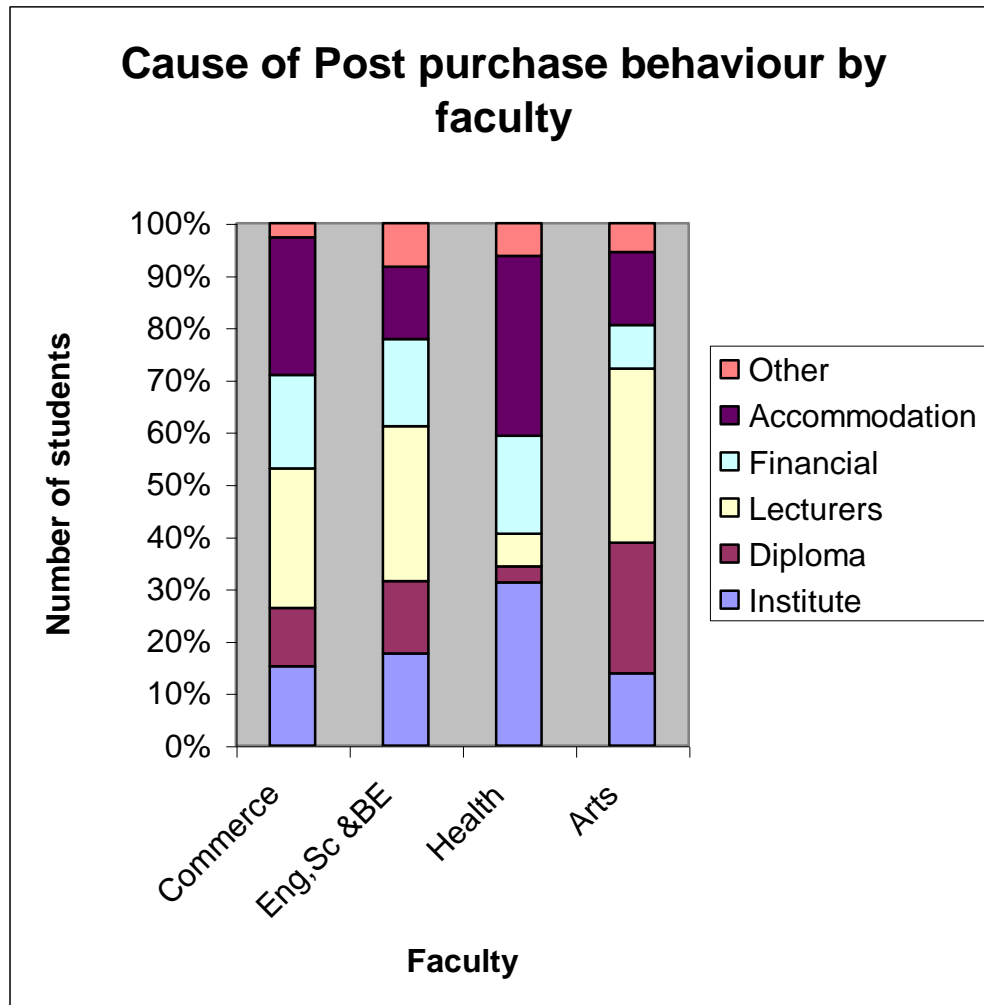


Figure 4.5: Factors that caused post purchase behaviour- by faculty

Of the respondents who reported that the institution was the cause of their discomfort, 15% were from the Faculty of Commerce, 17% were from the faculty of Engineering, Science and the Built Environment, 31% were from the faculty of Health Sciences, and 13% were from the faculty of Arts. Of the respondents who reported that the diplomas were the cause of their discomfort, 11% were from the

faculty of Commerce, 13% were from the faculty of Engineering, Science and the Built Environment, 3% were from the faculty of Health Sciences, and 25% were from the faculty of Arts. Of the respondents who indicated that lecturers were the sources of their discomfort, 26% were from Commerce, 29% were from Engineering, Science and the Built Environment, 6% were from Health Sciences, and 33% were from Arts.

It was found that 17% of respondents from the faculty of Commerce, 16% of the respondents from the faculty of Engineering, Science and the Built Environment, 18% of the respondents from the faculty of Health Sciences, and 8% of the respondents from the faculty of Arts indicated that finances were the cause of their discomfort. Twenty six percent of Commerce respondents, 13% of engineering respondents, 34% of Health respondents, and 13% of Arts respondents indicated that accommodation was the source of their discomfort.

#### **4.2.6 People consulted in an effort to reduce cognitive dissonance**

Forty four percent of respondents from the faculty of Commerce reported that they consulted friends, 37% consulted family, 3% went for counselling, 12% consulted nobody and 4% other sources/individuals. Thirty seven percent of respondents from the faculty of Engineering consulted friends, 30% consulted family, 13% went for counselling, and 20% consulted nobody. Thirty seven percent of respondents from the faculty of Health consulted friends, 31% consulted family, 9% went for counselling, and 23% consulted nobody.

Thirty four percent of respondents from the faculty of Arts consulted friends, 56% consulted family, 5% went for counselling, and 5% consulted nobody as shown in figure 4.6. These responses are supported by the literature review where Gilbert et al. (1998: 147) noted that consumers may tell their family, friends, and acquaintances about their experiences with buying and using products/services or look to known satisfied owner for reassurance.

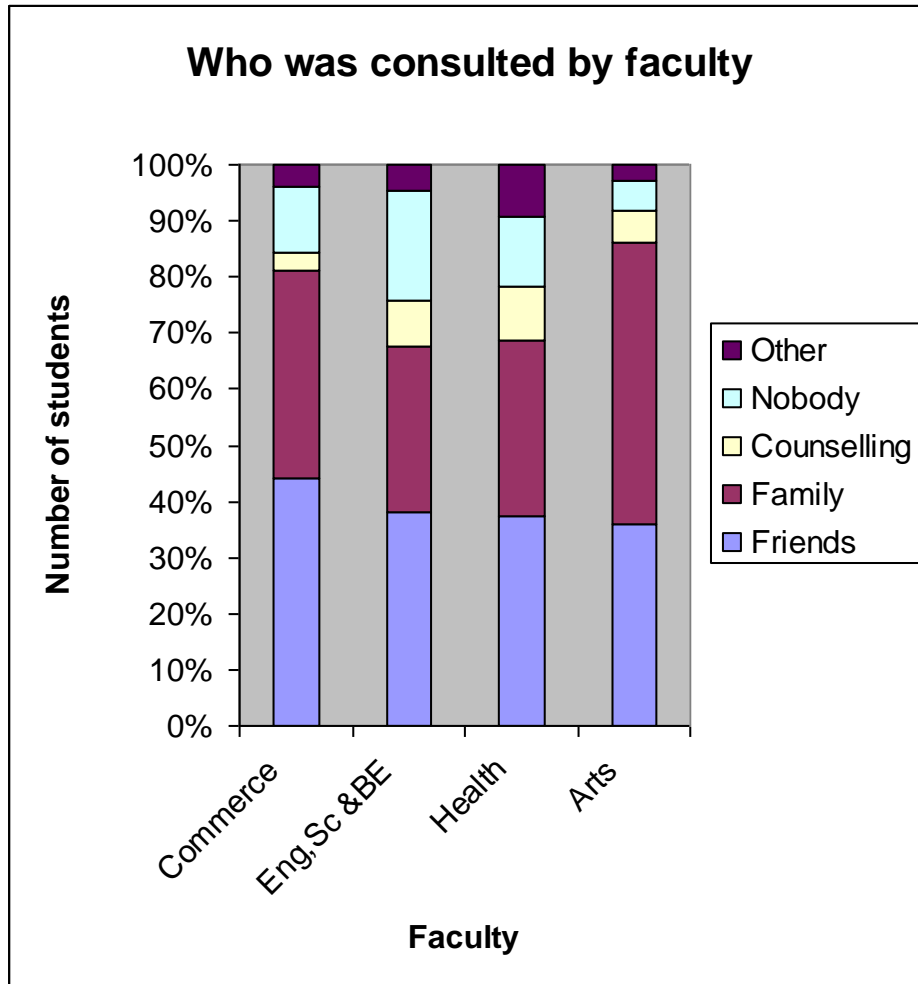


Figure 4.6: People consulted in an attempt to reduce cognitive dissonance

#### 4.2.7 What students resort to when faced with cognitive dissonance

In response to the question of what they resorted to when faced with cognitive dissonance, 39% of respondents reported that they used alcohol, 6% of respondents used drugs, 10% of respondents had suicidal thoughts and 45% of respondents used other means such as going to parties, movies and gyms as indicated in Figure 4.7. Cassel et al. (2001: 3) state that individuals faced with decisions in which they are trying to satisfy multiple objectives will use certain cognitive strategies to alleviate their stress resulting from: not having perfect information about available alternatives; not completely understanding their own



goals; and not being able to satisfy all of their objectives in choosing one option. Figure 4.7 shows that respondents did in fact resort to certain strategies/behaviours in order to reduce cognitive dissonance.

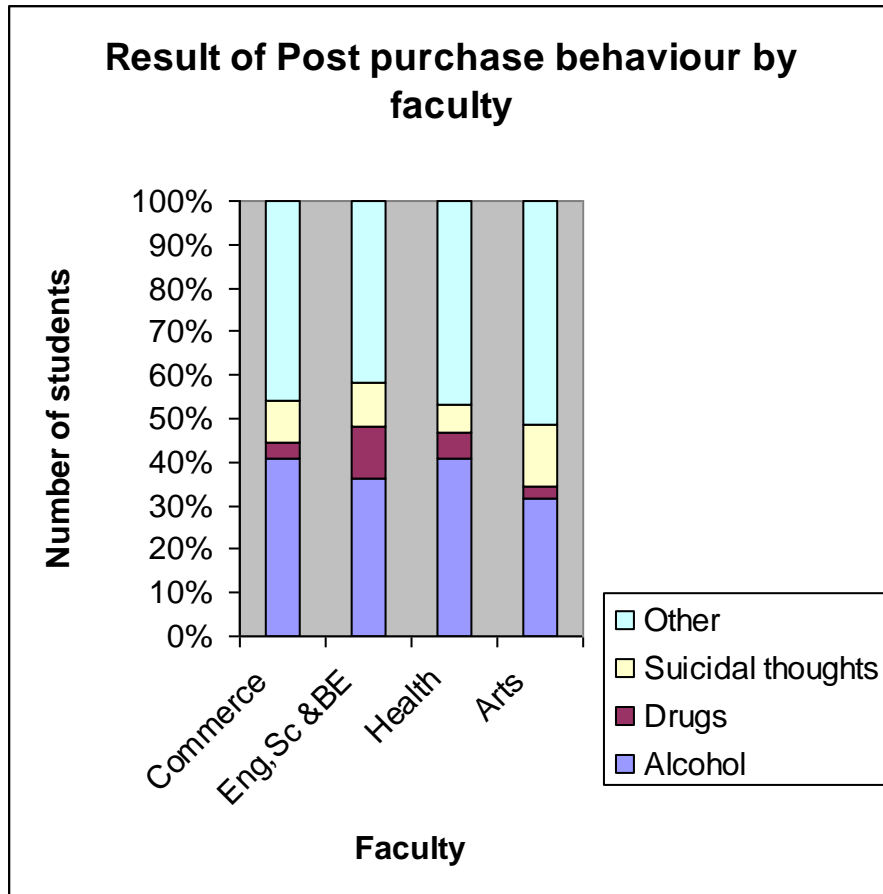


Figure 4.7: What students resort to – By Faculty

#### 4.2.8 Factors that DUT should consider in helping students deal with cognitive dissonance

Respondents were asked what the DUT should do to help them deal with cognitive dissonance. Sixty eight percent of respondents felt that all the mentioned strategies (counselling, information booklet, and career-guidance programmes) should be implemented. Sixty two percent of respondents from the

faculty of Commerce felt that all the above strategies should be implemented, 13% felt that career-guidance programmes should be implemented, 11% felt that counselling should be implemented, 5% felt that information booklets should be implemented, and 8% felt that other strategies should be implemented. Seventy four percent of the respondents from the faculty of Engineering Science and the Built Environment felt that all the strategies should be implemented, 8% felt that career-guidance programmes should be implemented, 4% felt that information booklets should be implemented, 6% felt that counselling should be implemented and 8% felt that other strategies should be implemented.

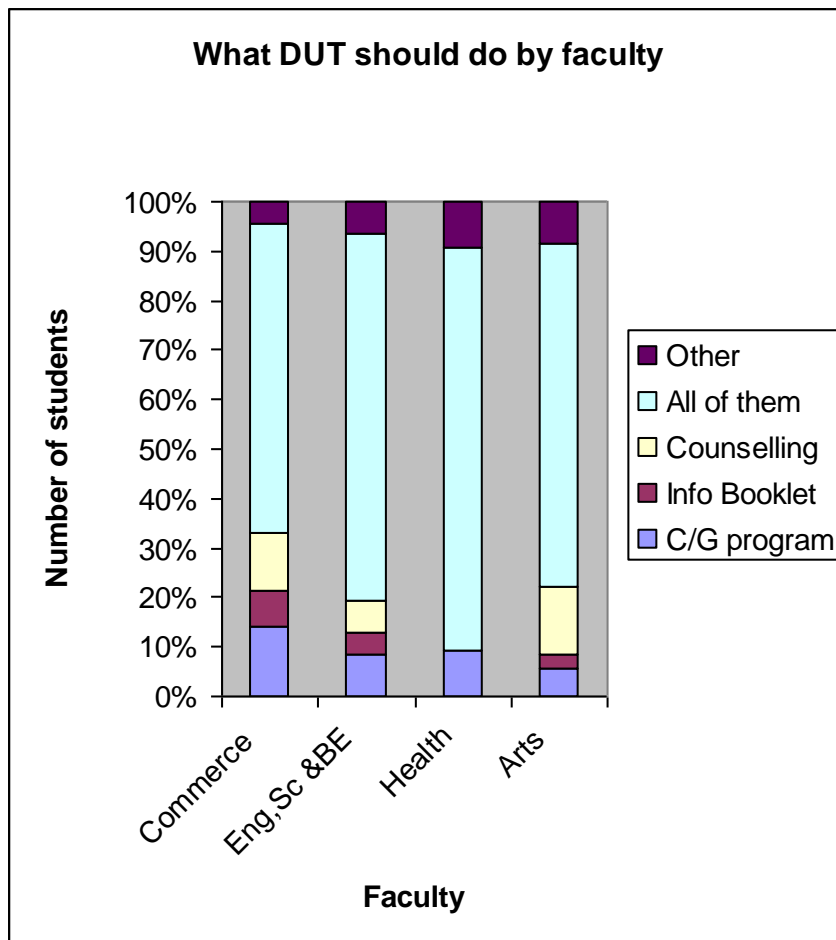


Figure 4.8: Factors that DUT should consider in helping students.

Eighty two from the faculty of Health Sciences felt that all the strategies should be implemented, 9% felt that the career-guidance programmes should be implemented, and 9% felt that other strategies should be implemented. Sixty nine percent of the respondents from the Art faculty felt that all the strategies should be implemented, 15% felt that counselling should be implemented, 5% felt that career-guidance programmes should be implemented, 4% felt that information booklets should be implemented and 9% felt that other strategies should be implemented.

In support, Fitzsimmons and Fitzsimmons (2004: 135) point out that one strategy to help reduce risk perceived by customers is to educate them about the features of the service, describe the types of users who can most benefit from it, and offer advice on how to obtain the best results. The results show that respondents agreed with the statement that they should be educated, guided, or even given advice when choosing their careers.

#### **4.2.9 Choosing DUT as the institution for studying**

Of the 400 respondents, 71% of respondents pointed out that it was their choice to study at DUT, 12% of the respondents indicated that it was their parents' choice, 9% of the respondents said that they chose DUT because of their friends, and 8% of the respondents said that they chose DUT for other reasons. For example, one respondent indicated that it was because of convenience (that DUT was close to home) as shown in Figure 4.9. McGinn and Depasquale (2004: 2) point out that some parents are more likely to intervene on their child's behalf; parents are actively involved in the lives and education of their children. The results of the study show that some parents still make choices for their children be it about a career or even a college of education.

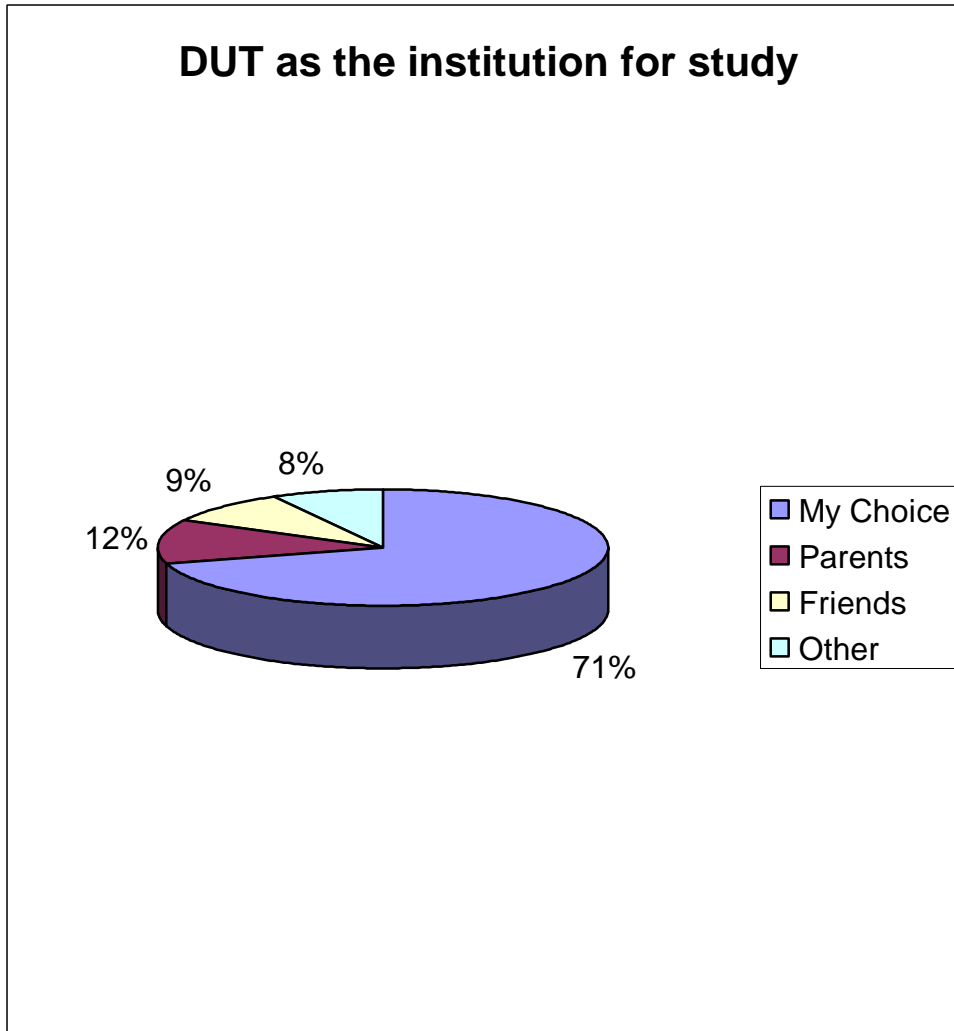


Figure 4.9: DUT as the institution for studies

#### 4.2.10 Qualification of first choice

As shown in Figure 4.10, 76% of the respondents indicated that the qualification was their first choice and 24% of the respondents indicated that the qualification was not their first choice.

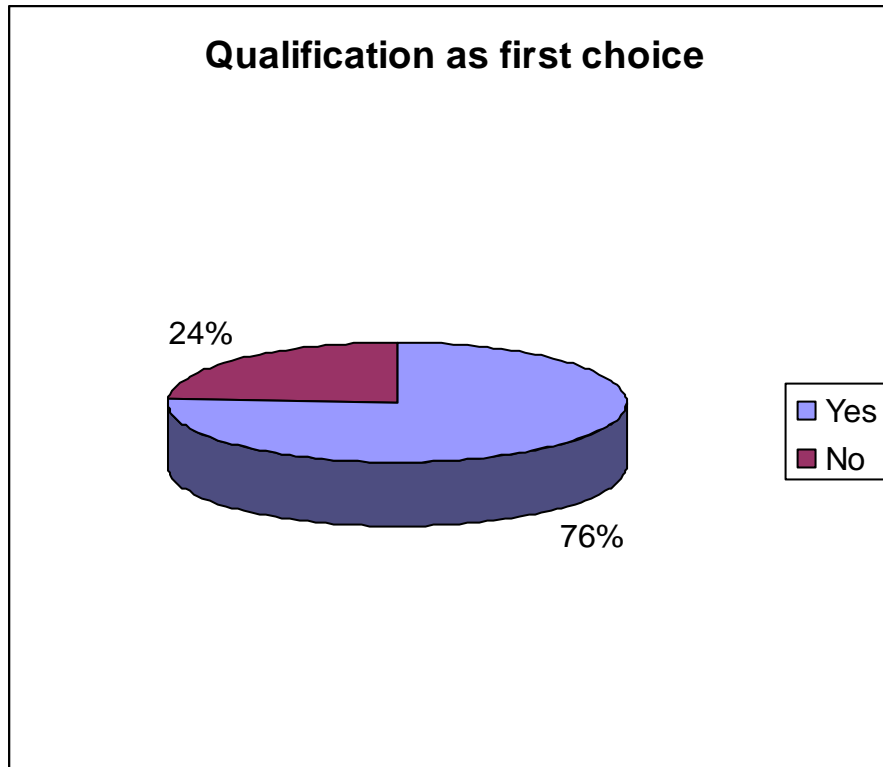


Figure 4.10: Qualification as the first choice

#### 4.2.11 What/Who influenced the qualification of choice

Of the 96 respondents who indicated that the qualification was not their first choice, 32% indicated that the course they wanted to do was fully enrolled, 29% of the respondents indicated that their parents influenced their qualification choice, 20% of respondents pointed out that other reasons influenced their choice of qualification, 11% indicated that their qualification choices were influenced by finances. Eight percent of respondents indicated that their friends influenced their choice of qualification as shown in figure 4.11. The results show that apart from parents being the drive behind the career or college choice, some factors like finances can determine one's career choice. Mitchell (1997: 2) states that students have become as sensitive as and, often more so, than their parents to the cost of a college education and what they are willing to pay.

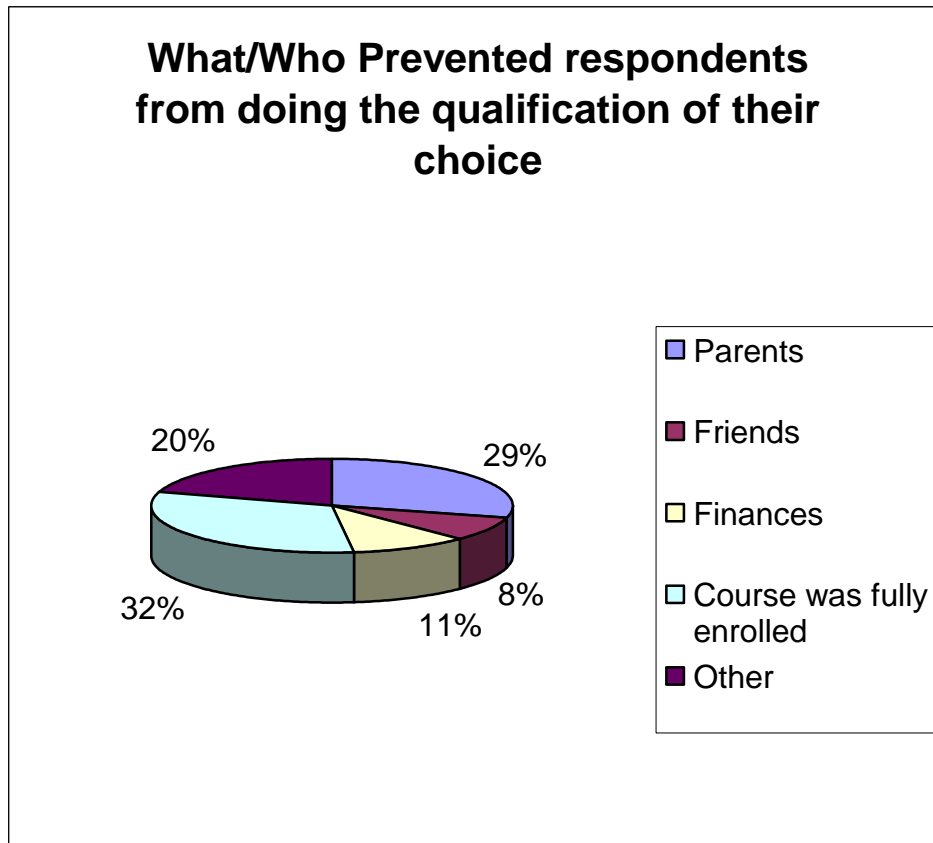


Figure 4.11: What/who influenced the qualification of choice

#### 4.2.12 Studying at DUT is academically challenging

Festinger (2003: 1) states that according to cognitive dissonance theory, discomfort or dissonance occurs when a consumer holds conflicting thoughts about a belief or an object. Therefore, in this study, it was necessary to analyse other factors that could lead to students experiencing anxiety or cognitive dissonance. This is done in section 4.2.12, 4.2.13, 4.2.14, 4.2.15, 4.2.16, 4.2.17, 4.2.18, and 4.2.19. It was found out that of all the respondents interviewed, 80% agreed that studying at DUT is academically challenging while 8% disagreed and 12% were undecided. Seventy percent of the respondents from the faculty of Commerce agreed that studying at DUT is academically challenging, 8% disagreed that DUT is academically challenging and 22% were undecided.

Seventy seven percent of respondents from the faculty of Arts agreed that studying at DUT is academically challenging, 11% disagreed that studying at DUT is academically challenging and 12% were undecided. Eighty seven percent of the respondents from the faculty of Health Sciences agreed that studying at DUT is academically challenging, 2% disagreed that studying at DUT is academically challenging, and 11% were undecided. Eighty percent of the respondents from the faculty of Engineering, Science and Built Environment agreed that studying at DUT is academically challenging,

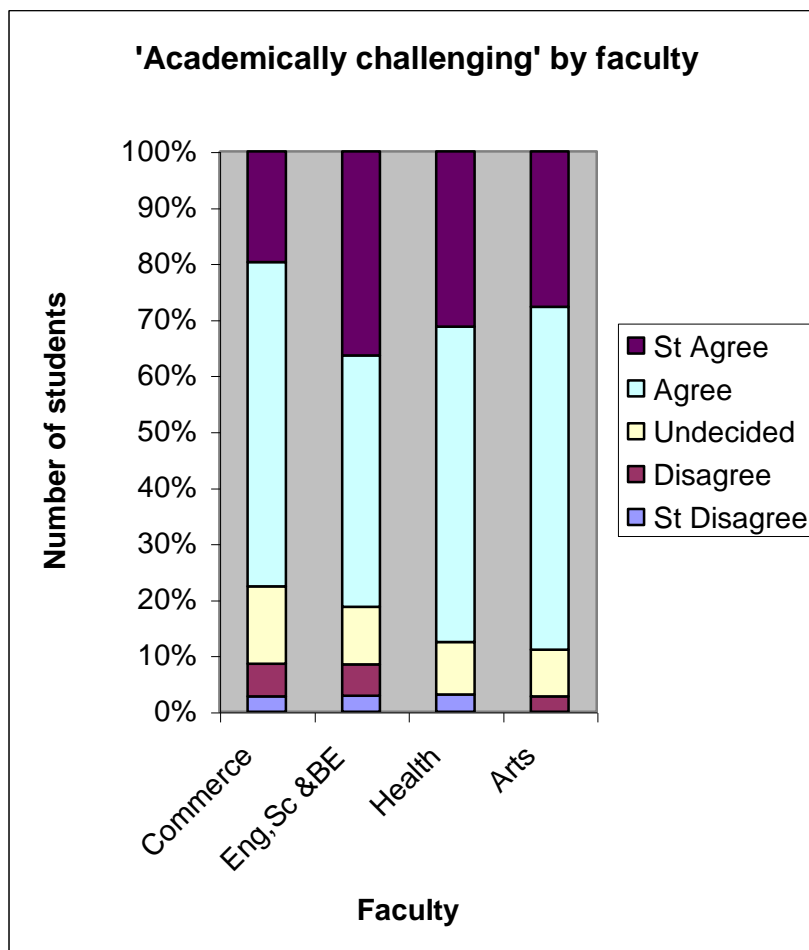


Figure 4.12: Studying at DUT is academically challenging – By Faculty

8% disagreed that studying at DUT is academically challenging, and 12% were undecided as shown in Figure 4.12.

#### 4.2.13 Studying at DUT encompasses too many responsibilities

As shown in Figure 4.13, 71% of respondents from the faculty of Commerce indicated that they agreed that studying at DUT encompasses too many responsibilities, 9% disagreed that studying at DUT encompasses too many responsibilities, and 20% were undecided.

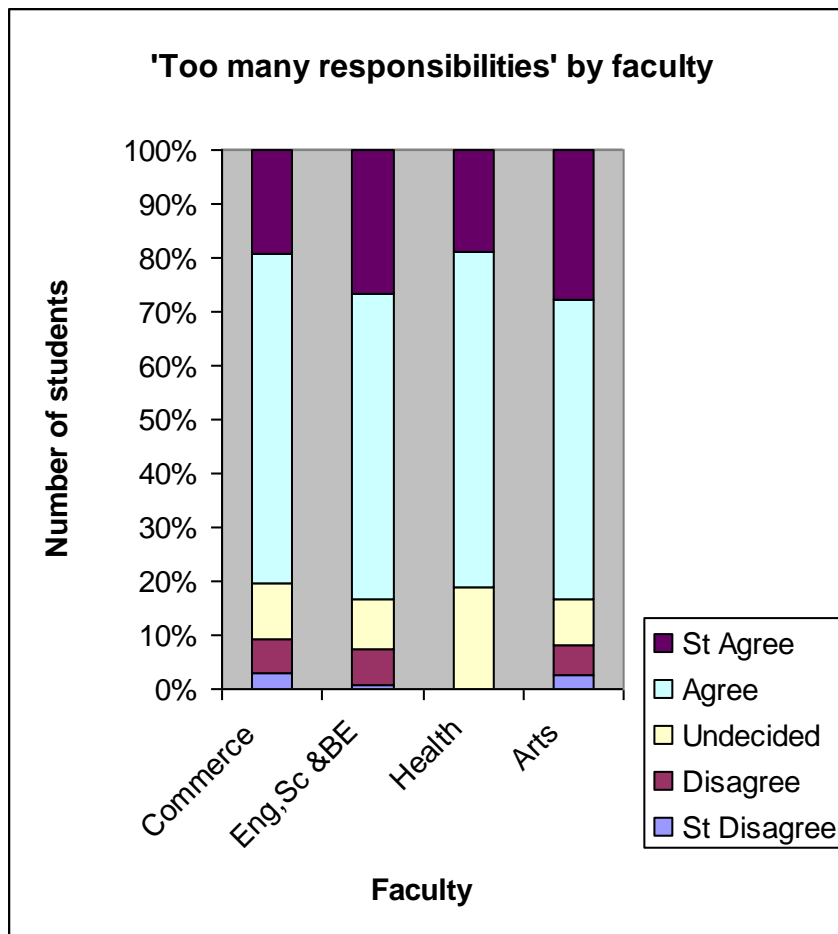


Figure 4.13: Studying at DUT encompasses too many responsibilities – By Faculty.



Seventy three percent of respondents from the faculty of Engineering agreed that studying at DUT encompasses too many responsibilities, 8% disagreed that studying at DUT encompasses too many responsibilities, and 19% were undecided. Eighty percent of respondents from the faculty of Health agreed that studying at DUT encompasses too many responsibilities, and 20% were undecided.

Seventy three percent of respondents from the faculty of Arts indicated that they agreed with the above statement (that DUT encompasses too many responsibilities), 8% disagreed that studying at DUT encompasses too many responsibilities, and 19% were undecided. According to Cassel et al. (2001: 2), the process by which students move from secondary to higher education is a process of great complexity, not fully understood by students. However, respondents seemed to agree with the statement.

#### **4.2.14 Having sufficient time to relax**

Figure 4.14 indicates the number of respondents by their faculty and their response to the statement 'there is sufficient time to relax'. Seventy seven of respondents from the faculty of Arts disagree that there is sufficient time to relax, 19% agreed that there is sufficient time to relax and 4% were undecided. Sixty five percent of respondents from the faculty of Engineering disagree that there is sufficient time to relax, 23% agree that there is sufficient time to relax and 12% were undecided.

Fifty three percent of respondents from the faculty of Health disagree that there is sufficient time to relax, 12% agree that there is sufficient time to relax and 31% were undecided and 45% of respondents from the faculty Commerce seemed to disagree that there is sufficient time to relax, 50% agree that there is sufficient time to relax, and 5% were undecided.

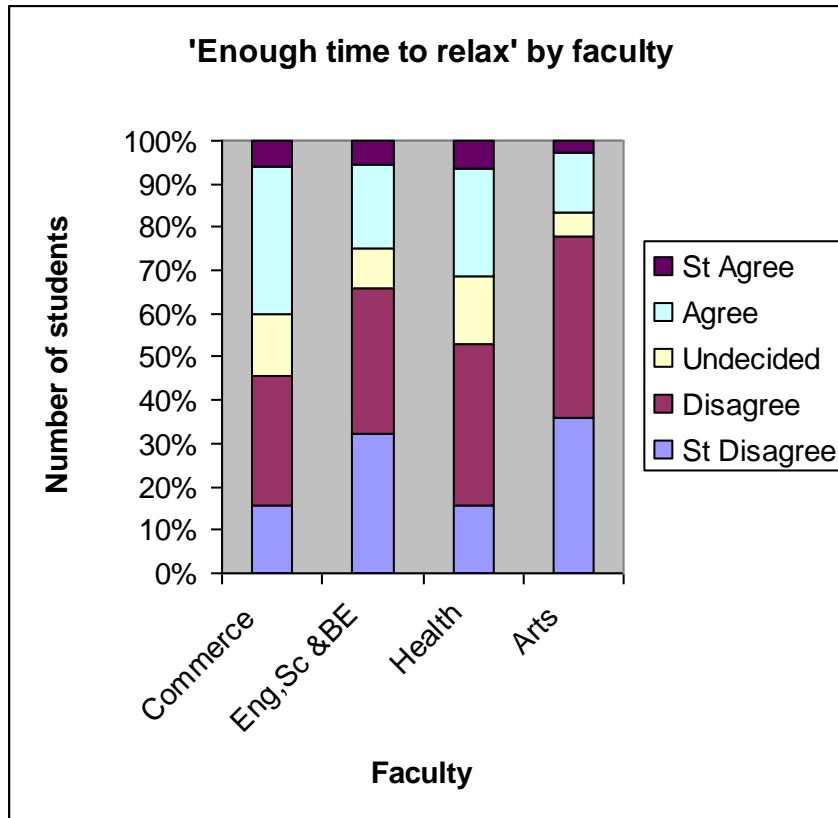


Figure 4.14: Having sufficient time to relax – by faculty

#### 4.2.15 Having sufficient time to study

When asked if they have sufficient time to study, it was found out that the majority of respondents agreed that they do have sufficient time to study. Seventy three percent of respondents from the faculty of Commerce agreed to having sufficient time to study, 13% disagreed to having sufficient time to study and 14% were undecided. Fifty two percent of respondents from the faculty of Engineering agreed to having sufficient time to study, 28% disagreed to having sufficient time to study, and 20% were undecided. Eighty seven percent of respondents from the faculty of Health agreed that they have sufficient time to study, 10% disagreed that they have sufficient time to study, and 3% were undecided. Fifty five percent of respondents from the faculty of Arts agreed to

having sufficient time to study, 30% disagreed to having sufficient time to study, and 15% were undecided as show in Figure 4.15.

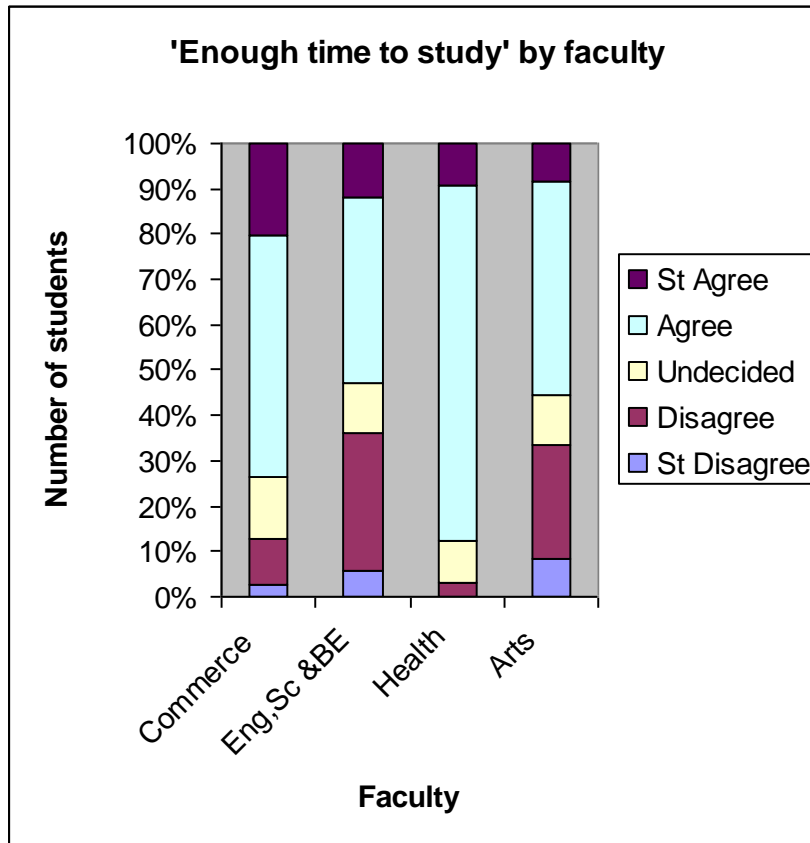


Figure 4.15: Having sufficient time to study – by faculty

#### 4.2.16 Having sufficient time to do homework

The majority of respondents indicated that they have sufficient time to do their home-work. This is shown in Figure 4.16 where 75% of respondents form the faculty of Commerce agreed that they have sufficient time to do their homework, 12% disagreed that they have sufficient time to do their homework, and 13% were undecided. Fifty five percent of respondents from faculty of Engineering agreed that they have sufficient time to do their homework and 45% disagreed that they have sufficient time to do their homework.

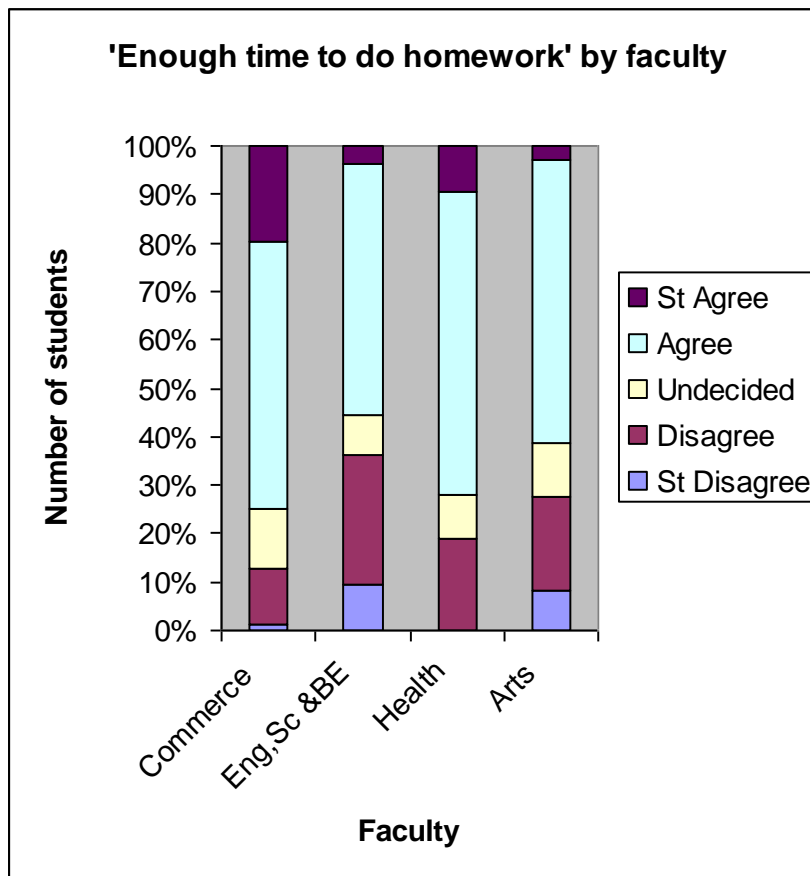


Figure 4.16: Having sufficient time to do homework

Seventy one percent of respondents from the faculty of Health agreed that they have sufficient time to do their homework, 19% disagreed that they have time to do their homework and 10% were undecided. Sixty one percent of respondents from the faculty of Arts agreed that they have sufficient time to do their homework. Twenty five percent disagreed that they have sufficient time to do their homework, and 14% were undecided.

#### 4.2.17 Having sufficient time to socialise

As shown in Figure 4.17, 51% of respondents from the faculty of Commerce agreed that they have sufficient time to socialise, 35% disagreed that there is

sufficient time to socialise, and 14% were undecided. Fifty percent of respondents from the faculty of Health agreed that they have sufficient time to socialise 35% disagreed that they have sufficient time to socialise, and 15% were undecided.

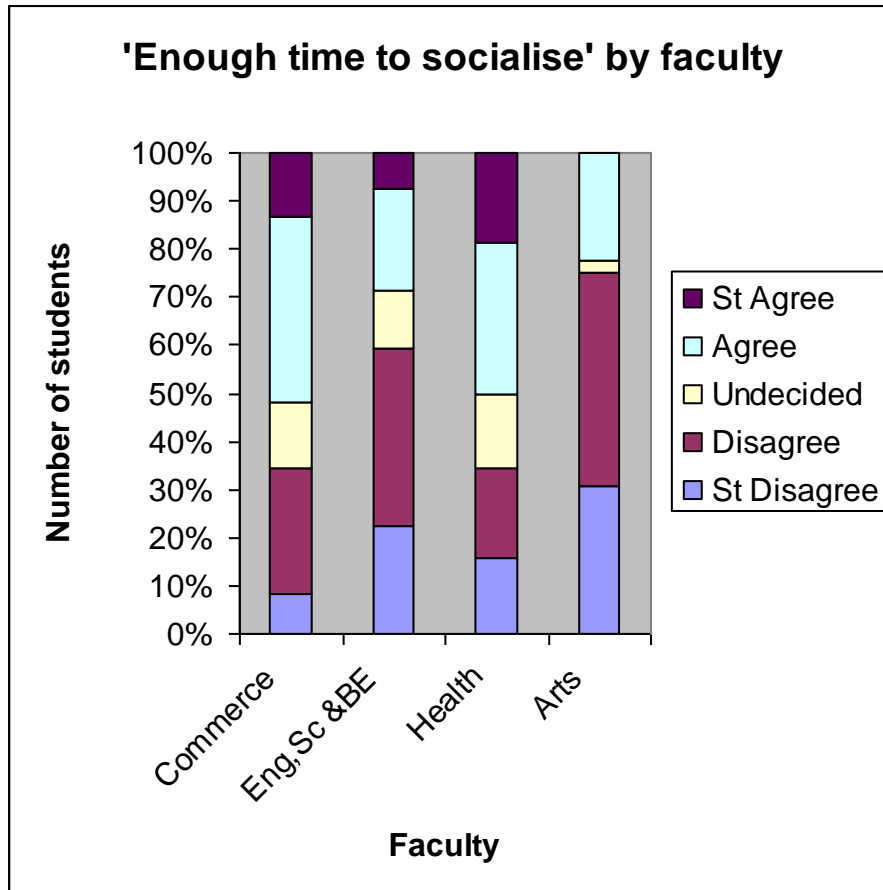


Figure 4.17: Having sufficient time to socialise

However, 59% of respondents from the faculty of Engineering disagreed that they have sufficient time to socialise, 29% agreed that they have sufficient time to socialise and 12% were undecided. Seventy five percent of respondents from the faculty of Arts disagreed that they have sufficient time to socialise, 23% agreed that they have sufficient time to socialise and 2% were undecided.

#### 4.2.18 The campus is intimidating

It was found that 54% of the overall respondents disagreed with the statement that the campus is intimidating. Twenty six percent of the respondents agreed that the campus is intimidating and 20% of the respondents were undecided as indicated in Figure 4.18.

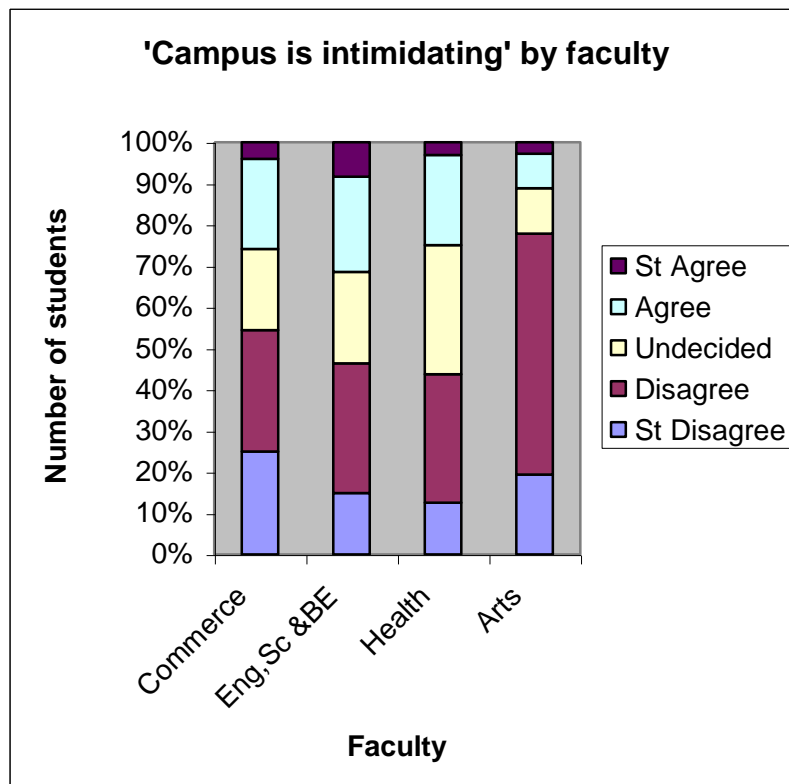


Figure 4.18: The campus is intimidating

#### 4.2.19 Tertiary education experience is satisfying

Figure 4.19 presents the number of respondents by faculty and their response to the statement 'the tertiary education experience is satisfying'. Sixty six percent of respondents from the faculty of Commerce agreed that the tertiary education

experience is satisfying, 12% disagreed that the tertiary experience is satisfying and 22% were undecided.

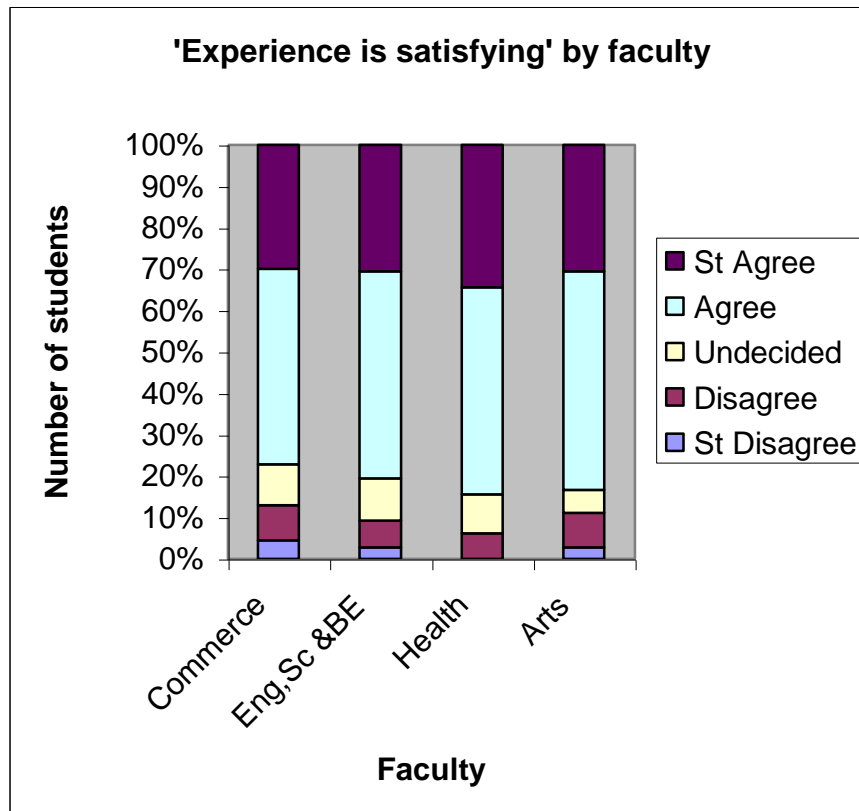


Figure 4.19: The tertiary education experience is satisfying

Seventy two percent of respondents from the faculty of Engineering agreed that the tertiary education experience is satisfying, 9% disagreed that the tertiary education experience is satisfying, and 19% were undecided. Eighty percent of respondents from the faculty of Health agreed that the tertiary education experience is satisfying, 5% disagreed that the tertiary education experience is satisfying, and 15% were undecided. Seventy eight percent of respondents from the faculty of Arts agreed that the tertiary education experience is satisfying, 14% disagreed that the tertiary education experience is satisfying, and 18% were undecided.

#### 4.2.20 Awareness of Career-guidance programmes

As indicated in Figure 4.20, 57% of the respondents indicated that they were not aware of career guidance programmes offered by DUT and 43% were aware of career guidance programmes offered by DUT.

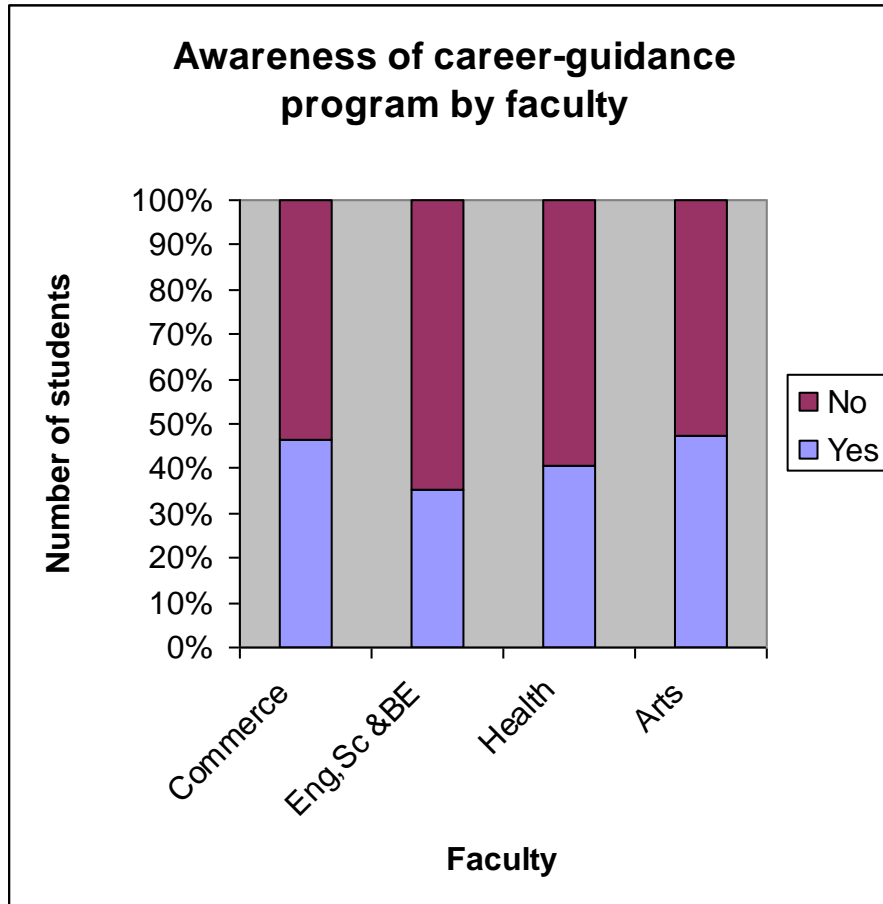


Figure 4.20: Awareness of career guidance programmes at DUT

Fifty three percent of respondents from the faculty of Commerce indicated that they were not aware of career-guidance programmes that are offered by DUT and 47% of the respondents were aware of the career guidance programmes offered by DUT. Sixty four percent of respondents from the faculty of Engineering reported that they were not aware of career-guidance programmes



offered by DUT and 36% were aware of career guidance programmes offered by DUT. 59% of respondents from the faculty of Health reported that they were not aware of career guidance programmes offered by DUT and 41% were aware of the career guidance programmes offered by DUT. 52% of respondents from the faculty of Arts indicated that they were not aware of career-guidance programme offered by DUT and 48% were aware of the career guidance programmes offered by DUT. Jones (1999: 225) states that marketers should supply sufficient literature; instruction manuals should seek to convince the buyer of the wisdom of the selection; they should provide information about where and how to secure services. The results of the study show that not enough information is passed to students in terms of career guidance programmes.

#### **4.2.21 How respondents became aware of the career guidance programmes at DUT**

Of the four hundred respondents interviewed, 43% were aware of the career-guidance programmes that are offered at DUT. Twelfth percent of these respondents heard from friends, 5% of these respondents heard from newspapers, 2% of these respondents heard from TV, 24% of these respondents read from DUT brochures and 14% of the respondents heard from other sources. These are depicted in Figure 4.21. Elliot and Devine (1998: 383) indicate that a marketer can relieve consumer dissonance by offering stronger guarantees or warranties, increasing the number and effectiveness of its services, or providing detailed brochures on how to use its products correctly. Respondents seem to agree with the statement.

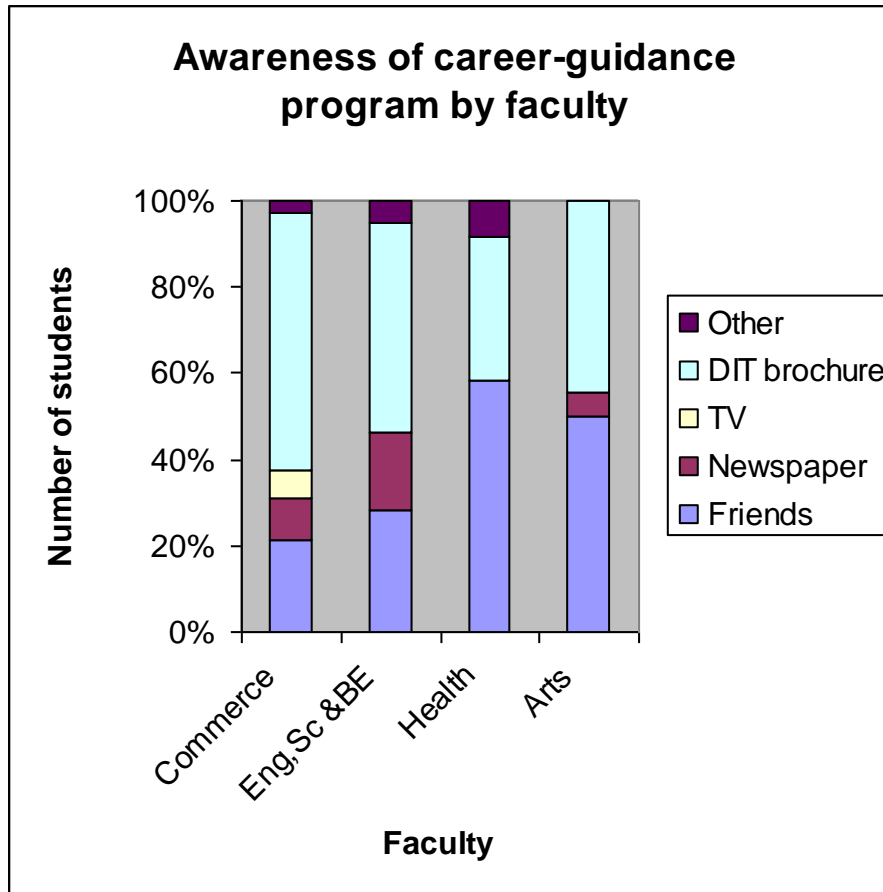


Figure 4.21: How respondents became aware of career-guidance programme

### 4.3 ASSOCIATIONS

Frequencies (Appendix C1) were used in order to test whether the differences between observed and expected values are caused by random sampling errors or whether they indicate a real difference in behaviour according to differences in age, gender, faculties and level of education with regard to how students deal with cognitive dissonance. These tests were done in the form of Chi-square tests (Appendix C3) and cross-tabulation (Appendix C2).

The Chi-square table shows some assumed factors that caused cognitive dissonance amongst students, people who were consulted, what students

resorted to, and what plan of action DUT should take to help students reduce this discomfort; and that there is a strong relationship in the columns and row categories.

In terms of the Chi-square tests, any relationships are considered to be significant if the significance level is less than 0.05. In instances where a relationship was found, the researcher has commented on the possible direction that these relationships have, with reference to the cross-tabulations tables. Chi-square tests are discussed in greater detail in Chapter three.

#### **4.3.1 THE RELATIONSHIP BETWEEN FACULTY AND THE CAUSES OF POSTPURCHASE BEHAVIOUR**

The results indicated that respondents from the faculty of Commerce reported that accommodation (26%) and lecturers (26%) were the major causes of their discomfort. Respondents from the faculty of Health Sciences indicate that accommodation (34%) and the institution (31%) are the main causes of their discomfort, while respondents from the faculty of Arts (33%) indicated that the diploma was the cause of their discomfort. Twenty nine percent of engineering respondents indicated that lecturers are the source of their discomfort. The Chi-square test (Appendix C3) indicates that there is a relationship between the faculty and the causes of cognitive dissonance ( $X^2 = 32.843$ ;  $p = 0.005$ ). It shows that there is a significant relationship between faculty and the causes of cognitive dissonance.

#### **4.3.2 THE RELATIONSHIP BETWEEN GENDER AND THE CAUSES OF POSTPURCHASE BEHAVIOUR**

Male and female respondents display similar post purchase behaviour, as 16% of male and 17% of female respondents indicated that the institution was the cause of their discomfort. Twelfth percent of male respondents and 12% of female

respondents indicated that diploma was the cause of their discomfort, while 21% of male respondents and 22% of female respondents indicated that accommodation was the cause of their discomfort. Therefore, there was no significant relationship found between gender and the causes of cognitive dissonance ( $X^2 = 1.865$ ;  $p = 0.868$ ).

#### **4.3.3 THE RELATIONSHIP BETWEEN AGE AND THE CAUSES OF POSTPURCHASE BEHAVIOUR**

The results show no significant relationship between age and the causes of postpurchase behaviour amongst students ( $X^2 = 17.468$ ;  $p = 0.065$ ). The descriptive results show that the majority of respondents between the ages of 16-18 are more likely to suffer from cognitive dissonance as the result of diploma (31%) and lecturers (36%). The majority of respondents between the ages of 19 and 21 indicated that lecturers (32%) were their main sources of discomfort and respondents between the ages of 22 and 24 indicated that the institute was the source of their discomfort. Respondents of 25 years and above reported that accommodation (28%) was their main concern.

#### **4.3.4 THE RELATIONSHIP BETWEEN LEVEL OF STUDY AND THE CAUSES OF POSTPURCHASE BEHAVIOUR**

The results show that there is no significant relationship between level of study and the causes of cognitive dissonance. This is proven by the results of Chi-square test ( $X^2 = 10.725$ ;  $p = 0.772$ ). The descriptive results show that 16% of B-Tech respondents, 11% first year respondents, and 17% of second year respondents indicated that accommodation was the source of their discomfort.

#### **4.3.5 THE RELATIONSHIP BETWEEN GENDER AND POSTPURCHASE BEHAVIOUR**

The results of Chi-square test show that  $p = 0.001$ , with  $X^2 = 17.490$  (Appendix C3), there is a significant relationship between gender and the way respondents behave or the way in which they deal with cognitive dissonance. The descriptive results shows that there are significantly more male respondents (44%) who resorted to alcohol to reduce cognitive dissonance, than female respondents (29%). It also shows that there are significantly more female respondents (52%) who resorted to other methods such as partying, religion, and gymnasiums, than male respondents (32%). Another significant relationship is shown by the fact that 8% of male respondents resorted to drugs while 3% of female respondents resorted to drugs.

#### **4.3.6 THE RELATIONSHIP BETWEEN AGE AND POSTPURCHASE BEHAVIOUR**

The Chi-square tests indicate that there is no significant relationship between the age of respondents and the techniques they use to reduce cognitive dissonance ( $X^2 = 9.314$ ;  $p = 0.409$ ). The descriptive results show that the majority of students use alcohol with 31% of respondents age 16-18, 44% of respondents age 19-21, 36% of respondents age 22-24 and 35% of respondents age 25 and above resorting to this means. The results show a slight difference in percentages on whichever method/manner students used to reduce cognitive dissonance.

#### **4.3.7 THE RELATIONSHIP BETWEEN LEVEL OF STUDY AND POSTPURCHASE BEHAVIOUR**

There is no significant relationship between the level of study and what students resort to in an effort to reduce cognitive dissonance. This is proven by Chi-

square test results ( $X^2 = 16.819$ ;  $p = 0.052$ ). According to the descriptive results, 17% of first year students had suicidal thoughts, 14% of second year students used drugs, 48% of B-Tech students used other and 60% of M-tech students used alcohol in order to reduce cognitive dissonance.

#### **4.3.8 THE RELATIONSHIP BETWEEN GENDER AND PEOPLE CONSULTED**

There is no significant relationship between gender and people consulted in order to reduce cognitive dissonance. Chi-square tests indicate that  $X^2 = 6.446$ ;  $p = 0.168$ . According to the descriptive results, 43% male respondents consulted friends and 40% female respondents consulted their family. It shows that male respondents are relying on friends and female respondents will likely rely on their families when faced with difficulties.

#### **4.3.9 THE RELATIONSHIP BETWEEN AGE AND PEOPLE CONSULTED**

The Chi-square test results show that there is no significant relationship between age and people consulted in an effort to reduce cognitive dissonance ( $X^2 = 16.228$ ;  $p = 0.181$ ). The descriptive results show that respondents between the ages of 16 and 18 (54%) are more likely to consult their family members to help them solve their problems. Respondents between the ages of 19 and 21 (40/43%) are more likely to consult friends/family members. Respondents between the ages of 22 and 24 and respondents of 25 and above are more likely to consult their friends in order to reduce any discomfort they may experience, even cognitive dissonance.

#### **4.3.10 THE RELATIONSHIP BETWEEN LEVEL OF STUDY AND PEOPLE CONSULTED**

The Chi-square tests show that there is no significant relationship between level of study and people consulted ( $X^2 = 14.909$ ;  $p = 0.246$ ). The descriptive results

show similarity between the levels of study and the people consulted in an effort to reduce cognitive dissonance. There is more or less the same number of people consulted in all the different levels of study with the majority of people consulted being family and friends.

#### **4.3.11 THE RELATIONSHIP BETWEEN FACULTY OF STUDY AND TIME TO RELAX**

There is a significant relationship between faculty and the time to relax. Chi-square tests indicate that  $X^2 = 27.491$ ;  $p = 0.007$ . It was found that there are significantly more Commerce (55%) and Arts (77%) students who agree that they have sufficient time to relax than expected. Also there were more Engineering (65%) and Health (53%) students disagreeing that they have sufficient time to relax than expected (Appendix C2). On the other hand, fewer than expected Commerce and Arts students disagree that they have sufficient time to relax and fewer than expected Engineering and Health students agree that they have sufficient time to relax. Thus it appears that Engineering and Health students do not find sufficient time to relax but Commerce and Arts students find time to relax.

#### **4.3.12 THE RELATIONSHIP BETWEEN FACULTY OF STUDY AND TIME TO STUDY**

There is a significant relationship between faculty and time to study ( $X^2 = 40.351$ ;  $p = 0.000$ ). The descriptive results show that 73% of respondents from the faculty of Commerce, 87% of respondents from the faculty of Health, 55% of respondents from the faculty of Arts and 52% of respondents from the faculty of Engineering agreed that they have sufficient time to study.

#### **4.3.13 THE RELATIONSHIP BETWEEN FACULTY OF STUDY AND TIME TO DO HOMEWORK**

There is a significant relationship between time to do homework and the faculty a student is enrolled under ( $X^2 = 39.121$ ;  $p = 0.000$ ). The descriptive results show a slight difference in the percentages. It shows that 75% of respondents from the faculty of Commerce, 71% of the respondents from the faculty of Health, 61% of respondents from the faculty of Arts and 55% of the respondents from the faculty of Engineering agreed that they have sufficient time to do their homeworks.

#### **4.3.14 THE RELATIONSHIP BETWEEN FACULTY AND TIME TO SOCIALISE**

There is a significant relationship between the faculty and time to socialize ( $X^2 = 39.581$ ;  $p = 0.000$ ). The descriptive results show that there are significantly more Engineering (59%) and Arts (75%) respondents who disagree that they have sufficient time to socialize. Fifty one of Commerce respondents and 50% of Health respondents seemed to agree that they have sufficient time to socialize.

#### **4.3.15 THE RELATIONSHIP BETWEEN GENDERS AND HOW STUDENTS BECAME AWARE OF CAREER GUIDANCE PROGRAMME**

There is a significant relationship between gender and how respondents became aware of the career guidance programme ( $X^2 = 11.683$ ;  $p = 0.009$ ). Female respondents became aware of programmes from TV, DUT brochures, and male respondents became aware of career-guidance programmes from friends and newspapers. The descriptive results show that 53% of female respondents became aware of the programmes from TV and 37% from DUT brochures. Eighty percent of male respondents became aware of the programmes from friends and 72% from newspapers.



#### **4.3.16 RELATIONSHIP BETWEEN AGE AND AWARENESS OF CAREER GUIDANCE PROGRAMME**

There is a significant relationship between age and awareness of career guidance programme ( $X^2 = 14.806$ ;  $p = 0.002$ ). The results (Appendix C2) show that 16-18 and 19-21 age groups were aware of guidance programs before coming to DUT. The respondents of 22-24 and 25+ age groups were not aware of the career guidance programme. The descriptive results show that 8% of the respondents of 16-18 age group and 37% of the respondents of 19-21 age group were aware of the career guidance programme. Thirty nine percent of the respondents of 22-24 age group and 29% of the respondents of 25+ age group were not aware of the career guidance programme.

#### **4.3.17 THE RELATIONSHIP BETWEEN AGE AND DUT IS ACADEMICALLY CHALLENGING**

Based on the Chi-square test, there is a significant relationship between age and DUT being academically challenging ( $X^2 = 21.448$ ;  $p = 0.011$ ). The 22-24 age group finds DUT academically challenging while the 19-21 group do not find it academically challenging and the 16-18 groups are undecided. The descriptive results show that 51% of the respondents from the 22-24 age groups indicated that DUT is academically challenging, and 43% of the respondents under the 19-21 age group indicated that they do not find DUT being academically challenging.

#### **4.3.18 THE RELATIONSHIP BETWEEN YEAR OF STUDY AND THE CAMPUS BEING INTIMIDATING**

There is a significant relationship between level of study and finding the campus intimidating ( $X^2 = 22.953$ ;  $p = 0.028$ ). The results show that second year respondents and B-Tech respondents do not find the campus intimidating. Third years do find campus intimidating. The descriptive results indicated that 58% of

third year respondents strongly agree that the campus is intimidating. Twenty two percent or second year respondents and 22% of B-Tech respondents strongly disagree that the campus is intimidating.

#### **4.4 CONCLUSION**

The focus of this chapter was on the analysis and interpretation of results, which were described and presented graphically. From the data analysis and interpretation of the results it can be deduced that students just like any other customer do in fact experience the effects of cognitive dissonance. The study discusses the causes of cognitive dissonance amongst students and how students deal with cognitive dissonance: the study also looks into what students feel the institution should do to help them reduce cognitive dissonance.

The findings indicate that students, like any other customers, do experience cognitive dissonance for many different reasons. And, as the theory indicates, they also seek ways to reduce this discomfort. This is done in many different ways. It is clear that accommodation, lecturers, and course of study are the common sources of cognitive dissonance among students at DUT. The results also reveal that not having sufficient time to do study related activities may lead to students' experiencing stress and becoming frustrated in the process. The results also revealed that parents and friends could add to this stress by make choices for students about which institution to study at and what course to enrol for. The next chapter will provide conclusions for the entire research based on the main objective and sub-objectives of the research.

# **CHAPTER 5**

## **CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 INTRODUCTION**

This chapter will discuss how the goals of the research were achieved, conclusions about the research findings, recommendations for the findings, recommendations for further study, recommendations for marketers in general, and the limitations of the study.

### **5.2 SUMMARY OF THE REPORT**

The goals of the research were explained in Chapter One, section 1.3. The main objective of the study was to determine whether cognitive dissonance occurs amongst DUT students and if so, to what extent. In addition to the main objective, the study also had sub-objectives which also needed to be addressed. The first sub-objective was to determine the causes of cognitive dissonance amongst students. The second sub-objective was to determine how students deal with the effects of cognitive dissonance. The third sub-objective was to determine what action students believe the institution should take to help them deal with cognitive dissonance and these were achieved in the following manner.

Section 1.5 of this study discussed the research approach and the methodological principles that guided the research towards the attainment of this objective.

Chapter Two began with defining what cognitive dissonance is, and when it is likely to occur. A survey of the literature was conducted. A detailed discussion of the critical factors surrounding cognitive dissonance was presented. The main

literature sources included papers from the recognised journals, articles from the Internet and the relevant text books.

Chapter Three presented an overview of the research design and the research strategy used toward attainment of the objectives of the study. Sampling method, data collection, data analysis, validity and reliability were discussed in detail. Section 3.6 presented the steps taken to construct the questionnaire. The questions were constructed based on the objectives of the study and the literature review. In order to ensure validity in this study, the researcher used pilot tests.

Chapter Four highlighted the results of the interviews and the analysis of the results. The analysis led to the establishment of the recommendations and conclusions in the final chapter.

### **5.3 CONCLUSIONS ABOUT THE FINDINGS OF THE STUDY**

According to Etzel et al. (2001:100), cognitive dissonance is a state of anxiety brought on by the difficulty of choosing from among alternatives. The results of the survey revealed that finances, accommodation, diplomas, lecturers, and the institute are some of the causes of cognitive dissonance amongst DUT students (see Figure 4.5). It is therefore, concluded that cognitive dissonance does occur amongst tertiary students as a result of the above mentioned reasons.

The results also revealed that one of the causes of cognitive dissonance amongst tertiary students seemed to be the lecturers. Twenty six percent of the respondents indicated that lecturers were the sources of their discomfort. The study concludes that this may result from the fact that students have poor time management. Furthermore, it can be concluded that because of the freedom students experience at tertiary level, they often leave work until it is too late, for example, only doing homework, studying, and doing assignments at the last

minute. They then end up failing or getting lower grades and in the process become frustrated. They will therefore, find someone or something to blame.

The analysis revealed that 12% of the respondents indicated that the diploma was the causes of their discomfort. The study concludes that this may be due to the fact that parents make career choices for their children and even friends seemed to have influence on career choice of some respondents. It can also be concluded that because some respondents do not apply in time for the courses they want to pursue, they end up studying courses they did not wish to do.

The results indicate that 16% of the respondents claimed that finances were the cause of their discomfort. It is concluded that some respondents seem to have financial problems. This may be due to the fact that they did not find funds from the government or the institute, and therefore, they depend on their parents' income which may be not enough. This causes a lot of pressure on students and on parents. The results also indicated that 22% of the respondents indicated that accommodation was the source of their discomfort. It is therefore, concluded that there is lack of accommodation at DUT and a higher demand on the side of students, therefore, management should try to do everything they can to help students in this regard.

The analysis also indicated that 17% of the respondents reported that the institute was the cause of their discomfort. It is therefore, concluded that students come to tertiary education from high school expecting to find the environment or culture the same. Therefore, when they realise that this is not the case they suffer stress and frustration. They find that tertiary life is far different from that of high school; they find themselves faced with too many responsibilities, such as finding accommodation, managing their funds and being responsible for everything that they do (attending, doing assignments and homework and studying).

The results indicated that respondents used certain strategies to alleviate their stress. It appeared that 38.5% of the respondents resorted to alcohol, 6.3% of the respondents resorted to drugs, while 9.8% of the respondents had suicidal thoughts. Therefore, it can be concluded that when faced with this phenomenon, people are forced to take action to reduce its effects and the students therefore, are also driven to find ways that will help reduce cognitive dissonance, as indicated in Figure 4.8.

In response to the question of which individuals were consulted, the analysis shows that the majority of the respondents consulted family and friends, and only a few seemed to have gone for counselling. It is therefore, concluded that students may not be aware services such as counselling are available for their use at DUT. It can also be concluded that those respondents who indicated that they used alcohol and drugs to reduce cognitive dissonance are the ones who lack knowledge about availability of counselling.

Based on the analysis, it can be concluded that there is a lack of awareness among students about career-guidance programmes and this may be because there is not enough advertising done in career-guidance programmes to inform students and assist them in their decisions about career-choice. Therefore, students end up making wrong choices and become frustrated in the process. It is also clear that few students seek help from counsellors in order to help reduce cognitive dissonance; this may be the result of students' not knowing of such services being available at campus for them to make use of. Management should make such services known to students, especially details of where and how they can make contact with such services when they first enrol with the Institute.

The findings also indicated that some respondents reported not having enough or sufficient time to study, do their homework, relax, and socialise. It can be concluded that this is due to poor time management. For this reason students

end up not achieving their goals or what is required of them and become frustrated and uncomfortable – sometimes extremely so with the situation so difficult that they will seek wrong ways of dealing with their frustration such as alcohol and drug abuse.

The analysis indicates that some respondents seemed to find studying at DUT academically challenging, and some respondents seemed to find studying at DUT encompassing too many responsibilities, and also that the campus is intimidating. It is therefore, concluded that these perceptions may be due to the fact that when students come to the institution, they come with high school mentality. They think that everything will be the same as it was, expecting to have somebody behind them to make sure that they do their work.

#### **5.4 RECOMMENDATIONS BASED ON THE FINDINGS**

Based on the findings, the following recommendations are made:

- Students should seek information regarding the careers or courses they would like to pursue before they can even think of enrolling for such, as this will help them in understanding what the courses entail and thus guide them in making better career choices. They should attend career-guidance programmes and seek as much information as possible from career advisers.
- Management of DUT should implement or introduce strategies such as academic advising and academic support services that will provide comprehensive academic support and career services to students in an effort to help them successfully attain their educational objectives. Students with questions about degree course requirements, selection of a major, study skills, time management, test taking, academic advice and career selection or information about other institutions of higher education should be able to avail themselves of a well equipped academic support service unit. This unit would

also be responsible for facilitating the following programmes: tutoring services, academic assessment for first year students and academic bridging programmes.

- Management should provide students with necessary and appropriate information and resources to enable students to make better decisions. It should offer students assistance and guidance in making clear career choices, developing suitable educational plans and strengthening their decision-making skills. It is recommended that major communication steps should be taken in regard to career-guidance programmes. Therefore, the immediate marketing objective should be to provide the necessary information about these programmes. This information should be spread in such a way that it will reach every student who wishes to enrol with DUT. Students should be made aware of the importance of attending these programmes. For example, a student who wants to enrol for the course of Marketing should be informed of what sorts of people the course is suitable for, and what skills a person should have, and what duties the person with a marketing career will be expected to perform. This information will allow a student to gauge for himself if he will be comfortable with that sort of career.
- The Student Counselling Office should offer a broad range of counselling services and programs to assist students in realizing their potential in all aspects of college life and beyond. These services and programmes include personal counselling for individuals and groups, as well as workshops to aid students in their personal growth and development. Referrals to trained and licensed student counsellors or education psychologists should be made when necessary. Counselling should be made available for every student. It should be a requirement for every student to see a counsellor on a monthly basis especially those who stay in residences. The counselling office should be open at all times and there should be a counsellor available who would be able to help students without appointments and free of charge. The



counsellor would give them help in their time of need and thus avoid the dire consequences of counselling that is given too late when the damage is already done.

- Accommodation and financial services should be made available to every student who is in need of such. Staff should be well trained to avoid tribalism and favouritism. They should also avoid admitting more students than they can accommodate. Management should buy more property so that they can accommodate more students. With regard to finance, students should be encouraged to participate in fund-raising campaigns and initiatives to benefit those who have financial needs. The office for student financial services should also provide all students with assistance in securing scholarships and loans and should provide counselling on financial management for families learning how to finance a college education.
- Instead of turning to drugs and alcohol which could lead them into more trouble, students should at least seek advice from family and friends or at least talk to professionals such as the lecturers and counsellors or even look for people who had been in a similar situation. It is also recommended that students should make use of facilities such as computer labs, libraries and many other facilities around the institute to make their academic work easier.
- Management should introduce or implement a time management programme in which students will be taught how to manage their time. The programme should be open for every student regardless of which level of study the student is at.
- The institution should have introduction courses in its programmes that will help students to change their behaviour from high school to university. This will help the students overcome the challenges, and the responsibilities they

are faced with and the problem of being intimidated by the different culture of learning at the university.

## **5.5 RECOMMENDATIONS FOR FURTHER RESEARCH**

It was noted that some respondents needed to say more about what caused their discomfort. The questionnaire did not allow that or was not designed in a manner that allowed that, therefore further research is recommended on this area. For example, where respondents said that the institute/lecturers were the cause of their discomfort, the questionnaire should allow them to explain how. Perhaps research of a qualitative nature would be appropriate. It is also recommended that another study be made of a qualitative nature that will explore, in depth, more about the existence of cognitive dissonance among students at the higher education level where more probing questions could be asked since it appeared, in this study, that students still had more to say about the things that caused them this discomfort.

It is also recommended that a sample should be drawn in which there will be equal numbers of the respondents of different ages so that a congruent conclusion can be drawn of what age category seems to be the one that experiences the dissonance the most. Again the sample could be drawn using appropriate numbers to see who suffer the most between male and female respondents. Also with the level of study, it is recommended that equal numbers of respondents (20 from each level) should be drawn to reach meaningful results of whom or at which level respondents seem to suffer the most because of cognitive dissonance. Future research should also include respondents from other institutions from all the provinces to determine whether these are relevant to other institutions as well.

## **5.6 RECOMMENDATIONS FOR MARKETERS IN GENERAL**

Marketers should supply sufficient dealer literature; instruction manuals should seek to convince the buyer of the wisdom of the selection. They should provide information about where and how to secure services and marketers should promote the availability and quality of their after-sale service. They must make sure that their advertising and other forms of promotion do not create expectations their products cannot meet. Companies need to ask customers what they want and how they want it. All in all marketers should seek to sell products/services that satisfy the buyer's needs.

The social context of consumer behaviour implies that the prospective purchaser may evaluate his own opinions, beliefs, attitudes, and behaviour by comparison with others in the society. The need to make socially acceptable decisions is reflected in the tendency to turn to others for information and advice. The potential value of seeking advice or information from friends and family may be considerable for the potential purchasers who lack confidence in their own ability to judge correctly. Whenever uncertainty is present the consumer is likely to be aware of a sense of risk. What concern marketers are the factors that promote the perception of risk, the importance in the buying situation, and what may reduce the level of risk by the consumer.

## **5.7 LIMITATIONS**

This study was limited to tertiary students at the Durban University of Technology only, therefore, it was not appropriate to generalise the findings of the study to the total population. Nevertheless, there are many tertiary institutions in South Africa like the one at which the research study was carried out, in which there might be the same problem.

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## **APPENDICE A**

### **LETTER OF CONSENT**

Room 221  
Student Village  
Durban University of Technology

23<sup>rd</sup> March 2005

Dear Respondents

I am finalizing my Master's Degree in Marketing at the Durban University of Technology. In terms of the programmes, a research project needs to be conducted.

I have chosen to conduct a research on post purchase behaviour (cognitive dissonance) amongst DUT students. I believe it is important for both students and the university to have a clear understanding of this subject: how it affects both groups and how to design programmes that will address this problem and bring about satisfactory change for both students and management. I will therefore be interviewing students from different faculties on campus. I will make the research report available at the DUT library.

I hereby request your consent and support in conducting this research by answering this questionnaire. Your responses will be highly confidential.

Thanking you

Palesa Mosala  
M-Tech Marketing

## APPENDICE B

### QUESTIONNAIRE

1. **Post Purchase behaviour** is a distressing mental state (a feeling of uncertainty or discomfort). After enrolling or registering with DUT did you experience this feeling? Please tick the appropriate.

a)	Yes	
b)	No	

IF THE ANSWER IS NO, TERMINATE.

2. Please indicate the Faculty you have registered under:

a)	Commerce	
b)	Engineering, Science and Built Environment	
c)	Arts	
d)	Health	



3. Please indicate your year of study:

a)	First Year	
b)	Second Year	
c)	Third Year	
d)	B-Tech	

4. Please indicate your gender:

a)	Male	
b)	Female	

5. Please indicate your age category:

a)	16 to 18	
b)	19 to 21	
c)	22 to 24	
d)	25 and above	

6. Can you now tell me what the cause of this discomfort was?

a)	The Institution itself	
b)	The Course of study	
c)	Lecturers	
d)	Financial	
e)	Accommodation	
f)	Other Specify..... .....	

7. Which of the following people did you consult in order to reduce post purchase behaviour?

a)	Friends	
b)	Family	
c)	Counselling	
d)	Nobody	
e)	Other Specify..... .....	

8. What do you think DUT should do to help students deal with post purchase behaviour?

a)	Implement career-guidance programmes	
b)	Provide information booklets on diplomas (what they are all about, etc.)	
c)	Counselling	
d)	All the above	
e)	Other <i>Specify</i> ..... .....	

9. What did you resort to when faced with post purchase behaviour?

a)	Alcohol	
b)	Drugs	
c)	Suicidal thoughts	
d)	Other <i>Specify</i> ..... .....	

10. What made you choose DUT as the institution for your studies?

a)	My choice	
b)	Parents'	
c)	Friends'	
d)	Other Specify..... .....	

11. Was this qualification your first choice?

a)	Yes	
b)	No	

12. If your answer to question 11 was 'No', what/who prevented you from doing the qualification of your own choice?

a)	Parents	
b)	Friends	
c)	Finances	
d)	Course was fully enrolled	
e)	Other Specify..... .....	

**Please indicate your opinion on each of the following statements**

13. Studying at DUT is academically challenging.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

14. Studying at DUT encompasses too many responsibilities.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

15. There is sufficient time to:

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
Relax					
Study					
Do your homework					
Socialise					

16. The campus is intimidating.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

17. The tertiary education experience is satisfying.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

18. Before you came here, were you aware of the career guidance programmes which DUT presents every year?

a)	Yes	
b)	No	

19.If your answer to the question 18 is 'Yes', how did you become aware of the career guidance programme?

a)	Friends and relatives	
b)	Newspapers	
c)	Television	
d)	DUT brochures	
e)	Other <i>Specify</i> .....  .....	

**Thank you very much for your co-operation.**

## APPENDIX C1

### FREQUENCIES

#### 1. Causes of postpurchase behaviour by faculty

	Institution	Diploma	Lecturers	Financial	Accommodation	Other
Commerce	34	25	60	40	59	6
Eng,Sc \$BE	19	15	32	18	15	9
Health	10	1	2	6	11	2
Arts	5	9	12	3	5	2

#### 2. People consulted by faculty

	Friends	Family	Counselling	Nobody	Other
Commerce	99	83	7	26	9
Eng,Sc \$BE	41	32	9	21	5
Health	12	10	3	4	3
Arts	13	18	2	2	1

#### 3. What DUT should do by faculty

	C/G program	Info Booklet	Counselling	All of them	Other
Commerce	32	16	26	140	10
Eng,Sc \$BE	9	5	7	80	7
Health	3	0	0	26	3
Arts	2	1	5	25	3

#### 4. Results of postpurchase behaviour by faculty

	Alcohol	Drugs	Suicidal thoughts	Other
Commerce	91	9	21	103
Eng,Sc \$BE	39	13	11	45
Health	13	2	2	15
Arts	11	1	5	18

#### 5. Studying at DUT is academically challenging by faculty

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	6	13	31	129	44
Eng,Sc \$BE	3	6	11	48	39
Health	1	0	3	18	10
Arts	0	1	3	22	10



**6. Studying at DUT encompasses too many responsibilities by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	7	14	23	137	43
Eng,Sc \$BE	1	7	10	61	29
Health	0	0	6	20	6
Arts	1	2	3	20	10

**7. The campus is intimidating by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	56	66	44	49	9
Eng,Sc \$BE	16	34	24	25	9
Health	4	10	10	7	1
Arts	7	21	4	3	1

**8. There is enough time to relax by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	35	67	32	77	13
Eng,Sc \$BE	35	36	10	21	6
Health	5	12	5	8	2
Arts	13	15	2	5	1

**9. There is enough time to study by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	6	23	30	120	45
Eng,Sc \$BE	6	33	12	44	13
Health	0	1	3	25	3
Arts	3	9	4	17	3

**10. There is enough time to do homework by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	3	26	27	124	44
Eng,Sc \$BE	10	29	9	56	4
Health	0	6	3	20	3
Arts	3	7	4	21	1

**11. There is enough time to socialise by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	19	58	31	86	30
Eng,Sc \$BE	24	40	13	23	8
Health	5	6	5	10	6
Arts	11	16	1	8	0

**12. Tertiary education experience is satisfying by faculty**

	St Disagree	Disagree	Undecided	Agree	St Agree
Commerce	10	19	22	106	67
Eng,Sc \$BE	3	7	11	54	33
Health	0	2	3	16	11
Arts	1	3	2	19	11

**13. Awareness of the career guidance programme by faculty**

	Friends	Newspaper	TV	DIT brochure	Other
Commerce	23	10	7	64	3
Eng,Sc \$BE	11	7	0	19	2
Health	7	0	0	4	1
Arts	9	1	0	8	0

**14. Was the qualification first choice by faculty**

	Yes	No
Commerce	104	120
Eng,Sc \$BE	38	70
Health	13	19
Arts	17	19

**15. Causes of postpurchase behaviour by year of study**

	Institute	Diploma	Lecturers	Financial	Accommodation	Other
First	8	11	16	7	8	2
Second	15	8	22	14	15	3
Third	32	25	46	36	50	9
B-Tech	12	6	22	10	15	3
M-Tech	1	0	0	0	2	2

**16. People consulted by year of study**

	Friends	Family	Counselling	Nobody	Other
First	21	21	3	7	0
Second	34	32	4	5	2
Third	76	70	11	32	9
B-Tech	32	18	3	9	6
M-Tech	2	2	0	0	1

**17. What DUT should do by year of study**

	C/G program	Info Booklet	Counselling	All of them	Other
First	5	3	3	39	2
Second	7	4	5	58	3
Third	24	12	27	121	14
B-Tech	9	3	3	50	3
M-Tech	1	0	0	3	1

**18. Results of postpurchase behaviour by year of study**

	Alcohol	Drugs	Suicidal thoughts	Other
First	19	1	9	23
Second	31	11	3	32
Third	76	9	19	93
B-Tech	25	2	8	33
M-Tech	3	2	0	0

**19. Studying at DUT is academically challenging by the year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	0	2	13	29	8
Second	0	3	3	52	18
Third	9	14	29	93	52
B-Tech	1	1	2	41	23
M-Tech	0	0	1	2	2

**20. Studying at DUT encompasses too many responsibilities by year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	0	3	8	35	6
Second	1	3	4	54	15
Third	8	13	22	109	46
B-Tech	0	3	8	37	20
M-Tech	0	1	0	3	1

**21. The campus is intimidating by year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	14	10	17	11	0
Second	19	26	16	14	2
Third	31	68	38	50	11
B-Tech	17	26	10	8	7
M-Tech	2	1	1	1	0

**22. There is enough time to relax by year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	6	16	11	17	2
Second	15	22	7	27	6
Third	49	67	20	50	12
B-Tech	17	24	10	16	1
M-Tech	1	1	1	1	1

**23. There is enough time to study by year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	1	5	5	33	8
Second	3	9	9	45	11
Third	8	41	25	88	36
B-Tech	3	10	9	39	7
M-Tech	0	1	1	1	2

**24. There is enough time to do homework by year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	1	10	8	24	9
Second	5	6	9	50	7
Third	7	39	20	103	29
B-Tech	3	12	5	42	6
M-Tech	0	1	1	2	1

**25. There is enough time to socialise by year of study**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	3	19	5	18	7
Second	10	23	11	26	7
Third	35	60	23	57	23
B-Tech	10	18	10	25	5
M-Tech	1	0	1	1	2

**26. Tertiary education experience is satisfying**

	St Disagree	Disagree	Undecided	Agree	St Agree
First	0	5	6	24	17
Second	1	4	3	44	25
Third	9	19	22	95	53
B-Tech	4	2	6	30	26
M-Tech	0	1	1	2	1

**27. Awareness of the career guidance program by year of study**

	Friends	Newspaper	TV	DIT brochure	Other
First	10	4	1	19	0
Second	14	4	2	19	0
Third	22	8	2	37	3
B-Tech	4	2	2	17	3
M-Tech	0	0	0	3	0

**28. Was the qualification first choice by year of study**

	Yes	No
First	19	33
Second	36	41
Third	73	125
B-Tech	27	41
M-Tech	3	2

## APPENDIX C2

### CROSS-TABULATIONS

#### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * Cause of post purchase behaviour	400	100.0%	0	.0%	400	100.0%

#### Faculty \* Cause of post purchase behaviour Cross tabulation

				Cause of post purchase behaviour					
			1 Institute	2 Diploma	3 Lecturers	4 Financial	5 Accommodation	6 Other	Total
Faculty	Health	Count	10	1	2	6	11	2	32
		Expected Count	5.4	4.0	8.5	5.4	7.2	1.5	32.0
		% within Cause of post purchase behaviour	14.7%	2.0%	1.9%	9.0%	12.2%	10.5%	8.0%
Commerce		Count	34	25	60	40	59	6	224
		Expected Count	38.1	28.0	59.4	37.5	50.4	10.6	224.0
		% within Cause of post purchase behaviour	50.0%	50.0%	56.6%	59.7%	65.6%	31.6%	56.0%
Engineering & Business		Count	19	15	32	18	15	9	108
		Expected Count							
		% within Cause of post purchase behaviour							

	Expected Count	18.4	13.5	28.6	18.1	24.3	5.1	108.0
	% within Cause of post purchase behaviour	27.9%	30.0%	30.2%	26.9%	16.7%	47.4%	27.0%
Ar ts	Count	5	9	12	3	5	2	36
	Expected Count	6.1	4.5	9.5	6.0	8.1	1.7	36.0
	% within Cause of post purchase behaviour	7.4%	18.0%	11.3%	4.5%	5.6%	10.5%	9.0%
Total	Count	68	50	106	67	90	19	400
	Expected Count	68.0	50.0	106.0	67.0	90.0	19.0	400.0
	% within Cause of post purchase behaviour	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Cause of PPB	400	100.0%	0	.0%	400	100.0%

**Gender \* Cause of PPB Crosstabulation**

			Cause of PPB						
			Accommodation	Diploma	Financial	Institute	Lecturers	Other	Total
Gender	Female	Count	39	21	28	30	40	10	168
		Expected Count	37.8	21.0	28.1	28.6	44.5	8.0	168.0
	Male	Count	51	29	39	38	66	9	232
		Expected Count	52.2	29.0	38.9	39.4	61.5	11.0	232.0
Total		Count	90	50	67	68	106	19	400
		Expected Count	90.0	50.0	67.0	68.0	106.0	19.0	400.0

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Cause of PPB	400	100.0%	0	.0%	400	100.0%

**Age \* Cause of PPB Crosstabulation**

			Cause of PPB						
			Accommodation	Diploma	Financial	Institute	Lecturers	Other	
Age	16-18	Count	2	7	2	2	8	1	22
		Expected	5.0	2.8	3.7	3.7	5.8	1.0	22.0
	19-21	Count	27	15	24	16	41	2	125
		Expected	28.1	15.6	20.9	21.3	33.1	5.9	125.0
	22-24	Count	34	21	25	31	38	8	157
		Expected	35.3	19.6	26.3	26.7	41.6	7.5	157.0
	25+	Count	27	7	16	19	19	8	96
		Expected	21.6	12.0	16.1	16.3	25.4	4.6	96.0
Total		Count	90	50	67	68	106	19	400



### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Cause of PPB	400	100.0%	0	.0%	400	100.0%

### Age \* Cause of PPB Crosstabulation

			Cause of PPB						Total
			Accomm odation	Diploma	Financial	Institute	Lecturers	Other	
Age	16-21	Count	29	22	26	18	49	3	147
		Expect ed	33.1	18.4	24.6	25.0	39.0	7.0	147.0
	22-24	Count	34	21	25	31	38	8	157
		Expect ed	35.3	19.6	26.3	26.7	41.6	7.5	157.0
	25+	Count	27	7	16	19	19	8	96
		Expect ed	21.6	12.0	16.1	16.3	25.4	4.6	96.0
Total		Count	90	50	67	68	106	19	400
		Expect ed	90.0	50.0	67.0	68.0	106.0	19.0	400.0

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Year of Study * Cause of PPB	400	100.0%	0	.0%	400	100.0%

**Year of Study \* Cause of PPB Crosstabulation**

			Cause of PPB						
			Accomm odation	Diploma	Financi al	Institute	Lecturers	Other	Total
Year of Study	B- Tech/M- Tech	Count	17	6	10	13	22	5	73
		Expecte d Count	16.4	9.1	12.2	12.4	19.3	3.5	73.0
	First	Count	8	11	7	8	16	2	52
		Expecte d Count	11.7	6.5	8.7	8.8	13.8	2.5	52.0
	Second	Count	15	8	14	15	22	3	77
		Expecte d Count	17.3	9.6	12.9	13.1	20.4	3.7	77.0
	Third	Count	50	25	36	32	46	9	198
		Expecte d Count	44.6	24.8	33.2	33.7	52.5	9.4	198.0
	Total	Count	90	50	67	68	106	19	400
		Expecte d Count	90.0	50.0	67.0	68.0	106.0	19.0	400.0

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * People consulted	400	100.0%	0	.0%	400	100.0%

**Faculty \* People consulted Crosstabulation**

		People consulted					Total
		Counselling	Family	Friends	Nobody	Other	
Faculty	Arts	3	10	12	4	3	32
		1.7	11.4	13.2	4.2	1.4	32.0
	Comm erce	7	83	99	26	9	224
		11.8	80.1	92.4	29.7	10.1	224.0
	Eng. Sc.&B E	9	32	41	21	5	108
		5.7	38.6	44.6	14.3	4.9	108.0
	Health	2	18	13	2	1	36
		1.9	12.9	14.9	4.8	1.6	36.0
	Total	21	143	165	53	18	400
		21.0	143.0	165.0	53.0	18.0	400.0

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Year of study * People consulted	400	100.0%	0	.0%	400	100.0%

**Year of study \* People consulted Crosstabulation**

			People consulted					Total
			Counsell ing	Family	Friends	Nobody	Other	
Year of study	B-Tech/M- tech	Count	3	20	34	9	7	73
		Expected Count	3.8	26.1	30.1	9.7	3.3	73.0
	First	Count	3	21	21	7	0	52
		Expected Count	2.7	18.6	21.5	6.9	2.3	52.0
	Second	Count	4	32	34	5	2	77
		Expected Count	4.0	27.5	31.8	10.2	3.5	77.0
	Third	Count	11	70	76	32	9	198
		Expected Count	10.4	70.8	81.7	26.2	8.9	198.0
	Total	Count	21	143	165	53	18	400
		Expected Count	21.0	143.0	165.0	53.0	18.0	400.0

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * People consulted	400	100.0%	0	.0%	400	100.0%

### Age \* People consulted Crosstabulation

			People consulted					Total
			Counselling	Family	Friends	Nobody	Other	
Age	16-18	Count	1	12	5	4	0	22
		Expected Count	1.2	7.8	9.1	3.0	1.0	22.0
	19-21	Count	7	54	50	10	4	125
		Expected Count	6.6	44.4	51.6	16.9	5.6	125.0
	22-24	Count	8	51	65	25	8	157
		Expected Count	8.2	55.7	64.8	21.2	7.1	157.0
	25+	Count	5	25	45	15	6	96
		Expected Count	5.0	34.1	39.6	13.0	4.3	96.0
Total		Count	21	142	165	54	18	400
		Expected Count	21.0	142.0	165.0	54.0	18.0	400.0

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * People consulted	400	100.0%	0	.0%	400	100.0%

**Gender \* People consulted Crosstabulation**

			People consulted					
			Counselling	Family	Friends	Nobody	Other	Total
Gender	Female	Count	12	68	64	18	6	168
		Expected Count	8.8	60.1	69.3	22.3	7.6	168.0
	Male	Count	9	75	101	35	12	232
		Expected Count	12.2	82.9	95.7	30.7	10.4	232.0
Total		Count	21	143	165	53	18	400
		Expected Count	21.0	143.0	165.0	53.0	18.0	400.0

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Result of post purchase behaviour	399	100.0%	0	.0%	399	100.0%

**Gender \* Result of post purchase behaviour Crosstabulation**

			Result of post purchase behaviour				
			1 Alcohol	2 Drugs	3 Suicidal thoughts	4 Other	Total
Gender	Female	Count	50	6	23	89	168
		Expected Count	64.8	10.5	16.4	76.2	168.0
		% within Result of post purchase behaviour	32.5%	24.0%	59.0%	49.2%	42.1%
	Male	Count	104	19	16	92	231
		Expected Count	89.2	14.5	22.6	104.8	231.0
		% within Result of post purchase behaviour	67.5%	76.0%	41.0%	50.8%	57.9%
Total		Count	154	25	39	181	399
		Expected Count	154.0	25.0	39.0	181.0	399.0
		% within Result of post purchase behaviour	100.0%	100.0%	100.0%	100.0%	100.0%

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Year of Study * Result of PPB	399	100.0%	0	.0%	399	100.0%

### Year of Study \* Result of PPB Crosstabulation

			Result of PPB				Total
			Alcohol	Drugs	Other	Suicidal thoughts	
Year of Study	B-Tech/M-Tech	Count	28	4	33	8	73
		Expected Count	28.2	4.6	33.1	7.1	73.0
	First	Count	19	1	23	9	52
		Expected Count	20.1	3.3	23.6	5.1	52.0
	Second	Count	31	11	32	3	77
		Expected Count	29.7	4.8	34.9	7.5	77.0
	Third	Count	76	9	93	19	197
		Expected Count	76.0	12.3	89.4	19.3	197.0
	Total	Count	154	25	181	39	399
		Expected Count	154.0	25.0	181.0	39.0	399.0

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Result of PPB	399	100.0%	0	.0%	399	100.0%

### Age \* Result of PPB Crosstabulation

			Result of PPB				Total
			Alcohol	Drugs	Other	Suicidal thoughts	
Age	16-18	Count	7	1	11	3	22
		Expected Count	8.5	1.4	10.0	2.2	22.0
	19-21	Count	55	7	51	12	125
		Expected Count	48.2	7.8	56.7	12.2	125.0
	22-24	Count	58	11	67	20	156
		Expected Count	60.2	9.8	70.8	15.2	156.0
	25+	Count	34	6	52	4	96
		Expected Count	37.1	6.0	43.5	9.4	96.0
	Total	Count	154	25	181	39	399
		Expected Count	154.0	25.0	181.0	39.0	399.0

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Year of study * Academically challenging	398	100.0%	0	.0%	398	100.0%

Year of study \* Academically challenging Crosstabulation

				Academically challenging			
			1 Strongly disagree/Disagree	2 Undecided	3 Agree	4 Strongly Agree	Total
Year of study	B & M-Tech	Count	2	3	43	25	73
		Expected Count	5.5	8.8	39.8	18.9	73.0
		% within Academically challenging	6.7%	6.3%	19.8%	24.3%	18.3%
	First	Count	2	13	29	8	52
		Expected Count	3.9	6.3	28.4	13.5	52.0
		% within Academically challenging	6.7%	27.1%	13.4%	7.8%	13.1%
	Second	Count	3	3	52	18	76
		Expected Count	5.7	9.2	41.4	19.7	76.0
		% within Academically challenging	10.0%	6.3%	24.0%	17.5%	19.1%
	Third	Count	23	29	93	52	197
		Expected Count	14.8	23.8	107.4	51.0	197.0
		% within Academically challenging	76.7%	60.4%	42.9%	50.5%	49.5%
Total	Count	30	48	217	103	398	
	Expected Count	30.0	48.0	217.0	103.0	398.0	
	% within Academically challenging	100.0%	100.0%	100.0%	100.0%	100.0%	



## Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Academically challenging	398	100.0%	0	.0%	398	100.0%

## Age \* Academically challenging Crosstabulation

				Academically challenging			
			1 Strongly disagree/Disagree	2 Undecided	3 Agree	4 Strongly agree	Total
Age	16-18	Count	0	5	14	3	22
		Expected Count	1.7	2.7	12.0	5.7	22.0
		% within Academically challenging	.0%	10.4%	6.5%	2.9%	5.5%
	19-21	Count	13	17	76	18	124
		Expected Count	9.3	15.0	67.6	32.1	124.0
		% within Academically challenging	43.3%	35.4%	35.0%	17.5%	31.2%
	22-24	Count	12	16	75	53	156
		Expected Count	11.8	18.8	85.1	40.4	156.0
		% within Academically challenging	40.0%	33.3%	34.6%	51.5%	39.2%
	25+	Count	5	10	52	29	96
		Expected Count	7.2	11.6	52.3	24.8	96.0
		% within Academically challenging	16.7%	20.8%	24.0%	28.2%	24.1%
Total	Count	30	48	217	103	398	
	Expected Count	30.0	48.0	217.0	103.0	398.0	
	% within Academically challenging	100.0%	100.0%	100.0%	100.0%	100.0%	

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * Enough time to relax	400	100.0%	0	.0%	400	100.0%

### Faculty \* Enough time to relax Crosstabulation

				Enough time to relax				
			1 Strongly disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly Agree	Total
Faculty	Health	Count	5	12	5	8	2	32
		Expected Count	7.0	10.4	3.9	8.9	1.8	32.0
		% within Enough time to relax	5.7%	9.2%	10.2%	7.2%	9.1%	8.0%
	Commerce	Count	35	67	32	77	13	224
		Expected Count	49.3	72.8	27.4	62.2	12.3	224.0
		% within Enough time to relax	39.8%	51.5%	65.3%	69.4%	59.1%	56.0%
	Eng,Sc &B	Count	35	36	10	21	6	108
		Expected Count	23.8	35.1	13.2	30.0	5.9	108.0
		% within Enough time to relax	39.8%	27.7%	20.4%	18.9%	27.3%	27.0%
Arts	Count	13	15	2	5	1	36	
	Expected Count	7.9	11.7	4.4	10.0	2.0	36.0	
	% within Enough time to relax	14.8%	11.5%	4.1%	4.5%	4.5%	9.0%	
Total	Count	88	130	49	111	22	400	
	Expected Count	88.0	130.0	49.0	111.0	22.0	400.0	

% within Enough time to relax	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
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#### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * Enough time to study	400	100.0%	0	.0%	400	100.0%

#### Faculty \* enough time to study Crosstabulation

				Enough time to study			
			1 Strongly disagree/Disagree	2 Undecided	3 Agree	4 Strongly agree	Total
Faculty * Enough time to study	Count		1	3	25	3	32
	Expected Count		6.5	3.9	16.5	5.1	32.0
	% within Enough time to study		1.2%	6.1%	12.1%	4.7%	8.0%
Community	Count		29	30	120	45	224
	Expected Count		45.4	27.4	115.4	35.8	224.0
	% within Enough time to study		35.8%	61.2%	58.3%	70.3%	56.0%
Engineering, Science & Business	Count		39	12	44	13	108
	Expected Count		21.9	13.2	55.6	17.3	108.0
	% within Enough time to study		48.1%	24.5%	21.4%	20.3%	27.0%
Arts	Count		12	4	17	3	36
	Expected Count		7.3	4.4	18.5	5.8	36.0
	% within Enough time to study		14.8%	8.2%	8.3%	4.7%	9.0%
Total	Count		81	49	206	64	400
	Expected Count		81.0	49.0	206.0	64.0	400.0

% within Enough time to study	100.0%	100.0%	100.0%	100.0%	100.0%
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#### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * Enough time to do homework	400	100.0%	0	.0%	400	100.0%

#### Faculty \* enough time to do homework Crosstabulation

				Enough time to do homework			
				2 Undecided	3 Agree	4 Strongly Agree	Total
F a c u l t y	Heal th	Count	6	3	20	3	32
		Expected Count	6.7	3.4	17.7	4.2	32.0
		% within Enough time to do homework	7.1%	7.0%	9.0%	5.8%	8.0%
Com mer ce		Count	29	27	124	44	224
		Expected Count	47.0	24.1	123.8	29.1	224.0
		% within Enough time to do homework	34.5%	62.8%	56.1%	84.6%	56.0%
Eng, Sc& B		Count	39	9	56	4	108
		Expected Count	22.7	11.6	59.7	14.0	108.0
		% within Enough time to do homework	46.4%	20.9%	25.3%	7.7%	27.0%
Arts		Count	10	4	21	1	36
		Expected Count	7.6	3.9	19.9	4.7	36.0
		% within Enough time to do homework	11.9%	9.3%	9.5%	1.9%	9.0%
Total		Count	84	43	221	52	400
		Expected Count	84.0	43.0	221.0	52.0	400.0
		% within Enough time to do homework	100.0%	100.0%	100.0%	100.0%	100.0%

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * Enough time to socialize	400	100.0%	0	.0%	400	100.0%

### Faculty \* enough time to socialize Crosstabulation

			Enough time to socialize				
			1 Strongly disagree	2 Disagree	3 Undecided	4 Agree/strongly agree	Total
Faculty	Health	Count	5	6	5	16	32
		Expected Count	4.7	9.6	4.0	13.7	32.0
		% within Enough time to socialize	8.5%	5.0%	10.0%	9.4%	8.0%
	Commerce	Count	19	58	31	116	224
		Expected Count	33.0	67.2	28.0	95.8	224.0
		% within Enough time to socialize	32.2%	48.3%	62.0%	67.8%	56.0%
	Eng,Sc &B	Count	24	40	13	31	108
		Expected Count	15.9	32.4	13.5	46.2	108.0
		% within Enough time to socialize	40.7%	33.3%	26.0%	18.1%	27.0%
	Arts	Count	11	16	1	8	36
		Expected Count	5.3	10.8	4.5	15.4	36.0
		% within Enough time to socialize	18.6%	13.3%	2.0%	4.7%	9.0%
	Total	Count	59	120	50	171	400
		Expected Count	59.0	120.0	50.0	171.0	400.0
		% within Enough time to socialize	100.0%	100.0%	100.0%	100.0%	100.0%

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Faculty * Campus is intimidating	400	100.0%	0	.0%	400	100.0%

### Faculty \* Campus is intimidating Crosstabulation

			Campus is intimidating					
			1 Strongly disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly Agree	Total
Faculty	Health	Count	4	10	10		1	32
		Expected Count	6.6	10.5	6.6	6.7	1.6	32.0
		% within Campus is intimidating	4.8%	7.6%	12.2%	8.3%	5.0%	8.0%
Commerce		Count	56	66	44	49	9	224
		Expected Count	46.5	73.4	45.9	47.0	11.2	224.0
		% within Campus is intimidating	67.5%	50.4%	53.7%	58.3%	45.0%	56.0%
Engineering, Science & Business		Count	16	34	24	25	9	108
		Expected Count	22.4	35.4	22.1	22.7	5.4	108.0
		% within Campus is intimidating	19.3%	26.0%	29.3%	29.8%	45.0%	27.0%
Arts		Count	7	21	4	3	1	36
		Expected Count	7.5	11.8	7.4	7.6	1.8	36.0

% within Campus is intimidating		8.4%	16.0%	4.9%	3.6%	5.0%	9.0%
Total	Count	83	131	82	84	20	400
	Expected Count	83.0	131.0	82.0	84.0	20.0	400.0
% within Campus is intimidating		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Year of study * Campus is intimidating	400	100.0%	0	.0%	400	100.0%

### Year of study \* Campus is intimidating Crosstabulation

			Campus is intimidating				
			1 Strongly disagree	2 Disagree	3 Undecided	4 Strongly Agree/Agree	Total
Year of study	B&M-Tech	Count	19	27	11	16	73
		Expected Count	15.1	23.9	15.0	19.0	73.0
		% within Campus is intimidating	22.9%	20.6%	13.4%	15.4%	18.3%
	First	Count	14	10	17	11	52
		Expected Count	10.8	17.0	10.7	13.5	52.0
		% within Campus is intimidating	16.9%	7.6%	20.7%	10.6%	13.0%
	Second	Count	19	26	16	16	77
		Expected Count	16.0	25.2	15.8	20.0	77.0

	% within Campus is intimidating	22.9%	19.8%	19.5%	15.4%	19.3%
Third	Count	31	68	38	61	198
	Expected Count	41.1	64.8	40.6	51.5	198.0
	% within Campus is intimidating	37.3%	51.9%	46.3%	58.7%	49.5%
Total	Count	83	131	82	104	400
	Expected Count	83.0	131.0	82.0	104.0	400.0
	% within Campus is intimidating	100.0%	100.0%	100.0%	100.0%	100.0%

#### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Pre-awareness of guidance programs	400	100.0%	0	.0%	400	100.0%

#### Age \* Pre-awareness of guidance programs Crosstabulation

				Pre-awareness of guidance programs	
			1 Yes	2 No	Total
Age	16-18	Count	14	8	22
		Expected Count	9.5	12.5	22.0
		% within Pre-awareness of guidance programs	8.1%	3.5%	5.5%
	19-21	Count	64	61	125
		Expected Count	53.8	71.3	125.0
		% within Pre-awareness of guidance programs	37.2%	26.8%	31.3%
	22-24	Count	66	91	157
		Expected Count	67.5	89.5	157.0
		% within Pre-awareness of guidance programs	38.4%	39.9%	39.3%
	25+	Count	28	68	96
		Expected Count	41.3	54.7	96.0
		% within Pre-awareness of guidance programs	16.3%	29.8%	24.0%
Total	Count	172	228	400	



Expected Count	172.0	228.0	400.0
% within Pre-awareness of guidance programs	100.0%	100.0%	100.0%

### Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Awareness of guidance programs	236	100.0%	0	.0%	236	100.0%

### Gender \* Awareness of guidance programs Crosstabulation

			Awareness of guidance programs				
			1 Friends	2 Newspapers	3 TV and other	4 DIT brochure	Total
Gender	Female	Count	22	5	7	36	70
		Expected Count	32.6	5.3	3.9	28.2	70.0
		% within Awareness of guidance programs	20.0%	27.8%	53.8%	37.9%	29.7%
	Male	Count	88	13	6	59	166
		Expected Count	77.4	12.7	9.1	66.8	166.0
		% within Awareness of guidance programs	80.0%	72.2%	46.2%	62.1%	70.3%
	Total	Count	110	18	13	95	236
		Expected Count	110.0	18.0	13.0	95.0	236.0
		% within Awareness of guidance programs	100.0%	100.0%	100.0%	100.0%	100.0%

## APPENDIX C3

### CHI-SQUARE TESTS

Causes of postpurchase behaviour by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.491(a)	12	.007
Likelihood Ratio	27.826	12	.006
N of Valid Cases	400		

4 cells (20.0%) have expected count less than 5. The minimum expected count is 1.76.

Causes of postpurchase behaviour by gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.865(a)	5	.868
Likelihood Ratio	1.859	5	.868
N of Valid Cases	400		

0 cells (.0%) have expected count less than 5. The minimum expected count is 7.98.

Causes of postpurchase behaviour by age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.371(a)	15	.034
Likelihood Ratio	25.917	15	.039
N of Valid Cases	400		

6 cells (25.0%) have expected count less than 5. The minimum expected count is 1.05.

Causes of postpurchase behaviour by age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.468(a)	10	.065
Likelihood Ratio	17.985	10	.055
N of Valid Cases	400		

1 cell (5.6%) has expected count less than 5. The minimum expected count is 4.56.

Causes of postpurchase behaviour by year of study

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.725(a)	15	.772
Likelihood Ratio	10.450	15	.791
N of Valid Cases	400		

3 cells (12.5%) have expected count less than 5. The minimum expected count is 2.47.

People consulted by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.737(a)	12	.160
Likelihood Ratio	16.143	12	.185
N of Valid Cases	400		

7 cells (35.0%) have expected count less than 5. The minimum expected count is 1.44.

People consulted by year of study

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.909(a)	12	.246
Likelihood Ratio	16.935	12	.152
N of Valid Cases	400		

6 cells (30.0%) have expected count less than 5. The minimum expected count is 2.34.

People consulted by age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.228(a)	12	.181
Likelihood Ratio	17.724	12	.124
N of Valid Cases	400		

4 cells (20.0%) have expected count less than 5. The minimum expected count is .99.

People consulted by gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.446(a)	4	.168
Likelihood Ratio	6.446	4	.168
N of Valid Cases	400		

0 cells (.0%) have expected count less than 5. The minimum expected count is 7.56.

Results of Postpurchase behaviour by gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.843(a)	15	.005
Likelihood Ratio	34.799	15	.003
N of Valid Cases	400		

4 cells (16.7%) have expected count less than 5. The minimum expected count is 1.52.

Results of postpurchase behaviour by year of study

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.819(a)	9	.052
Likelihood Ratio	15.627	9	.075
N of Valid Cases	399		

3 cells (18.8%) have expected count less than 5. The minimum expected count is 3.26.

Results of postpurchase behaviour by age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.314(a)	9	.409
Likelihood Ratio	9.916	9	.357
N of Valid Cases	399		

2 cells (12.5%) have expected count less than 5. The minimum expected count is 1.38.

DUT is academically challenging by year of study

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.490(a)	3	.001
Likelihood Ratio	17.771	3	.000
N of Valid Cases	399		

0 cells (.0%) have expected count less than 5. The minimum expected count is 10.53.

DUT is academically challenging by age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.448(a)	9	.011
Likelihood Ratio	23.669	9	.005
N of Valid Cases	398		

2 cells (12.5%) have expected count less than 5. The minimum expected count is 1.66.

Enough time to relax by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.540(a)	9	.000
Likelihood Ratio	36.190	9	.000
N of Valid Cases	398		

1 cell (6.3%) has expected count less than 5. The minimum expected count is 3.92.

Enough time to study by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.351(a)	9	.000
Likelihood Ratio	40.714	9	.000
N of Valid Cases	400		

2 cells (12.5%) have expected count less than 5. The minimum expected count is 3.92.

Enough time to do homework by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.957(a)	9	.049
Likelihood Ratio	17.038	9	.048
N of Valid Cases	400		

0 cells (.0%) have expected count less than 5. The minimum expected count is 10.66.

Enough time to socialise by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.581(a)	9	.000
Likelihood Ratio	40.848	9	.000
N of Valid Cases	400		

3 cells (18.8%) have expected count less than 5. The minimum expected count is 4.00.

The campus is intimidating by faculty

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.953(a)	12	.028
Likelihood Ratio	22.474	12	.033
N of Valid Cases	400		

2 cells (10.0%) have expected count less than 5. The minimum expected count is 1.60.

The campus is intimidating by year of study

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.683(a)	3	.009
Likelihood Ratio	11.582	3	.009
N of Valid Cases	236		

1 cell (12.5%) has expected count less than 5. The minimum expected count is 3.86.

Pre awareness of career guidance programme by age

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.806(a)	3	.002
Likelihood Ratio	15.047	3	.002
N of Valid Cases	400		

0 cells (.0%) have expected count less than 5. The minimum expected count is 9.46.

Awareness of career guidance programme by gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.121(a)	9	.000
Likelihood Ratio	41.316	9	.000
N of Valid Cases	400		

4 cells (25.0%) have expected count less than 5. The minimum expected count is 3.44.