An investigation of leaving certificate students' perceptions of image identification and formation for two Institutes of Technology

By

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Abstract

In Ireland, education is seen as the key to economic competitiveness. There has been a substantial increase in participation in higher education (HE) in recent years. The environment in which the higher education institutes (HEIs) operate has evolved into a competitive marketplace for students and funding. In order to overcome these challenges the HEI sector has focused on the development of HEI image. It is recognised that publics act towards a HEI on the basis of the positive or negative images that they hold. Image is seen as a powerful instrument in shaping a HEI's future. The current literature argues that HEI image has been relatively unexplored but it is recognised as a complex, inconsistently defined concept.

In light of these issues, the aim of this dissertation is to determine major elements in relation to HEI image specifically from the senior second level students' viewpoint in the context of Waterford Institute of Technology (WIT) and Cork Institute of Technology (CIT). This study aims to determine HEI image components, to investigate the HEI image sources and to determine the factors that contribute to the formation of HEI image.

The main research aims and objectives were investigated using a two-tier research approach. Initially, a total of four focus groups were conducted with senior second level students based in counties Waterford and Cork. The second phase of the study comprised a survey of 320 senior second level students based in these regions.

The primary research found that HEI image is a multi-faceted concept composed of elements that are quite similarly perceived for both HEIs. Word-of-mouth was found to be the strongest source of HEI image and organisational factors (academic, non-academic, physical and promotional) have the strongest influence with personal and environmental factors being perceived as less influential. The six hypotheses that were developed in this study were partially supported, thus indicating significant relationships between influential factors and certain dimensions of HEI image.

The research concluded there was a lack of knowledge regarding HEIs amongst senior second level students. These students' perceptions of HEIs were not based on one component. HEI image is very much sourced from outside the HEI. The non-academic (sports, social life) and promotional (open days, the prospectus) factors have the strongest influence. This research uncovers and proposes many practical points and recommendations that may assist in understanding and managing HEI image.

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Table of Contents

Ethical Declaration

I declare that this dissertation is wholly my own work except where I have made explicit reference to the work of others. I have uploaded and validated the dissertation in Turnitin® software.

Name: _____

Date: _____

List of Tables

List of Figures

List of Appendices

Appendix 1   Number of full time students in third–level education 1964-1997.

Appendix 2   Designated Institutions under the HEA.

Appendix 3   WIT and CIT Honours Bachelor Degrees – Level 8.

Appendix 4   WIT and CIT Ordinary Bachelor Degrees/ Higher Certificate – Level 7/ Level 8.

Appendix 5   Focus Group introductory letter

Appendix 6   Focus Group guide

Appendix 7   Free node and tree node reports

Appendix 8   Scale, literature sources, and focus group input on senior second level student survey

Appendix 9   Final Senior Second Level Student Survey

Appendix 10   Survey introductory letter

Appendix 11   Independent variables in study

List of Abbreviations

CAO	Central Applications Office
CHIU	Conference of Heads of Irish Universities
CIT	Cork Institute of Technology
CIT CCAD	CIT Crawford College of Art and Design
CIT – CSM	CIT Cork School of Music
HE	Higher Education
HEA	Higher Education Authority
HETAC	Higher Education and Training Awards Council
HEI	Higher Education Institution
HFS	High Feeder School
HPS	High Proximity School
IT	Institute of Technology
LFS	Low Feeder School
LPS	Low Proximity School
ND	No Date
OECD	Organisation for Economic Cooperation and Development
PhD	Doctor of Philosophy
RTC	Regional Technical College
UCC	University College Cork
UK	United Kingdom
US	United States
UWE	University of the West of England
WRTC	Waterford Regional Technical College
WIT	Waterford Institute of Technology

WOM   Word-of-mouth

WWW   World Wide Web

Chapter One – Introduction

1.1 Introduction

This chapter commences with a background to the research undertaken. It examines the Higher Education Institution (HEI) environment, defines HEI image and the research problem: research gap. The research aims, objectives are then presented, followed by the summarised research process. Research limitations are discussed and the format of the work is then outlined.

This research aims to investigate and examine the core area of image of HEIs as viewed by senior second level students. This research is pivotal as the Irish HEI market is highly dependent on this school-leaving cohort. In recent years the HE market has been transformed into a competitive market place with HEIs seeking to maintain student numbers. HEIs need to gain an appreciation of how their HEI is viewed by this important stakeholder group, as this cohort act towards the HEI based on the positive or negative images they have of the HEI. Little, if any, research has been undertaken from the perspective of the Irish recipient, i.e. senior second level student.

This study investigates senior second level students' perceptions of the impact of image influencers on the components of HEI image. These impacts are organisational, environmental and personal influencers (Kazoleas *et al.,* 2001). The HEI image components are demographic, spirit and temperament, curriculum, competitiveness and academic life (Terkla and Pagano, 1993). Furthermore, the manner in which students have obtained their HEI image from different sources is investigated (Williams and Moffitt, 1997).

1.2 Background to the study

1.2.1 The HEI environment

In the Irish economy, education is very important. Education is seen as the key to economic competitiveness and social cohesion. Ireland has experienced substantial

increases in participation in Higher Education (HE) since the 1960s. It has been argued that the expansion in education participation at both second and third level has been one of the main factors underlying Ireland's rapid economic growth (Donnelly, 2004; Fitzgerald, 2000). Hunt (2011) acknowledges that Ireland's HE system has made a significant contribution to the development of Irish society and the economy, and has a vital role to play in the coming decades in the restoration of an innovative knowledge based economy.

The HEA (2009) advise that at present in Ireland the HEI sector has 28 third-level colleges which are funded by the HEA. This sector is comprised of 7 universities, 14 Institutes of Technology and 7 institutions that are classified as 'other'. The HEA (2011) informs that in 2010, 157,234 students enrolled in full time higher education in Ireland. Hunt (2011) reports that 70% of entrants to HE in 2009 were directly from second level education.

White (2001) reports that 30 years previously the Irish state had what by European standards was a small elite system of higher education based mainly on five university colleges. Clancy (2001) reports that 1968 saw 19,508 students enrolled in full time higher education in Ireland. Clancy (2001) notes that the main features of the diversification was the development of a network of Regional Technical Colleges (RTCs) and the expansion of the existing technological colleges in Dublin and Limerick. White (2001) reports that in January 1998 all RTC's were upgraded to Institutes of Technology (ITs). This was required as colleges had to operate in an international context, change was needed to ensure international standing of their graduates qualifications. In addition, it was maintained that the change was required if the RTC's were to compete for the sizable segment of the student population which was being wooed increasingly by the British university system.

It is evident that a number of changes are taking place in the HE sector. The Organisation for Economic Cooperation and Development (OECD, 2004) advises that birth rates in Ireland which were 23 per thousand in the 1970s (which was about twice the European

average)', are forecast to decline to 13 per thousand by 2016. With the concentration of entry into tertiary education being predominately in the 18 to 20 age group (90%), this could lead to a decline in the annual cohort of second level school- leavers from around 70,000 in 1990 to around 53,000 by 2015, unless school retention rates improve considerably.

Irish tertiary education is strongly dependent on public funding. The OECD (2004) advises that state funding of Irish Higher Education Institutes (HEIs) is no longer a balanced way of funding. It is increasingly out of line with the situation and trends in some other advanced industrial nations, where non-state income is a growing element in institutional budgets. Hunt (2011) advises that the development of the HE system in the years to 2030 will take place initially in an environment of stern constraints on public finances. The OECD (2004) recommends that the government makes an unequivocal move that generates non-state based funding, whether through fees from overseas students, income from short courses for industry, income from spin-off companies, or other commercial activities. This should be retained by the institution concerned and should not be taken into account in any way in the calculation of the recurrent grant. Hunt (2011) advises that HEIs need to identify and engage with a broader base of funding sources, and reduce their strong relative reliance on exchequer funding. The funding base for HE must be broadened through the reform of student financing, including a new form of direct student contribution based on an upfront fee with a deferred payment facility. Stevens *et al*. (2008) highlights HEIs are operating in a different environment and they are now competing for students and funding.

A key strategy which has been recently adopted by the HEI sector to overcome these challenges is to focus on the development of HEI image. Torpor (1983) advises that institutions should be concerned about their image for three reasons. First, they need to know how their institution is perceived in relation to the competition. Second, they need to know how they are perceived by their various audiences and third, they need to monitor any change in image perception over a period of time. Lewin (1935) advises that external publics act towards an organisation on the basis of the positive or negative

images they have of the organisation, its merchandise, or services. Belanger *et al*. (2002), Gray (1986) and Abratt and Mofokeng (2001) insist that image has become a planned managerial decision as it impacts upon the ability of a HEI to recruit suitable faculty members, to attract research funds as well as charitable donations and to attract and maintain enthusiastic students.

1.2.2 Defining HEI image

Past literature has identified that there is lack of consensus in defining corporate image (Grunig, 1993; Haedrich, 1993; and Hutton *et al.*, 2001). Different labels are used interchangeably by authors in the area of HE image. Pardey (1991) and Kazoleas *et al*. (2001) ascribe the expression 'corporate image'; Terkla and Pagano (1993) use the term 'institutional image' while authors such as Belanger *et al*. (2002) and Arpan *et al.* (2003) apply the phrase 'organisational image' when referring to image. Kazoleas *et al*. (2001), Sung and Yang (2008), Prahald and Hamel (1990) and Kolter and Andreasen (1996) identified that image is a multi-faceted concept. Terkla and Pagano (1993) advise that these multi-faceted images may include academic, social, political and perhaps stylistic dimensions. Huddleton and Karr (1982) advise that everything about an institution communicates an image from the campus appearance, cost, personal attention, location, distance from home, graduates and professional school preparation, career placement, social activities and programmes of study and size. Terkla and Pagano (1993) have identified 27 semantic differentials to measure an institution's image. These were grouped into categories. Five dimensions were discovered, namely spirit and temperament, curriculum, competitiveness, academic life and demographic factors. These dimensions are believed to be a reasonable reflection of HEI image.

The literature indicates that image can only be held by its stakeholders (Abratt, 1989; Berstein, 1992; Alves and Raposo, 2010; Alvesson, 1998; Luque-Martinez and Del Barrio-Garcia, 2009; and Dowling, 1986). Andreassen and Linstead (1998) state that corporate image is recognised and developed in the customers' mind through communication and practice. Fombrun and Shanley (1990), Williams and Moffitt (1997) and Treadwell and Harrison (1994) highlight that messages about the organisation

delivered by the media and other observers such as family, friends, or employees of a firm also factor into the image of the organisation. Kazoleas *et al.,* (2001) found that respondents' perceptions were shaped by either personal experiences or by interpersonal relationships with others who had attended the university.

1.2.3 Research problem: research gap

A few researchers have turned their attention to image formation. Fombrun and Shanley (1990), Grunig (1993) Luque-Martinez and Del Barrio-Garcia (2009) and Dowling (1993) agree that numerous elements can influence corporate image. These influencing elements include industry image, interpersonal networks and individual experiences. Gray (1986) identified the symbolic element as being the primary indicator of the character of a business. Cornelissen (2000) and Carmeli and Tishler (2005) suggest managed communication is a significant influence in the formation of images. William and Moffitt (1997) found that images controlled by the organisation had a greater influence on images received by the organisation. Furthermore, Kazoleas *et al.* (2001) recognised environmental, organisational and personal variables as possible contributing factors in HEI image formation.

The researcher discovered there was little literature on the topic of HEI image as highlighted by Arpan *et al.* (2003) and Kazoleas *et al.* (2001). A review of the existing literature has highlighted that research has been undertaken internationally on HEI image among HEI stakeholders, but the literature does not present evidence of perceptions of an important stakeholder group: senior second-level students. Furthermore, there is no published research on this topic from an Irish perspective.

The HEI market has been transformed into a competitive market place, which would indicate the need for HEIs to identify and understand their market in order to maintain market share. Landrum *et al.* (1998) suggest that image influences various decisions about a HEI's future: it influences the quality of applicant, the community impressions concerning the HEI and the decision to follow a relationship. Therefore, in the current Irish situation researching the perceptions of senior second level students' image of HEIs

is vital due to the reliance that HEIs have on this cohort. The research problem is the lack of research which exists in an Irish context regarding HEI image amongst senior second level students.

Based on the above, this study investigates the HEI image variable in depth. Consequently, a primary research study investigating HEI image perceptions among senior second level students has been developed, using the key determinants of demographic, spirit and temperament, curriculum, competitiveness and academic life dimensions as devised by Terkla and Pagano (1993). Terkla and Pagano's (1993) study was chosen as there are few study's undertaken which measure an institutions image. It was exceptionally detailed, encompassing 27 variables. An understanding of the sources of HEI image for senior second level students has also been investigated.

This study identifies and explores three aspects of image formation as derived from Kazoleas *et al.* (2001) in his work on university image from the external stakeholder's perspective. These dimensions include organisational (buildings, landscaping), environmental (relative quality, location) and personal (demographic). The influence between each of these dimensions and HEI image components, as determined by Terkla and Pagano (1993), is investigated.

1.3 Research aims and objectives

The overall aim of this research is to determine major elements in relation to HEI image specifically from the senior second level students' viewpoint. For the purpose of this study, senior second level students are those that are in their final two years of second-level education. In this respect, the research objectives that emanated from the review of the relevant literature are:

1. To determine the constituent components of HEI image.

2. To investigate the source of HEI image as perceived by senior second level student.

3. To determine the components that contribute to the formation of HEI image from senior second level students' view point.

1.4 Research outline

At the outset of this research, it was determined that due to the exploratory nature of the research, two phases of research were necessary to study the HEI image and senior second level students views with regard to their perceptions, source components and factors that contribute to its formation. There is limited research done in this area specifically within an Irish context and no empirical studies have been completed with regard to HEI image and senior second level students' viewpoints. Hence the importance of this thesis contribution. The Waterford-Cork region of Ireland provides the context for this study, specifically senior second level students based in schools located in Waterford and Cork. This research took a multi-method two phase approach to the study. The research commenced with focus groups which were phenomenologically informed and phase two of the research was surveys which had a positivist influence. The diagram in figure 1.1 identifies the research approach.

Figure 1.1 Diagrammatic Presentation of the Research Approach

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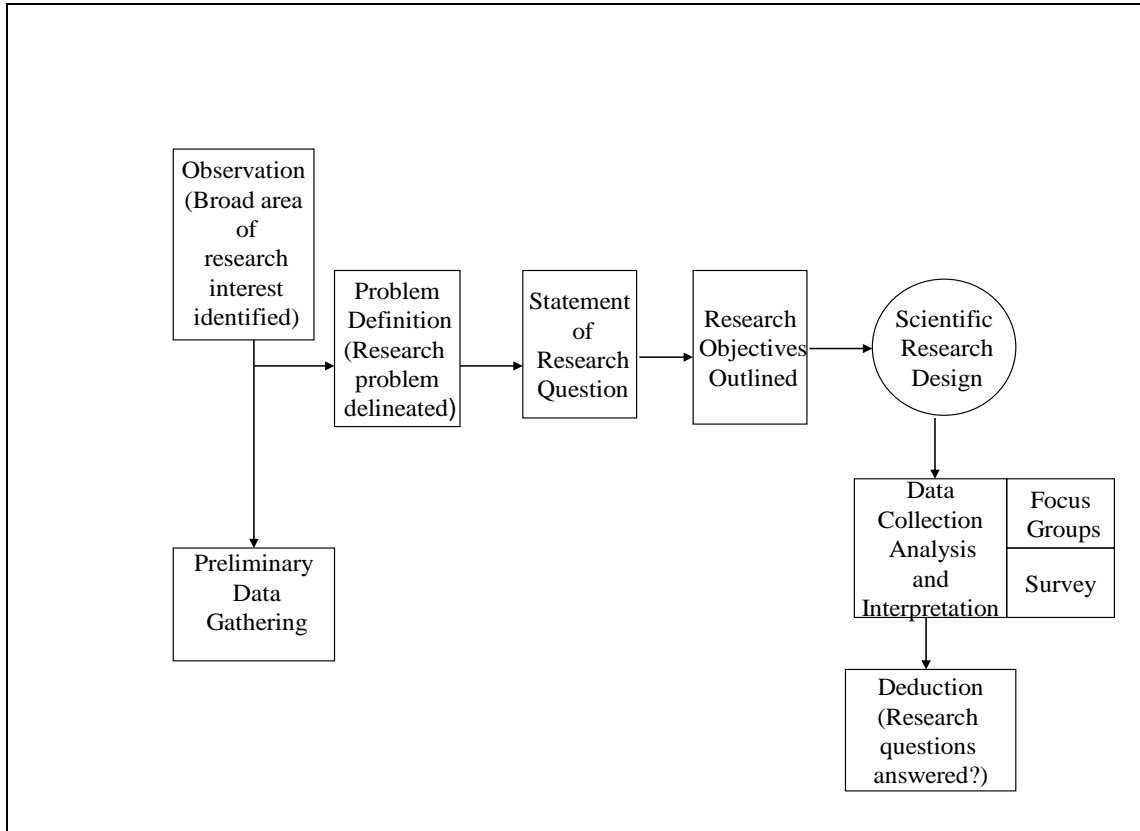
Source: Adapted from Sekeran, (1992)

Qualitative research phase one: focus groups with senior second level students

As detailed in chapter four, phase one of the research involved focus group interviews with senior second level students. The data collection vehicle was a focus group utilising a question guide that allowed some probing questions to be asked. The focus group respondents were mainly sixth year second level students who had a good knowledge of HEIs, as they were making decisions regarding their future college choices. In phase one, a total of four focus groups were conducted with senior second level students. Two focus groups were conducted in each county. The results from phase one assisted in the creation of the survey in phase two.

Quantitative research phase two: survey of senior second level students

Based on the results from the literature review and phase one of the primary research, several hypotheses were developed and an empirical survey was designed in order to examine the influence of organisational, environmental and personal dimensions on HEI image.

The research hypotheses which the researcher examined were:

H_1: The greater the non-academic image influence, the greater the HEI image components amongst senior second level students.

H_2: The greater the academic image influence, the greater the HEI image components amongst senior second level students.

H_3: The greater the physical image influence, the greater the HEI image components amongst senior second level students.

H_4: The greater the promotional image influence, the greater the HEI image components amongst senior second level students.

H_5: The greater the environmental image influence, the greater the HEI image components amongst senior second level students.

H_6: The greater the personal image influence, the greater the HEI image components amongst senior second level students.

The survey drew on scales primarily developed by Terkla and Pagano (1993), William and Moffitt (1997), Kazoleas *et al.*,(2001) and adapted from focus group findings.

Some measures were derived from other sources, which are detailed in the literature review. This phase assessed each of the hypotheses and the influence which organisational, environmental and personal dimensions had on overall HEI image, Waterford Institute of Technology (WIT) and Cork Institute of Technology (CIT) image. Responses were inputted into a statistical package for the social sciences SPSS version 15 computer software. The following analyses were run: reliability and regression analysis.

1.5 Research limitations

As with all research projects, limitations exist that have prevented the researcher from completely investigating the research area. The focus groups may have reliability and validity limitations. Due to restricted resources and time available, a broader audience could not be surveyed. The low sample number might lead to claims of findings being unrepresentative of the population. The researcher felt that, at times, it was difficult to get students to open up during the focus group interviews; it was felt that this lack of confidence related back to the age cohort that was responding. The researcher overcame this by stressing that all data collected would be treated with the strictest of confidence and open ended questions also helped to get the group talking.

Penn (1999) and Martin and Dixon (1991) highlight that parents and teachers can influence students college choice. The researcher feels that in order to achieve more in-depth results, further research needs to be conducted to include these groups in the research process. However, this was not possible due to resource constraints. The researcher was satisfied with the range of respondents questioned.

Both focus groups and surveys conducted during this research were conducted with senior second level students. Working with this age cohort brought about several limitations for the study. It was difficult to gain access to these students as the researcher had to gain permission from the principal of the selected secondary school; the researcher was not able to approach them directly. Time constraints also existed as students were only available during the school day and also the school year. Schools also did not want their students' studies to be interrupted due to this research, so many of the focus groups and survey sessions were undertaken during non-exam classes, such as careers. The geographic spread of respondents also presented difficulties. The researcher tried to organise days where she could undertake the research with as many schools in one area as possible. The survey technique does not facilitate probing but as this study utilised focus groups as well it is hoped that this limitation has been overcome. Validity threats which were evident included the duration of the focus groups. The researcher had limited time to conduct the focus group as permission was granted by the secondary schools to

conduct the focus group in one timetabled class. Another validity threat which was evident for CIT was its close proximity to UCC.

1.6 Structure of the thesis

Chapter two: The literature review is contained in chapters two and three. The chapter defines image and examines the relationship between image and reputation. It then investigates forming and maintaining image. Communicating and influencing the corporate image is then outlined.

Chapter three: This chapter focuses on the literature reviewed. It reviews image in the HEI sector in more depth by examining the influences on college choice: corporate image in the HEI sector, marketing HEI and finally college choice.

Chapter four: In this chapter, a philosophical and methodological overview of the current study is presented. The foundation and justification for the research approaches taken to investigate the objectives are clarified and rationalised. In addition, a detailed account is given of the research process and methodology utilised to investigate HEI image from the senior second level student's perspective, with qualitative focus groups utilised in phase one and quantitative surveys used in phase two. This chapter covers the main methodological issues, specifically the design, implementation of the chosen research methods and the planned analysis.

Chapter five: Chapter five contains the data analysis and findings of the research, - focus groups and surveys with senior second level students. The first phase's qualitative findings present an overview of the HEI image that exists among senior second level students. The second section of this chapter presents the data analysis and findings of the quantitative senior second level student surveys. It presents the respondent information, perceptions of HEI's, sources of HEI image, and HEI image formation. The results of the regression analysis on HEI image and hypotheses developed are presented.

Chapter six: Chapter six is composed of the researcher's discussion in relation to the literature review, research objectives and research findings. The chapter concludes with a discussion of the regression analysis on the hypotheses developed.

Chapter seven: Finally, chapter seven contains the conclusions drawn from the entire study. The contribution and limitations of this research are discussed as well as recommendations for future research.

Chapter Two – The Higher Education Institution Environment

2.1 Introduction

In order to provide the context for the study it is necessary to provide the reader with a synopsis of the challenges which HEIs face in their operating environment. This chapter commences with an outline of the demographic factors and Higher Education (HE). Subsequently, determining the target market and the funding for HEIs is discussed. In addition the HEI competition for students is discussed. A background to HE in Ireland is examined. This chapter concludes with a quantitative analysis of the Institutes of Technology (IT) sector.

2.2 The HE environment

2.2.1 Demographic factors and HE

Gabbott and Sutherland (1993) assert that a growing number of United Kingdom (UK) institutions are competing for a decreasing number of possible students. Goddard (2001) claims that in the UK, 22,000 HEI places were vacant since 1994 and there was a reported oversupply of 6,000 undergraduate student places in the academic year 2002-2003. Major (2001) informs that HEIs now compete heavily each year to 'hoover up' available students. Furthermore, Van Der Spoel (2003) reports that the HEIs in Holland are experiencing similar challenges. Therefore, the literature suggests that internationally there is competition amongst HEIs to attract the scare resource of students.

McDonagh and Patterson (2002) acknowledge that entry to full time HE in Ireland is strongly dependant on school leavers in the 16-19 age group. The OECD (2004) adds that expansion in education participation has concentrated on full time tertiary education for 18-21 year olds at the expense of widening access and lifelong learning. Hunt (2011) reports that 70% of entrants to HE in 2009 were directly from second level education in Ireland.

The Central Applications Office (CAO) (2009) reports the age breakdown of the 2009 CAO acceptance in table 2.1. The majority of acceptances are in the under 19 years age

bracket with 83.5% of this age group accepting level 8 courses and 74% of this age group accepting level 6/7 courses.

Table 2.1 Age Breakdown of CAO Acceptances 2009 in Percentage Terms

	16-17	18-19	20-22	23+
Level 8	44.4	39.1	4.8	11.8
Level 7/6	39	35	8.2	17.8

Source: CAO (2009)

Mc Donagh and Patterson (2002) warn that the largest change in Irish enrolment patterns will be the demographic one – the decline of the school leaving cohort. The OECD (2004) advises that the Irish birth rates are set to decline. This will have an effect on HEIs student numbers as a significant proportion of new entrants to HEIs come from this cohort.

According to the CAO Directors Reports of 2005 to 2009, enrolment of new entrants in Irish HEIs has increased slightly. Within the age bracket of 16-19 years, enrolment in the HEIs in the Republic of Ireland has remained relatively static in the academic years 2005 to 2009. Total enrolment of new entrants within the age bracket of 16-19 years encompassed 87% of the market in 2005 and 81% in 2009. This is diagrammatically presented in figure 2.1.

Figure 2.1 Total Net Acceptance for Admission to HEIs in Ireland Compared with Acceptance in the 16-19 Year Old Age Bracket Between 2005 and 2009
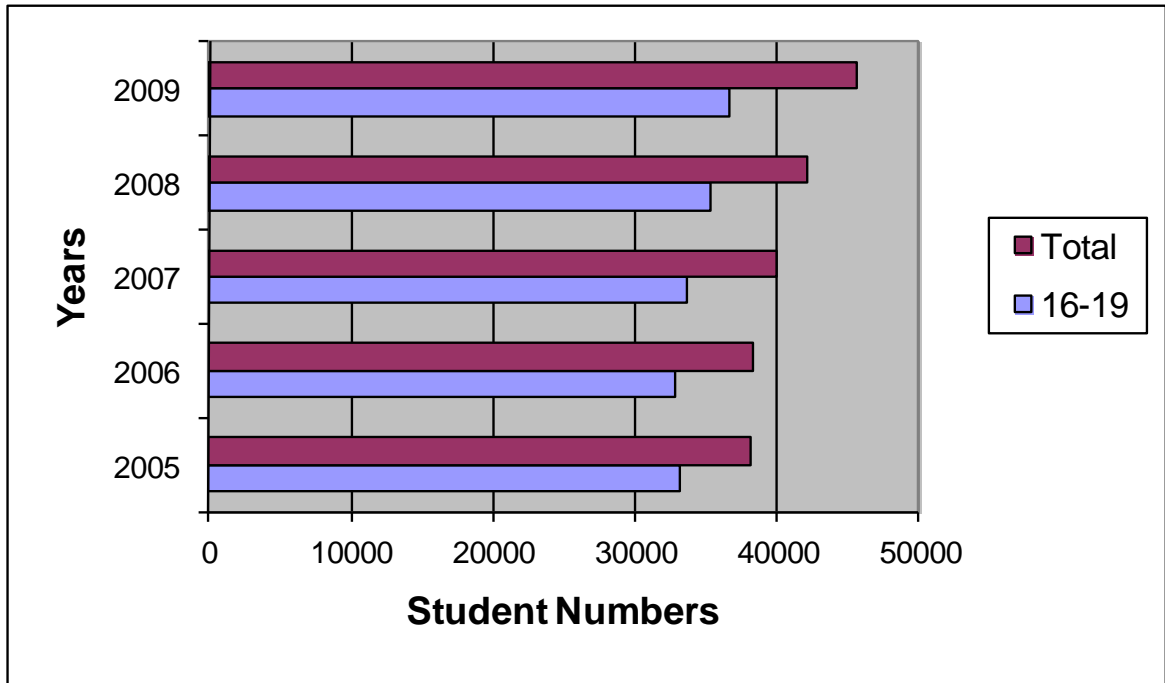
Thus, the literature indicates that HEIs are operating in an exceptionally competitive environment of falling student numbers due to demographic changes, and there is increased competition amongst the HEIs to attract students. This is due to the HEIs being very dependent on state funding. In this setting HEIs are making a concerted effort to proactively manage image and not let it reactively develop.

2.2.2 Background to HE in Ireland

Donnelly (2004), OECD (2004) and Hunt (2011) report in an economy such as that in Ireland, education is very important. Education is seen as the key to economic competitiveness and social cohesion. Fitzgerald (2000) asserts that Ireland has experienced substantial increases in participation in HE since the 1960s. It has been argued that the expansion in education participation at both second and third level has been one of the main factors underlying Ireland's recent economic growth. Hunt (2011) proposes that HE is the key to economic recovery in the short term and to longer-term prosperity.

White (2001) highlights that the number of students in HE in Ireland has increased by more than a factor of six between 1964 and 1997 from 18,000 to over 112,000. The prospects are still for further growth (see appendix 1). The HEA (2011) informs that the number of persons in full and part time third level education in 2009/2010 is 158,234.

White (2001) reveals that 30 years previously the Irish state had what by European standards was a small elite system of HE based mainly on five university colleges. A generation later, it has diversified and there exists a well developed provision of mass HE with greater participation rates among 18 year olds. Clancy (2001) notes that in 1968/1969 92.5% of full time enrolments in the Irish HE system attended Irish universities. The HEA (2011) report this decreased to 60.9% in 2009/2010. This is illustrated in table 2.2.

Table 2.2 Enrolment of Fulltime Students in HE by Sector 1968-2010

Sector	1968-1969		2009-2010		% Change
	Number	**%**	**Number**	**%**	**1968-2009**
Universities	18,056	92.5	96,436	60.9	- 31.6
ITs	1,449	7.4	43,476	39.1	+ 31.7
Total	19,508	100	157,234	100	

Source: Adapted from Clancy (2001) and HEA (2011)

Clancy (1995) records that the most striking feature of the growth pattern in enrolments in HE is the increase in the technological sector. In 1968/1969, this sector accounted for 7.4% of enrolments. According to the HEA, Ireland (2011) in 2009 /2010 the IT sector accounted for 39.1% of the total third level student population. This represents an increase of 31.7%.

The OECD (2004) stresses one of the strengths of Ireland's tertiary education system is the extent to which a diversity of mission has been maintained between the university and the institute sectors, as well as within the sectors. The OECD (2004) were particularly impressed by the extent to which the ITs see themselves as different from universities. They differ in the role they play in respect of the national spatial strategy in local economic development, in encouraging wider participation through local catchments. Furthermore, they differ in their support for apprenticeship and craft skills training and the provision of ladders of opportunity through different educational levels, and in the applied character of their work.

2.2.3 HEI target markets

Gabbott and Sutherland (1993) propose that HEIs are recognising and targeting students so they can maintain their market. Seidman (1995) acknowledges that recruitment commences with identifying prospects (Prospects are students who are eligible to attend). Gabbott and Sutherland (1993) consider that the initial stage in any market examination begins with establishing the features of present customers. McDonagh and Patterson (2002) identify mature students as potential prospects for HEI. These are students who are aged 23 or more on January 1st of the year of entry to full time courses. The CAO (2009) statistics show that mature acceptance of HEI places are increasing in recent years. There was a year on year increase in the number of mature acceptors 23+ for degrees, certificates and diplomas. This is presented in table 2.3 Acceptance of Mature Students to Full Time Courses.

Table 2.3 Acceptance of Mature Students of Full Time Courses

	2007	**2008**	**2009**
Degree			
Number	2,784	3,012	3,701
%	10%	10.1%	11.8%
Certificate/Diploma			
Number	1,418	1,540	2,518
%	12%	12.4%	17.8%
Total	4,202	4,552	6,219

Source: CAO (2009)

The CAO (2009) advises that 84% of college entry is in the under 20 age group. Figures to represent this are presented in table 2.4. McDonagh and Patterson (2002) inform that the intake to HEIs is regionally dependant. Morgan *et al*. (2000) found in a survey of first year HEI students, 'location' was given as the strongest influence on their preference for courses.

Table 2.4 Age Distribution of Full Time 1st Year Enrolments to HEIs 2009/2010

Age	**2009/2010**
17 and under	19,453
18	14,033
19	3,219
20	1,310
21	806
22	541
>23	6,219
Totals	**45,581**

Source: CAO (2009)

Therefore the literature suggests that HEIs are identifying target markets for entry into HEIs. The mature student target market has increased recently but the under 20's target market is pivotal to HEI student entry figures and warrants research.

2.2.4 The HE product

Gabbott and Sutherland (1993) suggest that definition of the product is complicated, from the view point of the HEI, as the core product is the programme. From the student's viewpoint, the value could possibly be much wider than the mere qualification. It could consist of skills, career prospects, social standing and contacts. Seidman (1995) adds that the product in education is the curriculum, academic programme and services. The literature seems to concur that education is a complex product offering.

Gabbott and Sutherland (1993) declare there is a resemblance between HEI offerings and as a result HEIs need to be concerned with market positioning and differentiated offerings, if they are to prosper. Clark and Hossler (1990) add that a HEI can have various positions: a privileged college, a low cost pathway to upward mobility or a church-related school. Kolter (1982) reports that a HEI markets itself by manipulating the organisation's offerings in terms of the target market's needs and desires and using effective pricing, communication and distribution to enlighten, stimulate, and service the markets. Moreover, Litten (1982) advises that before expressing communication towards prospects, HEIs need to investigate their precise characteristics and fit them to the characteristics of those potential students they are seeking to attract to the HEI.

2.2.5 Funding for HEIs

The literature highlights the international issue of funding for HEI. Van Der Spoel (2003) reveals that the recruitment of students has become essential for HEIs. Moreover, Gabbott and Sutherland (1993) highlight that as close association exists between funding and student recruitment: 'Money follows students', it is vital for HEIs to recruit in order to protect funding and thereby expand. McClaran (2003) notes that the harsh financial decreases of the early 1980s, coupled with the expansion in student numbers in the late 1980s and early 1990s led to HEIs becoming 'market driven'. Gabbott and Sutherland

(1993) observe that the UK Government manages HEIs' finances by encouraging institutions to increase their student numbers. Governments exert pressure on HEIs to grow student numbers generally, or in a particular field of study or to increase the intake from particular socio-economic groups. Tapp *et al.* (2004) state that, unfortunately, UK Government financial support has not kept pace with student numbers. This concurs with Luque-Martínez and Del Barrio-García (2009) who report a growing limitation of public resources for HE education.

Van Der Spoel (2003) argues that institutional financing is moving away from government funding to the institutions and towards more external funding. HEIs are seeking new ways to manage expenses and generate income. Cavusgil (1996) and Eastman and Allen (1999) recognise that a decreased financial support from government for HEIs has placed increased pressure on public institutions to partner with external publics to maintain and improve quality at the college and unit level. Beckerink (1999) explains that a growth in student enrolment numbers would benefit a HEI by providing extra tuition funds for use within the department and permit a wider assortment of programmes to be offered. Farr (2003) outlines that with more competition for students between the HEIs and changes to how students finance their studies, all HEI providers have become much more marketing-focused and as a result have begun to examine their student population in much greater detail.

In an international comparative context the OECD (2004; 2008) highlight that Irish tertiary education is strongly dependant on public funding. The state's contribution to university sector funding is about 85%, which is funded through the Higher Education Authority (HEA), while the state contribution to the Institute of Technology (IT) sector is 90% funded through the HEA. The Conference of Heads of Irish Universities (CHIU) estimates that there was a reduction of state funding to universities of 4% in 2003 and 10% in 2004, (OECD 2004). The Department of Education and Science in Ireland, reports that investment in Irish tertiary education stands at some €1.44 billion in 2004 (OECD, 2004). The HEA (2009) report that from a funding viewpoint, 2009 was dominated by the impact of the recession. Subsequent to the original 2009 allocation,

there were two further downward adjustments (totaling €24 million) to recurrent allocations during the year. Hunt (2011) advises that public funding for HE has fallen in recent years with the recurrent annual funding of HE currently at €1.3 billion.

The OECD (2004) argues that state funding of Irish HEIs is no longer a balanced way of funding. It is increasingly out of line with the situation and trends in some other advanced industrial nations, where non-state income is a growing element in institutional budgets. The HEA (2009) advises that the financial sustainability of Irish HE into the future will depend on Ireland's ability to maximise the impact of current levels of investment and Ireland's ability to increase funding through continued public investments and a diversification of funding sources. Hunt (2011) warns that if Ireland wishes to build on existing strengths, to meet forthcoming demand and to retain quality, it needs to broaden its funding base. The OECD (2004) recommends that the HEI's make an unequivocal move that generates non-state funding whether through fees from overseas students or income from short courses for industry, income from spin-off companies, or from other commercial activities. This should be retained by the institution concerned and should not be taken into account in the calculation of recurrent grants. This would remove any disincentive for institutions to generate additional resources by their own efforts and would encourage institutional diversity. Hunt (2011) recommends a new approach to HE funding based on the following key components: a new system of individual contributions to complement exchequer funding and a new model for the allocation of funding. Furthermore, The OECD (2004) outlines that most OECD countries that have historically had largely state-funded tertiary education systems are increasingly opening them up to market mechanisms in order to provide a counterweight to control by the state.

2.2.6 HEI competition for students

White (2001) explains that between 1970 and 2000, great changes occurred in HE in Ireland with 17 new publicly funded third-level teaching institutions created. The third level organisations publicly funded through the HEA in 2009 are presented in table 2.5, which follow: (see also appendix 2)

Table 2.5 Number of Third Level Organisations Publicly Funded through the HEA 2009

Organisation Type	Number
Universities	7
Institutions of Technology (ITs)	14
Other (Designated) Institutions	7
Total	28

Source: HEA (2009)

The Department of Education and Science (2000) warned about the prospects for ITs. It envisaged a drop in the numbers of full time students in these institutes. The Council of Directors of IT (2000) predicted that a drop in available students would make it difficult for colleges to maintain or expand their numbers.

The increasingly competitive HEI environment has been highlighted in the literature (Tapp *et al*., 2004; Gabbott and Sutherland, 1993; Luque-Martínez and Del Barrio-García, 2009 and Amara, 2004). Amara (2004) advises that this competition has been fuelled by globalisation, internationalisation and increasing economic challenges. Furthermore, Alves and Rapso (2010) envisage that this scenario of competition will become even more intense, deriving from the implementation of the Bologna Convention and the resulting harmonisation of academic degrees across the European Union. Schwartz (2004), Goddard (2001), Alves and Raposo (2010) and Hoyt and Brown (2003) inform that HEIs are now competing with each other for students, employees, research funding, industry contracts and donations.

Schwartz (2004) notes that traditionally UK HEIs gave only modest attention to promoting themselves. Farr (2003) acknowledges however that since 1990, HEIs have become much more marketing focused due to competition. McClaran (2003) claims that few institutions can afford simply to sit back and consider, in a reasonably relaxed way, those applicants who had chosen to approach them. Gabbott and Sutherland (1993) assert that HEIs need to recognise and comprehend their market in an attempt to maintain market share and the quality of their applicant. Hossler (1984) reports that HEIs have

developed two essential market-oriented needs: they want to plan and predict their enrolment more successfully, and to influence the college-going decision-making process of desired students.

2.2.7 The competitive market place

Cohen and March (1974) and Keller (1983) highlight that traditionally HEIs thrived in a setting of anticipated financial support and student enrolment with modest competition. Recent economic, demographic and political changes, have cast HEIs into a less certain territory. This resembles more and more an aggressive marketplace. Such a volatile environment calls for change to meet these new circumstances. HEIs are engaging in behaviours that are taken for granted in commerce but are still comparatively unknown in university circles.

Zinkhan *et al.* (2001) affirm that image allows the organisation the podium to recognise itself very visibly in the marketplace as standing for something. Abratt (1989) argues a well-built image, favourably disposed to an organisation will provide a tactical advantage over its competitors. Furthermore, Kazoleas *et al.* (2001) insist that in the competition for students in a climate of deteriorating enrolments and decreasing birth rates, the HEI can no longer await the arrival of student applications: they need to be more proactive. Moreover, Frank (2000) describes that today's HEIs give substantial attention to attracting students. HEIs tend to present themselves as excellent on some required dimensions, in order to communicate to parents, graduating school students and school counsellors that it should be the HEI of choice in today's competitive market. Thus the literature suggests that the HEI environment has evolved in recent years into a competitive arena. HEIs are therefore utilising their image to gain visibility and an advantage over the competitors.

2.3 Profiles of Cork and Waterford Institute of Technology

WIT

WIT (2011) identify Waterford Institute of Technology (WIT) as a state funded third level educational institution, situated in Waterford City, founded in 1970 as a Regional

Technical College (RTC). WIT was the first RTC to gain Institute of Technology (IT) status. Waterford Chamber of Commerce (2002) explains how this occurred: the government accepted the recommendations of the steering committee on the future development of HE, and the statutory order changing the title of Waterford Regional Technical College (WRTC) to WIT was signed in 1997. WIT (2011) note that WIT has gained delegated authority for research and taught awards at a high level which were previously awarded by the Higher Education and Training Awards Council (HETAC).

The WIT (2011) verifies the mi*ssion statement* of the Institute as being: *"WIT will apply excellence in teaching, learning and research within an inclusive student-centred environment to foster graduates of distinction who are ready to take or enhance their leadership role in business, the professions, industry, public service and society. The Institute will manage its hinterland as a learning region by empowering knowledge generation and knowledge transfer and is committed to the educational development of the region in a way that is reflective of its national and international aspects. The Institute will contribute to the economic, social and cultural development of the South East region and beyond"*.

WIT (2011) lists the six schools which WIT operates: Business, Education, Engineering, Health Science, Humanities and Science. According to HEA (2011) WIT registered more than 8,404 students for the academic year 2009/2010 (7,035 full time and 1,369 part time). WIT holds the position of third largest institution in terms of numbers within the IT sector.

The WIT Post Graduate Prospectus (2010) advise that WIT has developed on several campuses in the City. The main campus is on the Cork Road. The second largest campus is at College Street and this comprises some very historical buildings. The latest acquisition by WIT is an estate in County Waterford at Carriganore which will be WIT's corporate headquarters and will house research and innovation, a student village and provide extensive sports and recreational facilities.

WIT (2011) accepts that WIT has successfully grown its student numbers and expanded its profile. It has one of the highest levels of post graduate and research activities for the sector, and it has retained its technological and vocational profile as core work below level eight (honours degree level) and its culture of support to its local and regional communities.

CIT

CIT (2011) identify CIT, as formerly Regional Technical College, Cork, a college located in Cork, Ireland which opened in 1973. White (2001) adds while this college opened on a greenfield site, it was not an entirely new institute. The third level component of the existing Crawford Municipal Technical Institute it moved into the new RTC. White (2001) advises in 1997 the minister announced the upgrading of the Cork RTC to IT status. CIT (2011) verifies that CIT awards higher certificates, bachelor degrees and honours degrees, while postgraduate study leads to masters and doctoral (PhD) awards.

According to the CIT (2011) the mission statement of CIT is "to provide student centered education with a career focus for the benefit of the personal, intellectual and professional development of the student and for the benefit of the whole of society".

The Computing Technology Industry Association (2005) affirms that CIT courses span five main fields – Science, Business and Humanities, Engineering, Arts and Music. According to HEA (2011) CIT registered more than 11,382 students for the academic year 2009/2010 (7,456 full time and 3,926 part time). CIT holds the position of second largest institution in terms of numbers within the IT sector.

CIT (2011) advises that CIT has four principal campuses. The biggest is at Bishopstown, while CIT Crawford College of Art and Design (CIT CCAD) and CIT Cork School of Music (CIT – CSM) are located in Cork City. The National Maritime College of Ireland is located in Ringaskiddy in Cork Harbour.

2.4 Number of Students in WIT and CIT

In order to provide a background to the two ITs studied in this research, it is necessary to provide the reader with key statics concerning Waterford and Cork ITs.

Figure 2.2 illustrates the number of full time students in each IT in 2008/2009 and 2009/2010.

From figure 2.2 the IT with the greatest number of full time students in 2008/2009 outside Dublin is CIT, with 6,569 students. WIT was the second largest institute with 6,469 students. This trend was also evident in 2009/2010 with CIT enrolling 7,456 students and WIT enrolling 7,035. It is clear that both institutes' student numbers have increased from 2008/2009 to 2009/2010. CIT had the largest increase outside Dublin with 887 extra students. WIT recorded an increase in student numbers of 566 from 2008/2009 to 2009/2010.

Figure 2.2 The Number of Full Time Students in each IT in 2008/2009 and 2009/2010

	AIT	CIT	DIT	DL IT	DK IT	GMIT	ITB	IT Carlow	IT Sligo	IT Tallaght	IT Tralee	Lkenny IT	LIT	Tipp Institute	WIT
2008/2009	3208	6569	10409	1724	3866	4898	1239	2997	3438	2156	2097	2534	3765	332	6469
2009/2010	3540	7456	11348	1973	4259	5473	1560	3120	3775	2520	2340	2795	4123	481	7035
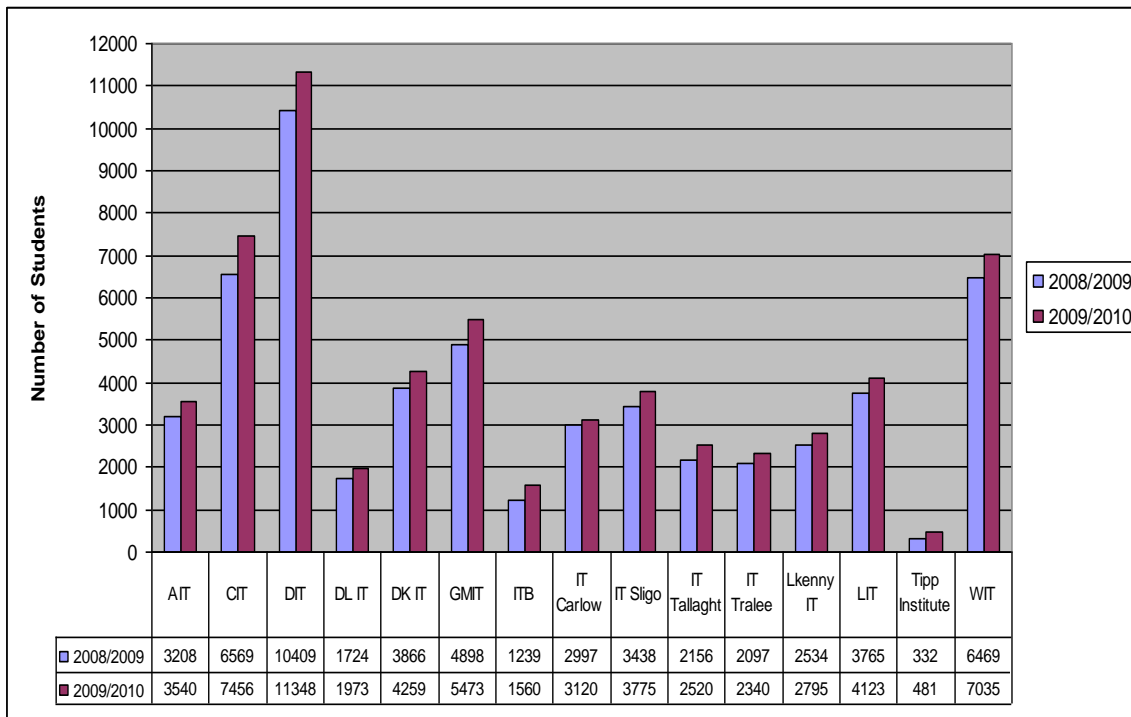
Figure 2.3 shows the number of part time Students in each IT in 2008/2009 and 2009/2010.

In 2008/2009 CIT had the largest number of part-time students outside Dublin with 3,382. WIT followed as the second largest with 2,333. This trend continued in 2009/2010 with CIT holding on to its place as the largest provider of part time education with 3,926 students and Waterford having 1,369. Between the period 2008/2009 to 2009/2010 the institutes encountered varied swings with regard to their part time students. CIT encountered an increase in part time student numbers, with an increase of 544 students in this period. WIT reported a decrease of 964 students.

Figure 2.3 The Number of Part Time Students in each IT in 2008/2009 and 2009/2010

	AIT	CIT	DIT	DL IT	DK IT	GMIT	ITB	IT Carlow	IT Sligo	IT Tallaght	IT Tralee	Lkenny IT	LIT	Tipp Institute	WIT
2008/2009	1919	3382	3586	160	1340	1397	1224	1783	1115	1773	821	400	987	385	2333
2009/2010	1858	3926	6767	209	1266	1636	1312	1591	1168	1819	814	454	1393	229	1369
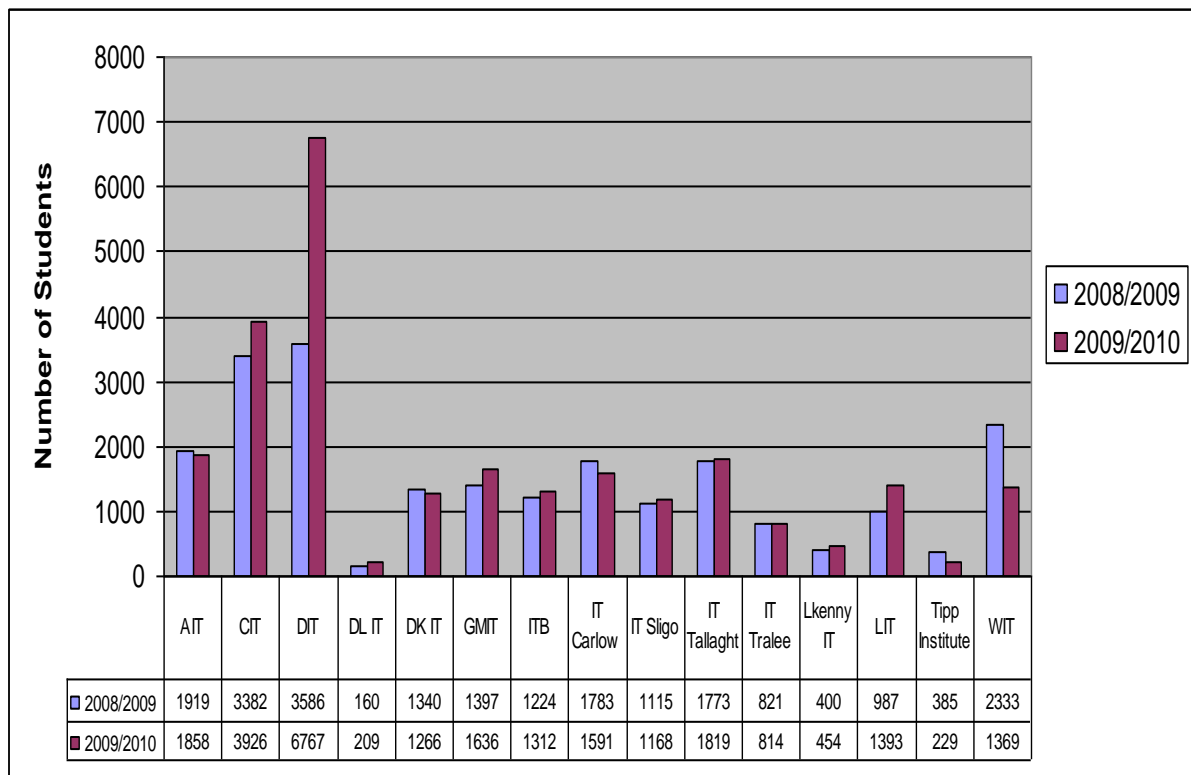
Source: HEA (2011)

Figure 2.4 highlights the number of full time level 6, 7 and 8 courses at Waterford and Cork IT as per the CAO 2011.

WIT offer a higher number of level 8 courses (honours degree) for 2011 entry, i.e. 38 such programmes. CIT offer 33 level 8 programmes for 2011 entry (see also appendix 3)

In the 2011 college entry, CIT offered the larger number of full time level 6/7 (higher certificates/ ordinary degree) programmes, accounting for 33 programmes. WIT offered 25 ordinary degree level 6/7 for this period. (See also appendix 4).

Figure 2.4 The Number of Full Time Level 6, 7 and 8 Programmes at CIT and WIT 2011
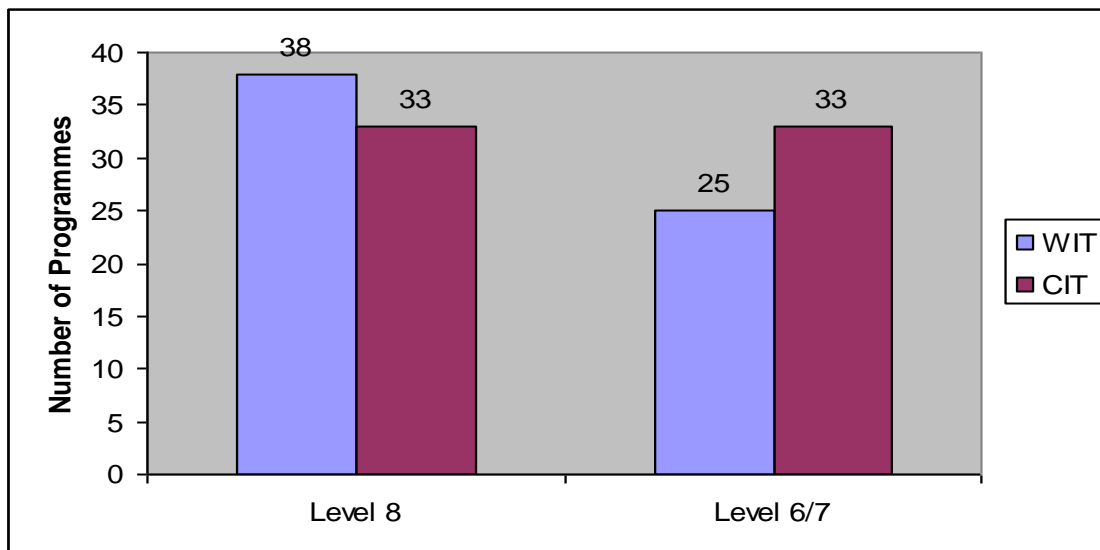
Source: CAO (2011)

2.5 Conclusion

HE is the key to economic recovery. HE is important in Ireland with 158,000 individuals in full and part time third level education. Today, HEIs are operating in a challenging environment, due to demographic, funding and competitive pressures. There is a dependancy on the school leaving cohort, with 70% of all new entrants coming from this group. Public funding which HEIs have traditionally received has been reduced in recent

times. HEIs are operating in a competitive market where they seek to increase student numbers and resources. Recently, HEIs have devoted increasing resources to their marketing activities. The next chapter will explore in greater detail image in the HEI sector.

Chapter Three – Key Aspects of Image

3.1 Introduction

Following on from the literature reviewed concerning the challenging environment in which HEIs currently operate, image has become critical for HEIs. Publics act towards an institution based on their image. Most of the published literature concerning image focuses on the 'for profit' sector. Therefore, this chapter commences by offering an understanding of the elusive image construct. The elements of image, being communication, publics and perception, shall be reviewed. The literature concerning the image reputation debate will be inspected. Image formation, looking at the organisational (traditional, inside out model) and recipient perspective will be considered. The various approaches to image are highlighted. The issue of linking perception and reality with regard to image is analysed. The topic of monitoring image is reviewed. The different means of communicating and influencing (internally and externally) image are evaluated.

The role of image in HE is assessed. HEIs operate with up to 16 publics therefore, the issues of HEIs relating to publics is explored. The means of influencing perceptions is examined. Raising awareness of HEIs is pivotal to their image. Therefore the marketing tools that are at the HEI's disposal are scrutinised.

3.2 Defining image

3.2.1 Understanding image

Alvesson (1998) explains, at its simplest, image denotes the overall view of an object. Dichter (1985) notes that image refers to a global or overall impression, or the total impression an entity makes on the minds of others. According to the Concise Oxford English Dictionary (1995) the noun 'image', is viewed as 'a simile, metaphor, mental representation, an idea or a conception, the character of a 'thing' or person as perceived by the public'. As a verb, making an image is seen as portraying or mirroring something. Prahalad and Hamel (1990) and Kolter and Andreasen (1996) propose that image is a combination of some or all of the following elements: beliefs, attitudes, stereotypes, ideas, significant behaviours or impressions that an individual holds with respect to an

item, individual or entity. Moreover, Kolter and Fox (1995) conclude that an image is the total beliefs, ideas, and impressions that an individual has of an entity. Thus the literature suggests that image is a complex multifaceted concept formed when diverse elements combine.

According to Grunig (1993), Haedrich (1993) and Hutton *et al.* (2001) there is a lack of consensus in defining corporate image. Budd (1969) remarks that corporate image consists of 1 letters that spell out an alphabet of meaning and misunderstanding!' Palacio *et al.* (2002) advises that the concept of image has been the object of much confusion stemming from the polysemy of the term itself.

Bristol (1960) defines corporate image as "merely the picture which your organisation has created in the minds of your various publics". Capriotti (1999) cited in Palacio *et al.* (2002) refers to image as the mental representation of a real object that acts in the object's place. Bravo *et al.* (2009) notes that corporate image could be considered as a type of brand image in which the name refers to the organisation as a whole rather than to its individual products. Howard (1998) argues image "comprises all the visual, verbal and behavioral elements that make up the organisation". For the purpose of this study corporate image is viewed as per Berstein (1984), Dowling (1986), Moffitt (1994) and Treadwell and Harrisons (1994) explanation of corporate image. The consensus from these authors seems to be corporate image is the impression that individuals perceive of an organisation and the amalgamation of many impressions that result from the interaction of an individual's beliefs, ideas, feelings, and perceptions about the organisation.

Martineau (1958) regards the image of commercial establishments as the way in which organisations are described in the consumers' mind based on functional qualities and psychological attributes. Furthermore, Kennedy (1977) advises that image has two principal components: functional and emotional. The functional relates to tangible characteristics while emotional is associated with psychological dimensions that are manifested by feelings and attitudes towards the organisation. These feelings are derived

from individual experiences with an organisation and from the processing of information regarding the attributes of the organisation. Wan and Schell (2007) and Anastasi (1966) claim that these audience-centred perceptions of corporate image relate to the company's merchandise, services, management quality, communication activities, employee orientation, to the appearance of its buildings, grounds, printing type used on its letterhead and company philanthropy.

Flanagan (1967) recognises that corporate image is not new as AT&T has been involved in image building since 1908. According to Bromley (1993) corporate image can be used to describe a firm or establishment, such as a small business, or division in a larger corporation. It can also be used to refer to a firm or establishment such as a university, an international firm or state government. Pardey (1991) and Kazoleas *et al.* (2001) ascribe the expression 'corporate image' while authors such as Belanger *et al.* (2002) and Arpan *et al.* (2003) apply the phrase 'organisational image' when referring to image. Thus the literature uses different terminology in the image literature when discussing this phenomenon.

Bromley (2001) reports that organisational image has been described as the internal collective state of mind that underlines the organisation's efforts to communicate itself to others. Wei (2002) sees image as consisting of the elements of the audience and persuasion. Arpan *et al.* (2003) and Avenarius (1993) explain that these definitions of corporate image stem back to the idea that an exclusive corporate image is fashioned in the external audience's mind. The literature suggests that corporate image and organisational image are identically developed using perception, publics and communication. For the purpose of this dissertation the term image will be used to represent organisational or corporate image. The elements of image are diagrammatically outlined in figure 3.1. The three principal elements are perception, publics and communication and these interact to form image.

Figure 3.1 Elements of Image
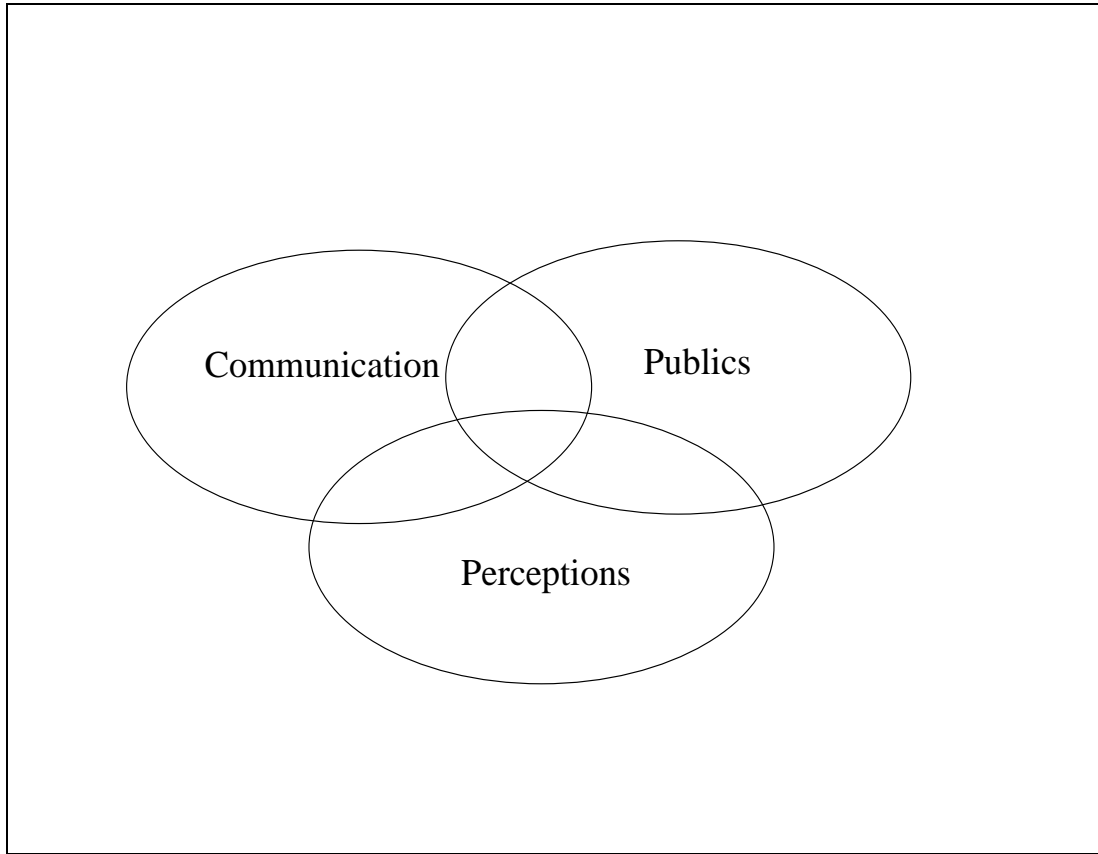
Image according to Gray and Balmer (1998) is what comes to mind when one sees or hears an organisation's name. According to Holzhauer (1999), Bravo *et al.* (2009) and Abratt (1989), image is the set of perceptions that individuals have of a corporation. Wei (2002), Fombrun (1996) and Hatch and Schultz (2003) agree that the image of a corporation hinges on its public's perceptions, whether it is external clients or internal staff. Gioia and Thomas (1991) and Dichter (1985) explain that image is joined to the perception of how external constituencies see the organisation in spite of whether these views are normative or manipulated. Furthermore, Abratt (1989), Berstein (1992), Alvesson (1998) and Dowling (1986) outline that image is not what the corporation believes it to be, but the views and beliefs about the corporation that exist in the minds of

its publics. Boulding (1956) affirms the organisation does not own its image but rather it is the property of individual persons and not the organisation.

Leuthesser and Kolhi (1997) and Van Riel and Balmer (1997) acknowledge that corporate image is the result of a communication process in which the firm creates and transmits an identity that reflects the values and essence of the brand. Goldsmith (1997) insists that flourishing corporations, particularly service organisations, make exclusive images to signify what they are, what they stand for, and what clients and the community can expect from them. Worchester (1970) suggests that image is the net result of the dealings of all experiences, impressions, beliefs, feelings and information individuals have about a corporation. Kazoleas *et al.* (2001) asserts that an image is the effect of a difficult and multifaceted struggle of attributes processed by the person through communication sent by the establishment and through other planned and unplanned social, historical, private lived experiences and material factors.

Furthermore, Schuler (2004) suggests that all organisations' publics create images about them through their perception and their way of dealing with organisational information. Christensen and Askegaard (2001) note that image is a word deliberately constructed to extract rather precise responses and reactions. Image is based on the interpretive capabilities and preferences of publics. Furthermore, Hatch and Schultz (1997) stress that image arises from individual or group interpretation and from messages by the establishment of a desired portrait of itself. This is diagrammatically represented in figure 3.2. Thus the image stems from within the organisation via an organisation message, which the stakeholder interprets to create the perceived image.

Figure 3.2 Image Process
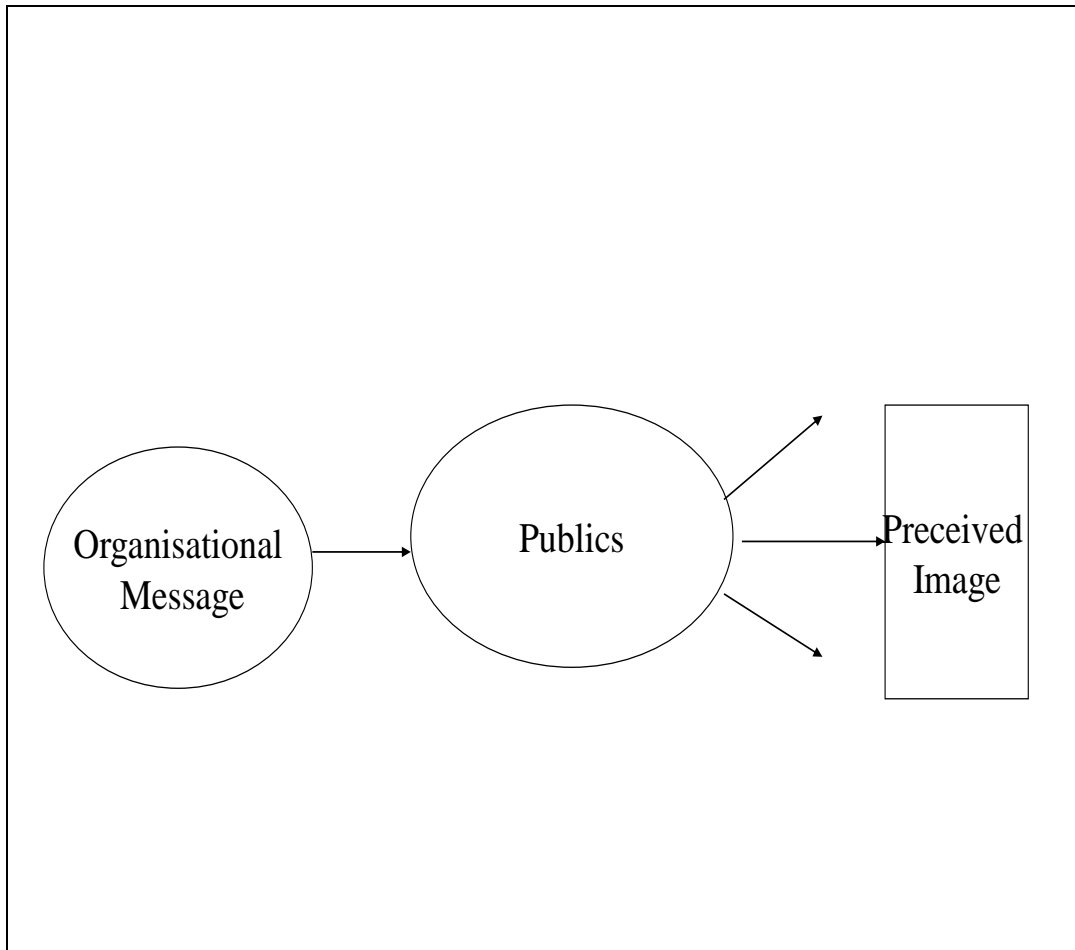
3.3 Distinguishing the concept of image and reputation

Dolphin (2004) notes that confusion exists as to whether image and reputation are identical. Gotsi and Wilson (2001) highlight that there are two sides to the image-reputation debate: the 'identical' debate (i.e. corporate reputation is synonymous with image) and the 'differentiated' debate which considers the terms to be different, yet interrelated. These concepts frequently appear in the literature as identical, as totally separate concepts or as interrelated phenomena depending on the viewpoint adopted.

Kennedy (1977), Dowling (1994), Alvesson (1998) and Bromley (1993) argue the analogous school of thought that corporate reputation is sometimes seen as identical with image. Kennedy (1977) claims that an image takes many years to establish and argues that terminology used in corporate image studies is quite diverse in the sense that different terms may describe the same concepts. Thus the literature is suggests that there is an argument that reputation and image are indistinguishable, take a long time to develop and that different terms describe the same concept.

Dolphin (2004) and Wei (2002) announce that the words image and reputation are interchangeable. There is a connection between image and reputation but they are not identical. Grund (1996) adds that the corporation name and image with important publics, including clients, the community, investors' image and workforce, merge to form corporate reputation. Argenti (1997) and Fombrun (1996) declare that a corporation's reputation is directly linked to its capacity to increase and project an exclusive set of images to numerous diverse publics. Alessandri (2001) insists that repeated impressions of an organisation's image can form a reputation of an organisation over time. Corenelissen and Thorpe (2002) see reputation as a subject's collective reputation of past images of an institute (induced through either communication or past experiences) established over time. Bennett and Kottasz (2000) claim those perceptions of past actions may derive from personal experiences, yet could result from word-of-mouth. The literature suggests that reputation needs image in order to survive.

Several authors assert that image and reputation are different (Dukerich and Carter, 2000; Balmer, 1998). Balmer (1998) accepts that as the former concerns the publics' most recent ideas concerning an establishment, reputation represents a value judgement concerning the establishment's merits. Bennett and Knottasz (2000) verify that because reputation evolves in due course, it cannot be created as swiftly as an image. Dukerich and Carter (2000) propose that individuals can distinguish between the reputation of the establishment and its exterior image. The former represents the public's views of the establishment whereas the latter represents how establishment members feel outsiders see the establishment.

Gotsi and Wilson (2001) conclude that there is scope to combine the differentiated schools of thought with regard to corporate image and reputation, as they appear to be showing two sides of a two-pronged relationship. In this relationship, corporate image that publics structure can be prejudiced by their total appraisal of the corporation i.e. its corporate reputation and at the same time a firm's corporate reputation is principally prejudiced by the corporate image that publics shape daily for the establishment. Rindova (1997) reveals a bilateral relationship between the concepts of corporate reputation and corporate image. Dolphin (2004) found a strong correlation between reputation and image, though few respondents regard them as synonymous.

3.3.1 The current perspective

Davies *et al.* (2001) view reputation as a combination of image, that being the external public's perception identity and the internal stakeholders' perspective. Eberl and Schwaiger (2005) feel that reputation is related to, but distinct from corporate image since reputation is a more robust construct with respect to the company's time and communicational efforts. Furthermore, Hawabhay *et al.* (2009) found managers believe that corporate reputation is closely linked to image and is built over time. Balmer (1998), Bromley (1993) and Fombrun (1996) propose that corporate reputation is dependent on the everyday images that people form of an organisation. Birkigt and Stader (1986) highlight that this is based on a company's behaviour, communication and symbols while Barick and Kolter (1991) acknowledge that at the same time, corporate reputation can influence stakeholders' images of a firm.

It is evident from the literature that there are many varied arguments and plausible viewpoints as to the relationships between image and reputation: the indistinguishable debate that image and reputation are identical; the interconnected argument that there is a connection between both concepts; and diverse yet linked arguments that they impact on each other. There is also merit in the isolated debate that they are separate concepts. For the purpose of this research, image and reputation will be viewed as separate concepts as evident by the development of separate scales for image (Terkla and Pagano, 1993) and

reputation (Walsh and Beatty, 2007). This literature clarifies the confusion surrounding the image and reputations relationship.

3.4 Forming and maintaining image

Alfred and Weissman (1988) highlight that image management is the management of public judgments through evaluation of the effectiveness of institutional marketing and public relations techniques, joined with redesign of corporate communication plans to make an impact with publics. Zinkhan *et al.* (2001) note that organisations develop structures and systems to sustain both internal and external communication. Zinkhan *et al.* (2001) however argue that it is imperative to bear in mind that corporate image is essentially multidimensional and that a company will have an image whether or not it does something towards the construction of one.

Poon Teng Fatt *et al*. (2000) acknowledges that many organisations spend time, resources and effort to construct an image for their company. Moreover, Gray (1986) suggests that construction and communication of the corporate image has become a key concern for organisations and company leaders as it is important for gaining and constructing public confidence. Zinkhan *et al.* (2001) argue that corporate image is a controllable resource that can be mistreated at the organisation's own peril; it is of tactical significance to the achievements of the objectives of the organisation. Poon Teng Fatt *et al.* (2000) comment that management need to comprehend how the procedure of developing corporate image works and how it can work for their corporation. The literature suggests organisations are extremely interested in their corporate image, as it impacts greatly on their public influence. This emphasises the importance of the initial development of image.

3.4.1 Image development
3.4.1.1 Organisational perspective

Gray (1986) emphasises the significance of involving each person in the corporation: 'corporations do not produce images, individuals do'. From the Chief Executive Officer to personnel and line management, they all are carriers of the company image torch. Furthermore, Zinkhan *et al.* (2001) note that the corporation itself guides the entire

process; it establishes the degree to which the corporate image management plan is ordered, in terms of what needs to be completed, how it should be completed and what the overall objectives of the process are. Furthermore, Zinkhan *et al.* (2001) highlight that the design and the management of the corporate image is not an accident but an ongoing process that requires a planned approach to accomplish the required organisational goals.

Cornelissen (2000) reports that the management of the organisation's image has been conventionally influenced towards an organisation's perspective, that it is concerned with the management of organisational image from the organisation's viewpoint. This customary "inside-out" model of corporate communication is highlighted in the writings of Abratt (1989), Van Reil (1995) and Balmer and Soenen (1999). Cornelissen (2000) argues that traditionally the market place consisted of mass communication and uniform publics, therefore a 'stable publics' response was assumed. There was little competition so communication effects could be presumed and therefore a perspective from the establishment outward was adequate. Gray (1986) supports this argument that corporate image construction commences with individuals inside the organisation, namely staff. The image employees form spills into the community and spreads beyond with a rippling effect. The community, customers, suppliers, investors, the media and the government cause the organisation's image to leak into society, which subliminally absorbs it. This is diagrammatically represented in figure 3.3. Bromley (1993) asserts that individuals belong to many interlocking publics with overlapping memberships: there are small, primary groups such as relations, friends and secondary groups: public and private division of organisations; religions; and charities. Social interaction, communication and influence happen through different forms of association. In the secondary groups, individuals interact indirectly, through intermediaries, notices or other means. An individual's reputation spreads well past his or her direct contacts, creating secondary images diverse from the primary images. Cornelissen (2000) argues that research into image formation needs to differentiate the mixture of the images held by respective publics.

Figure 3.3 Image Formation and Projection
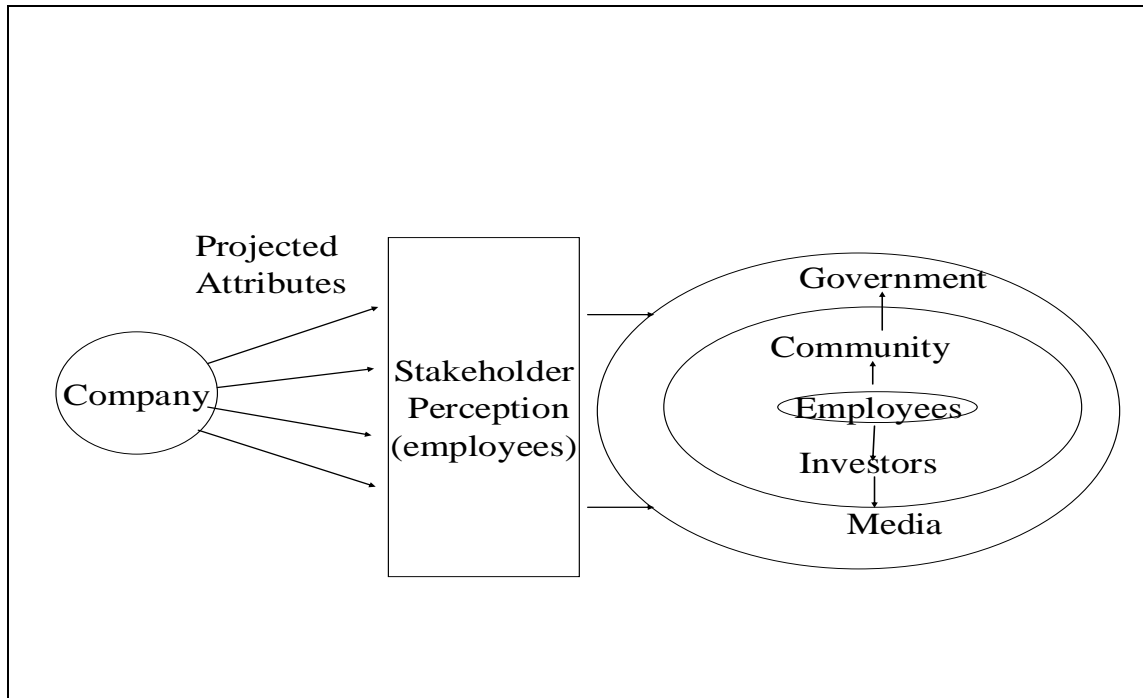
Furthermore, Christensen and Askegaard (2001) highlight that to locate the perceptions and impressions, namely, organisational image, chiefly in the minds of external publics is to neglect the point that the most vital recipients of organisational symbols may in fact be the members of the distributing organisation. Cheney and Christensen (1999) reveal that such numerous memberships imply that the organisation's own members potentially belong to groups that form impressions of the organisation; a detail that has been openly accepted in the consolidation of corporate communications functions in numerous sectors.

3.4.1.2 The recipient perspective

Cornelissen (2000), Zinkhan *et al.* (2001) and Gray (1986) imply that images are constructed out of numerous elements held by publics; some of which are guarded by the organisation such as corporate advertising. According to Nguyen and LeBlanc (2001) even for a person who has not yet had experience with an organisation, the perception may be formed from other sources of information such as advertising and word-of-mouth. Cornelissen (2000) advises that the recipient perspective is when publics decide

whether they consider communication, and to which message sources they give consideration. This perspective captures the important forces of corporate communication of a company but recognises that such communication takes place amidst other communication sources (interpersonal, corporate communication, interpersonal, word-of-mouth, and other communication). The conventional (inside out) model, that image is shaped from the organisation, is not ignored but complemented by adding the magnitude of numerous communication sources and interactivity (between the organisation and publics) within the communication processes. This is diagrammatically presented in figure 3.4. Furthermore Cornelissen (2000) suggests that the communicative behaviour of the organisation has to be coordinated with the cognitive processing and behaviour of publics. Thus, there is a need for a recipient perspective.

Figure 3.4 Image Formation and Two-Way Interaction Process between an Organisation and its Publics with External Source
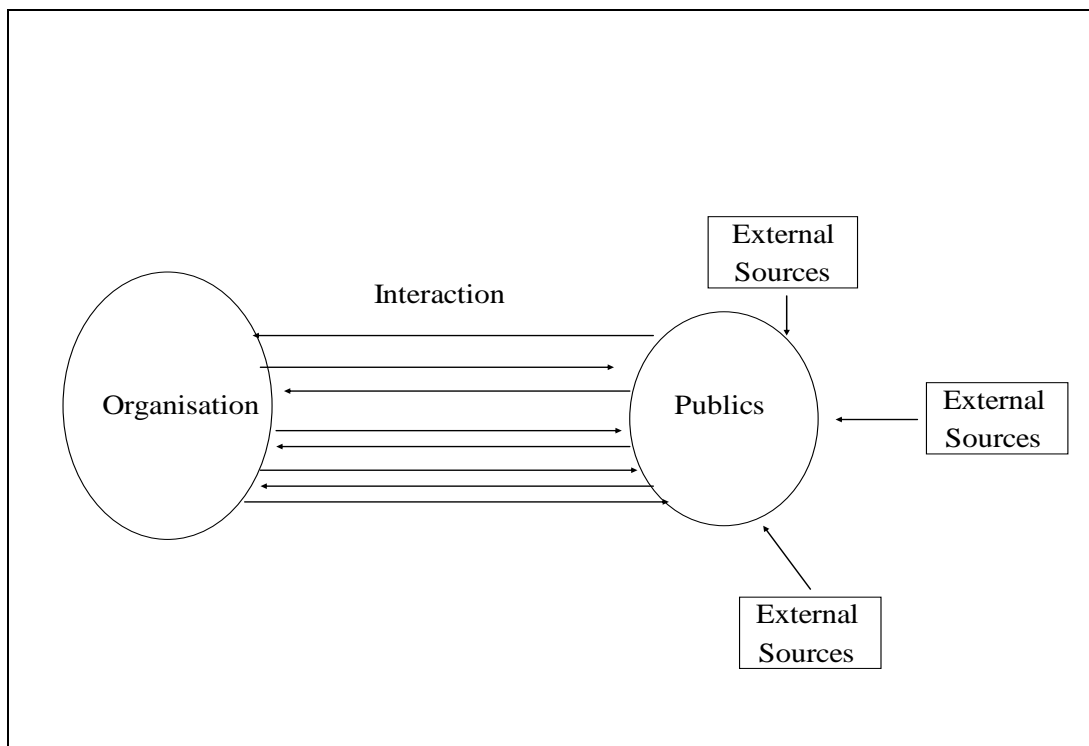
Source: Cornelissen (2000)

41

Van Reil (1995) and Balmer (1995) agree with the recipient perspective and acknowledge that images are certainly not complete in themselves. Moreover, Cornelissen (2000) explains that image is a perception by the recipient of his or her received projection of the corporate identity and own reflections of interpretations of diverse elements from a variety of sources. It is a difficult cognitive interpretation of an institution that members of the crucial publics embrace. Dowling (1988) agrees with this recipient perspective and proposes corporate image is generally linked to the receiver's part of the communication process. Dichter (1985) affirms that building institutional image is a lengthy process that can be improved by technological breakthroughs and unexpected achievements, or destroyed by neglecting the needs and expectations of the various groups who interact within the organisation.

Thus, the literature highlights that there are various perspectives to image management but corporate image does require a degree of management by the organisation. Traditionally, corporate image was influenced by an organisational perspective, the 'inside out model', the image is developed by the employees within the organisation and then moves into society. The literature suggests that the most recent argument is that image is formed by publics who decide what communication to engage in. Thus, this recognises the necessity to determine the image held by publics in the first instance.

3.4.2 Image and publics

Zinkhan *et al.* (2001) emphasise that prior to implementing an image programme, it is advisable that an organisation recognises what image it wants to develop in each of its publics. A complete appreciation of the different publics will assist in manipulating an appropriate image programme. Zinkhan *et al.* (2001) further argue that in order to illustrate a successful corporate image, an appreciation of all the public's perceptions, expectations and desires is required. The desires and aspirations of the different publics will alter and therefore identification of these varying needs can differ between the publics.

Gray (1986) warns that dealing with diverse publics can bring problems. Schlenkar and *et al.* (1990) state that individuals present different edited versions of themselves to different publics. This is seldom fraud but a normal effect of dealing with diverse social situations. Marziliano (1998) remarks that the process of meeting the prescribed standard becomes difficult because of the diverse expectations that survive in the different circumstances. Marziliano (1998) notes, externally, organisations vigorously produce an "image" to be managed in order to produce an approving perception for outsiders. Such an organisation's image includes those elements that its members believe outsiders will use to differentiate it from other organisations. Christensen and Askegaard (2001) report that the organisation seeks to comprehend the perception of particular organisational symbols among select vital publics. Furthermore, Christensen and Askegaard (2001) advise that in order to devise a precise corporate profile, decision makers frequently want to know how the organisation is viewed by the publics or put differently, how the signs that symbolise the organisation are received and changed into corporate images.

Zinkhan *et al.* (2001) note that a desired image should be defined and planned as accurately and cautiously as the other marketing elements such as the brand name, product, pricing, advertising and distribution. A comprehensive analysis of the organisation's present image is obligatory prior to any corporate image programme commencing. To help ensure that an accurate image is getting through to the publics, the complete image should be consistent, carrying the same idea and following the same messages. Furthermore, Zinkhan *et al.* (2001) claim the precise image should leave little scope for public interpretation. The corporate image is the external public's perception that results from their interactions with the establishment. It is therefore rational that if the organisation is guided by its vision and mission in its daily exchanges with its publics, the resulting image will echo those guiding values.

Thus, the literature attaches importance to an organisation with many different images. It suggests that an organisation should have a comprehensive understanding of the publics that it services. Organisations need to understand how these publics translate information into the corporate image.

3.4.3 Approaches to corporate image management

Zinkhan *et al* (2001) highlight four approaches to image management as illustrated in figure 3.5.

Figure 3.5 Approached to Corporate Image Management
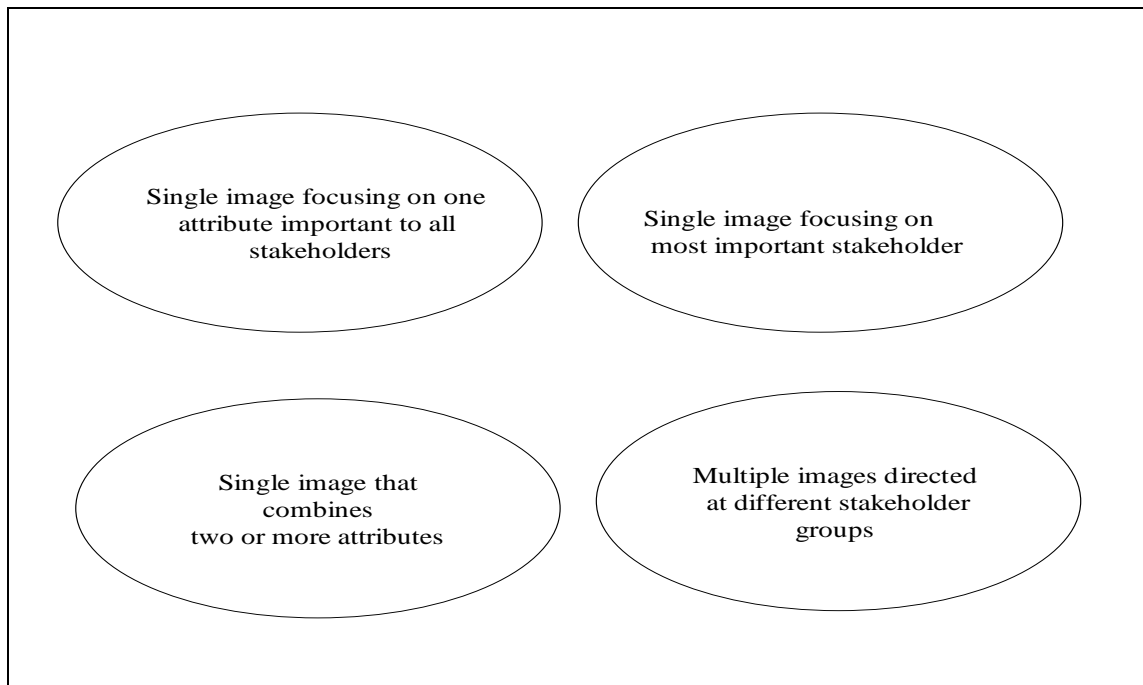
Zinkhan *et al.* (2001) highlight a single image, focusing on one feature imperative to all publics. The organisation makes a promise, whether stated or un-stated, to all publics; an example would be trust. A second strategy is to focus on the most important publics and create an image customised to that selected public. A third strategy would be to develop an image that combines two or more elements that are relevant to publics. Focusing on one image or one public may be too restrictive for some organisations. Finally, there is the approach of creating an image programme that attempts to sway the numerous images held by different publics. This mutli-pronged tactic could be successful in conveying a vital significant image to each intended public. Nevertheless, this approach may also lead to a varied corporate image that can lead to misunderstanding among the organisation's publics. Thus the literature suggests that there is no single strategy that is used by

organisations when deciding what image to project to publics. It is very much dependant on the organisation's preferences, objectives, needs and stakeholders. This study does not take a management perspective; but it does recognise the existence of various stakeholder groups and focuses on one of these.

Marziliano (1998) concludes that it is necessary to control corporate image as there is an inconsistency between what we think we perceive that others believe. Bromley (1993) suggests that management can bring perceptions more in line with reality. Management can work to ensure that the images shaped by all their publics are correctly reflected in the organisation. In interacting with their environments, organisations assume an energetic role in defining organisational demands and incorporating them into their own description of reality. Marziliano (1998) asserts that an establishment must create different representations of itself, that are logical in the context of diverse external contexts and internal assumptions. Gray (1986) proposes that corporate image is important in providing the association between public perception and organisational reality. Moreover he claims the aim of a corporate image programme is to bring perception into line with reality. Not even the most expensive advertising or PR efforts will bring into sharp focus the identities of organisations, without first responding to the challenges of creating an apparent and optimistic identity, based on organisational reality – on what the organisation is, where it wants to go, and how it plans to get there. This is diagrammatically presented in figure 3.6.

Figure 3.6 Corporate Image: the link between Corporate Reality and Public Perception
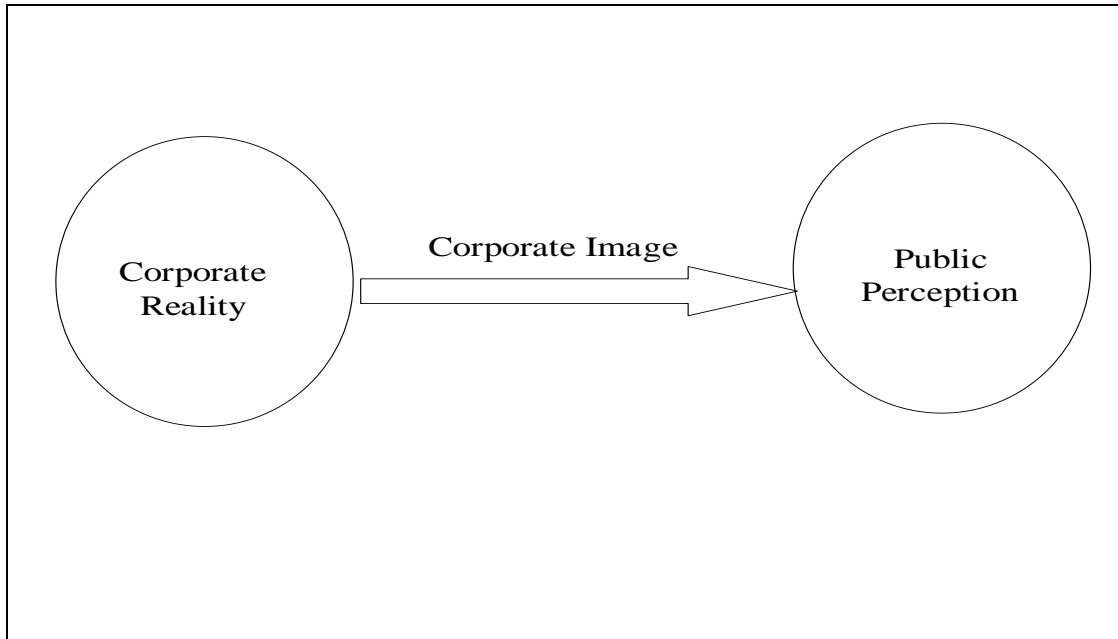
Gray (1986) accepts that organisations recognise that public's perceptions are part fable and part reality. To divide fable from reality, an organisation manages its image illustrated to the many publics with which it is in contact. Christensen and Askegaard (2001) stress that the communication manager cannot hope to discover any natural or true representation of the establishment. Berg and Gagliardi (1985) add that since symbolic representations of the establishment are only partial reflections of the establishment and frequently seldom match the establishment's reality behind the symbols, they are phony representations. Marziliano (1998) concludes that it is not sufficient to build an attractive image, since this image must be acknowledged by the publics. Organisations that are capable of creating an incorporated image of themselves are successful. Poon Teng Fatt *et al.* (2000) remind that this is a long-term process and involves the endeavours of the complete corporation.

Thus, the literature suggests that the public's perception may not equal reality. Therefore careful management of the corporate image is required in order to ensure that public perception and reality are not skewed.

3.4.4 Monitoring corporate image

Dutton and Dukerich (1991) consider that the demise of an organisation's image is an important prompt for action. Gray (1986) and Zinkhan *et al.* (2001) affirm that the public's image of products and services, like those of individuals and organisations, need to be monitored and attuned. It is vital, then, to differentiate between the product image that publicity promotes and the product image fashioned and shared by customers. Careful monitoring should disclose any disparity between the images the marketers are trying to produce and the impression created. Moreover, Gray (1986) advises that regular re-evaluation of the image provides the organisation with an apparatus to converse with the publics and to maintain the organisation's image. Zinkhan *et al.* (2001) explains that feedback on an organisation's image impacts on the usefulness with which the organisation image process is being managed. The successful organisation relies on continuing efforts to protect and maintain positive public perceptions. Regular re-evaluation of the images provides the organisation with an arena to communicate within. The likely sources of feedback are recognised as client surveys, workforce surveys and image tracking mechanisms. Furthermore, Zinkhan *et al.* (2001) stress that it is imperative that organisations continuously measure the perceptions held by the different publics. A regular two-way communication between the organisation and its target publics is essential to emphasise the desired image.

Dowling (1986), Gray (1986) and Balmer (1998) agree that to manage an organisation's image requires both a close appreciation of how these images are fashioned and how to measure them. Smith (1993) identities four areas from which corporate image is formed. This is diagrammatically represented in figure 3.7. These are products or services, social responsibility, environments and communications. Furthermore, Duimering and Safayeni (1998) inform that a range of fundamentals were linked to the occurrence of the image construction and maintenance in organisations. These include the official structure,

47

language vagueness, responsibility and authority linked with official organisational roles, as well as certain cognitive processes by which individuals select, abstract and represent organisational events for official reporting and communications. Mofitt (1992;1994) identify numerous factors that can influence the stakeholder's image or perception of an organisation. These include persuasive messages released by the organisation, conversations with family and friends about the organisation, advertising for the organisation, prior transactions with the organisation and exposure to the organisation's facilities and buildings.

Figure 3.7 Source of Image Formation
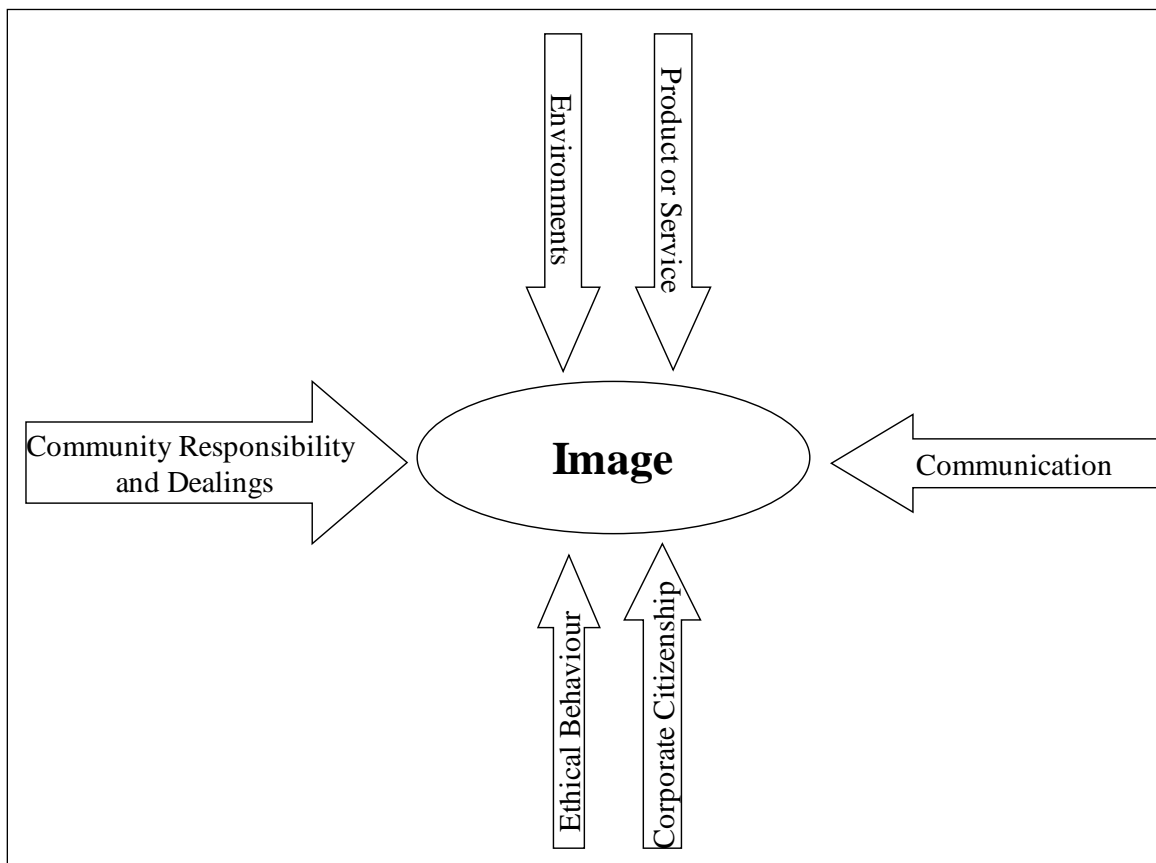
The literature suggests that two way communication is required between the public and the organisation to ensure that a positive image is being portrayed. It is argued that this

image needs to be constantly monitored and attuned as there are a considerable number of variables that impact on the image of the organisation. This literature does not support the organisational perspective with regard to image creation as two-way communication is required. The literature is more in sync with the recipient perspective of image creation as this perspective allows for two- way communication and management.

3.5 Communicating and influencing corporate image

Duimering and Safayeni (1998) conclude that organisations, individuals and departments inside them, use image as a method of communicating with clients, staff and other social audiences or publics. Chajet (1989) stresses that when a company changes its mission or product line, it should organise a communications effort to assure publics that its image reflects this new course. Zinkhan *et al.* (2001) highlight that research has shown that the marketplace responds better to those organisations that offer reliable information about their policies, future plans and other decisions.

Andreassen and Linstead (1998) note that corporate image is recognised and developed in the customer's mind through communication and practice. Alvesson (1998), Gray (1986) and Zinkhan *et al.* (2001) acknowledge that communicating with publics is critical. Some practical methods of doing this include: monthly newsletters, promotional videos, leaflets to clients, supplements to monthly statements, club letters to registered members, presentations by the board members to different levels of the organisation, electronic media, employees' gatherings or sessions at various geographic locations of the organisation, one-to one interactions and roadshows.

Zinkhan *et al.* (2001) advise that organisations use the internet as a possible means of communicating with publics. The emergence of the internet as a mass communication tool has almost instantly altered the way organisations think about interacting with its publics. Websites are built around the idea of integrated marketing communications. A website helps an organisation's public collect information, shape perceptions, and interactively communicate with the organisation. Technology allows the organisation to

manage their corporate image through a web site at a relatively low cost. Web sites enable the organisation to rebuild and reposition itself to meet the needs of the market.

Thus, the literature suggests that communicating with publics is essential to achieve a desired image and response with these important stakeholders. There is an array of tools at an organisation's disposal to achieve this goal. The options available through using the internet are an effective means of interacting with publics.

3.5.1 Influencing image through communication

Fombrun and Shanley, (1990) Grunig, (1993) and Dowling (1993) believe that there are numerous elements that can influence corporate image; it is therefore a very intricate issue. Moreover, Christensen and Askegaard (2001) identify that modern organisations centre attention on the symbolic scope of their activities. Gray (1986) emphasises the importance of these elements by stating that:

> External symbols are the primary indicators of the character of a business. The organisation name, emblem, building address, workplace design, fixtures and fittings, company vehicles, stationery and product labels are among external visuals that hold the corporate image to the external world. These symbols activate images in the public image for the new or expanding organisation. External image is not purely a visual symbol of accomplishment but represents stakeholder acknowledgment of product quality and this builds into revenue for the organisation.

Scott and Jehn (2003) consider that image is somewhat more enduring than impression or perception but it is still able to alter with new information. Kazoleas *et al.* (2001) notes that numerous images and image attributes can be held and even struggle against each other, within each individual and can alter from moment to moment based on factors influencing image at that historical moment. Zinkhan *et al.* (2001) propose that images can be improved through product excellence, organisational viewpoints, workforce, organisation emblems, dress code, advertising programmes, organisation name, and front line staff. Duimering and Safayeni (1998) accept that since publics may obtain

information from a range of sources outside an organisation's direct power, organisations naturally struggle with unconstructive information by attempting to build images that stress the optimistic aspects of their activities and by attempting to manage and control the stream of organisational information attained by these publics. They achieve this through a range of mechanisms intrinsic in their official structure that serve to restrain the informational outputs of persons and departments within the organisation. Zinkhan *et al.* (2001) conclude that this suggests the existence of a construction or a framework through which the company's management intentionally intervenes in creating the required perceptions in the minds of the public interacting with the relevant organisation.

Andreassen and Lindestad (1998) announce that, in today's competitive marketplace, services and service organisations within the same sector are becoming gradually more comparable and differentiation through the delivery channel is difficult. Therefore, service companies have started on a voyage of positioning through the communication channels. Andreassen and Bredal (1996) cited in Andreassen and Lindestad (1998) acknowledge that an organisation's aim is to construct a sturdy corporate image in order to produce relative attractiveness. Cornelissen (2000) suggests managed communication is a significant influence on the formation of images. Moreover, Yeo and Youssef (2010) found that corporate communication is a factor which significantly influences perception. Zinkhan *et al.* (2001) recognise that, the content of communication has an impact on the outcomes of images, as perceived by the publics. Bromley (1993) believes that the greater the level of communication and influence, the more probable it is that consistency (shared beliefs, common standards or behaviour, common interest) will increase. Cornelissen (2000) suggests that, amidst the multifaceted interaction between communication sources and the publics, it can be ensured that the corporate communication activity of an organisation still has a strong influence. Gray (1986) contends that organisations need a relentless public image programme that frankly and truthfully communicates with publics, including the workforce, clients and investors and which responds willingly to their concerns. Herstein, *et al.* (2008) and Miles and Mangold (2004) suggest that the corporate image communication process should be holistic and take place on four levels – internal formal and internal informal (directed at

employees) and external (directed at customers) formal and informal. Internal formal sources include human resource management systems, public relations systems while internal informal communications include influence, of co-workers, corporate culture, leaders / managers. External formal communications include public relations, advertising and external information communications includes customer feedback (word-of-mouth). Hawabhay *et al.* (2009) found the concept of corporate communication includes a combination of all internal and external communication channels.

The literature suggests that image is influenced by a vast number of elements. Organisations have been utilising organisational symbols to convey an image and these need to be recognised by the public in order to foster the image an organisation intends to project. Image is subject to change when new information becomes available. Therefore organisations try to control their image by ensuring that relevant communication is taking place with publics.

3.5.2 Image and the spheres of influence

Zinkhan *et al* (2001) identifies that there are two spheres of influence (a) the controllable sphere of influence and (b) the exterior and non-controllable sphere of influence. Variables that are internal to the organisation are controllable and can be used to sway the public's image of the organisation. These include: (a) corporate personality and identity, (b) corporate advertising, (c) public relations, (d) brand image and (e) frontline employee behaviour. Zinkhan *et al*. (2001) note that factors outside of the organisation, which are not within the direct control of the organisation, can sway the organisation in a roundabout way by manipulating the variables it controls in the internal image sphere. These include: (a) word-of-mouth (b) industry image (c) country of origin image and (d) press reports. This is diagrammatically presented in figure 3.8.

Figure 3.8 Spheres of Influence
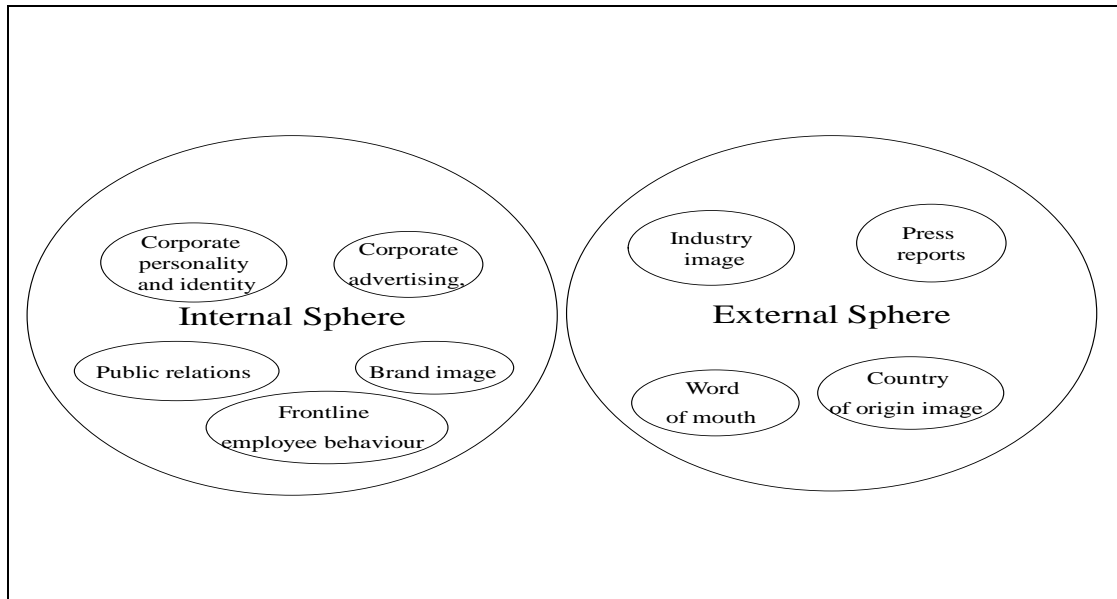
Williams and Moffitt (1997) found that organisations that control factors such as advertising, philanthropy and organisational characteristics were judged to be largely influential on the construction of the overall corporate image rather than the other message sources. Zinkhan *et al.* (2001) claim that organisations influence their image by utilising the tools the organisation has within its direct control to alter or influence its corporate image.

Both internal and external spheres factors are reviewed, commencing with the internal sphere.

(a) *Corporate personality and identity:* Bromley (1993) defines corporate personality as the set of major attributes that truly characterise the organisation. Marziliano (1998) states that corporate identity answers the question: "What do we believe we are?" Furthermore, Zinkhan *et al*. (2001) advises that identity is a set of conscious cues or carefully selected characteristics of the corporate personality that is illustrated to the

public in an effort to sway the public's; corporate identity does not change into a corporate image but it does influence the corporate image.

(b)   *Corporate advertising:* Zinkhan *et al.* (2001) find that corporate advertising can influence corporate image by controlling the types of information distributed to the public about the organisation. One way an organisation can influence the attribution of its publics is to give them consistent, constructive information about the organisation over time. Significant resources are utilised by organisations advertising their products and services to produce a powerful image. Corporate advertising is a frequently used tool for image management. Corporate advertising can be utilised not only to develop the company image but also to assist in dismissing unfavourable images attached to the organisation via a universal industry image, country of origin or outside press report. Poon Teng Fatt *et al.* (2000) accept that advertising can assist in creating an image of a publicly accountable organisation in the eyes of the public. Herstein *et al.* (2008) found that advertising allows the organisation to communicate the company message through every available media source.

(c)   *Brand image***:** Temporal (2002) defines brand image as the totality of consumers' perceptions about the brand, or how they see it. Park *et al*. (1986) suggest that brand image consists of practical, representative and experiential aspects of the product or service. Ghosh and Ho Ho (1996) declare that corporate image and brand image are not identical, and if there is a gap, then that is not to the benefit of an organisation. Delano (2001) confirms that brand image should support a company's image. Furthermore, Ghosh and Ho Ho (1996) urge that corporate image does not, even should not, replace brand image, but should complement it.

(d)   *Frontline employee behaviour***:** Zinkhan *et al.* (2001) outline that whenever an organisation comes into contact with the public, communication occurs which influences perceptions of that organisation and creates or influences the relationship between the parties. Direct contact with the frontline staff of the organisation serves to create impressions about the organisation. Front line staff will assist in forming or strengthening

an organisation's image. Zinkhan *et al.* (2001) warns that to discard the inclusion of junior staff, especially front-line employees, in corporate mandates, results in a lack of cohesion, which not only harms image, but perhaps damages corporate integrity itself. Scott and Jehn (2003) reveal that various employee behaviours can potentially affect the public's image of organisations. Marziliano (1998) advise that service should be delivered by employees who know the corporate guarantee to the marketplace, that understand the corporate values, and deliver on the promise to the client daily. Zinkhan *et al.* (2001) observe that internal image management among employees is a different strategy in an organisation's corporate image campaign. Employees are an organisation's key public. Employees can project an encouraging image of the organisation. The organisation's corporate image should be expressed precisely to every employee and should be reinforced in each contact with them.

(e) *Public relations***:** Vendelo (1998) verifies that an efficient method to "manage" the corporate image and control the outsiders' perception is to "control" this image by using impression management activities. That is, to enlighten with tales about the organisation's potential to be, to do, or to achieve objectives, in spite of its actual capabilities. Herstein *et al.* (2008) found public relations activities are crucial to communicate new values and culture. Cornelissen (2000) insists that corporate communication managers try to influence the coverage of these new media (news relating to industry) by issuing newsworthy information and establishing relations with the media. Martineau (1958) notes that public relations can build up a universal reservoir of goodwill. The flip-side of the coin is that an appalling public relations programme could lead to deterioration. Theus (1993) argues that in today's unstable and mass media controlled surroundings, any disturbance or media incident can shake a firm's institutional reputation. Zinkhan *et al.* (2001) note public relations is an image construction device often used during a catastrophe to set right a flawed image. It is also noted that rumours and accidents can have a pessimistic influence on an organisation's image within a small time-frame and that quick and sharp responses help produce confidence among publics.

Alfred and Weissman (1988) affirm that most institutions, prodded by recent criticism, have begun to develop marketing and public relations plans. Poon Teng Fatt *et al*. (2000) and Bromley (1993) list that some PR activities, which are, employed include: communicating through corporate charity (which can add to the visibility of an organisation in a community), grants, sponsoring charitable events and conducting projects.

Thus the literature presents a range of internal factors that can influence image. Next a review of the external sphere factors, which influence image are presented. These include word-of-mouth, industry image, country of origin and press reports.

(a) ***Word-of-mouth:*** Zinkhan *et al.* (2001) define word-of-mouth (WOM) as personal communication between two or more individuals. This includes the public's conversations with relations, friends, colleagues, acquaintances and so on. In the absence of direct contact from the organisation, the publics may shape opinions and impressions of the organisation based on what others say about the organisation. Herstein *et al.* (2008) is aware that the most important form of advertising is word-of-mouth. Schiffman and Kanuk (1987) believe that WOM tends to be extremely believable and influential, thus having considerable influence on the image formed of an organisation. Buttle (1998) observes that WOM is usually more influential on behaviour than other organisation-controlled sources. WOM is assumed by receivers to be autonomous of corporate influence. Buttle (1998) and Fombrun and Shanley (1990) inform that corporate communication managers try to spread information that in turn gets scattered through networks of interpersonal relations. Moreover, Scott and Jehn (2003) reveal that publics may converse and thus communicate their image of an organisation with other publics.

(b) ***Industry image***: Boyle (1996) stresses that one must remember that the image of an industry affects the image of a company - an honest politician remains a politician and can do nothing to change this fact. The same applies to a company. Zinkhan *et al.* (2001) add that the universal image of the industry that an organisation is associated with

impacts on the organisation's image. Gray and Smeltzer (1985) warn that a firm's corporate image can become "blurred and negative" if for some reason it is incompatible with the image of an industry it is involved in or with the image of a product it produces. This can frequently occur when a firm diversifies into a new industry or enters new product areas. Moreover Dowling (1993) concludes that industry image is seen as affecting a firm's performance.

(c) *Country of origin:* Chung Koo (1995) notes that brand executives have often questioned whether a country name could have a major impact on the marketing effectiveness and the market share of a brand. Darling and Arnold (1988) advise that country of origin image research has shown that an understanding of the country of origin affects the image of the brand and the company. According to Chao (1993), Roth and Romeo (1992) and Cordell (1991), the country of origin affects customer perceptions of product excellence. Baker and Currie (1993) highlight that country of origin has a major influence, beyond advertising and marketing techniques, on the clarity of a product. Wang and Lamb (1983) declare that customers' assessment of product clarity is subject to a country's stage of progress, i.e. customers hold more negative perceptions of products manufactured in developing countries. Tse and Gorn (1993) confirms that the country of origin has superior effects on customer evaluations of product quality than brand name.

(d) *Press reports:* Zinkhan *et al* (2001) point out that there is a connection between an organisation's public relations, press reports and the image of the organisation. Public relations and press releases are controlled by an organisation, while press reports are reported by others. Renkema and Hoeken (1998) show that negative publicity damages the company's perceived reliability, expertise and attractiveness.

It is apparent in the literature that organisations may utilise both controllable and uncontrollable tools when influencing their image. It is recognised that the controllable tools such as corporate advertising have a strong influence over the image that is projected to stakeholders. The literature suggests that image is very much perception-

based and the influence of the impression that front line employees have of the corporate image. The uncontrollable tools have an effect on the image of the organisation. This may be as stakeholders perceive factors such as word-of-mouth as being very much outside the company's control; it is external, thus more believable. It is suggested that there is a constant struggle by the organisation to manage these uncontrollable factors through utilising the tools at their disposal. The literature suggests that all these tools may have a part to play in influencing the corporate image.

The next section specifically examines image in HE to gain an understanding of HEI image and the importance of communicating with diverse publics.

3.6 Image in HE

Christensen and Cheney (1994) and Cheney and Christensen (1999) concur that image is now a significant issue for organisations in most sectors of society. Arpan *et al.* (2003) and Kazoleas *et al.* (2001) point out that although image has been researched extensively with regard to the commercial sector, it has been infrequently examined in the non-profit segment. Kolter and Fox (1995) note that, in the education sector, all institutions have a fundamental interest in learning about their different images in the marketplace and ensuring that these images correctly and positively mirror the institution. Terkla and Pagano (1993) concur that to ensure congruence between reality and image, the HEI should work on ways to ensure that image accurately reflects the HEI or should work on ways to improve the current image.

In the wider marketing literature Lewin (1935) advises that external publics act towards an organisation on the basis of the positive or the negative images they have of the organisation, its merchandise, or services. Thus, investors may invest in an organisation and clients may purchase its merchandise if they hold positive images of the organisation or its merchandise. This concurs with Landrum *et al.'s* (1998) suggestion that image influences a number of decisions about a HEI's future; it influences the calibre of applicant, the community impressions regarding the HEI and the decision to pursue a relationship with the HEI. Moreover, Landrum *et al.* (1998) observe that image affects

the attitudes of publics that may affect financial resources available to HEIs. Weissman (1990) emphasises that HEIs are resource-acquiring institutions and HEIs understand that an optimistic outlook about higher education is vital because this influences their financial stability and ability to maintain their academic courses.

Kazoleas *et al*. (2001) and Theus (1993) assert that one form of institution that depends on its image or images, in order to flourish and continue, is the HEI. Landrum *et al.* (1998), Belanger *et al.* (2002) and Fielder *et al.* (1993) agree that image is important in the retention of as well as the attraction of students. Furthermore, Kolter and Fox (1995) warn that HEIs internationally are encountering falling student numbers and declining funding grants and it becomes essential for them to decide upon their image in the eyes of their different publics. Moreover, Parameswaran and Glowacka (1995) insist that HEIs develop a unique image to maintain their competitive positioning in the marketplace.

Mazzarol (1998) outlines that one reason for the increased attention regarding university image is that the advances in IT have led to new teaching methods by means of distance learning. There are greater economic and administrative facilities for the transfer of teaching, research staff and students and this offers greater geographic mobility. The literature suggests that image is important for HEIs as the market has evolved into a competitive place in recent years. HEIs are directing attention to understanding and managing their image as they require more resources i.e. students, staff and funding. They are communicating a distinct image to their publics. Some of the elements that impact on the HEI's ability to improve their resources include their relationship with publics.

3.6.1 Relating to publics

Scott and Jehn (2003) and Alvesson (1998) introduce the idea of stakeholders and publics. This is all individuals who have a present, past or future interest in the organisation. This includes: current, previous and prospective employees, clients and community members as well as the workforce, suppliers, competitors and other companies that relate to the organisation. Yavas and Shemwell (1996) and Landrum *et al.*

59

(1998) suggest that images portrayed by HEIs play a critical role in the attitudes of institution's publics towards the institution. According to Dick and Basu (1994) and Raj (1985) institutional image is important to develop and maintain a loyal relationship with customers. Melewar and Akel (2005) state that students are recognised as customers by HEIs, thus they have to apply strategies to retain and enhance their competitiveness. The OECD (2004) notes that HEIs are more student led than in the past and that this has implications for stakeholders, institutions and resource planning. Furthermore, Robinson and Long (1988) distinguish between the different publics by categorising them into three groups: primary (students), secondary (the "paymaster", such as government agencies and donors), and tertiary (other publics that have an interest, such as alumni, suppliers and parents). Kolter and Fox (1995) propose that there are up to 16 different publics that have an 'actual or potential interest in or effect on the HEI institution'. This is diagrammatically represented in Figure 3.9.

Figure 3.9 Higher Education Institutions' Publics
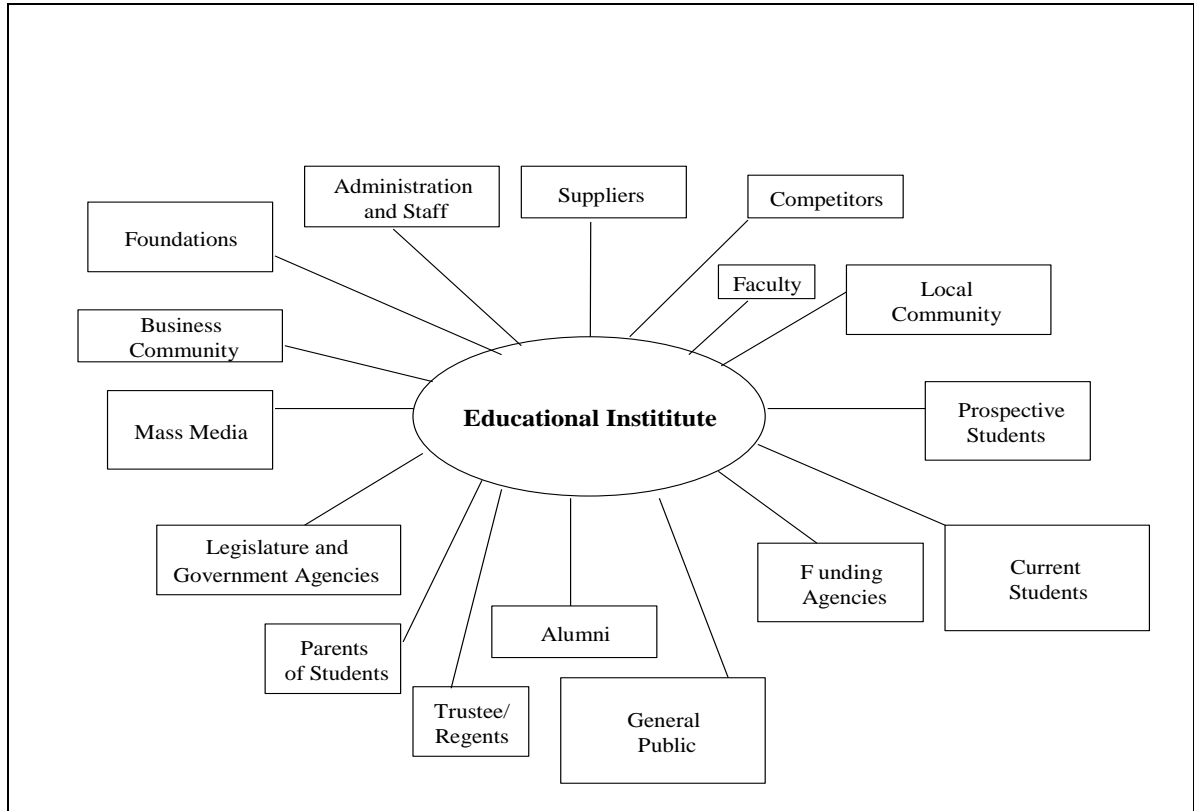
Source: Kolter and Fox (1995)

Dowling (1988) advises that an organisation serves numerous publics and thus has many images. Poon Teng Fatt *et al.* (2000) add it is crucial that the organisation understands that each group of publics relates differently to the organisation and thus has diverse perceptions of the organisation. Treadwell and Harrison (1994) also believe this to be true for the university sector. Abratt and Mofokeng (2001) claim that an organisation cannot separate itself from the publics among which it operates. Marzilano (1998) explains that an organisation devise different images to match aspects of the environment it operates in. Zinkhan *et al.* (2001) assures that a positive image predisposes an institution towards its target markets. Furthermore, Gray (1986) declares what publics believe about an organisation determines, in many cases, whether or not the organisation ultimately survives. Velman (1979) cited in Gray (1986), remarks that image should remain a concern to managers as failure to react to public pressure can mean the collapse of the total organisation. Bok (1990) and Phair (1992) acknowledge that universities are responding to the dynamic environment they find themselves in and are beginning to communicate to outside publics and to the media.

Belanger *et al.* (2002), Gray (1986) and Abratt and Mofokeng (2001) argue that image has become a planned managerial decision as it impacts upon the ability of a HEI to recruit suitable faculty members, to attract research funds as well as charitable donations and to attract and maintain enthusiastic students. Gray (1986) urges that HEIs: 'must conserve and foster: positive stakeholder beliefs as if it were the organisation's most important asset'. Furthermore, Gray (1986) reports that organisations have become more aware of using communications to achieve objectives, to ensure it is articulating its position more visibly to government agencies, legislators, shareholders, staff, clients, financial institutions, and other vital publics.

Thus the literature suggests that the HEI has many publics with different perspectives and the image which these publics hold may influence their attitude toward the institute. The HEI needs publics to hold positive attitudes of the organisation as they rely on them for many of their resources. HEIs, therefore, need to communicate with their publics to ensure that positive attitudes are maintained and developed.

3.7 Influencing perceptions of HEIs

Belcher *et al.* (2003) and Gabbott and Sutherland (1993) acknowledge the importance of understanding the factors that influence the students' decision to act towards a HEI. Bryant and Crockett (1993) discuss university attributes that might determine preference i.e family connections to the HEI, ranking of particular HEIs, college departments or majors, overall education quality, size of the HEI and its classes and the relative emphasise on sports. Furthermore some indications of the overall HEI climate that Bryant and Crockett (1993) found to be important to United States (US) student and family members when assessing a HEI include: existence of a party school image, image of the Greek system (fraternities /sororities), existence of family atmosphere, friendliness of students and extent of family related values on campus. Martin and Dixon (1991) highlight four types of influence on students' college decisions: academic programme, social climate, cost, location and influence of others (e.g. parents, friends, peers and teachers).

Paulsen (1990) states that students make the choice to act towards a HEI based upon the HEIs characteristics that are important to them and their own personal characteristics. Hossler and Gallagher (1987), Litten (1982) and Paulsen (1990) affirm that research has frequently recognised a student's socio-economic standing to be a powerful gauge of HEI preference. Furthermore Belcher *et al.* (2003) acknowledges that the interpersonal influences of others such as parents and peers, have been involved in students' aspirations to attend a HEI. Hayden (2000) highlights that parental support to attend college had a direct effect on college attendance. Belcher *et al.* (2003) informs that students who have friends interested in attending college are more likely to pursue an undergraduate degree. Some of the factors which influence college preference are diagrammatically outlined in figure 3.10.

Figure 3.10 Some Factors that Affect College Preference

Seidman (1995) advises that two sets of factors will influence the student's preference of a HEI. Student factors include: ability and interests; socioeconomic background; the influence of significant others; aspirations and goals; and expectations of the HEI. HEI characteristics include: academic programmes, cost, location, and reputation or quality. Wajeeh and Micceri (1997) found that good academic reputation, graduates getting good jobs, size of college/campus, offers of financial assistance, desire to study near home, good social reputation, availability of the desired major/programmes and the opportunity for part-time work were factors influencing HEI perception and students' choice. Belcher _et al._ (2003) discover that reputation of programmes, reputation of the HEI, campus visits and high school/community college teacher/counsellor as influencing factors on a

student's attraction to a HEI in the USA. McDonough and Antonio (1996) uncover that students' preference for a HEI is based on their ability to make more money, to get a good job or prepare for graduate school. Academic reputation, the lore of academics/prestige, graduates that excel and financial aidwere also significant. By extension therefore, a student's image of any of these factors may influence student preferences.

Kazoleas *et al.* (2001) identify sources of information that had the greatest impact on perception of HEI image. Family members and friends who attended the HEI, experiences as a student, family members and friends who know about the HEI and someone who works at the HEI influences image. Gutman and Miaoulis (2003) and Kolter and Fox (1995) confirm that a positive image can be an influential pressure on the preference of HEI. Alves and Raposo (2010) found that image can influence students satisfaction and loyalty. Andreassen and Lindestad (1998) insist that image will play a significant role in both attracting and retaining publics, especially when service attributes are difficult to assess. Milo *et al.* (1989) and Weissman (1990) inform that image is widely used as a positioning instrument to sway student preferences of a HEI.

3.7.1 Public perceptions of HEI image

Palacio *et al.* (2002) contend that of the few published works that exist on university image from the perspective of the recipient, those that have attempted to analyse the image formation process are prominent. Fram (1982) found for the outside stakeholder, university image was often composed of ideas about faculty, curriculum, teaching quality and-tuition quality relationships. Terkla and Pagano (1993) uncover in a US survey amongst accepted applicants, current students, seniors, faculty, administrators and alumni, that image is composed of five factors, spirit and temperament, curriculum, competitiveness, academic life factors and demographic factors. Treadwell and Harrison (1994) conducted one of the few case studies examining a university's image among its stakeholder groups (students, faculty and staff). Some of the statements or items identified in the study with regard to HEI image   include: commitment to academic

excellence, having a well- regarded business school, whether students form close friendships, whether graduates are proud of their education, whether the school has a national image, whether faculty research has a national image, whether the school makes a cultural contribution to the community, whether students party too much, the presence of adequate facilities, problems with athletes' performance, and the homogeneity of the student population, that students are similar. Treadwell and Harrison (1994) conclude that students pre-entry images of institutes are usually the result of interactions and contact with recruiters, institutional literature and other sources.

Kazoleas *et al*. (2001) survey of US students examines university image factors associated with the image of one university held by individuals throughout their home state. Kazoleas *et al*. (2001) found image factors controlled by the university itself (e.g. existence of particular programmes, strength of academic programmes, sports programmes, libraries and technical facilities) were stronger predictors of the overall image rating than the demographic characteristics of respondents or environmental factors (e.g. location, expense compared to other universities and admissions, standards compared to all other universities). Furthermore personal experiences with the university in question were found to have had a greater impact on overall image than did media exposure related to the university.

Arpan *et al.* (2003) examined groups of participants in order to understand the underlying concepts of university image and to look for possible differences in the use of image criteria across different groups of evaluators based in ten major US universities. Study one examined university image among two groups of university students. Study two consisted of adult non-students. Arpan *et al.* (2003) found from the focus group research with undergraduate students that participants considered multiple factors when assessing university image. These factors included name recognition, academics, athletics, social life and the physical environment of the university. The academic component of image was reported to consist of the perceived worth of a degree when entering the job market, characteristics of the student body (e.g. motivation, dedication, intelligence as measured by grade point averages) and degree programme characteristics (e.g. diversity of

65

offerings, professor/teaching assistant ratio, selection criteria). The athletic components of a university's image was found to be composed of sports teams national rankings, individual images of specific coaches and players and school spirit. A strong student social life was found to contribute to a university's overall image. Students were found to rely on several sources of gathered information about image including external rankings, accreditation, word-of-mouth (family, friends, alumni, students) and the media.

In comparing both study groups (the student and adult non-student groups), Arpan *et al.* (2003) found that the groups used different criteria and different attitude structures to rate universities. Adult non-students based their image ratings on pure evaluation (good/bad) information stored more deeply in the memory, rather than on limited information they had about specific attributes of each university. It was discovered that academic attributes, athletic attributes and new coverage affected image ratings by current university students. Adult non-students considered similar attributes when rating the universities as well as the evaluation of friends and family members. Adult non-students' education level and extent of individual fanship had a direct effect on image ratings.

Belanger's *et al.* (2002) US survey of student image was constructed around three large categories of variables: institutional (the type of environment e.g. relaxed), social environment (e.g. has the institute got a friendly atmosphere?) and the academic environment (e.g. is it academically challenging?). It was found that where the students surveyed had a markedly different experience from what they expected, students' expectations were exceeded but also failed to meet expectations on some of the variables. Seidman (1995) records that the perception of first year students are partly the result of an institution's admissions material and personal contact with the institution. In a Norweigan case study of HEIs, Helgesen and Nesset (2007) uncovers that the image of a HEI is measured by students' perceptions of the HEI among his/her circle of acquaintances, the student's perception of the HEI among the general public and the student perception of the HEI among employers.

Theus (1993) devises an extensive list of factors impacting on university image: students' entrance test scores, peer ranking, reputation for innovation, quality of leadership, quality of faculty, expenditure per student, size of endowment, number of volumes in the library, size of the operation budget, quality of facilities, accomplishments of alumni, admission selectivity, volume of gifts and grants. Environmental factors which impact on university image include: demographics, economic trends, social issues, technological change and public policy. In the case of, Schools of Public Affairs and Administration, Conant (1992) offers factors such as the geographic location in a country, types of programmes, size of institute and type of university as affecting image.

In a survey of Canadian students, Nguyen and LeBlanc (2001) advise that elements such as faculty members, other employees and facilities on campus may be considered as critical factors which determine the student's perception of the image or reputation of higher education institutions. Furthermore, Nguyen and LeBlanc (2001) state that individual perceptions are manifested by the consumer's attitudes and beliefs which rely on past actions of organisations or previous experiences with the organisation. Ivy (2001) determines in a UK and South African survey of HEIs that various publics draw conclusions about an institution's overall image from impressions they have about the strength and weakness of the institutional offerings. These images are formed from word-of-mouth, past experience and the marketing activities of the institution. Moreover, Luque-Martinez and Del Barrio-Garcia (2009) found that HEI image results from the individual's experience of the HEI.

Further studies of university image from the public's perspective include Milo *et al.'s* (1989) study of the effects of negative publicity on the image of the university. Parameswaran and Glowacka (1995) examine the relationship between university image and companies' perceptions of the aptitudes of graduates for professional careers. Grady *et al.* (1996) report on the differing images of teaching centres held by various publics. Landrum *et al.* (1998) note that little research exists on the formation of the images of universities by the various publics and that more work is necessary.

The literature on HEI image does not diverge significantly from image literature in general. An image is compiled by a multitude of factors and HEI image shows evidence of this. The image which evolves is very individualistic. This is evident in the literature due to the number of authors who reported on the multifaceted and perceptive (Kazoleas, 2001; Terkla and Pagano, 1993) nature of HEI image. HEI, university and college image have been examined to some extent in the literature when compared to the limited body of literature on IT image. It is reasonable to assume that many of the variables that are used in these studies can be applied to IT image due to IT's providing a similar service.

3.8 Raising awareness of HEIs

Schwartz (2004) believes that communicating with assorted HEI target audiences is essential to educate and enlighten. Moreover, Amara (2004) warns that HEIs are continually illustrating their superiority. They communicate constantly in order to enhance and promote their image.

Wajeeh and Micceri (1997) concludes that the recruitment of new students and the retention of the currently enrolled students is a priority for all HEIs. Blunkett (2000) informs that various old and new British universities have established concentrated school programmes involving the recruitment of some new staff members to work on awareness raising within schools and colleges nationally. McClaran (2003) and Seidman (1995) acknowledge the significance of school liaison officers in attracting potential students. These officers are given responsibility for visiting schools to talk to possible applicants and to guarantee that schools are completely aware of the opportunities offered by the HEI. Anctil (2008) advises that HEIs have established new marketing units to create, maintain and promote their image. Furthermore, McClaran (2003) adds that marketing officers have begun to tackle the need for ensuring that an institution's image, advertising and publications are functioning as effectively as possible in communicating with and attracting possible applicants.

3.8.1 Marketing HEIs

Gabbott and Sutherland (1993) claim that traditionally, marketing has been viewed by educationalists as purely a promotional activity designed to enhance the prosperity of an organisation, through selling as much merchandise as possible. In this traditional climate it is not surprising that marketing and higher education were not combined. However, Schwartz (2004) and Van Der Spoel (2003) concur that HEIs have to increase their marketing and promotional activities to differentiate themselves from the competition. Moreover, Gabbott and Sutherland (1993) advise that application of marketing techniques to the HEI sector is not new. Schwartz (2004) acknowledges that a great deal of marketing is already going on in the HEIs of many OECD countries, even though it may not seem adequately sophisticated to the advocates of the commercialisation of education.

Penn (1999) states it is a necessity that HEIs understand the influencing factors that impinge on students' HEI selection. Therefore, HEIs are attending to external publics (parents, career guidance counsellors) as these affect students' preferences. Tapp *et al.* (2004) insists that HEI marketing departments need to utilise more resources on student attraction and retention; the period of focusing marketing primarily on the quality of prospectus production and recruitment open days has ceased. Furthermore, Tapp *et al.* (2004) believes that HEIs have a responsibility to use the most cost effective method to realise their student recruitment objectives.

3.8.2 Marketing tools an influence on HEI image

Kazoleas *et al.* (2001) illustrate the significance of the contribution of organisational factors as an influence on the perceived image of the HEI. Barich and Kolter (1991) claim that, in marketing, the vital role of institutional image in consumer buying intentions is recognised**.** Hemsley *et al.* (2006) found that the potential benefit of applying business focused marketing theories and concepts to HE marketing is recognised by researchers. Anctil (2008) advises that recent marketing efforts of HEIs have become highly organised and controlled to create, maintain and promote a HEI image.

Ivy (2001) reports that marketing tools (school careers counsellors, direct mail, open days, recruiters visiting schools, press advertising, sports facilities) have been harnessed to convey a HEI image. Schwartz (2004) reveals that marketing and public relations must attempt to present correct and honest information about educational programmes to prospective students who will be able to make fully informed decisions. Litten and Brodigan (1982) found that students and their parents obtain information from several sources in the USA: high school counsellors, institutional literature, campus personnel, student encounters through on-site visits, and other networks. Hossler and Gallagher (1987) suggest that the HEI develops numerous tools to assist with this process. The literature advises that a number of marketing techniques are employed to influence perceptions of a HEI (See table 3.1).

Table 3.1 Marketing Tools Influencing HEI Image

Websites
Advertising
Open days
Recruitment fairs
Relationship marketing
Direct marketing
School visits
Reputation
Ranking
Students as recruiters

Source: Hossler and Gallagher (1987)

Each of these mechanisms are reviewed.

(a)   *Websites:* Klassen (2002) and Van Der Spoel (2003) point out the significance of the internet for marketing of HEIs, as over 80% of HEIs use the World Wide Web (WWW) for recruiting purposes. Seymour (2000) advises that HEI websites have become one of the most helpful or influential sources of information for customers. Kittle and Ciba (1988) suggest that, as a marketing tool, the web is unrivalled as it offers a comparatively inexpensive means of stimulating demand for information about a HEIs' products and services and developing enduring relationships with students and alumni. Furthermore, Schmidt (1998) found that the 'information superhighway' provides a convenient and competent means of distributing information and recruiting possible students nationally and internationally. The HEI website contains all the information that is in a typical promotional mailing pack. Anderson and Reid (1999), Howes and Mailoux (1999), Queijo and Torgensen (1999), Liebowitz, (1999), Almeida and Dwight (1999) and Kittle and Ciba (1988) acknowledge the relevance of websites for HEIs: websites provide students with information on costs, admissions requirements, available specialisations and ways to contact enrolment officers. Web-based technology can also be used to gather survey information on current students, establish systems of electronic application processing and recruitment of international students.

Klassen (2002) reports that a website is inexpensive relative to other media but it is still costly. Any organisation can create a website but not all are committed to making it a vital and useful tool for marketing. Klassen and Sitzman (2000) state that 'the sheer presence of a web-site guarantees no quantifiable effect on the marketing success of any organisation'. The success of a website depends on the HEI's willingness and ability not just to create, but also to successfully maintain and effectively operate web sites. Brunner and Boyer (2008) maintain a home page is a way for an institution to shape its image. HEIs are missing a chance to manage communication and showcase their activities with prospective students, faculty and donors by not using their homepage to project an image. Pegoraro (2006) called for more research on how user friendliness affects the image of a HEI. Studies for this area could focus on determining if website usability plays a role in how website users form an image of the institutions on the site.

(b) Advertising: Hartman (1997) informs that although applicants use the internet to search for HEI information, they rate printed material more highly. Beckerink (1999) highlights the significance of promotional material in developing a professional promotional brochure for distribution. Abrahamson and Hossler *et al.* (1990), Van Der Spoel (2003) and Schwartz (2004) advise that HEIs now advertise through print, radio, cinemas, television, billboards and the exterior of various modes of transport. Schmidt (1998) believes that the absence of advertising or unproductive advertising is a traditional difficulty for HEIs' programmes and is one of the key causes of low enrolment. Tapp *et al.* (2004) conclude that increasing advertising for HEIs is unproductive as most career magazines were thought only to reach career offices' tables rather than applicants. Tapp *et al*. (2004) illustrate that the University of the West of England (UWE) in 1996 conducted advertising that was expensive, national and untargeted. The UWE then adjusted their tactics as their student numbers were declining and they had more difficult entry criteria. According to Tapp *et al.* (2004) more efficient 'narrow-cast' targeting is vital as most applicants come from within the locality of the HEI. Therefore, institutions deliberately target marketing activities in those areas where it is currently recruiting well and this is referred to as 'sailing with the wind'.

(c) *Open days:* Jonas and Popovics (1990), Belcher *et al.* (2003), Seidman (1995), Van Der Spoel (2003) and Schwartz (2004) assert that campus visits are a significant feature in college choice. Wanat and Bowles (1992) and Schwartz (2004) believe that open days allow for campus tours where visiting, prospective students can view the department, its lecture rooms and labs. Belcher *at al.* (2003) advise that faculty play an essential part in these campus visits and often provide both the primary contact and long-lasting impression for prospective students. McClaran (2003) adds that a more intensive development on open days is the summer school where prospective students can experience HEI life for themselves.

(d) Recruitment fairs: Beckerink (1999) and Breland *et al.* (2002) agree that institutions have increased participation in HEI fairs that charge substantial fees for participation. These fairs allow HEIs to meet students. Schmidt (1998) stresses that personal contact

with prospective students is the most effective method of recruiting. McClaran (2003) affirms that institutions are using the data developed on "pre-applicants" who have registered to take part in one of the networks of educational fairs for mailing and other forms of direct marketing.

(e) Relationships marketing: Marketing literature has shown that relationship marketing may impact upon organisational image. Gronroos (2004), Kang and James (2004) and Vegholm (2011) found that the way customers are treated during interactions with the organisation greatly influences their perception of the organisation and its products. In HE, Gabbott and Sutherland (1993) warn that universities will have to be more proactive in their relationships with schools, which provide prospective students in order to maintain their market position and protect themselves from a funding crisis. Seidman (1995) concludes that since students have the freedom to choose the college they wish to attend, HEIs establish, early on, a client relationship with students, parents and community. Schmidt (1998) urges that recruiters need to be aware of the influence that parents and relatives have over potential students. While visiting with potential students, faculty should also attempt to make contact and open lines of communication with the student's parents and relatives. Seidman (1995) recommends HEI 'parent nights' for school students. Bradshaw *et al.* (2001) confirm that despite strong parental influence, the school guidance counsellor can be an important source of information for many students. Schmidt (1998) reveals that school guidance counsellors are very significant when school students are making decisions about HEIs or possible careers. Moreover, Belcher *et al.* (2003) consider that contact with schoolteachers who provide the HEI with information about prospective students is essential.

Seidman (1995) argues that one way of expanding student numbers is to increase the number of prospects (potential students). Prospects that come through referrals have a much higher yield rate than those from other types of referrals. Seidman (1995) lists ways to increase referrals including: targeting school guidance counsellors, alumni and other significant groups. Tapp *et al.* (2004) and Hoyt and Brown (2003) suggest that much of the direct marketing endeavours are not aimed at the students themselves, rather they are

centred on key opinion formers – sixth year heads and careers officers. A key strength of direct marketing lies in its use as a retention tool, and students would not fit into this category because by and large they are a continuously renewing pool of customers. They influence each other and this influence takes place in an unstructured way e.g. through recommendations to family and friends. Another means of influencing opinion formers, according to Gabbott and Sutherland (1993), is through HEIs keeping schools informed on a regular basis of the progress of their former pupils. Therefore, Tapp *et al.* (2004) confirm that the emphasis on relationship building and retention for opinion formers seems to make sense.

(f) Direct marketing: Tapp *et al.* (2004) suggest that direct marketing offers tools for HEI enhancement. Tapp *et al.* (2004) inform that direct database marketing can be successful in obtaining good quality applicants at a lower cost per response than would probably be achieved using press advertising and open days. Gabbott and Sutherland (1993) acknowledge that possible applicants or their parents (key opinion influencers) can be targeted using commercial mailing lists and the electoral register. This mode is available but is not being utilised fully due to cost and resource allocation issues.

Beckerink (1999), Van Der Spoel (2003) and Schmidt (1998) assert that guidance counsellors are mailed regarding HEI opportunities as they are key opinion formers. Seidman (1995) recommends that HEIs publish and distribute a quarterly guidance newsletter. Tapp *et al.* (2004) adds that HEIs target guidance counsellors in high feeder schools, where guidance counsellors are positive opinion formers for the HEI: that is they recommend and influence applicants to attend the HEI. Tapp *et al.* (2004) outline that direct and relationship marketing can be used to ensure that these behaviours are not allowed to disintegrate by being taken for granted. Tapp *et al.* (2004) illustrate that identifying immediate prospects for relationship marketing activity, based, on the level of applications from the school and through knowing trends and discriminating factors such as institution type, faculty attractiveness and geography can create a high institute attraction for future prospects.

Jonas and Popovics (1990) suggest that HEIs also attract students via college guides, brochures and other catalogues sent in the mail. Lucas (1984) observes that receipt of the semester course schedule in the mail has proven highly effective for prospective students when choosing a HEI. According to Byrant and Crockett (1993) and Krosteng (1993) computerised databases are used for recruitment and application: they have provided tools enabling more efficient management of huge amounts of data about students. Tapp *et al*. (2004) notes that database –driven marketing is also utilised by HEIs.

(g) School visits: Beckerink (1999) and Van Der Speol (2003) conclude that school visits by faculty are a vital recruitment strategy. Breland *et al.* (2002) accept that recruiting outside local geographic areas has increased for HEIs. Gabbott and Sutherland (1993) recommend that it might be worthwhile to ask each member of academic staff to act as a direct point of contact for a small number of schools in order to improve the sense of customer care. Each individual should be backed up by a sophisticated information system. Little published research exists on the impact of school visits on students' HEI image perspectives.

(h) *Reputation:* Wajeeh and Micceri (1997) and Hayden (2000) declare good academic reputation is ranked highly as a factor influencing college attraction. Belcher *et al.* (2003) believe that faculties that recruit for programmes need to put less emphasis on the alumni of the programme or direct transfer from community colleges and friends at the HEI i.e. more emphasis should be placed on the reputation of the university.

Wajeeh and Micceri (1997) observe that, from a student's perspective, what most influences a university's academic reputation is using 'cutting edge equipment', utilising technology in classrooms and having an excellent library on campus. Belcher *et al.* (2003) outline that programme reputation can be communicated to prospective students in a number of ways: (a) job placement statistics showing successful employment after programme completion and a comparison to similar types of programmes can be made available to students; (b) reputation of the programme and career opportunities should be emphasised when faculties visit schools. Keller and Aaker (1998) affirm that the degree

to which the organisation is considered to be a believable source of information influences the degree to which the receiver gives attention and appreciation to its products, services and other aspects of the organisation.

(i) *Ranking:* Schwartz (2004) understands that rankings have an important effect on students' behaviour, particularly students at the top end of the ability range. HEIs may not believe in them, but no HEI wants to be seen to be falling down the league tables. Amara (2004) acknowledges that rankings are seen to be an influential promotional tool. Van Der Spoel (2003) accepts that the significance of institutional ranking and rating in education has grown steadily.

(j) *Students as recruiters:* Schmidt (1998) confirms that it has been found that school students respond very well to contact with undergraduate students. Moreover, Van Der Spoel (2003) asserts that prospective students seem to value current student stories in the media and their opinion in public rankings if they happen to come across them. Van Der Spoel (2003) and Beckerink (1999) agree that reports making use of existing students as ambassadors in the recruitment process can contribute to the prospective student's process of identification with the programme or department. Gabbott and Sutherland (1993) suggest that when teachers or pupils from a school are visiting the HEI, it should be possible to identify students from that specific school to meet them.

Seidman (1995) and Schwartz (2004) introduce some further recruitment strategies: These are presented in table 3.2.

Table 3.2 Further Recruitment Strategies

Special programme on the importance of college
Help recruit international students
Career days
Special workshops for high school students at institute or at high school
Pursue students who are spouses or family of faculty and staff
Family or friends of currently enrolled students.
DVD
Videos

Source: Adapted from Seidman (1995) and Schwartz (2004)

McClaran (2003) highlights that for some HEIs these initiatives have been in position for many years but pressure is now on to extend them, and to ensure that they are fully incorporated with all aspects of the recruitment and admissions cycle.

HEIs are increasing marketing activates to promote their image. This image will allow the HEI to differentiate from the competition and thus attract students. The marketing tools that are being utilised include websites, advertising, open days, recruitment fairs, relationship marketing, direct marketing, school visits, reputation, ranking and using students as recruiters.

3.9 Image measures

Treadwell and Harrison (1994) highlight that image is how an external public views an organisation and this is communicated by a set of beliefs concerning an object, and not a single belief. Kolter and Fox (1995) state that a 'responsive institution has a strong interest in how its publics see the school and programmes and services, since people often respond to the image, not necessarily reality'. Leister and MacLachlan (1975) argue that image is an aggregative idea, to be measured by merging the viewpoints of many. They argue that image must be measured for numerous factors at once in order to gain any significant information. Furthermore, Terkla and Pagano (1993) found that a HEI has a multifaceted image.

Torpor (1986) lists the numerous methodologies that can be utilised for image evaluation. These include focus groups, mail surveys, telephone interviews, mall intercept research and personal interviews. Kolter (1975) claims that structured interviews are one method used to measure institutional image. This method is response determined and may show new perceptions of the institution. The interviewer asks the respondent how they perceive the institution. Familiarity and favourability measurements are utilised to measure image. Kolter and Fox (1985) add that this method allows the researcher to explore the respondent's awareness of the institution on a scale measuring familiarity, from "never heard" to "know very well".

To measure favourability, respondents rate every aspect on a scale from "very unfavourable" to "very favourable". Kolter (1975) proposes that object sorting may also be used to measure image. Respondents are given a set of stimuli and asked to group them in whatever way they wish. Kolter (1975) also advises of the multidimensional scaling technique. The respondents are given triads of objects and are asked to state which two are most alike and which two are most different. When all responses are compiled, the researcher creates a map showing the image distance of the institutions from each other. Another image measurement technique which is highlighted by Berkowitz *et al*. (1986) are perceptual maps where the researcher collects three types of information from the respondents: evaluations of the important attributes of the institution, judgement of important attributes of competing institutions and the rating of an ideal institution. Researchers then plot the institution on a perceptual map, using the feature dimensions extracted from the data collection. Carlivati (1990) identifies these methods as response orientated means of image measurement.

Carlivati (1990) defines a judgement image measurement method as supplying image labels to respondents who rate, rank or interpret them in relation to the organisation. Item list and semantic differentials are examples of judgement measures. Kolter (1975) put forward the item list technique. Respondents are required to rate the institution on a list of pre-specified attributes. The list relates to central dimensions of the institution's image, and respondents are asked to select the item that best fits their views of the institution.

Huddleston and Karr (1982), Kolter (1975), Kolter (1984), and Kolter and Fox (1985) present the semantic differential method. This technique can be used to compare an institution to its competitors and to compare it to an ideal institution in the minds of the respondents.

Terkla and Pagano (1993), in their attempt to define HEI image, develop five image factors based on a semantic differential scale of 27 items. These factors are demographic, spirit and temperament, curriculum, competitiveness and academic life. The demographic factor encompasses items such as urban versus rural and large versus small. The spirit and temperament factor includes items such as a grind versus fun, diverse academic versus limited academic and impersonal versus personal. The curriculum factors include items such as innovative versus traditional, liberal versus conservative and easy versus academically rigorous. The competiveness factors includes high pressure versus relaxed, non competitive versus cut throat and non-selective versus selective. Lastly, the academic life factors are analysed. This factor includes graduate student teaching versus faculty teaching, graduate emphasis versus undergraduate emphasis and not research orientated versus research orientated (see table 3.3).

Terkla and Pagano's (1993) image variables can be compared and contrasted to Belanger *et al's* (2002) and Steven's *et al's* (2008) studies. Belanger *et al's* (2002) study is similar with regard to the variable of 'wide range of academic courses', 'relaxed environment', 'secure environment' and 'cultural diversification'. Belanger *et al*. (2002) does include variables such as 'scheduling problems', 'student involvement' and 'administrative attitude' which are evident in Terkla and Pagano's (1993) study. Steven *et al*. (2008) highlights 'offers a wide variety of academic programmes', 'provides many student activities' and 'has high admission standards' as possible similarities. Steven *et al's* (2008) study can be contrasted on the variables of 'is well organised' and 'responds quickly to enquiries about admissions'. A possible reason for these differences is the studies relate to many different publics. Terkla and Pagano (1993) study investigated five different publics while Belanger *et al's* (2002) work concerned current students and

the senior management team and Steven *et al's* (2008) looked at business people located near the HEI.

Table 3.3 Terkla and Pagano's Image Variables Categorised Under Five Factors

Demographic
Small versus Large, Rural versus Urban

Spirit & Temperament
A Grind versus Fun, Diverse academics versus Limited academics
Impersonal versus Personal, Easy versus Academically rigorous
Homogenous versus Diverse, Apathetic versus Spirited
Weak reputation versus Strong reputation, Limited social options versus Wide social options
Egalitarian versus Elitist, Overrated versus Underrated
Excellent versus Average, Non Selective versus Selective
Unsafe versus Safe, Limited cultural options versus Wide cultural options

Curriculum
Innovative versus Traditional, Liberal versus Conservative
Homogenous versus Diverse, International versus Provincial
Non-competitive versus Cut throat, Limited cultural options versus Wide cultural options
Structured curriculum versus Open curriculum

Competitiveness
Easy versus Academically rigorous, High pressure versus Relaxed
Non-competitive versus Cutthroat, Non-selective versus Selective

Academic Life
Graduate student teaching versus Faculty teaching, Graduate emphasis versus Undergraduate emphasis
Liberal arts emphasis versus Preprofessional, Not research oriented versus Research oriented

Source : Terkla and Pagano (1993)

In order to define image, the organisations (HEIs, in the case of this research) need to recognise what image customers have and continuously measure the perceptions held by

the different publics (in the case of this research - senior second level students). According to Torpor (1986), the publics' views are crucial to an institution's well-being. Image has an impact on a range of factors concerning the HEI such as attracting new students, recruiting faculty staff, attracting external funding for research and influencing the kindness of possible donors. It is significant for HEIs to recognise their image and be conscious of the tools that are accessible to permit them to measure this important construct.

3.9.1 Image influencing measures

Treadwell and Harrison (1994) indicate that an organisational image is the consequence of an individual's self-reported responses to an organisation. These responses appear from any interaction planned or unplanned, persuasive or non-persuasive, mediated or interpersonal. Images are shaped because of choices, actions and social interactions of the involved publics. Albert and Wetton (1985), Bok (1990), Contant (1992), Gioia and Thomas (1991), Pratt and Foreman (2000) and Theus (1993) conclude that numerous factors influence the final formed images in the audience members relating to the HEI.

Alvesson (1998) highlights that an image is something mainly got through accidental, infrequent, superficial and/or mediated information, through mass media, public appearances, from second-hand sources, not through a person's own direct, durable experiences and views of the 'core' of the object. Moffitt (1994) found that during image formation, personal, social, environmental and organisational factors fight for meaning over the environment of these very messages, activities and experiences. Williams and Moffitt (1997) believe that organisational image is a creation of multiple organisational, environmental and personal factors. There are few published scales to measure HEI image influencers. Kazoleas *et al.* (2001) developed a model of the factors which influence HEI image (see figure 3.11).

Figure 3.11 Model of HEI Image Influencers
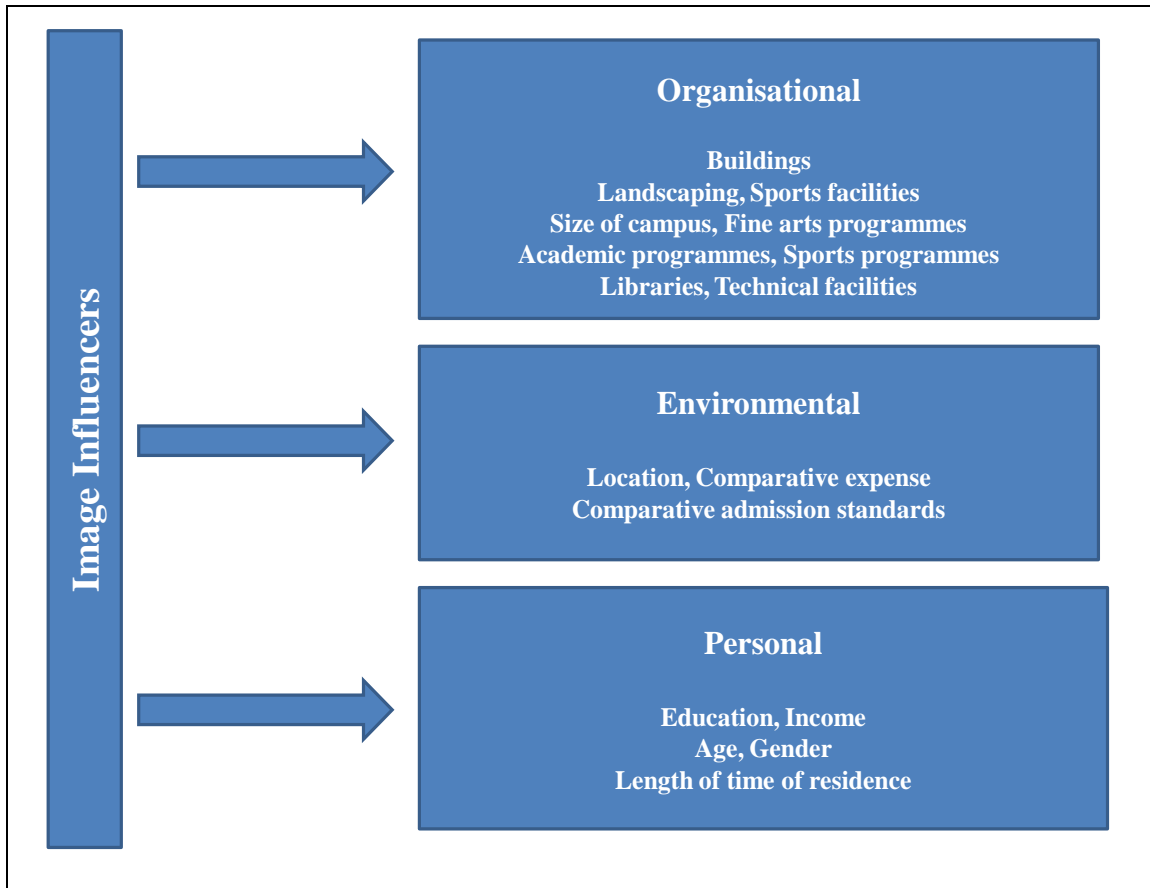
This was based on a scale of 1-10. This model looks at organisational variables (buildings, landscaping, sports facilities, size of campus, fine art programmes, academic programmes, sports programmes, libraries and technical facilities), environmental variables (location, comparative expense and comparative admission standards) and personal variables (education, income, age, gender and length of time of residence). The findings suggest that organisational factors such as academic programmes, campus landscape and campus size add to the formation of positive and negative images most extensively. Kazoleas *et al.* (2001) conclude that HEI infrastructure and strengths of the HEI should be the primary vehicle for image building**.**

Kertesz (1991) and Kovach (1985) agree that image is largely visual and chiefly determined by the organisation. This is consistent with the organisational perspective of

image development. Moffitt (1992;1994) adds that persuasive messages released by the organisation and advertising for the organisation can influence the public's image of the organisation. Zinkhan *et al's.* (2001) study shows that companies can do something about their image by effectively utilising one or more of the essential tools the organisation has within its internal sphere of influence. Williams and Moffitt (1997) note that certain organisational-managed factors dominate and contribute a large proportion of what a person thinks of as organisational image. Yet, other factors still add a major amount of extra variance. The results specify that other factors, less controlled by the organisation, cannot be ignored. Arpan *et al.* (2003) created an 11 item semantic differential scale to address the potential factors that might make up a HEI's image. Williams and Moffitt (1997) propose that image is shaped by the organisation, by publics and by the environment. Fombrun and Shanley (1990) highlight that personal lived experiences influence the image formed.

In order to understand HEI image, HEI managers need to recognise what influences the HEI image. Kazoleas *et al.* (2001) advise once the HEI appreciates this image configuration process at work in its publics, it can plan image strategy, design messages and choose communication selection to improve its desired image's and to oppose possible negative images. HEI image has an enormous impact on the HEI resources as highlighted in the work of Lewin (1935) and Landrum *et al.* (1998) It is therefore necessary that the HEI understands the image influencers that could strengthen their image.

3.10 A conceptual model of HEI image

Based on a review of the literature and considering the unique context of the study, the researcher developed a model of HEI image which centres on image influencers (see figure 3.12). To the best of the researcher's knowledge, limited or no research exists that has examined the combined effects of all three sets of image influencers: organisational, environmental and personal on the HEI components of image comprising of demographic, spirit and temperament, curriculum, competitiveness and academic life.

Figure 3.12 The Influencer Model of HEI Image
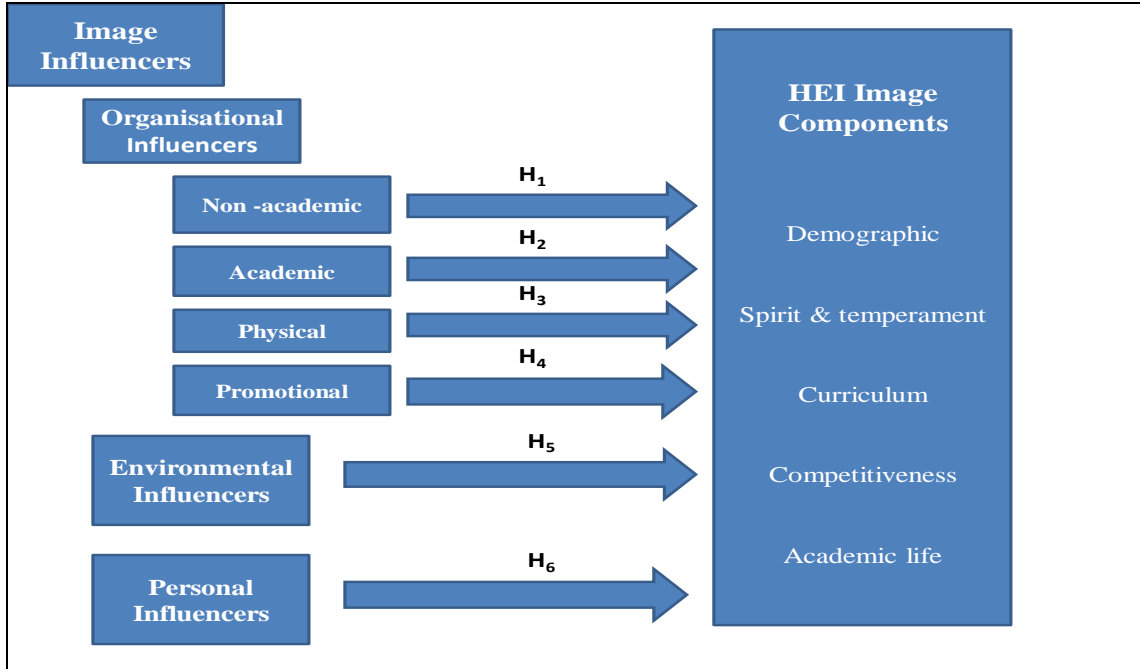
The model positions the image influencers' variables as an antecedent of all components of HEI image and highlights the dimensions of image influencers: organisational, environmental and personal factors. For Kazoleas *et al.* (2001), an image is influenced by the interaction of organisational factors, environmental and personal, thereby indicating these influencers have a critical impact on the HEI image which emerges. The model indicates a direct relationship between the three image influencers and HEI image. Based on literature presented heretofore, the following subsection presents a brief justification of the model's major components and relevant hypotheses.

As previously noted, Williams and Moffitt (1997) maintain that numerous factors contribute to the configuration of the overall organisational image. Organisational, environmental, and personal factors all affect the development of the corporate image. However, much remains to be learned in terms of these influencing factors, as little empirical research exists that has investigated the effects of these organisational, environmental and personal influencers on variables such as image with the exception of Kazoleas *et al.* (2001).

Kazoleas *et al.* (2001) found a significant relationship between organisational factors, environmental factors and personal connections in the process of image formation. Regarding the three factors of image influence, the literature indicates that organisational, environmental and personal factors each have an impact on the HEI image. For Kazoleas *et al.* (2001), organisational actors include: buildings, technical facilities and libraries. Studies have found that environmental factors such as location and admission criteria influence the HEI image (Kazoleas *et al.* 2001; Theus 1993; Alvesson 1998 and Williams and Moffitt 1997). Research has also shown that personal factors such as education, income, age and gender can influence HEI image (Kazoleas *et al.* 2001; Fombrun and Shanley 1990; Williams and Moffitt, 1997; Treadwell and Harrison, 1994). Hence, the forgoing shows there is a connection between organisational, environmental and personal factors with overall image.

Based on the foregoing and as delineated in the paths outlined in figure 3.12, the following hypotheses are presented:

H_1: The greater the non-academic image influence, the greater the HEI image components amongst senior second level students.

H_2: The greater the academic image influence, the greater the HEI image components amongst senior second level students.

H_3: The greater the physical image influence, the greater the HEI image components amongst senior second level students.

H_4: The greater the promotional image influence, the greater the HEI image components amongst senior second level students.

H_5: The greater the environmental image influence, the greater the HEI image components amongst senior second level students.

H_6: The greater the personal image influence, the greater the HEI image components amongst senior second level students.

3.11 Conclusion

Although image has been extensively examined in the corporate sector, relatively little research has been completed on HEI image and a minuscule amount on the pre-admission cohort. As the HE sector has evolved into a competitive market place, HEI image has gained significant importance, as it has the potential to help attract resources which allows a HEI to prosper. The literature presents image as a complex multifaceted concept that is difficult to define. Vital components of image include: experiences, impression, beliefs and feelings about products, services, social responsibility, environment and communication. Specifically, HEI image components, according to Terkla and Pagano (1993), relate to ideas on spirit and temperament, curriculum, competitiveness, academic life and demographic factors relating to the HEI.

The literature highlights two perspectives on image formation: organisation perspective and the recipient perspective. The recipient perspective highlights that there are numerous sources of image such as interpersonal, corporate communication, word-of-mouth and other communication. HEIs operate in an environment with many different publics with different images of the HEI. Career guidance counsellors, family and friends are sources of HEI information and thus image. The literature suggests that numerous factors influence image. These are the internal spheres (corporate personality and identity, corporate advertising, public relations, brand image and frontline employee behaviour) which the organisation can control and the external non-controllable sphere (industry image, press reports, word-of-mouth and country of origin image). Exclusively, for HEIs the influences relate to organisational, personal and environmental factors. The methodology employed is examined in the next chapter as well as the underlying philosophical assumptions.

Chapter Four - Research Methodology

4.1 Introduction

The intention of this chapter is to provide an overview of how the current study was undertaken and to offer a justification and elaboration on the methods used to address the objectives of the study. It commences with an outline and discussion of the research process. Philosophical perspectives are presented, alternative approaches are considered and a philosophical stance is selected. A research problem, question and objectives are offered and examined. The research design, to which the data collection and analysis phase of the research are linked to, is reviewed. Sampling criteria are presented and explained. The main research methodologies are reviewed and a rationale for the chosen research methodologies is discussed. This study adopted a multi-method strategy based on focus groups and surveys with senior second level students. The research limitations including validity threats are also examined.

4.2 The research process

The research process can only begin once the research questions and objectives have been established. This process has many stages as illustrated in figure 4.1. According to Sekaran (1992) research starts with recognition of the research topic and concludes, numerous stages later, with deduction from the data and information collected in order to answer the research questions. These stages consist of observation, preliminary data gathering and problem definition. The outcomes of these initial stages lead to the development of research objectives.

Sekeran (1992) advises the research process is the arrangement of procedures used for collecting and analysing information in order to deal with a difficulty or explore an opportunity. The framework of the research process acts as a structure, which guides the researcher to gather the necessary information through the most appropriate approaches, methods or procedures. The diagram in figure 4.1 identifies research as an interlinked process that develops incrementally. Furthermore, Sekaran (1992) identifies the literature review as the most vital part of the process. The literature review is essentially ingrained

in the early and concluding stages of the process as it guides idea creation and helps the researcher to recognise the objectives and research questions and ultimately to reflect on the findings in the context of the literature.

Figure 4.1 Diagrammatic Presentation of the Research Process
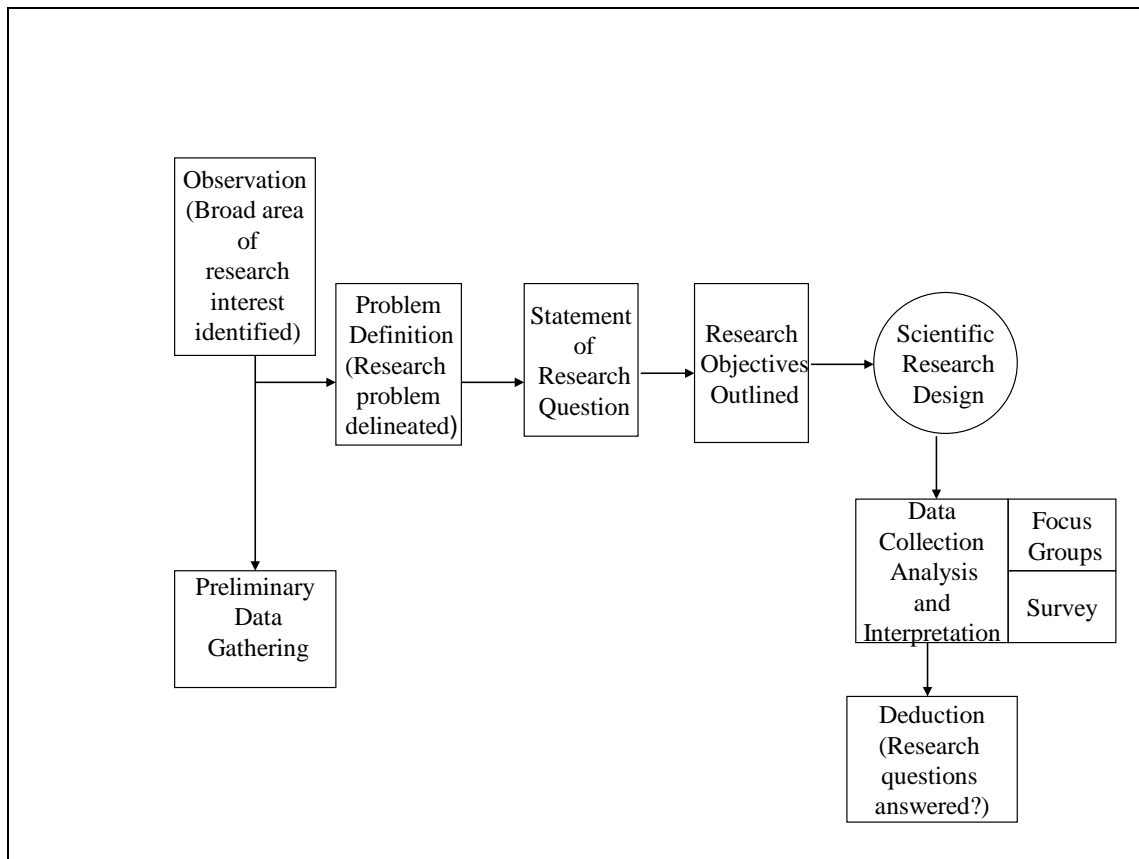
The research process for this study had many stages, as illustrated in figure 4.1. This process began with an examination of the available literature relating to the topics which led to the initial focus groups being conducted. Surveys were then administered to the relevant population of interest.

4.3 Research philosophy

The research design is influenced by the chosen approach to the research (Kervin, 1992). There are two types of research approaches, phenomenology and positivism. Phenomenology is a theoretical point of view that advocates the study of direct experiences taken at face value and one which sees behaviours as determined by the phenomena of experience rather than by an external, objective and physically described reality (Cohen and Manion, 1987). Phenomenology is a study of how things appear to people – how people experience the world (Gill and Johnson, 1997). Phenomenology is 'characterised by a focus on the meanings, which the research participants attach to social phenomena; it is an attempt by the researcher to understand what is happening and why it is happening' (Kervin, 1992). A researcher who undertakes a phenomenological study would be concerned with understanding the meanings that respondents ascribe to various phenomena (Saunders *et al.* 2003). Phenomenology requires an understanding of the phenomena in depth and this understanding should result from attempting to find tentative answers to questions such as what, why and how. Such an understanding can result from using methods other than measurement (Remenyi *et al*. 2002).

Gray (2004) identified three main advantages associated with a phenomenological approach. Firstly, it facilitates the understanding of how and why. Secondly, this approach aids researchers to be alert to changes that occur during the research process. Finally, it is useful for understanding social processes. According to Smith (1975), the major constraints of the phenomenological approach are data collection, which can be time consuming, and data analysis, which is difficult. A researcher has to live with the uncertainty that clear patterns may not emerge. Furthermore, this approach is generally perceived as less credible by non-researchers.

The second type of research approach is known as positivism. Remenyi *et al.* (2002) explain that postivism was adopted by Comte (1798-1857) to express the idea that phenomena were real, certain and precise. All knowledge culminates in the description, coexistence and succession of such phenomena. It became an extremely influential intellectual trend from the mid nineteenth century, forming, until very recently, the

generally accepted view of science. Positivism is a theory of the nature, omnicompetence and unity of science as understood in the physical world. Positivism is a research approach that emphasises the use of methods from natural sciences in the social sciences (Gill and Johnson, 1997).

Bryman and Bell (2003) outline that positivism can entail the following principles:

- It is only phenomena and hence knowledge confirmed by the senses that can genuinely be warranted as knowledge.
- The purpose of the theory is to generate hypotheses that can be tested and that will thereby allow explanations and laws to be assessed.
- Knowledge is arrived at through the gathering of facts that provide the basis for laws.
- Science must be conducted in a way that is value free.
- There is a clear distinction between scientific statements and normative statements and a belief that the former are the true domain of the scientist.

Smith (1975) identified the main advantages and disadvantages associated with a positivist approach. These advantages include: easily comparable data, economic collection of a large amount of data with greater opportunity for researchers to retain control of the research process and a clear theoretical focus. Disadvantages of the approach include: inflexibility which often cannot be changed once data collection has started, it is weakness at understanding social factors and an inability to discover the meaning people attach to social phenomena.

In this research, the researcher adopted a phenomenological and positivist form of philosophical approach. Phase one, focus groups were phenomenological while phase two surveys were positivist. Phase one allowed for a greater understanding of an individual's HEI image experience without measurement while phase two relies on prior theory and develops hypotheses for testing. The data collection instruments utilised in phase two were largely structured in nature.

4.4 Research design

Following on from the creation of the research objectives, the researcher must then build a suitable research design in order to address the research problem. As Zikmund (1997) states, the research design is a 'master plan specifying the methods and procedures for collecting and analysing needed information.' Cooper and Schindler (1998) highlight that the research design process offers a plan for selecting the sources and types of information used to respond to the research question. It also offers a plan that outlines each procedure from literature review to examination of data, thus allowing the researcher a structure that specifies what data is to be collected and by what method.

Patton (1990) affirms that the selection of the research design must be suitable to the topic under review. At the same time, the choice of population of interest determines the kind of methodology strategy considered most suitable by the researcher for the purpose of the study (Brannick and Roche, 1997). The multi-method strategy is deemed to be the most relevant research strategy for this study, as it allows the researcher to achieve the objectives of this research investigation. Furthermore, as Sekaran (1992) affirms, the acceptance of a multi-method approach cancels the 'method effect', as the collection of information from multi-sources and through multi-methods eliminates the biases often linked with single method approaches and can therefore add rigor to a research study.

This study focuses on senior second level students' perceptions of HEI image, with particular reference to WIT and CIT. These institutions were chosen as they were convenient for the researcher. The researcher is based in WIT and CIT is in close proximity. However, in order to explore the research issue and develop appropriate research scales, it was decided that the research methodology would consist of a two-phase approach. As little research has been conducted on HEI image, this research commences with focus groups. These are used to explore and gain a deep understanding of the HEI image, to examine the HEI environment, to identify definitions, sources and formation issues regarding HEI image. Focus groups are deemed to be necessary as these groups allow the young senior second level students to express their perceptions using the

group process. There is less individual pressure than in a depth interview for the participants. Focus groups are necessary as there are limited scales regarding HEI image in the published research. Therefore these groups highlight factors that could be added to these scales. Surveys were then developed and employed. The survey scales are enhanced with some of the issues that were highlighted in the focus groups. The survey allows for a quantifiable understanding of the characteristics of image. It allows the researcher to examine the relationship between image influencers and image. It also allows for ease of comparison as groups responded to a standardised instrument.

4.4.1 Phase one: exploratory research – Exploratory research aims to investigate and discover issues about the problem at hand. A research study is exploratory when there is doubt about the size or scope of a difficulty or opportunity. This technique is frequently utilised when there is not a lot of background information obtainable about the subject (Sellitiz *et al*., .N.D.). Exploratory research involves experience surveys, talking to experts in the subject, secondary data analysis, literature reviews and conducting focus group interviews (Sellitiz *et al.,* N.D. Saunders *et al.,* 2003). It may also comprise of convenience or judgement samples, small scale surveys or simple experiments, case analyses and subjective evaluations of the results (Hawkins and Tull, 1993). The findings of exploratory research generally do not give instant answers but do explain the issues and limits of the research problem. Exploratory studies are very flexible, perceptive and informal, and the data that is collected is qualitative and soft in nature (Weiers, 1998). For the purpose of this research, exploratory research concerned comprehensive desk and fieldwork research. The researcher became more aware of the literature concerning the HEI environment, image and the applications of image to higher education. In addition, the researcher conducted focus group interviews with senior second level students from key WIT and CIT feeder schools in both Waterford and Cork.

4.4.2 Phase two: descriptive and explanatory research - Descriptive research presents a picture of the precise particulars of a situation, social setting or relationship (Neumann, 1991). The researcher commences with a defined subject and conducts research to explain it precisely (Saunders *et al.,* 1997). Robson (1993) advocates that the principal

objective of descriptive research is to 'portray an accurate profile of persons, events or situations'. Saunders *et al.* (1997) expand on Robson's (1993) work and record individual goals of descriptive research which include: the provision of precise profiles of a group; the presentation of essential background information; clarification of a series of events and the documentation of data that contradicts past beliefs about a subject. The bulk of research techniques, such as surveys, field research, histograms, comparative techniques and content analysis, can all be used as descriptive research apparatus (Smith and Dainty, 1991). Explanatory studies require data to analyse theory. In addition to those issues raised for descriptive research, the researcher needs to define theories to test a relationship between variables prior to designing a survey. The researcher needs to have reviewed literature extensively, discussed ideas and conceptualised the research clearly prior to designing the survey (Ghauri and Gronhaug, 2002; Saunders *et al.,* 2003).

In the case of this research, descriptive and explanatory research concerned the conduct of surveys with groups to attain quantitative data. This data was then utilised to identify relationships between variables.

4.5 Qualitative and quantitative research

Sekaran (1992) defined primary data as 'data collected from the problem situation firsthand, in order to analyse them and find solutions to the problem being researched'. The advantages of primary research are that it is appropriate, comprehensive, and up to date. Blaxter *et al.* (1997) have identified three disadvantages linked with the use of primary research: data can be hard to collect, it is relatively costly and it demands a lot of time. Primary research was conducted through qualitative and quantitative methods. Qualitative methods involved the use of focus groups for the first phase of the research while quantitative methods were used in the second phase of the research.

4.5.1 Qualitative research

Sarantakos (1998) states that qualitative research refers to numerous methodological approaches based on various theoretical principles, using means of data gathering and analysis that are non-quantitative and aiming for exploration of social relations that

describes reality as experienced by participants. The defining traits of qualitative research according to Stake (1995) are:

- It is holistic, that is, it is well developed, case orientated, and it is non-comparative, seeking to comprehend its objectives rather than how it differs from others.
- It is empirical in that it is field focused and it aims to be naturalistic.
- It is interpretative as researchers rely more on perception rather than on criteria.
- It is empathic, whereby the design although planned, is evolving and responsive.

Kelly (1999) contributes more to this definition and gives two extra traits of qualitative research. Firstly, it is based on open-ended interviews. The open-ended nature of interviews allows the procedure of questioning to be flexible and creative. Through 'open-ended interviews respondents reveal the issues, which effect and trouble them most'. Secondly, it gathers information in the shape of narrative statements. Quotations become the basis of raw information in qualitative research, which disclose the respondent's beliefs, experiences, opinions and perceptions.

According to Malhotra (1999), qualitative research allows the researcher:
- To gather sensitive and private information.
- To explore the subconscious opinions of the respondents.
- To describe a difficult phenomenon.
- To get a wide-ranging and total picture of the whole circumstance in which the phenomena of significance occurred, adopting a holistic viewpoint, in an effort to explain the complete situation of interest.

The employment of qualitative approaches has increased in recent years and is appropriate when studying social phenomena; nonetheless as with each research approach there are a number of disadvantages that also need to be considered. Richards and Richards (1994), outline three key constraints of using qualitative research. They are:

- Quantity of information – qualitative research data gathering can be tedious and may need additional resources.

- Difficulty of analysis – analysis and understanding of information may be more complex.

- Flexibility and momentum of analysis – it can prove difficult to manage the speed, advancement and end-points of the research.

In this research, the researcher used qualitative research in the form of focus groups. These focus groups allowed the researcher to explore the issue of HEI image in a less structured way. It afforded the respondents the opportunity to explain their perceptions regarding the complex phenomena of HEI image.

4.5.2 Quantitative research

Sarantakos (1998) has described quantitative research as research that is 'based on the methodological principles of positivism and neopositivism, and adheres to the standards of strict research design developed before the research begins'. Furthermore, Sarantakos (1998) emphasises that quantitative research involves the use of quantitative dimensions and the statistical examination of the findings resulting from the dimensions studied. Yin (1993) has described quantitative research as being more 'hard-nosed' and data driven in character. This research philosophy focuses more on the outcomes of statistical or numbers-based research, and to this end, is thought of by many writers to be more systematic than qualitative research (Yin, 1993).

According to Stevenson (1998) the adoption of the quantitative research approach involves working with samples that are big enough to assist the generalisation of data in statistical terms. To this end, quantitative research allows statistical analysis. It is based on extremely structured processes that centre on particulars and quantifiable actions and also answer the question: 'how many?', as opposed to 'how, why or what?'. Quantitative research measures the incidence in which events happen and the pattern of such occurrences.

Stevenson (1998) outlines the virtues of using a quantitative approach which include; the capability to generalise findings; to decrease the cost of the research; to offer empirical evidence for existing theories; and to uphold research independence. Some problems, include, it is difficult to explain individual actions, there is the possibility of revealing unimportant results and the superiority of the research findings depend completely on the quality of the data gathered (Stevenson, 1998). These confinements can have a negative effect upon the research findings. In this study, quantitative research was used as it allows the researcher to explore the variables that emerged from the exploratory focus groups in measurable terms thus gaining a quantifiable understanding of the image construct. It allows the researcher to explore the relationship of image to other variables.

4.6 Research problem

Emory and Cooper (1991) suggest that 'the purpose of the research, or the problem involved, should be clearly defined and sharply delineated in terms as unambiguous as possible'. It can be argued from this statement that a clear delineation and statement of the research problem is a vital aspect of the complete research process. It is at this interface in the research process that a subject, or area, is selected for study (Smith, 1991). The action of plainly defining and delineating the research problem in the early stages of the research process allows the researcher to carry out a more accurate study of the selected areas. It permits the researcher to establish boundaries to the research. Furthermore, a clearly defined research problem makes it easier to construct hypotheses in a rational way. In addition, the development of a planned research design and well prepared written presentation can follow on from the unambiguous delineation of the research problem, as the study would clearly be fixed on developing an answer to the problem.

Conducting a critical review of the accessible literature on the subject matter may present the researcher with the research problem. The researcher discovered there was a lack of literature in the field of HEI image as highlighted by Arpan *et al.* (2003) and Kazoleas *et al.* (2001). A review of the available literature has highlighted that research has been conducted internationally on HEI image among various HEI stakeholders but the

literature does not provide evidence of perceptions of an important stakeholder group: senior second-level students. Furthermore, there is no published research of this nature in an Irish context.

The HEI market has changed into a competitive market place, which would strongly indicate the need for HEIs to recognise and comprehend their market, in an attempt to maintain market share. Landrum *et al.* (1998) suggest that image influences a number of decisions about a HEI's future: it influences the calibre of applicant, the community impressions regarding the HEI and the decision to pursue a relationship. Therefore, in the current Irish climate, researching the perceptions of senior second level students' image of HEIs is pivotal due to the dependancy that HEIs have on this group.

4.7 Research objectives

Emory and Cooper (1991) note that the research objectives tackle the purpose of the study. It is during the research objective stage that the plan for the intended research is laid out. The following objectives have been developed from the research question:

1) To determine the constituent components of HEI image.
2) To investigate the sources of image as perceived by the senior second level student.
3) To determine the components that contribute to the formation of image from the senior second level students' view point.

4.8 Data collection

Data collection entails the gathering of information by the researcher that allows the researcher to get an appreciation of the subject matter. Data collection is usually broken up into two categories: primary and secondary data.

4.8.1 Secondary research

Prior to primary research being conducted, it is essential that secondary data connected to the subject matter is analysed (Malhotra, 1996). Sekeran (1992) has defined secondary

data as 'data that has previously been collected by researchers, data printed in statistical and other journals and information accessible from published or unpublished sources accessible from inside or outside the organisation'.

Secondary data provides the researcher with a number of advantages: it is faster to collect secondary data than to commence a new study (Emory and Cooper, 1991; Fay, 1997) and using secondary data sources is less expensive than conducting primary research (Fay, 1997). Although the secondary data may be appropriate and essential, there may not be adequate information to meet the data requirements for the problem being researched (Malhotra, 1993).

The researcher utilised the following internal and external secondary data, computerised database(s) searches and information services as sources of information for the literature review:

- An extensive library search was conducted at WIT library
- PhD, MBS and MBA theses
- Newspapers and educational magazines linked to the topic under investigation were analysed
- Computerised databases e.g. ABI Inform, Emerald, Business Source Premier and Science Direct
- Internet: Particular use was made of the Google Scholar and Yahoo search engines, which prioritises search results by applicability to search criteria. 'Education and Living' online with The Irish Times provided current data on the education environment in Ireland.
- Liaison with agencies including the Department of Education and Science and the Higher Education Authority
- Proceedings from conferences and seminars given on the subject area e.g. key note address delivered at the OECD Institute of Management in Higher Education Seminar 2004
- Prospectuses and publications from WIT and CIT
- The Department of Education and Science (Annual and Key Statistics Reports)

- Interlibrary loans through WIT library

The key literature domain examined by the researcher in this study is HE marketing with particular reference to HEI image. This focused on HEI image formation, sources and influencers. The key words that were used for the literature searches included college image, university image, institutional image.

Moffitt (1994) advises that corporate image is conceptualised as multifaceted: any information, attitude and action – big or small, positive or negative that an individual may have towards an organisation. Kazoleas (2001) agrees the concept of image was conceptualised as multifaceted which includes a large quantity of attributes. Image was operationalised from many perspectives including, personal, environmental and organisational factors. Terkla and Pagano (1993) believe an educational HEI has a multifaceted image that includes academic, social, political and stylist elements.

4.9 Selection of the sample

A sample is: 'a subgroup or part of a large population' (Saunders *et al*., 2003) Malhotra (1999) advises that the first step in the sampling design process is to define the target population. According to Hawkins and Tull (1993), the population sample can be set out in terms of:

(I)   Elements
(II)   Units
(III)   Extent
(IV)   Time

An *element* refers to the individual to whom the research device is delivered. For the purpose of the survey element of this research, the target population was defined as 6th year leaving certificate students. This study sought the views of students that were in the final years of school - a time when third level education choices are at the forefront of their thoughts. These 6th year leaving certificate students were located in counties

Waterford and Cork. They are deemed to have been exposed to WIT and CIT because of their location. Respondents were surveyed about the specific IT that was based in their county. This provides confidence in respondents awareness of each IT. These students are educated to Leaving Certificate level. This characteristic is seen as an important attribute among the target population as it is believed that these students would have knowledge of the HEI sector and would have the competencies to complete the survey with minimum assistance.

The *sampling frame* is a list of all the members of a relevant population (Luck *et al*. 1978). The sampling frame utilised for this research was derived from a feeder school list made available through the Registrar's Office at both WIT and CIT for 2007. These lists detailed the number of students from each second level school going to WIT and CIT as undergraduate students. For the purpose of this research the information on feeder schools based in counties Waterford and Cork that send students to the IT located in their respective counties is extracted. These lists were cross checked with Department of Education and Science school listings and Irish Times feeder school supplement.

Extent refers to the geographical dispersion of the sample. In this research, the feeder school sampling frame included all WIT feeder schools located in county Waterford and all CIT feeder schools located in county Cork.

Time The duration of conducting the primary research was five months in total. This time period included the conducting of the focus groups from September to October 2006 and surveys from September to December 2008 amongst second level students.

4.9.1 The sampling strategy

Saunders *et al.* (2003) highlight that sampling techniques can be divided into two types probability or representative sampling and non-probability judgemental sampling. Probability sampling occurs when the chances or probability of each entity being selected from the population is known and is usually identical for all. Non-probability samples are those where the probability of each entity being selected from the total population is not

known. It is impractical to answer each research question or to deal with objectives that require the researchers to make statistical inferences about the characteristics of the population. Non-probability sampling techniques include quota, purposive, snowball, self-selection and convenience (Saunder *et al.,* 2003). This study used a sampling technique combining cluster and random sampling. Saunders *et al.* (2003) define cluster sampling as a 'probability sampling procedure in which the population is divided into discrete groups or clusters prior to sampling. A random sample (systematic or simple) of these clusters is then drawn'. Remenyni *et al.* (2002) identifies multi-stage sampling, as an extension of cluster sampling.

This research focused on counties Waterford and Cork and the second level schools in this area. This reduced the number of schools available for consideration. The researcher developed a sampling frame of all schools that sent students to WIT and CIT within their respective counties. Having reviewed the sampling frame, it was logical that a 'high' feeder school would be classified as schools that supply 10 or more students to an institution with 'low' feeder schools supplying less than 10 students. The population was then broken down into clusters of high feeder schools and low feeder schools. It was evident in the focus groups that image may differ based on location. Therefore, this high-low feeder group was further subdivided into high proximity (city) schools and low proximity (rural) schools before sampling commenced (see table 4.1). The researcher believed that a balanced cross-section of the target population views could be attained by dividing the target population into these eight cluster groups.

Table 4.1 Sampling Frame Details

Students Attending	Waterford Schools		Cork Schools		Total
	High Proximity	Low Proximity	High Proximity	Low proximity	
≥ 10	9	5	41	21	76
< 10	3	4	12	16	35
Total	12	9	53	37	111

A target sample of 320 students was deemed an appropriate figure as it allows for an extensive study to be completed if non responses occur. This compares favourably with the response rate in previous studies of second level students at a local level: Arpan's (2003) research of university image has 78 participants in the survey section while Shank *et al's.* (N.D.) research has 183 respondents. Once the sample size was finalised, the number of units from each cluster was calculated. This was based on incorporating high/low feeder secondary schools and high/low proximity secondary schools for WIT and CIT. A random sample of one senior second level school was selected for each of the eight clusters. There was an exception, low feeder/high proximity secondary schools for WIT and CIT as two secondary schools were necessary for this cluster.

The next section describes the primary research tool of focus groups that was utilised in this research.

4.10 Focus group interviews

The focus group technique is a type of group interview in which there are numerous participants (in addition to the moderator or facilitator); the questioning is on a particular tightly defined subject and the accent is upon interaction within the group and the combined development of meaning. Gibb (1997) highlights that a focus group can be defined as '...a group of individuals selected and assembled by researchers to discuss and comment upon, from personal experience, the topic that is the subject of the research'.

Zikmund (1997) summarises the advantages of such group discussions as the '10 S's':

(1) Synergy - the group process creates a wider variety of information than would accumulate from a similar number of depth interviews.

(2) Snowballing - respondent communication creates a sequence of thoughts and ideas.

(3) Serendipity – an important idea can come up out of the blue.

(4) Stimulation - respondent's views are brought out by the group process.

(5) Security - respondents are more likely to be frank as there will most likely be other similar people there, and there is less individual pressure than in a depth interview.

(6) Spontaneity - because it is not compulsory for one individual to respond to a question, this encourages a spontaneous response when people have a definite point of view.

(7) Specialisation - a trained moderator can interview more respondents in a given sitting.

(8) Structure - it is easier for the moderator to reintroduce a subject not sufficiently covered previously than in a depth interview.

(9) Speed - faster than individual interviews.

(10) Scrutiny - can be observed by members of the research team.

Gibb (1997) suggests a further 'S' for saliency in that groups help to extract why a particular subject is prominent. Groups also highlight differences between clients, making it possible to appreciate a variety of behaviours (Gordon and Langmaid, 1988; Morgan, 1998; Fern, 2001). It is evident that the benefits of focus groups are gained from two features: group dealings (Burns, 1989; Albrecht *et al*., 1993) and the duplication of social forces (Robson, 1990; Kruger and Casey, 2000).

It is apparent that the process of group dynamics accounts for many of the advantages of focus groups but this can be regarded as a double-edged sword. Participants may feel subdued in a group situation (Hedges, 1985; Greenbaum, 1998) and social pressures can also lead to over-claiming (Webb, 1995; Greenbaum, 2003). Some respondents expressly concur with the views of other focus group respondents, whilst privately disagreeing (Robson, 1990). Group interaction can create a consensus perspective (Bloom, 1989), with potentially limited validity (Griggs, 1987). Consensus however may mean a shared view that nobody disagrees with, but similarly one that nobody wholly endorses either.

A number of the benefits claimed for focus groups may be misleading. For example, the often-quoted benefits of time and cost savings (Crimp and Wright, 1995; Chisnall, 1997) have infrequently been systematically tested, and where they have been (Roe, 1988;

Crabtree *et al.,* 1993), these traits were called into question. Focus groups are occasionally defensible as an appropriate means to get the viewpoint of a wider number of individuals (Robson and Foster, 1989). This could be difficult if the group processes lead to agreement within the group, implying that the unit of analysis is a single unit - the group - rather than the cumulative number of respondents who attend it (Birn *et al.,* 1990; Crabtree *et al.*, 1993; Fern, 2001).

The responsibility is placed on the moderator to explain the focus groups' purpose thus avoiding uncertainty and misunderstanding. The moderator encourages participants to relax and start the discussion. A balance between encouraging participants to converse on particular issues and allowing them to express more freely issues in this discussion may reveal data that provides the moderator with important insights. (Saunders *et al.*, 2003).

4.10.1 Focus group interview guide

Cover letter

Initial contact was made through a cover letter (see appendix 5) a functional means of introducing both the researcher and the nature of the study being conducted (Brannick and Roche, 1997). A cover letter was sent to the principals of target schools seeking their permission for their senior students to participate in the focus groups. The researcher believed that the cover letter was necessary as it clarified the importance of the respondents to the research. Telephone calls and e-mails were used to follow up on these letters and focus groups were then organised.

Focus group guide

Parker and Tritter (2006) highlight a focus group requires a logical sequence of open ended questions. Hennink *et al.* (2011) advise that a focus group guide is a list of questions or issues that are to be examined throughout the focus group. It provides topics or subject areas within which the facilitator is free to investigate, probe and ask questions that will clarify the subject. The list acts as a guide to the conversation, yet it should not in itself dictate the whole discussion. A focus group guide ensures that all focus group participants are 'focused' on the same topic. In designing the focus group guide, it was

decided to divide the questions into a number of areas which drew directly from the literature review and research objectives (see appendix 6).

Piloting of focus group guide

In order to evaluate the response of the respondents to, and the procedures involved in carrying out an interview, pilot interviews are often held (Brannick and Roche, 1997). which involve duplication on a miniature scale of the main interview. Possible problems with the focus group interview can be uncovered thereby allowing changes to be made. Bryman and Bell (2003) highlight that piloting an interview schedule can provide interviewers with some experience of using it and can infuse the researcher with a greater sense of confidence in the guide.

A pilot interview was conducted at WIT with a leaving certificate student in September 2006 prior to the main focus group interviews being held. This allowed the researcher time to alter the wording and sequence of the focus group interview guide to make sure the focus group interview was adapted to this particular group and increasing the likelihood of it being as successful as possible. The pilot interview highlighted the need for the term 'image' and 'literature' to be explained in further detail. As a result of this pre-testing, the researcher was able to organise the focus group more efficiently as the researcher was aware of the time involved to complete the focus group interview and also was able to modify the wording of unclear and misleading questions.

4.10.2 Focus group operational details

The researcher carried out four 25-35 minute focus groups with senior second level students at feeder Schools for WIT and CIT. Each focus group had 12 students. Two of these focus groups were conducted in September 2006 in Waterford at a male secondary school (Colaiste De La Salle) and a female secondary school (St. Angela's). These schools were selected due to convenience and they allowed the researcher to ensure that the views of both genders would be gathered, thus, eliminating any gender bias. These schools had previously sent students to WIT. The two Cork based focus groups were conducted in secondary schools in Cork in October 2006 they also followed the same

criteria (see table 4.2 for details). It was deemed important that senior second level students had a knowledge of the subject area and the school had a willingness to co-operate. The focus group allowed for a more in-depth documentation and comparison of how these senior students perceived WIT's and CIT's image. Each focus group was taped and full transcripts were typed up following the focus groups.

Table 4.2 Focus Groups

Schools in which the focus group occurred	*Male*	*Female*
Waterford St Angela's School, Waterford City Colaiste De La Salle, Waterford City	1	1
Cork Douglas Community School, Cork City St Patrick's Secondary School, Cork City	1	1

4.10.3 Focus group data analysis

The data collected from the qualitative research conducted using focus groups with senior second level students was analysed using the NVivo computer package. In relation to qualitative data analysis, Easterby-Smith *et al.,* (2000) divide analysis into two areas: content analysis or grounded theory analysis. Content analysis is a 'technique that is applied to non-statistical material and that allows the researcher to analyse such material in a systematic way' (Finn *et al.,* 2000). The grounded theory analytical approach focuses on creating 'common or contradictory themes and patterns from the data' (Easterby-Smith *et al.,* 1997). For this research, the grounded theory or thematic approach was utilised. As indicated, this method is concerned with the analysis of themes involving 'higher level abstractions inferred from their connection to a unique pattern in the content' (Cooper and Schindler, 1998). The thematic approach was more appropriate in this study than the content analysis approach as it was necessary to analyse the qualitative data generated from the first phase focus group interviews in order to identify any themes and patterns.

The NVivo package was chosen as it is extremely efficient to identify themes in comparison to the manual method of analysis. The researcher transcribed each focus group interview and imported this information into NVivo. This source information allowed for free nodes to be created which in turn were analysed into a structure tree node. The key areas of WIT and CIT image were classified as tree nodes, from which nodes concerning institutional image were gathered. The tree nodes were then put into sets, and from these sets an analysis was conducted in order to identify clear themes (see appendix 7).

4.11 Survey

Aaker *et al.* (1998) highlight that surveys are the most popular means for gathering data. A survey is a list of carefully prepared questions, selected after substantial testing, with a view to eliciting dependable responses from a selected sample (Collis and Hussey, 2003). They are extensively used for data collection as they offer an efficient means of collecting responses from large samples (Saunders *et al.,* 1997). Survey research can be carried out through mail survey method, telephone survey method, case study approach and personal interview with a respondent.

For the purpose of this study, a structured survey was used. This gave the researcher the opportunity to examine the HEI image concept uniformly and permit statistical analysis to be conducted. The surveys were distributed by the researcher in person to a group of senior second level students. This allowed the researcher to distribute and retrieve the surveys from a large number of students without delay. The reasons for doing surveys in a group setting, included higher response rates, uniformity in data collection conditions, opportunities to answer questions and to clear up ambiguities, and savings in time and postage (Hinrich and Gatewood, 1967). The Web Centre for Social Research Methods (2011) advises that this group administration method allows respondents, that are unclear about the meaning of a question, to ask for clarification.

Burns and Bush (2000) summarise the advantages of the survey method in general as:

- Simple to administer.
- Less time dependant.
- Allows large samples and statistical examination.
- Uncomplicated when comparing groups.
- Anonymity possible.
- Standardisation of questions and response options.
- Capability to tap the 'unseen'.

Drawbacks of the survey method as:

Inflexibility - Due to the set and standard character of the questions in a survey, the flexibility of respondents' answers is restricted (Segars and Grover, 1998).

Lack of required knowledge - Respondents may not have the necessary information to respond to all elements of the survey, but frequently do nonetheless (Emory and Cooper, 1991).

Access limitations - Problems can happen when attempting to gain access to organisations and individuals for research purposes (Segars and Grover, 1998).

Limited length of survey – The length of the survey can still depend upon the readiness and collaboration of the respondent (Segars and Grover, 1998).

Closed nature of questions - Respondents are usually ready to devote a limited quantity of time to the survey instrument (Segars and Grover, 1998). The employment of open-ended questions requires the respondent to devise answers which takes time and may, as a result, discourage the respondents from finishing the survey

Delay in return of surveys - respondents, particularly in the business community, are bombarded with surveys (Segars and Grover, 1998). As a result researchers can meet extensive delays in awaiting the return of surveys or do not get a response at all.

4.12 Survey design

To design the survey, a clearly defined problem and terms of reference and objectives needs to be present. The researcher is then able to devise questions and organise the survey. Questions can be open ended or closed ended. The type of question has an effect on the data that can be obtained and also the method of analysis.

Open ended questions: Open-ended questions are used in exploratory studies, where the researcher is not in a situation to pre-specify the response groups (Remenyi *et al.,* 1998). The response is in the shape of a description, which has to be analysed qualitatively, but which may be transformed into a form appropriate for quantitative analysis. The major disadvantage of open-ended questions is the prerequisite that the respondent needs to be articulate and keen to spend time to fully answer the questions.

Closed ended questions: Closed-ended questions are used in quantitative projects. The assumption is that comprehensive information is accessible on the attributes of interest and therefore, it is possible to pre-specify the categories of response (Remenyi *et al.,* 1998). Closed-ended questions can simplify the collection and analysis of evidence and make the job of the respondent easier.

It is the researcher's choice as to which questioning option to implement (Remenyi *et al.*, 1998). In this research the quantitative survey included primarily closed questions centring on measurement scales. During the focus groups it became apparent that Waterford participants had little knowledge of CIT and vice versa. Therefore, in the survey, Waterford respondents were only asked about WIT and Cork respondents about CIT.

4.12.1 Measurement scales

Remenyi *et al.* (1998) identify that measurements can be made at four levels: nominal, ordinal, interval and ratio. De Vaus (2004) advises that a scale is a composite measure of a concept, a measure composed of information derived from several questions or indicators. De Vaus (2004) puts forwards the following reasons for using scales: it helps get at the complexity of the concept, multiple indicators assist in developing more valid measures and increased reliability and greater precision. Scales were taken from earlier studies principally Terkla and Pagano (1993) and Kazoleas (2001). Interval scaling was used i.e. Likert and semantic differentials. Saunders *et al.* (1997) defines Likert scales as scales that allow the respondent to indicate how strongly she or he agrees or disagrees with a statement. Semantic differentials are rating scales that allow the respondent to indicate his or her attitude to a concept defined by two opposite adjectives or phrases. In this study, five and seven point Likert scales and five point semantic differentials were utilised. This was used in order to reduce repetitive behaviour on surveys, known as common methods variance, as highlighted in the work of (Lynch *et al.,* 1991). The source for each set of items is discussed.

Respondent Information

The first part of the survey gathered significant respondent information such as gender and knowledge. To extract this information category, a five-point Likert scale was used.

Perception of HEI

For the purpose of this study the researcher adapted Terkla and Pagano's (1993) scale for institutional image which comprises of five sets of factors: demographic, spirit and temperament, curriculum, competitiveness and academic life. The researcher identified a number of other studies which have examined university image that overlap with these factors (Stevens *et al.,* 2008; Belanger *et al*., 2002). Terkla and Pagano's (1993) scale was utilised as it was exceptionally detailed, encompassing 27 variables. Factors from these studies were combined with findings from the qualitative focus groups undertaken by the researcher to form the survey scale. The focus group allowed a number of new items to be introduced to the scale such as 'like school', 'male students attend' and

'inferior to universities' (see appendix 8). The perceptions measure used a combination of a seven-point Likert scale and five-point semantic differential.

Sources of HEI image

Eleven measures of sources of HEI image were included in the study to capture the sources construct. A five point Likert scale was used, ranging from 'completely disagree' to 'completely agree'. The researcher was unable to locate a HEI image source scale. Therefore, the items to measure sources of image were taken from Williams and Moffitt's 1997 research that was published in the wider marketing literature. The scale also has input from the focus groups undertaken at secondary schools in both Cork and Waterford. The focus groups highlighted the source factor such as 'career guidance counsellors', which adds to the literature.

HEI image formation

Kazoleas *et al.* (2001) scale was modified to measure HEI image formation. This instrument comprises of three sets of factors that influence image - organisational, environmental and personal. Variables discussed at the focus groups were also added to the scale. These included 'summer camps', 'campus atmosphere' and 'independence' (see appendix 8). A seven point Likert scale ranging from 'little influence' to 'strong influence' was applied.

4.12.2 Survey operational details

Piloting the survey

Saunders *et al.* (2003) notes that validity relates to the degree to which data gathering methods accurately measure what they were intended to measure i.e. the degree to which research findings are actually about what they propose to be about. Easterby-Smith *et al.* (2000) define validity as the question of how far an individual can be certain that a test or instrument measures the attributes that it is supposed to. Pilot testing or pre-testing of the survey needs to be undertaken before the final administration of the survey; the purpose of such pre-testing is to notice likely shortcomings in the design and administration of the survey (Emory and Cooper, 1991). Pre-testing provides a chance to assess such things as

the clarity of the instructions and questions, the covering letter, the completeness of codes or categories for pre-coded questions, the quality of the evidence and the ability to carry out significant examination of the evidence obtained (Remenyi *et al.,* 1998). The time taken to complete the survey, the probable response rate, the cost of administering the survey, which questions are classed as irrelevant, which are relevant, and whether questions on key issues have been ignored, can also be addressed at this point.

The survey instruction sheet and the survey (see appendix 9) were piloted with two senior second level students during the summer of 2008. These senior students were asked about problems they encountered with completing the survey. Following recommendations, a number of alterations were made to the instrument. During the pilot test, the organisational dimension included a large number of items. It was decided during this phase to divide these items into non-academic, academic, physical and promotional factors. This division enhanced the presentation of the survey making it easier for the respondent to complete.

An initial cover letter (see appendix 10) was sent to principals of target schools, explaining the purpose of the survey and requesting permission that their senior second level students participate in the study. Follow up telephone calls were required and appointments were then confirmed. The surveys were conducted in late 2008 with senior second level students attending secondary school in the WIT and CIT catchment areas. The researcher personally visited five secondary schools in the WIT catchment area and five secondary schools in the CIT catchment area. In order to ensure that sufficient respondents were surveyed it was necessary to visit ten secondary schools to fulfil the eight cluster criteria. The researcher distributed the structured surveys personally in a timetabled class in each of the schools. The students completed the surveys individually, but the researcher was on hand to explain the purpose of the survey. The survey was therefore completed and returned to the interviewer during the appointment. This was important as it overcame many of the problems associated with poor response rates. This method is a quick and efficient means of data collection (Hinrich and Gatewood, 1967). Crank (1998) cited in Woods (2003) highlighted the potential for response biases that

might arise when a survey is given to respondents for completion in a group setting. The researcher was very mindful of this and, therefore, only instructional questions raised about completing the survey were addressed. Respondents were also asked not to consult with other individuals in the group.

4.12.3 Senior second level students – survey administration

Three hundred and twenty surveys were distributed to senior second level students based in counties Waterford and Cork between March and May 2009. See Table 4.3.

Table 4.3 Surveys Distribution

Target group	Number Surveyed
Senior second level WIT feeder schools based in Co. Waterford	161
Senior second level CIT feeder schools based in Co. Cork	159

One school was selected from each cluster (high feeder /high proximity, high feeder/ low proximity, low feeder/high proximity, low feeder/low proximity) based in counties Waterford and Cork with a minimum of 19 students in each cluster (see table 4.4). This allowed for documentation and comparison of perceptions of senior second level students with regard to their image of WIT and CIT. It also allowed an exploration of the components that contribute to the formation of WIT and CIT image from the senior second level student's viewpoint.

Table 4.4 Secondary Schools Students Surveyed

Target Group	School	Numbers Surveyed
High feeder/high proximity WIT	Waterpark College, Waterford City	33
High feeder/low proximity WIT	Blackwater Community School, Lismore, Co. Waterford	76
Low feeder/high proximity WIT	XLC Regional Youth Services and Youthreach, Waterford City	19
Low feeder/low proximity WIT	Scoil Na Mbraithre, Dungarvan, Co. Waterford	33
High feeder/high proximity CIT	Mount Mercy College, Cork City	45
High feeder/low proximity CIT	Glanmire Community College, Glanmire, Co. Cork	38
Low feeder/high proximity CIT	Community School Mayfield and Deerpark C.B.S., Cork City	56
Low feeder/low proximity CIT	Colaiste Pobail Naomh Mhuire, Buttevant, Co. Cork	20
Total		320

4.12.4 Survey data analysis

The data gained from the surveys with second level students was analysed using the statistical package Statistical Package for the Social Sciences (SPSS). This package was chosen as the surveys are quantitative in nature. The SPSS programme allows the researcher to generate routine descriptive statistical data for question responses. The researcher can also explore relationships between responses and also create graphical presentations of the survey data.

After testing for reliability and validity, which resulted in some scales being modified and/or eliminated from further analyses, each scale's items were amalgamated utilising SPSS's compute function, so that one measure was determined to represent each variable in further statistical analyses. In order to conduct the necessary statistical analyses pertinent to the research objectives (correlation and regression), the data were checked

for underlying data assumptions for these techniques (linearity, normally distributed data, collinearity, and outliers). Tabachnik and Fidell (2001) define an outlier as 'an extreme value on one variable that may distort the statistics'. At this stage, scatterplots and partial correlations indicated all data assumptions were met.

The next step involved examining the hypotheses. Multiple regression analysis was used, as it is one of the most powerful and flexible procedures for analysing associative relationships between a dependant variable and multiple independent variables. It also allows the researcher to incorporate diagnostics in which to further check underlying data assumptions (Hair *et al.* 2006).

Stepwise regression

Ronchetti (1997) advises that model choice is a critical component in every statistical analysis. Saunders *et al.* (2003) defines regression analysis as the method of calculating a regression coefficient and regression equation with one independent variable and one dependent variable. Furthermore, Faraway (2002) explains regression analysis is used for exploring or modelling the association between a single variable y, called the response, output or dependant variable and one, or additional, predictor, input, independent or explanatory variable, $X_1...X_{10}$. When p = 1 it is a simple regression. When p >1 it is a multiple regression. Cryer and Miller (1994) define the p-value of a test as the probability of obtaining an outcome at least as extreme as the outcome actually observed. The p-value is calculated under the assumption that the null hypothesis is correct. The less significant the p-value, the stronger the evidence against the null hypothesis. Hocking (1976) outlines that stepwise regression includes regression models in which the selection of predictive variables is completed by an automatic procedure.

Burns and Bush (2000) highlight with stepwise multiple regression, that one independent variable is statistically significant, explains the most variance in the dependent variable and it is entered into the multiple regression equation. Larsen (2008) found that the stepwise regression procedure was created from the traditional procedures, in order to

increase the odds of achieving the best model. Stepwise regression can be either backward or forward. Forward is a reversed version of the backward removal procedure. Instead of commencing with the maximum model, and removing variables one by one, the process commences with an 'empty' model. This has no explanatory variables, and adds variables one by one, until the researcher cannot advance the model by adding more variables.

Chatfield (1995), Harrell *et al*. (1996) and Steyerberg *et al*. (1999) have documented the limitiations of stepwise selection:

1. The assortment is unbalanced; adding or deleting relatively few variables may substantially change the assortment.
2. The statistical power of a study may be inadequate to select true predictors, whereas multiple comparisons enhance the risk that noise variables are included. Failure to choose true predictors leads to a loss in predictive performance.
3. The variance of the estimated regression coefficients is estimated as if the selection of covariables was predetermined. This biases the computation of confidence intervals.
4. The assortment is based on the fact that a covariable had a fairly extreme p-value (usually < 5%). This biases the p-values of particular covariables to extreme values.
5. Extreme p-values match to relatively extreme regression coefficients. The approximate regression coefficients are therefore biased to more intense values

Larsen (2008), Cryer and Miller (1994) and Sandy (1990) found that the stepwise regression process is helpful when the numbers of explanatory variables in the maximum model are numerous. Burns and Bush (2000) advise that researchers may choose to use stepwise multiple regression if faced with a substantial number of independent variables, such as numerous demographic characteristics. With stepwise multiple regression, independent variables are entered into the multiple regression equation containing only statistically significant independent variables Moreover, stepwise regression is practical,

if a researcher has a lot of independent variables and needs to narrow the set down to a lesser number of statistically important variables.

The model in this study contains 45 independent variables (see appendix 11), which represent a substantial number of variables. This can be divided into the following influencing variables: 25 organisational variables (non-academic, academic, physical, promotional), 10 environmental variables and 10 personal variables. Stepwise regression was utilised due to the large number of independent variables in the study.

4.13 Limitations of the research

As with all research projects, limitations exist that has impacted on the research conducted. The focus groups had limitations due to restricted resources and time available to gather a wider range of perceptions by having more focus groups. The survey technique does not facilitate probing but as this study utilised both focus groups and surveys it is hoped that this restriction was somewhat mitigated.

Frank (2000), Penn (1999) and Martin and Dixon (1991) highlight that parents and teachers can influence students' college choice. The author feels that in order to achieve more in-depth results, the author would have liked to conduct further research to include these groups in the research process. Not all stakeholders that may shape HEI image are involved in the study. However, this was not possible due to resource constraints.

Both focus groups and surveys that were conducted during this research were deployed with senior second level students. Working with this age cohort brought about several limitations for the study. It was difficult to gain access to these students as the researcher had to gain permission from the principal of the selected secondary school; the researcher was not able to approach them directly. Time constraints also existed as students were only available during the school day and also the school year. Schools also did not want their students' studies to be interrupted for this research, so many of the focus groups and survey sessions were undertaken during non-exam classes, such as careers classes. The

geographic spread of respondents was also a difficulty and so the researcher tried to organise days where she could undertake the research with as many schools in one area as possible. The researcher felt that, at times, it was difficult to get these students to open up during the focus group interviews; it was felt that the lack of confidence related to this particular age cohort. The researcher tried to overcome this by stressing that all data collected would be treated with the strictest of confidence and open ended questions also helped to get the group talking.

A validity threat evident during this research is CIT being adjacent to a university. CIT was very much considered in the context of UCC. The focus group time of 25 to 35 minutes maybe considered as a validity threat. The researcher feels that this duration is justifiable as permission was given by the secondary schools to use a specific timetabled class (approx. 30 minutes) to conduct the focus group. The participants are school students and if the focus group were longer it would have been difficult to hold their attention. To address reliability threats the researcher contacted Belanger and Terkla to obtain relevant reliability indicators.

4.14 Summary

This chapter presented the methodology adopted in this research. The chapter described the research process and philosophical stance adopted by the researcher. The researcher's stance is both a phenomenogical and positivist approach, which determined the methodological approach which should be utilised. The research problem and objectives were presented. The relevant data is collected through both qualitative and quantitative approaches. The rationale for these approaches is explored. The methods of data collection were highlighted and investigated, with the researcher using exploratory focus groups in order to collect data from senior second level students. Findings from these focus groups helped to shape image scales, for the second phase of this research, a survey of senior second level students. The next chapter will present the findings from the senior second level focus groups and group administered surveys.

Chapter Five - Research Findings

5.1 Introduction

This chapter presents the findings from both the qualitative and quantitative phases of the research. The chapter commences with the qualitative findings pertaining to the third level education environment and perceptions of HEI image. The qualitative findings conclude with a detailed explanation of the HEI image formation which includes sources of image. The aim of this section is to provide an understanding of HEI image from the perspective of senior second level students based in Waterford and Cork. In addition, these exploratory focus groups have assisted in the development of the senior second level student survey.

The second section of this chapter presents the quantitative findings of phase two of the research which involved a survey of senior second level students. The aim of this section is to recognise and describe each of the components of HEI image (i.e. demographic, spirit and temperament, curriculum, competitiveness and academic life). In addition, the sources of HEI image are examined. The researcher identifies and analyses the factors influencing HEI image i.e. organisational (non-academic, academic, physical and promotional), environmental and personal factors. The results from the stepwise regression model are also presented in the context of the study's hypotheses.

5.2 Phase one: focus group findings

The subsequent sections present the qualitative findings derived from phase one of the research: the senior second level student focus groups. The four schools investigated in this study have been previously presented in table 4.2. An overall definition of HEI image is presented in this section based on the senior second level student focus groups.

5.2.1 The third level education environment

A variety of themes were discussed by focus group participants with regard to their initial thoughts upon hearing the term: third level education. *'Social life'* was also seen as a major element by all participants. One Waterford participant added *'craic agus ceol'*. The qualifications that could be achieved and the academic side were also discussed by all participants with *'career enhancement'* and further options also being mentioned. Independence was a topic which Waterford participants discussed. One Waterford participant stated that their initial thoughts were connected to '*living on your own and independence'*. Expense was a further element that Cork participants discussed with one Cork participant stating *'more time being broke'*.

It was a general opinion among focus group participants that when they turned their thoughts to the Institutes of Technology, the closest institute gained preference, the one with which they had personal experience. One participant explained the rationale behind this by stating *'WIT because it is the closest'*. Another participant stated *'We live in Cork so we hear about CIT'*.

5.2.2 Defining HEI image

It was the general view among participants that various elements defined their image of WIT. A Waterford participant stated; *'We visited WIT last year for the open day'*. A number of participants mentioned how modern the campus was with *'nice grounds'*, *'new'*, *'big'* and *'buildings'* being mentioned. The social element was also highlighted. The academic side was also explored with *'study'* and *'various courses'* being highlighted i.e. Business, Finance and Nursing. The reputation of WIT as being *a 'centre for excellence'* was also perceived as an element of the image of WIT. Cork participants felt that their image of WIT centered around *'sports'* stating '*that WIT play hurling'*. *'New academic courses'* were also discussed such as the *'architecture courses'*. *'Location'* seemed to have a bearing on HEI image and the *'expense'* attached to attending WIT for Cork participants in the focus group seemed to impact.

Various facets defined the image of CIT for Cork participants: facilities such as the *'gym'*, *'canteen'*, *'library'* and *'computer amenities'* impacted on their image. CIT was seen as a *'fun place', where students are interested in their studies'*. It was also viewed as extremely *'strict'* with participants stating *'CIT is practically like school'*. The academic side was also highlighted with courses such as *'Business'* and *'Engineering'* being discussed. CIT was seen very much as a *'boy's college'* with engineering courses being highlighted. *'University College Cork'* (UCC) was perceived as impacting on the image of CIT as participants perceived that CIT qualifications were *'inferior'* to University College Cork (UCC) qualifications.

Waterford participants had difficulty in defining their image of CIT. One participant stated *'you don't hear about CIT'*. Another participant stated *'I don't know anyone that attends CIT'*. The *'location'* of Cork was one of the essential attributes to define the image of CIT. Interestingly, these students viewed CIT as an *'inferior'* college to WIT. The UCC argument also seemed to have an impact with one participant stating *'UCC overtakes CIT'*. The Waterford participants agreed that their image of CIT was as a *'modern place'* with an excellent reputation for *'Art'*, *'Music'* and *'Media'*.

5.2.3 Image formation
The following three sections present focus group findings on image formation analysed into organisational attributes, environmental factors and life experience. Each of these are analysed further into sub-themes.

5.2.3.1 Organisational attributes
All participants agreed that factors controlled by the institute have an impact on their image of an institute. This can be further subdivided into academic activities, non-academic activities, physical attributes and promotional activities.

Academic activities
Waterford participants thought that their image of WIT was formed through their perception of lecturers at the institute, with one participant commenting '*the lecturers are*

very approachable'. The impact of the courses that are on offer was also highlighted with one participant stating: *'WIT offers more courses than other institutions'*. Courses mentioned included Finance, Nursing, Childcare and Social Care with all participants agreeing that '*Business was the biggest and the best course'*. Students that attended WIT were also perceived as having a strong influence with one participant stating: *'We know students that attend'* and another participant adding that *'they really liked it'*.

Cork participants acknowledged that CIT had a strong academic side. Lecturers seemed to impact on their image formation for CIT, with one participant stating: *'lecturers at CIT are like secondary school teachers; students can relate to them'*. Another participant added: *'lecturers are more approachable with a small class size'*. The length of programmes at CIT also seemed to have an impact. There seemed to be a consensus that courses were shorter at CIT with one participant stating *'students can attend CIT for two to three years instead of going to UCC for four. Courses are shorter in CIT'*. The programmes offered seem to have a strong impact with participants mentioning Business, Engineering, Sports Studies, and French. One participant stated *'a lot of students study Business and Accounting'*. With regard to qualifications gained at CIT, one participant stated *'qualifications gained in CIT are inferior to UCC qualifications; a lower qualification is required to gain entry to CIT'*. Another participant commented *'the qualifications are not as prestigious as UCC'*. The idea of it being an extension of secondary school was also discussed. Participants stated that *'attendance is checked and parents are advised'*. The students that attended CIT were seen as a pivotal factor in the formation of the CIT image with participants acknowledging that they were aware of students that attend.

Non-academic activities
Sport seemed to feature strongly in the formation of WIT's image for Waterford participants. One participant referred to the Fitzgibbon Cup stating *'I am more sports focused than academic'*. Another participant stated that '*individuals travel to play at WIT'*. All participants were aware of the sports activities occurring at WIT, referring to the hurling, rugby, football, basketball and camogie teams. The social life was also

discussed with participants mentioning *'Wednesday nights, the pub and the Dome (college bar)'*. Reference was also given to the WIT summer camps as a tool in forming the image of WIT.

It was the general opinion among focus group participants that fun seemed to feature strongly in their image formation of CIT. One participant stated that *'CIT was fun'* while another stated *'it's a laugh'*. The social aspect was also present with one participant stating; *'We look at the social side'*. Participants went on to speak about *'Thursday nights, Fresher's week and the parties at CIT'*. One participant stated *'CIT has a good social life'*. Alcohol also featured with participants stating *'alcohol is available at CIT'*. Sport also seems to feature in the image formation of CIT with participants referring to the great sports facilities at CIT i.e. the *'astroturf and the athletics track'*. Teams that were mentioned included soccer, hurling and basketball. One participant also referred to sports stars Ronan Curran and John Gardiner stating that *'they were good representatives for CIT'*.

Physical attributes

This was divided into intangible and tangible attributes. Under intangible, Waterford participants discussed the atmosphere of the institute. One participant stated that *'We visited Dublin colleges and found them to be not as nice as WIT'*. One participant went so far as to say that WIT *'was homely'*. The quietness of the library was also commented on. How modern the institute buildings are was another strong intangible factor identified by Waterford participants. One participant commented that *'WIT was modern when compared to other colleges'*. Reference was also given to the new buildings at WIT i.e. the nursing building and the new tourism building under construction. Tangible attributes that were discussed included the library. Participants discussed the library stating that *'it is new and the best'* and its vastness was also highlighted. The size of the campus was also discussed with one participant stating: *'it's massive; there are two or three parts'*.

For intangible factors, Cork participants mentioned the atmosphere at CIT stating that: *'visiting the CIT library is similar to attending a church'*. Participants also felt that CIT

was modern stating: *'CIT is more modern than UCC. The buildings are new. There is no ivy growing up the side of them'*. With regard to tangible attributes the buildings at CIT were discussed. A participant stated: that *'they were massive'*. The gym was also mentioned which was *'excellent'*. The canteen and library facilities were also discussed. The computer facilities also featured strongly with one participant stating *'CIT has brilliant computer rooms'*. With regard to the campus, one participant stated '*CIT is located in a housing estate'*. The green areas were also highlighted and trees were also mentioned. The participants mentioned that *'CIT is spread over several campuses with the school of Music in the City and the Marine Dept located in Ringaskiddy'*.

Promotional material

There was a mixed reaction at the focus groups when participants were presented with the logos of WIT and CIT. Waterford participants were without hesitation able to identify the WIT logo. This pattern also emerged with one group of Cork participants, while the other group of Cork participants required significant clues before WIT's logo was identified. Both groups of Cork participants were initially unable to identify the CIT logo. The facilitator had to probe considerably before the logo's identity became evident. This trend was also apparent with one group of Waterford participants, while the other group of Waterford participants quickly identified the CIT logo.

Waterford participants had witnessed the WIT logo due to sports i.e. the Fitzgibbon Cup, gear bags, the prospectus, signage at WIT, the WIT web page and as one participant stated *students wear the WIT hoodies in town'*. Waterford participants had seen the CIT logo through the *'the prospectus'*. Cork participants felt that they were exposed to the CIT logo through jerseys, jumpers, the sign outside CIT and having attended CIT open days. One participant stated *'my sister has a jersey with the crest on it'*. Cork participants had noticed the WIT logo on jackets, gear bags, and in the literature. Sources of logo recognition for WIT and CIT are represented in table 5.1.

Table 5.1 Sources of Logo Recognition for WIT and CIT

WIT	CIT
Clothing	Clothing
Gearbags	Signage
Literature	Open days
Sports	Prospectus
Prospectus	
Signage	
Web page	

When promotional material was discussed with regard to WIT, Waterford participants referred strongly to the prospectus; one participant stated that *'you receive your image from there'*. One participant stated that: *'I felt it was an attractive, bright, mellow place with computers having looked at the prospectus'*. The effect of the internet was also discussed with a participant commenting: that *'you get most of your information from the internet'*. A few participants had attended the open day at WIT and others had not, but intended going to the next open day. Some participants had met the school liaison officer who had given them information on the various courses available at WIT and had distributed brochures to the group. Some of the participants had also attended a career exhibition in the RDS where there was a WIT stand with information which they availed of. They also noted that local radio stations were *'constantly advertising WIT'*.

Promotional material was seen as a source of CIT image with one Waterford participant stating: *'there was a video of CIT shown to us last year, in career guidance'*. One participant admitted to *'flicking through the CIT prospectus but not giving too much attention to the CIT courses*. One participant commented '*CIT is there but when you have the WIT book. There is no point in searching for another college'*.

There was a surprisingly negative response to the CIT website as a source of CIT image from most Cork participants. They admitted to not having even looked at it, while one participant stated that *'it doesn't show much'*. There was a mixed reaction to open days with Cork participants stating *'we hadn't attended an open day in CIT'*, while other

participants stated *'we had a week in CIT last year'*. One participant mentioned the *'goody bag'* which they received at open day. This contained a CIT attack alarm, a novel piece of promotional material. When the topic of the CIT prospectus was highlighted, one participant asked *'What is that?'* Other participants stated 'I have *seen the prospectus before'*. There was a mixed reaction to the school liaison officer with some students stating that: *'We had a meeting; information was given on qualifications that could be gained in CIT'*. Other students had never heard of the term before and had no contact whatsoever. Some participants admitted to having attended a career exhibition where CIT had a stand and prospectuses were readily available. Promotional material that was mentioned included: rulers, pens and draws for various competitions.

Cork participants had a mixed reaction to the promotional material regarding WIT with most agreeing that they hadn't visited the WIT website or looked at the prospectus. One participant did state that he could recall a poster: *'it was in the Tech room it showed engineering or architecture in WIT'*. Table 5.2 presents a summary of organisational attributes components and perceptions among Waterford and Cork students.

Table 5.2 Summary of Organisational Attribute Components and Perceptions among Waterford and Cork Students

	WIT	**CIT**
Academic activities	Lecturers at IT Courses on offer Students that attend	Lecturers Length of programmes Programmes offered Inferior qualifications Extension of secondary school Students that attend
Non-academic activities	Sport Social life Summer camps	Fun Social life Alcohol Sports
Physical attributes	Atmosphere Modern New buildings	Atmosphere Modern Buildings

	Library	Facilities
	Size of campus.	Location
		Green areas
		Campus spread
Promotional material	Logo	Website
	Prospectus	Open days
	Internet	Goody bag
	Open days	Prospectus
	School liaison officer	Logo
	Career exhibitions	School liaison officer
	Advertising on radio	Career exhibitions
		Promotional material

5.2.3.2 Environmental factors

Factors outside the organisation were also seen to form the image of an institute. Participants discussed such issues as admissions, economic factors, grants and fees, location, media and reputation.

Admissions

Waterford participants felt that admission criteria did impact on their image formation of WIT. One participant stated *'the entry points at WIT are lower in comparison to other Institutes'*. Another participant commented *'WIT's nursing course has lower points, it is 395 now and the course was 420 – 410'*. Cork participants were seen to compare CIT to UCC with regard to admission standards. One participant stated *'the entry points are lower for CIT, if you don't meet the admission criteria for UCC you can attend CIT and transfer to UCC'*. Another participant reiterated the *'entry points are lower in CIT than UCC'*.

Economic factors

Waterford participants felt that economic factors did impact on image formation. One participant stated that: *'if you have money, you can afford to study away'*. Other participants opposed this opinion, stating with regard to WIT: *'it's my local option'*. With regard to expense and image formation, a Waterford participant stated that: *'if WIT*

provides the course you want to study, there is no reason to go to Cork. It is cheaper and you don't have to get accommodation'. However, another Waterford participant stated that: *'if there is a course that you particularly want to study in CIT, you will go, expense won't hinder'*. It was acknowledged that to study at CIT would be more expensive for Waterford students. Waterford participants felt Cork students would be of the opinion that they should study in Cork as one participant commented *'they would study in UCC more than CIT, if they are living in Cork they would be living at home'*. Cork participants stated that *'the major reason for studying in Cork, is it is cheaper, we can stay at home'*. A Cork participant stated that: *'if you really want to study something you will pay for it'*. For Cork participants what was foremost in their minds regarding WIT was the cost: *'the cost of living in Waterford'*.

Grants and fees

Waterford participants thought that grants were more important if you were traveling away to study. One participant commented *'if you are from Waterford and if you are going away to study, the grant would help to pay for accommodation'*. Another participant stated *'you don't get that much, so why does it impact on image'*. Cork participants felt that grants/fees didn't have an impact on image formation. One participant stated *'no HEIs are all free, the books and fees aren't but the rest is'*. Another participant commented *'it depends on what you want to study, not grants or fees'*.

Location

Waterford participants felt that their image was formed due to the location of WIT. One participant stated *'you drive past it every day'*. Another participant added '*it's hard to miss it, the minute you go into Waterford you see it'*. Waterford participants, like their Cork counterparts, also felt that their image of CIT was formed mainly due to the fact that it was based in Cork. For Cork participants location formed part of their image of CIT. One participant mentioned a number of amenities near the CIT campus, including *'the number 19 bus and FAS'*. One participant stated that: *'we are from Cork so if you attend CIT, you can live at home'*. Another participant stated: *'we are more familiar with CIT because of its location'*. One Cork participant stated that: *'when I was thinking of*

third level studies, immediately my thoughts turned to studying in Cork'. Location seems to have a definite impact on Cork participants' image formation of WIT, with participants stating that *'our image was formed of WIT because of where it is'*. Another participant commented that *'my image of WIT was firmly based in Waterford'*.

Media

Waterford participants stated that the main topic in the media at the moment regarding WIT *'was their quest for university status'*. They also highlighted that Beat FM (radio station) had a lot of coverage regarding WIT. Waterford participants felt that the only thing in the media at the moment regarding CIT would be the points for the institute courses. They also acknowledged that little if any coverage is given to CIT in the Waterford based media. Cork participants perceived that there was little in the media regarding CIT which could help to form their image. One participant stated that *'in the Evening Echo there is a report on UCC. There would be a supplement on college which would mention every institute, which would compare institutions'*. Another participant stated that *'you wouldn't take notice of what's in the media unless you wanted to study at CIT'*. They felt that their image of WIT was not formed through the media as there was little in the Cork media about this institute; they acknowledged that it may be quite different in Waterford. One participant stated '*no, not in Cork but there might be articles in the Waterford Times'*.

Reputation

A Waterford participant stated that '*WIT was supposed to be the best institute'*. Another participant highlighted the impact of WIT's reputation by simply stating '*there are people from all over studying there, it has a good reputation, it is a good college'*. With regard to CIT, Waterford participants stated '*it wouldn't be as good as WIT, UCC would be their main college'*. UCC was discussed quite a bit when the reputation of CIT was discussed. UCC was seen as a superior HEI to CIT with one participant stating: *'CIT was a step down from UCC, it is not as good as UCC'*. Another participant stated that: *'UCC is more prestigious than CIT'*. A participant highlighted that *'the programmes in CIT are meant to be very good, well the main ones, engineering'*. With regard to WIT, a Cork

participant stated that *'I heard about a sports course at WIT, Recreation and Leisure, lots of people from Cork go to Waterford to study that. They have that here in CIT but that is a good course in WIT. If you want to become a Physical Education teacher you have attend this'*. Table 5.3 presents a summary of environmental factors components and perceptions among Waterford and Cork students.

Table 5.3 Summary of Environmental Factors Components and Perceptions among Waterford and Cork Students

	WIT	**CIT**
Admissions	Low entry points.	Lower entry points when compared to UCC.
Economic factors	It makes economic sense to study local if the course is available. If it isn't available economic factors should not deter.	Study locally because it is cheaper. Although economic factors would not impact if one chooses to study outside Cork.
Grants and fees	Minor influence but important if going away to study.	Free education, so it's an individual's preference.
Location	Familiar. Unmissable.	Various amenities surrounding CIT. Familiar with location.
Media	University status. BEAT FM.	Supplement on college in '*Evening* Echo' newspaper.
Reputation	'*The best'. 'Good college'.* Positive reputation.	UCC impacts on CIT reputation. Engineering programme is excellent.

5.2.3.3 Life experiences

Some of the factors discussed by the participants under life experiences include age, background, family, friends, gender, personal experiences, and word-of-mouth.

Age

One Waterford participant stated: '*I think if you have students that are 17 doing the Leaving Cert they may want to study locally, stay at in Waterford'*. Another participant

added *'if you are young, 17, it might impact, it depends how independent you are'*. Another participant stated that: *'my parents would be delighted if I went to WIT. They think it's a good college'*. Another participant added: *'yeah mine do too'*. Cork participants felt that age did impact on the image that was formed of CIT. One participant stated that *'their parents would think more of UCC as it is more influential than CIT and they want the best for their child'*. Another participant commented with regard to age that *'parents have a different image of CIT; we see the social side of CIT while they are paying so they want us to study'*.

Education and economic background

Waterford participants had mixed thoughts regarding the impact that background had on image formation. One participant stated that *'there are wealthy people in the group and they planned on going away and weren't staying in Waterford'*. Another participant commented that *'WIT is convenient, and background didn't matter'*. The Waterford participants thought that Cork students would attend UCC more so than CIT if they were wealthy. Waterford participants perceived that individuals' standard of education impacted on image formation. One participant stated *'generally better educated people have more money'*. Another participant added *'people that are more educated have a different outlook, standard of education probably does impact on HEI image'*.

Cork participants perceived that their image of CIT was formed through their background. One participant stated if you are *'wealthy you probably go to UCC, if I was wealthy I would go to UCC or Trinity'*. It was inferred that CIT was somewhere students study if less well off. Another participant stated:

> *'That's a real Cork thing. Lots of wealthy people go to UCC. My sister attends UCC and this person in her class that drives a mini coupe and goes on holiday a couple of times a year'*.

Family and friends

Waterford participants felt that family and friends also have a strong influence on the image formation of WIT. One participant stated that: *'my brother attended WIT and thought it was very good'*. Another participant added that *'my sister also attends and loves it'*. One participant stated that '*you hear about the institute through the students as you know people that attended'*. Waterford participants were unsure of the impact of family and friends on their image of CIT. They were not sure if they knew any students that attended. All Cork participants strongly agreed that family and friends are a strong source in their image formation of CIT. Most participants could identify a sister, brother, mother, neighbour or cousin that had attended CIT. Another participant stated that *'my sister had studied in UCC but she didn't like it so she studied in CIT and said that it was way better due to the standard of lecturing'*. Another participant stated that his brother had supplied him with the prospectus for CIT. Participants highlighted that the biggest influence was family and friends with one participant stating *'my brother'* and another participant stating *'my friends'*. Cork participants felt that family and friends didn't have the same impact on their image formation of WIT as they knew few if any students attending.

Gender

Waterford participants had a mixed reaction to this subject with one participant stating that gender didn't have an effect on his image of WIT. Another participant added that *'boys priorities in college would be drink, girls and they might learn a little. Boys attend college for the fun, a girl would have fun but study'*. There was mixed reaction with regard to the influence that gender has on image formation of CIT. One participant stated that *'I am unsure if gender had an influence'*. Another participant commented that *'a lot of boys attend CIT for engineering, it is more male orientated'*. Furthermore, another participant added *'There are more boys than girls in CIT'*.

Personal experiences

Waterford participants saw personal experiences as a strong source of image formation as a Waterford participant stated *'we passed it daily'*. They also seemed to know lots of

students that attended. They had visited the campus and used the facilities. One participant stated that: *'my image was formed from my visit there'*. They felt that their image of CIT was not as influenced by personal experience. One participant stated that: *'I only realised that it existed when I visited the careers exhibition at the RDS'*. Waterford participants stated that:

> *'Cork students would be more familiar with CIT. They would know people that have attended. They would probably have a similar opinion to our opinion of WIT. They would have their opinion on CIT'.*

Cork participants felt that personal experiences were a source of their image formation of CIT. One participant commented: *'I was playing soccer in Leisure World yesterday, near CIT'*. Another participant added: *'We were in CIT for a week; those of us that got the opportunity to visit CIT have a better image'*. One participant stated that his image was formed because *'I was out there'*. Cork participants knew few if any students that had attended WIT. They had never visited the campus, and they had little personal experience of WIT. They perceived that Waterford participants would have the information that they have on CIT *'Waterford respondents would be informed about WIT the way we are about CIT'*.

Word-of-mouth

Waterford participants firmly believed that word-of-mouth was a major source in their image formation of WIT. One participant stated *'their image existed because of what people say'*. Participants felt that they had heard positive reports with one participant stating: *'I have never heard anything negative, you hear about Rag Week and all the activities'*. Another participant added that *'the lecturers are supposed to be excellent'*. With regard to the CIT image, Waterford participants felt that they didn't hear about CIT. One participant stated *'you never hear anything, you only hear about WIT you never hear anything about CIT. You hear about UCC'*. There was an agreement that word-of-mouth was a source of image formation as a participant was aware that the CIT School of Music existed and was told about it by a friend. Another participant stated *'I know someone*

interested in music and media'. Another participant added *'a friend said she was interested in doing a course it's around 300 points. The creative arts studies are supposed to be very good.'*

It was the general opinion among Cork participants that word-of-mouth was a strong source of their image formation regarding CIT. One participant stated that *'word-of-mouth is a big source in image formation'.* Another participant endorsed this by stating that *'your image is formed because that's what you hear about college, what people have said'.* Cork participants stated that they heard positive stories about CIT, of it being a *'fun place'* with excellent academic and sports facilities. One participant stated that:

> *'Students talk about the social life, they don't talk about lectures, they talk about people they have met and they make friends. You know your whole class. Students know a lot of people there'.*

Furthermore, a participant stated: *'I heard that CIT is good, there is nothing bad, it's very nice'.* Cork participants' image of WIT was formed through word-of-mouth as participants were aware of programmes available at WIT through talking to others. One participant stated that *'he heard that someone had applied for architecture'.* Other programmes that were mentioned included radio broadcasting and sports studies. Sports associated with WIT were also seen to have an impact. Very few Cork participants knew students that had attended WIT but reference was given to several hurling stars who attended WIT: '*John Mullane, Dan Shanahan, Setanta O' Halpin (attended WIT before he went away to Australia), Eoin Kelly, Rory Jacob went there, he is a Wexford hurler'.* Table 5.4 presents a summary of life experience factors components and perceptions among Waterford and Cork students.

Table 5.4 Summary of Life Experience Factors Components and Perceptions among Waterford and Cork Students

	WIT	CIT
Age	Study locally if you are young. Participants' parents have same view of WIT.	Participants' parents see UCC as more prestigious. Parents view CIT as study participants see social element.
Background	Wealthy people study outside Waterford. Background is not important.	Wealthy people study in UCC.
Family and Friends	Participants knew students that had attended WIT.	Participants had family and friends that had studied at CIT, one participant received the prospectus from them.
Gender	Males look at '*fun side*', females 's*tudy*'. Some participants felt '*gender didn't impact*'.	Gender didn't impact. Viewed as a '*Boys college*'.
Personal experiences	Knew lots of students. Visited the campus.	Used facilities near CIT. Visited the campus.
Word-of-mouth	Positive reports regarding social life and lecturers.	Big input into image. Positive reports, '*fun*' with '*excellent academic options*', '*social life*' and '*sports facilities*'.

5.3 Phase two quantitative findings

This chapter examines the findings of surveys conducted with senior second level students concerning their image of CIT and WIT. An overview of the senior second level students' response rate and gender balance, as well as their responses to various issues, such as knowledge of HEIs, perceptions of HEIs, image sources and influencers is outlined. The results of each of the hypotheses are analysed and presented.

5.3.1 Analysis of survey response

The target population for this research was senior second level students based in counties Waterford and Cork. As detailed in Chapter four, a total of 320 surveys were distributed,

in ten schools in the counties of Waterford and Cork. The number of usable responses achieved was 316, providing a usable response rate of 98.75%. The reason for this high usable response rate was that the researcher sought the permission from schools to allow her to conduct the survey and the researcher administered the survey in a group setting, while she was present. The following table 5.5 presents the sample that the surveys were distributed to and the categories to which they belonged.

Table 5.5 Analysis of Survey Response

	Waterford	Cork	Total
Schools in population	21	90	111
Random sample	5	5	10
Surveys distributed	161	159	320
Surveys collected	161	159	320
Invalid surveys	2	2	4
Usable surveys	159	157	316
High feeder school surveys	108	83	191
Low feeder school surveys	51	74	125
High proximity school surveys	52	99	151
Low proximity school surveys	107	58	165

The four invalid surveys were removed as they did not meet the criteria of being 50% completed and showed little variability in selection; that is where the respondents selected the same criteria through the entire survey.

5.4 Section A: respondent information

5.4.1 Gender balance

The gender ratio of respondents who answered the gender question consisted of 58.8% male and 41.2% female. The gender question in the survey of WIT image was completed by 158 respondents. These respondents consisted of 113 (71.5%) male and 45 (28.5%) were female. The gender query in the survey of CIT image was completed by 155 respondents. These respondents consisted of 71 (45.8%) male and 84 (54.2%) were female (see table 5.6, for gender of all respondents).

Table 5.6 Gender of all Respondents

	Frequency	**Percent**
Male	184	58.2
Waterford	113	
Cork	71	
Female	129	40.8
Waterford	45	
Cork	84	
Total	313	99.1
Unknown	3	.9
Total	316	100

5.4.2 Knowledge of HEI

Respondents were asked to rate their knowledge of WIT or CIT. 17% of Waterford respondents rated their knowledge of WIT as low, 23.9% thought it moderate, 38.4% believed their knowledge to be average, 17% stated it was strong and 3.8% considered it very strong (see figure 5.1 for knowledge of WIT as described by Waterford respondents).

Figure 5.1 Knowledge of WIT as Described by Waterford Respondents
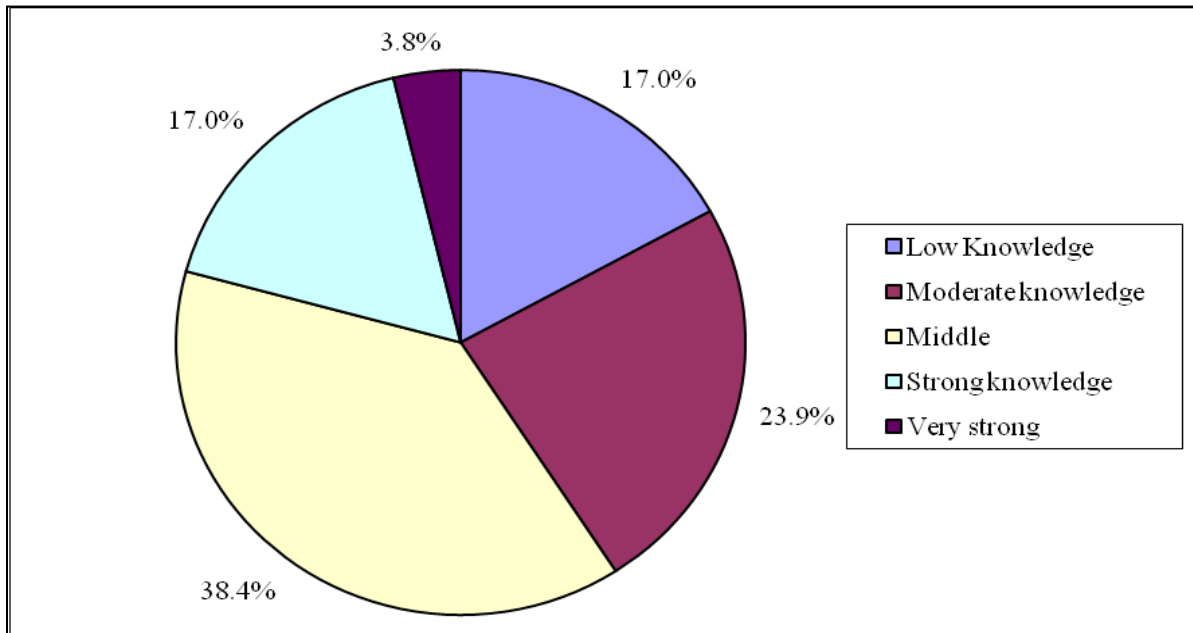
9.6% of Cork respondents deemed their knowledge of CIT as being low, 24.2% thought it was moderate, 44.6% rated their knowledge to be average, 16.6% felt it is strong and 5.1% believed it to very strong (see figure 5.2 for knowledge of CIT as described by Cork respondents).

Figure 5.2 Knowledge of CIT as Described by Cork Respondents

Legend:
- Low Knowledge
- Moderate knowledge
- Middle
- Strong knowledge
- Very strong

5.1%
9.6%
16.6%
24.2%
44.6%
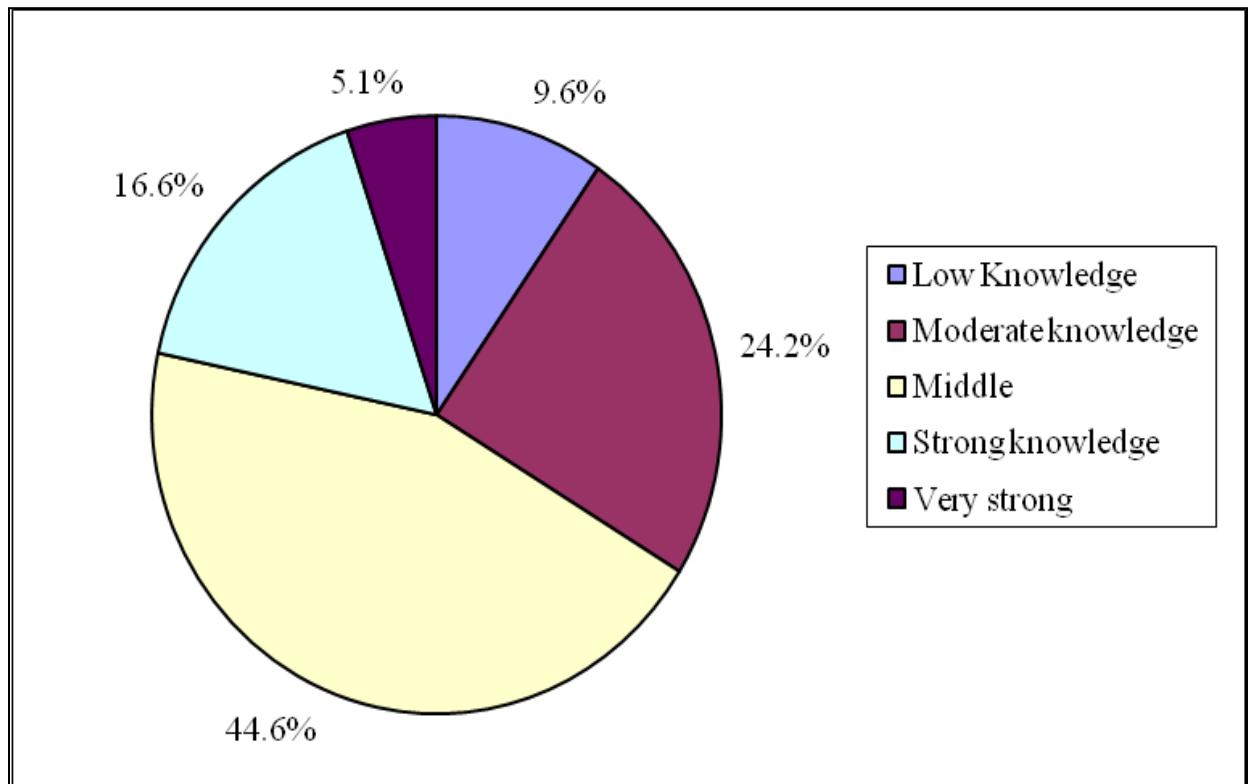
5.5 Section B: perceptions of HEIs

Respondents were asked to describe their image of either WIT or CIT. WIT image was described by 130 (82%) of Waterford respondents. It was revealed that the top ten factors to represent the respondent's image of WIT (in percentage terms) were: location (where the IT is based) at 20%, size of the IT with 18%, trailed by university status on 9% and next sports, buildings and facilities with 8% each. These were followed by friendly (atmosphere) with 7%, business (courses available) at 6% and courses and new are joint with 5% (see figure 5.3, for image of WIT as perceived by Waterford respondents).

Figure 5.3 The Top Ten Factors that Represent the Image of WIT among Waterford Senior Second Level Students
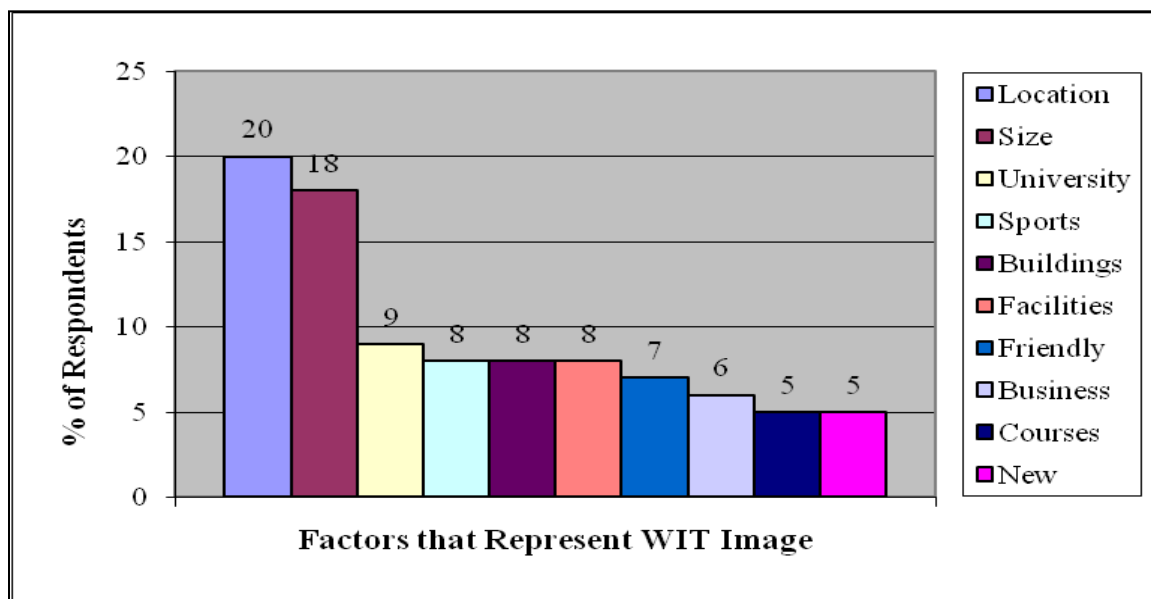
CIT image was described by 139 (89%) of Cork respondents . It was discovered that the top ten factors to represent respondents' image of CIT were: courses with 23%, size with 17%, followed by UCC (the IT's close proximity to UCC) and practical (courses that can be used in real circumstances) at 11% each. Next are inferior (lower quality service than the competition) and facilities both at 8%. This is followed by engineering (courses available) on 7%. School (similar to school), education and university equally have 6% (see figure 5.4, for image of CIT as found by Cork respondents)

Figure 5.4 The Top Ten Factors that Represent the Image of CIT among Cork Senior Second Level Students
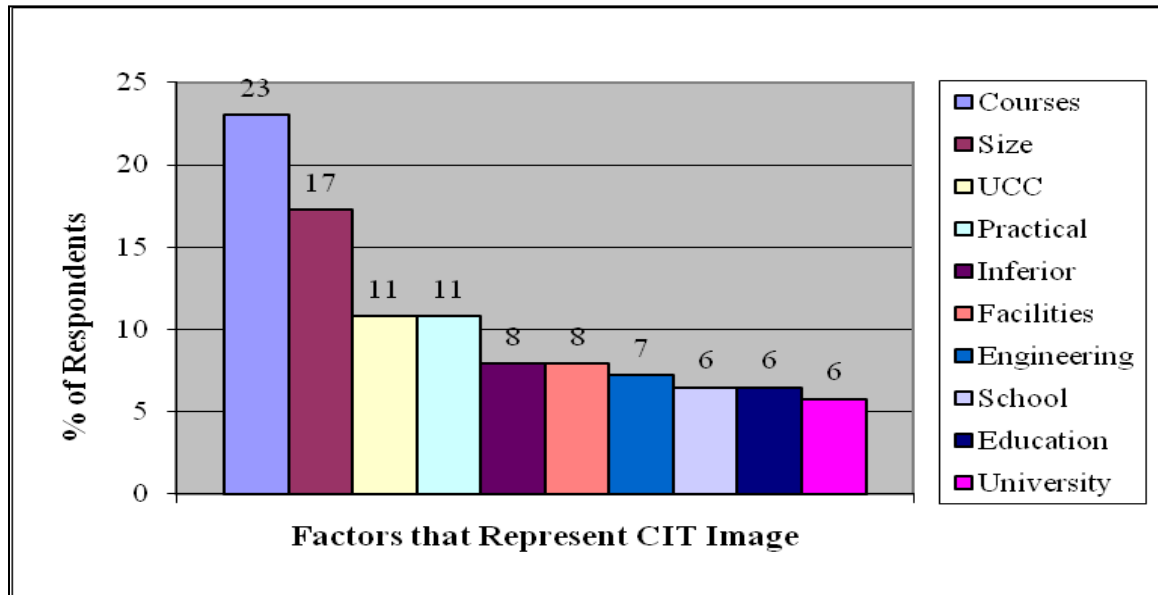
5.5.1 Demographic perception factors

Section B of the survey asked respondents to indicate on a scale of 1 to 7, with 1 being completely disagree and 7 being completely agree, the demographic factors that best represent their perception of WIT or CIT. The responses elicited are presented in figure 5.5.

5.5.1.1 Demographic perception factors WIT

Waterford respondents somewhat agreed that 'convenient location' best represents their perception of WIT, recording a mean value of 4.77. Waterford respondents reported that that they neither agreed nor disagreed that the factor of 'urban' best illustrated their perception of WIT. Waterford respondents reported a mean value of 4.27. Waterford respondents somewhat disagreed that the category of 'small' and 'old' best demonstrated their perception of WIT, measuring a mean value of 3.31 for 'small' and 2.74 for 'old'. Waterford respondents disagreed that 'dirty' best exemplifies their perception of WIT reporting a mean value of 2.47.

5.5.1.2 Demographic perception factors CIT

Cork respondents also somewhat agreed that 'convenient location' most strongly represents their perception of CIT with a mean value of 4.64. Cork respondents reported that that they neither agreed nor disagreed that the factor of 'urban' best represented their perception of CIT. Cork respondents achieved a value of 4.24. Cork respondents also somewhat disagreed that 'small' and 'old' best symbolised their perception of CIT giving a mean value of 2.7 for 'small' and 2.67 for 'old'. Cork respondents again disagreed that the aspect of 'dirty' best represents their perception of CIT; with a mean value of 2.5.

Figure 5.5 Demographic Factors that Represent the Image of WIT and CIT among Senior Second Level Students
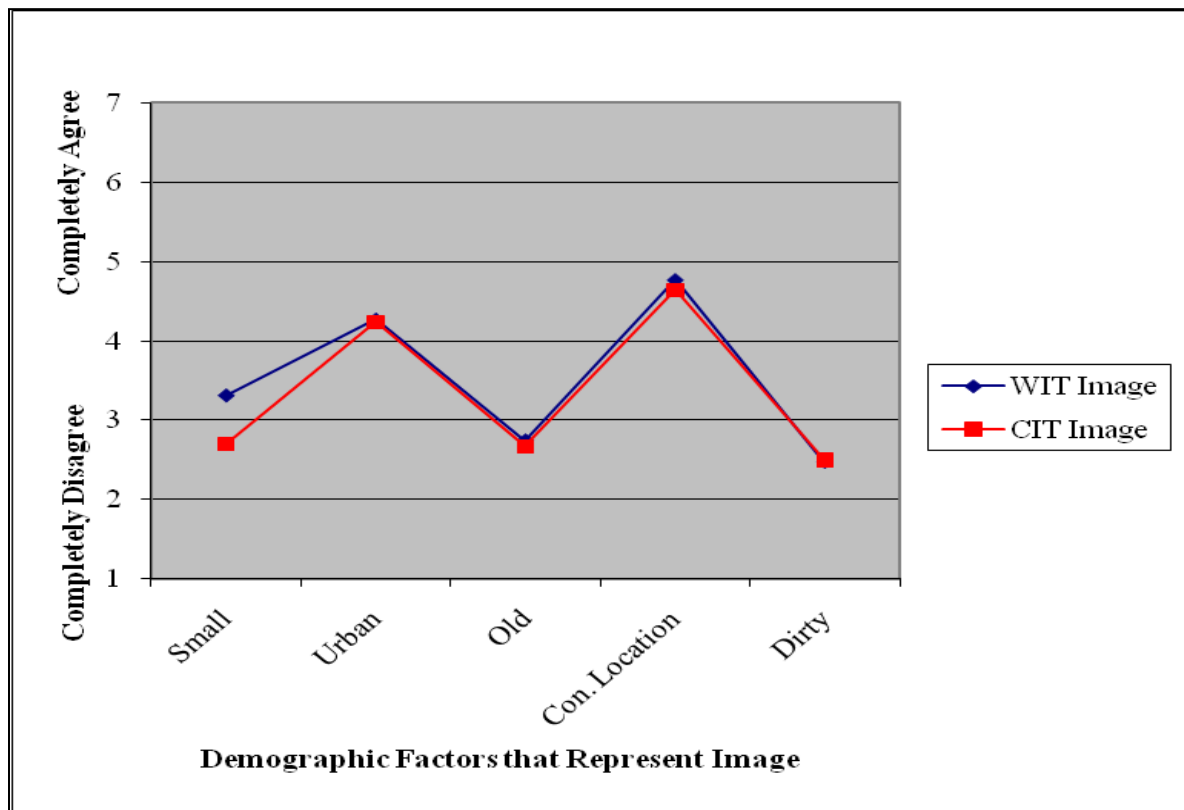
5.5.2 Spirit and temperament perception factors

Respondents were asked to specify on a scale of 1 to 7, with 1 being completely disagree and 7 being completely agree the spirit and temperament factors that best represent their

perception of WIT or CIT. Figure 5.6, shows the spirit and temperament factors that represent the perception of WIT and CIT among senior second level students.

5.5.2.1 Spirit and temperament factors WIT

Waterford respondents somewhat agreed that 'wide range of courses on offer', 'male students attend' (majority of students are male) and 'interested students' (the IT has interested students) most strongly represents their perception of WIT. 'Wide range of courses on offer' has a mean value of 4.74 with both the items of 'male students attend' and 'interested students' having a value of 4.6 and Waterford respondents reported that that they neither agreed nor disagreed that the factors of 'enthusiastic', 'average' (the IT is perceived as mediocre) and 'campus centred' represented their perception of their specific institute. The mean value is 4.47 for the factor 'enthusiastic', 4.03 for 'campus centred' and 3.82 for 'average'. Waterford respondents somewhat disagreed that the factors of a 'grind' (hard work), 'impersonal (large, featureless), 'weak reputation', 'limited social life', 'overrated' (merits of IT are over estimated), 'unsafe', 'no sense of institutional pride amongst graduates', 'like school' and 'unhelpful employees' best represented their image of WIT. 'Like school' has a mean value of 3.42, followed by 'a grind' at 3.41, next is 'impersonal' 3.36, with 'weak reputation' at 3.24. 'Limited social life' at 3.17 is next, followed by 'unhelpful employees' at 3.14, with 'no sense of institutional pride amongst graduates' at 3.08. 'Overrated' is next at 2.99 and finally 'unsafe' at 2.82 see figure 5.6.

5.5.2.2 Spirit and temperament factors CIT

Cork respondents also somewhat agreed on the same factors as Waterford respondents. 'Male students attend' has a mean of 5.18, followed by 'wide range of courses on offer' with a value of 5.01 and 'interested students' at 4.94. Cork respondents reported that that they neither agreed nor disagreed that the factors of 'enthusiastic', 'average' and 'campus centred' best represented their perception of their specific institute. There is a mean value of 4.47 for 'enthusiastic', 4.08 for 'campus centred' and 3.68 for 'average'. In the case of CIT the item of 'like school' can also be catalogued under neither agree nor disagree with a mean of 3.55. Cork respondents somewhat disagreed that the factors of 'a grind',

'impersonal', 'weak reputation', 'limited social life', 'overrated', 'no sense of institutional pride amongst graduates' and 'unhelpful employees' represented their perception of CIT. 'Impersonal' has a mean value of 3.32, followed by 'a grind' at 3.24, with 'weak reputation' next at 3.15. 'Overrated' is next with a value of 2.82, with 'no sense of institutional pride amongst graduates' at 2.77. 'Unhelpful employees' at 2.68 is next and lastly 'limited social life' at 2.55. Cork respondents disagreed that 'unsafe' best represents their perception of CIT designating a mean value of 2.17 (see figure 5.6).

Figure 5.6 Spirit and Temperament Factors that Represent the Image of WIT and CIT among Senior Second Level Students
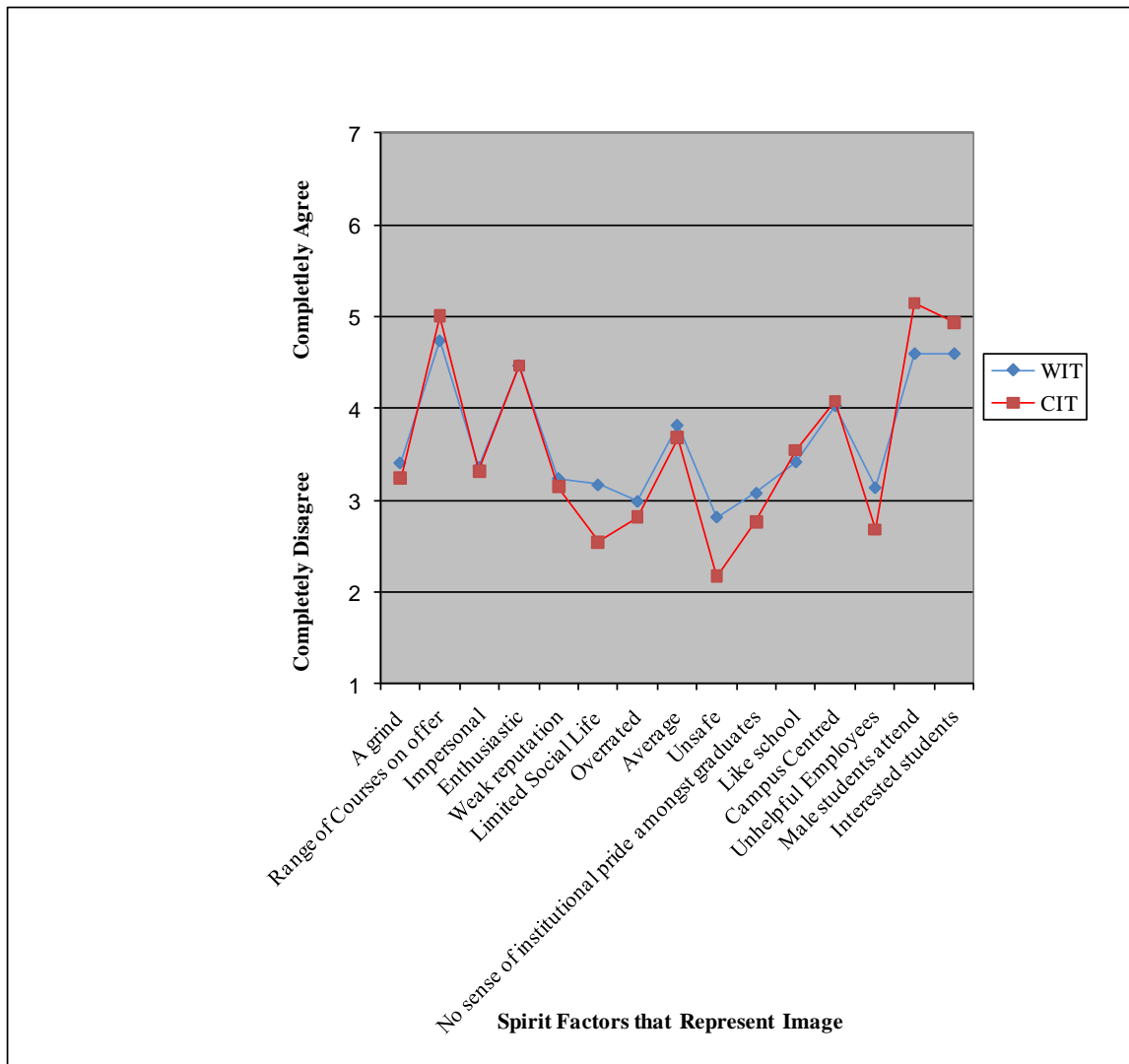
5.5.3 Curriculum, competitiveness and academic life perception factors

Respondents were asked to score each of 18 semantic differentials relating to their perception of WIT or CIT. Each respondent was presented with two opposite factors for example 'innovative' versus 'traditional', which they rated from very innovative, moderately innovative, neither, moderately traditional and very traditional. The responses that emerged are presented in tables 5.7 and 5.8.

5.5.3.1 Curriculum, competitiveness and academic life WIT

When WIT is compared to CIT, Waterford respondents' view WIT as less 'innovative', more 'local', less 'quick to change', to have less 'satisfactory leisure facilities', to be less 'career focused' and more 'relaxed' . Respondents also believe WIT as having less of a 'focus on certs, diplomas and degree courses', less 'approachable lecturers', less longer courses and more 'inferior to universities'.

Table 5.7 Curriculum, Competitiveness and Academic Life Factors that Represent the Image of WIT among Senior Second level Students

	1 Very	2 Mod.	3 Neither	4 Mod.	5 Very		Mean	SD	Mode
			%						
Innovative	8.8	51.6	25.2	12.6	1.9	Traditional	2.47	0.89	2
Local	38.4	33.3	15.7	9.4	3.1	International	2.06	1.10	1
Quick to change	12.6	37.7	33.3	10.7	5.7	Slow to change	2.59	1.03	2
Satisfactory leisure facilities	35.2	31.4	15.7	11.9	5.7	Unsatisfactory leisure facilities	2.21	1.21	1
Not sports focused	6.3	8.8	22.0	28.9	34.0	Sports focused	3.75	1.20	5
Career focused	38.6	31.6	13.9	13.3	2.5	Not career focused	2.09	1.13	1
Courses are difficult	1.9	22.6	50.3	18.9	6.3	Courses are easy	3.05	0.86	3
Inexpensive	5.7	22.6	32.1	21.4	18.2	Expensive	3.24	1.16	3
Relaxed	15.7	42.1	23.9	16.4	1.9	High pressure	2.47	1.01	2
Cut-throat	4.4	17.6	45.9	25.8	6.3	Non-competitive	3.12	0.92	3
Non-selective	5.0	17.0	48.4	20.8	8.8	Selective	3.11	0.96	3
Focus on Certs, Diplomas Degree Courses	30.8	27.7	27.7	11.9	1.9	Focus on Masters, PhD courses	2.26	1.08	1
Courses available on philosophy, politics and history	5.7	17.0	27.0	27.0	23.3	Courses available for professional qualification	3.45	1.18	3a
Not research focused	7.5	15.1	36.5	30.2	10.7	Research focused	3.21	1.07	3
Has approachable lecturers	20.8	40.9	29.6	6.3	2.5	Has unapproachable lecturers	2.29	0.95	2
Long courses	10.7	28.9	29.6	20.8	10.1	Short courses	2.91	1.15	3
Unsatisfactory facilities for student learning	3.1	15.1	23.9	36.5	21.4	Satisfactory facilities for student learning	3.58	1.08	4
Inferior to universities	26.4	18.9	38.4	9.4	6.9	Superior to universities	2.52	1.18	3

5.5.3.2 Curriculum, competitiveness and academic life CIT

Cork respondents perceived CIT as more 'innovative', less 'local', more 'quick to change', as having more 'satisfactory leisure facilities', more 'career focused', with

courses viewed as moderately difficult. Respondents also perceived CIT to be less 'relaxed', to have more of a 'focus on certs, diplomas and degree courses' more 'approachable lecturers', more 'longer courses' and is less 'inferior to universities'.

Table 5.8 Curriculum, Competitiveness and Academic Life Factors that Represent the Image of CIT among Senior Second level Students

	1 Very	2 Mod.	3 Neither	4 Mod.	5 Very		Mean	SD	Mode
		%							
Innovative	14.0	49.0	22.9	9.6	4.5	Traditional	2.41	.99	2
Local	33.1	29.9	22.9	10.8	3.2	International	2.21	1.12	1
Quick to change	12.1	35.7	40.8	9.6	1.9	Slow to change	2.54	0.90	3
Satisfactory leisure facilities	38.9	33.1	16.6	8.9	2.5	Unsatisfactory leisure facilities	2.03	1.07	1
Not sports focused	2.5	7.0	24.8	28.7	36.9	Sports focused	3.90	1.06	5
Career focused	43.3	35.7	14	3.8	3.2	Not career focused	1.88	1.00	1
Courses are difficult	6.4	33.1	47.8	10.8	1.9	Courses are easy	2.69	0.82	3
Inexpensive	3.2	24.8	38.9	22.3	10.8	Expensive	3.13	1.01	3
Relaxed	10.8	37.6	29.9	16.6	5.1	High pressure	2.68	1.04	2
Cut-throat	7.7	17.3	47.4	21.8	5.8	Non-competitive	3.06	0.97	3
Non-selective	7.6	17.2	48.4	17.8	8.9	Selective	3.03	1.01	3
Focus on Certs, Diplomas Degree Courses	38.7	31	21.9	5.2	3.2	Focus on Masters, PhD courses	2.03	1.05	1
Courses available on philosophy, politics and history	3.2	11.5	23.6	30.6	31.2	Courses available for professional qualification	3.75	1.11	5
Not research focused	7.6	17.2	36.9	26.8	11.5	Research focused	3.17	1.09	3
Has approachable lecturers	25.5	38.9	29.3	4.5	1.9	Has unapproachable lecturers	2.18	0.93	2
Long courses	8.3	26.1	35.7	24.2	5.7	Short courses	2.93	1.03	3
Unsatisfactory facilities for student learning	4.5	6.4	26.8	33.1	29.3	Satisfactory facilities for student learning	3.76	1.08	4
Inferior to universities	12.8	25.6	44.4	7.1	5.1	Superior to universities	2.66	0.97	3

5.6 Section C: where does the institute image come from?

Respondents were instructed to rate 11 sources of image factors on a scale of 1 to 5 with 1 being completely disagree, 5 being completely agree, 2 being disagree, 3 being neither agree nor disagree and 4 being agree. Respondents were asked what point on the scale best represented how much each factor represented a source of HEI image for them to their perceived image of either CIT or WIT.

5.6.1 Sources of HEI image

When examining WIT and CIT image, a mean value was calculated for each of the 11 source categories and the mean values of these source categories are presented for WIT and CIT. The following mean values illustrate the representation that sources of image categories made to respondents' perceived image of WIT or CIT.

5.6.1.1 Sources of WIT image

Waterford respondents agreed that 'word-of-mouth' represented their sources of image of WIT with a mean value of 3.61. 'WIT's reputation' follows next with a mean value of 3.55 and then 'friends' with a mean value of 3.46. Waterford respondents neither agreed nor disagreed that 'students, current and graduates' represented their image of WIT with a mean value of 3.43, with 'physical image' following next with a mean of 3.26 then 'personal experiences' with a value of 3.09. This is followed by 'promotional material' at 2.98; 'family' is next with a mean value of 2.89, 'media' at 2.82 and 'career guidance counsellors' at 2.79. Waterford respondents disagreed that 'institute staff' represented their image of WIT with a mean value being recorded of 2.42 see table 5.9.

5.6.1.2 Sources of CIT image

Cork respondents agreed that 'word-of-mouth' contributed to their perceived image of CIT with a mean value of 3.87. 'Students, current and graduates' is next with a mean value of 3.70, then 'friends' with a mean value of 3.57 and this is followed by 'reputation' 3.56. Cork respondents neither agreed nor disagreed that 'career guidance counsellors' contributed to their image of CIT with a mean of 3.44, followed by 'personal experiences' with a value of 3.25, then 'CIT physical image' at 3.12, 'promotional

material' at 3.07, 'media' and 'family' at 2.59. Cork respondents also disagreed that 'institute staff' contributed to their image of CIT with a mean value of 2.32 (see Table 5.9, for mean values that represent sources of HEI image for WIT and CIT).

Table 5.9 Mean Values which Represent the Contribution of each Source to the Perceived WIT and CIT Image

Overall Ranking	Category	WIT Mean	WIT Ranking	CIT Mean	CIT Ranking
1	Word-of-mouth	3.61	1	3.87	1
6	Personal experiences	3.09	6	3.25	6
10	Media	2.82	9	2.59	9
2	Students current and graduates	3.43	4	3.70	2
7	Career guidance counsellors	2.79	10	3.44	5
8	Promotional material	2.98	7	3.07	8
9	Family	2.89	8	2.59	9
4	Friends	3.46	3	3.57	3
11	Institute staff	2.42	11	2.32	11
5	Physical image: buildings, offices	3.26	5	3.12	7
3	Reputation	3.55	2	3.56	4

5.7 Section D: image influencers

Respondents were instructed to rate WIT or CIT image influencing factors on a scale of 1 to 7 with 1 being little influence and 7 being strong influence. Organisational factors are composed of non-academic, academic, physical and promotional influencers.

5.7.1 WIT and CIT non-academic image influencers

Respondents were asked what non-academic factors influenced their WIT or CIT image. It was found that the most influential non-academic factor for Waterford respondents was 'social life' with a mean value of 4.91. The next most influential factor was 'achievements of graduates' at 4.67, and then 'leisure facilities' at 4.66. 'Summer camps' were seen as having a much less influence with a mean value of 2.91. Figure 5.7, illustrates the mean scores for Waterford and Cork respondents.

Figure 5.7 Non-academic Factors that Influence Senior Second Level Students WIT and CIT Image
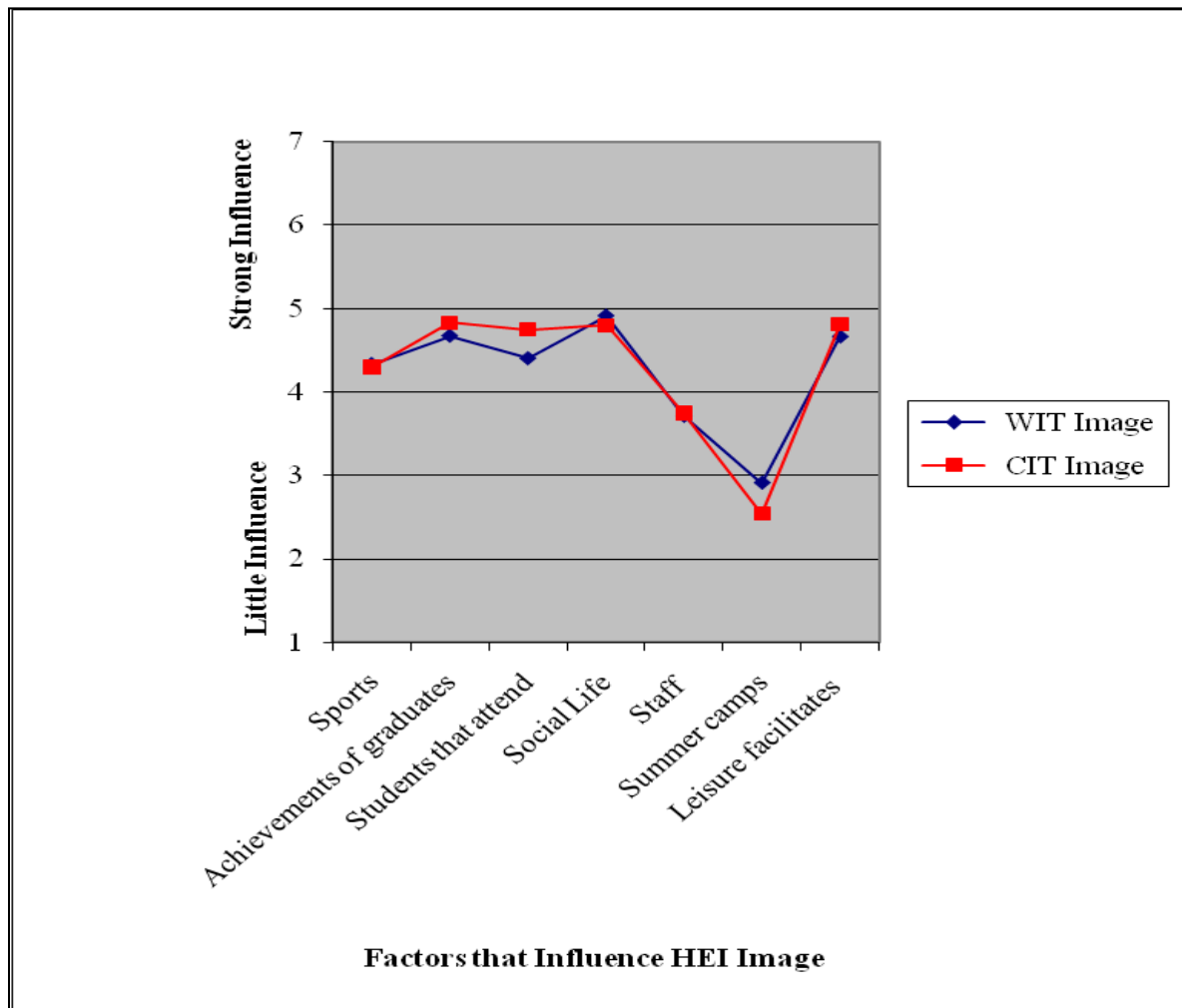
5.7.2 WIT and CIT academic image influencers

Respondents were asked what academic factors influenced their WIT or CIT image. Cork respondents regarded 'academic programmes' as the most influential academic factor with a mean value of 4.80. Figure 5.8, illustrates the mean scores for Waterford and Cork respondents.

Figure 5.8 Academic Factors that Influence Senior Second Level Students WIT and CIT Image
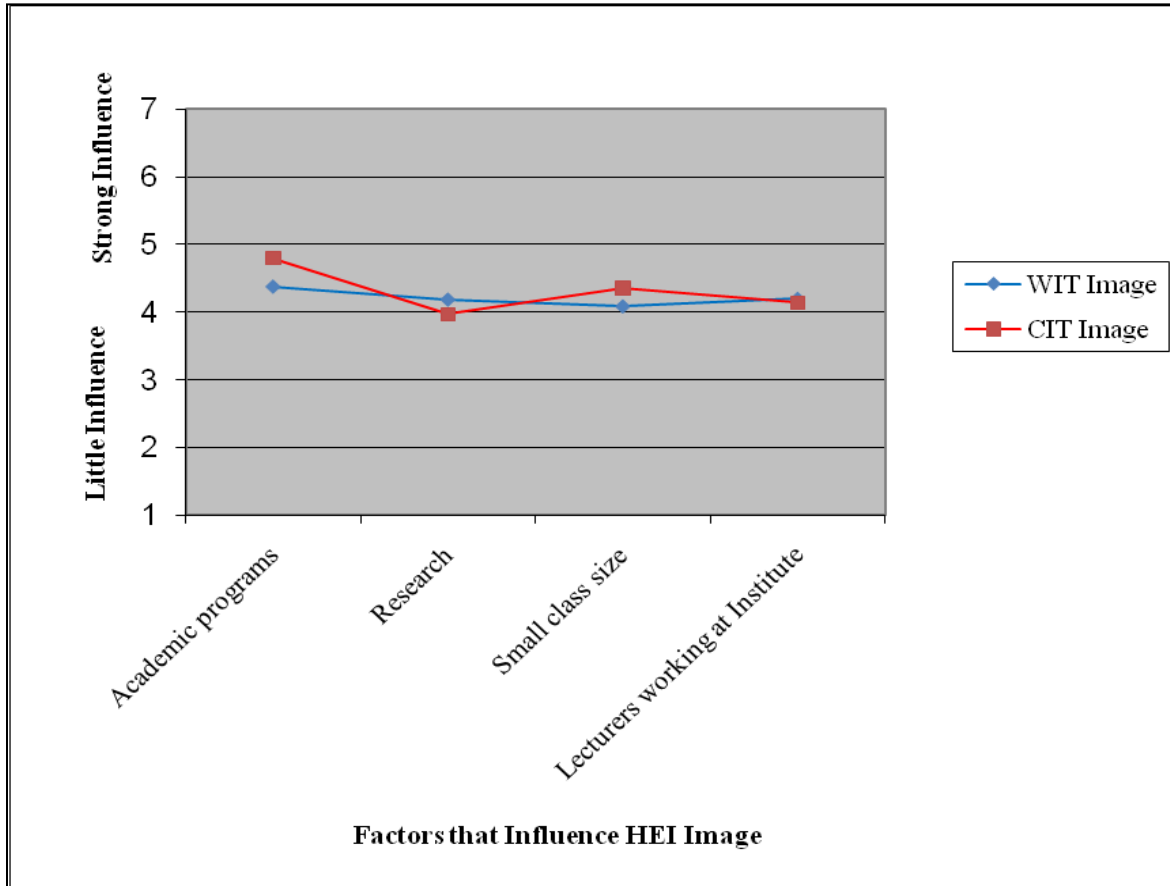
5.7.3 WIT and CIT physical image influencers

When respondents were asked what physical factors influenced their WIT or CIT image, it was reported that the most influential factors for Waterford respondents were 'campus atmosphere' with a mean value of 5.18, 'campus' (the physical campus) at 4.81 and 'technical facilities' at 4.57. These variables can be categorised as a slightly strong influence on the scale. 'Academic facilities' have less of an influence with a mean value of 4.28. Cork respondents perceived that 'campus atmosphere' was the most influential factor on their image of CIT with a mean value of 5.34, followed by 'technical facilities' at 4.81 and 'campus' at 4.76. 'Academic facilities' had less of an influence with a mean value of 4.38. This is seen in figure 5.9.

Figure 5.9 Physical Factors that Influence Senior Second Level Students WIT and CIT Image
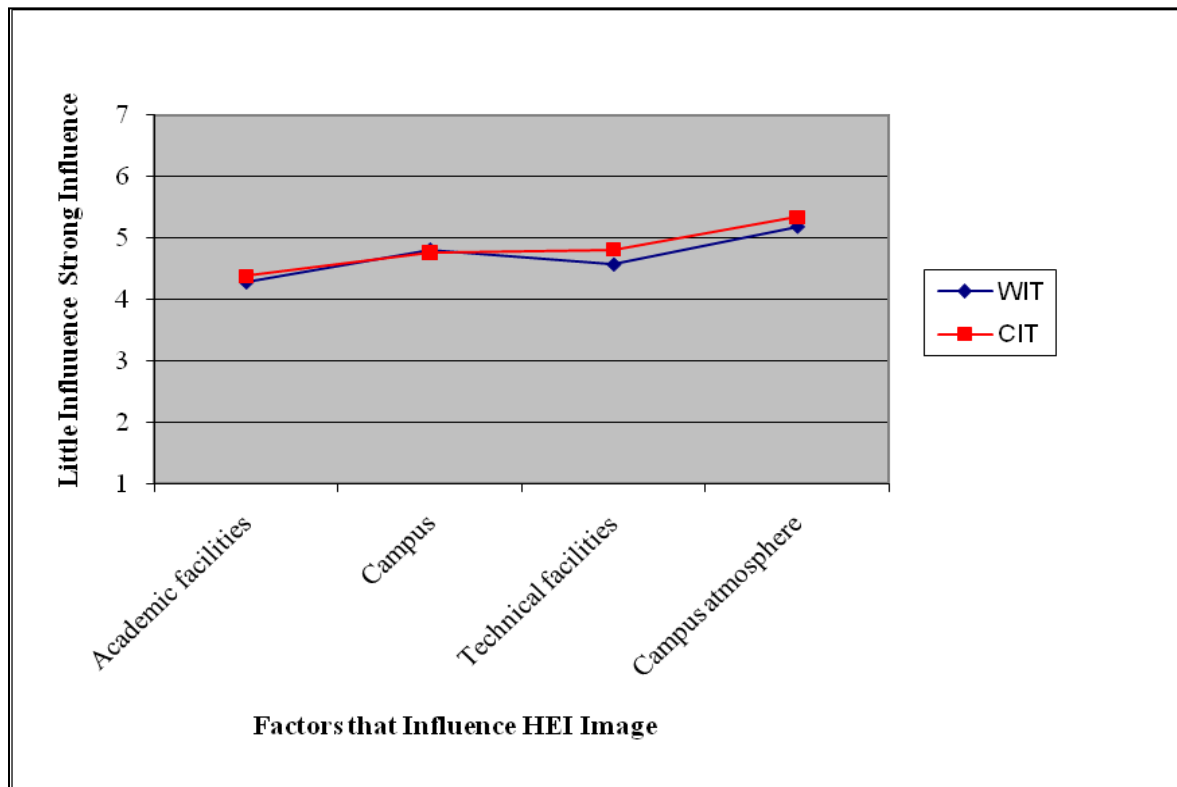
5.7.4 WIT and CIT promotional image influencers

When respondents were asked about promotional factors that influenced their WIT or CIT image, the most influential factors for Waterford respondents were 'open days' with a mean value of 4.57, and then 'the prospectus' at 4.53. These items come under the slightly strong influence area on the scale. The variables that were recognised as having less influence on the image of WIT were 'adverts' and 'promotional videos of the IT' having a mean value of 3.42. This was followed by 'newsletter to career guidance counsellors' at 3.36.

It was revealed that the most influential factors for Cork respondents were 'the prospectus' with a mean value of 4.7, followed by 'open days' at 4.59 and then the 'career exhibitions' at 4.53. These variables were under the slightly strong influence area on the scale. The factors that were seen as having less influence on the image of CIT

were 'adverts' at 3.24, 'promotional videos of the ITs' at 3.03 followed by 'merchandise' at 2.9. Figure 5.10 presents the promotional factors that influence senior second level students' WIT and CIT image.

Figure 5.10 Promotional Factors that Influence Senior Second Level Students WIT and CIT Image
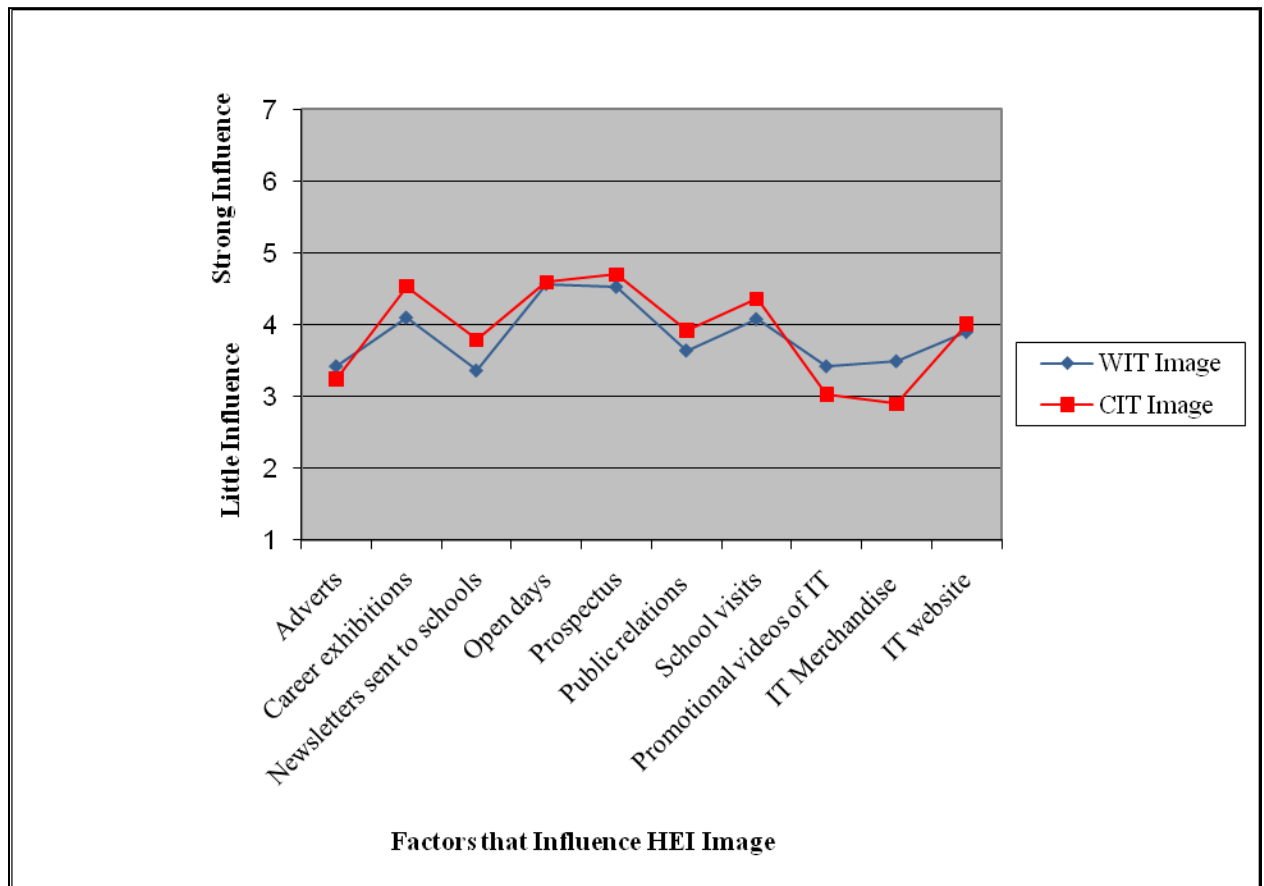
5.7.5 WIT and CIT environmental image influencers

When respondents were questioned about the environmental factors that influence CIT or WIT, the most influential factors for Waterford respondents were 'location' with a mean value of 5.08, then 'CAO Points' at 4.83, followed by 'expense' at 4.74 and next, 'reputation' at 4.58. These variables fell under the slightly strong influence area on the scale. Cork respondents perceived that 'CAO points' was the most influential environmental factor, as a slightly strong influence with a mean value of 5.04. This is followed by 'location' with a mean value of 4.87, 'reputation' with a value of 4.68 and then 'grants/fees' at 4.55. 'Media' had a little less influence with a mean value of 2.99. These results are illustrated in figure 5.11.

Figure 5.11 Environmental Factors that Influence Senior Second Level Students WIT and CIT Image
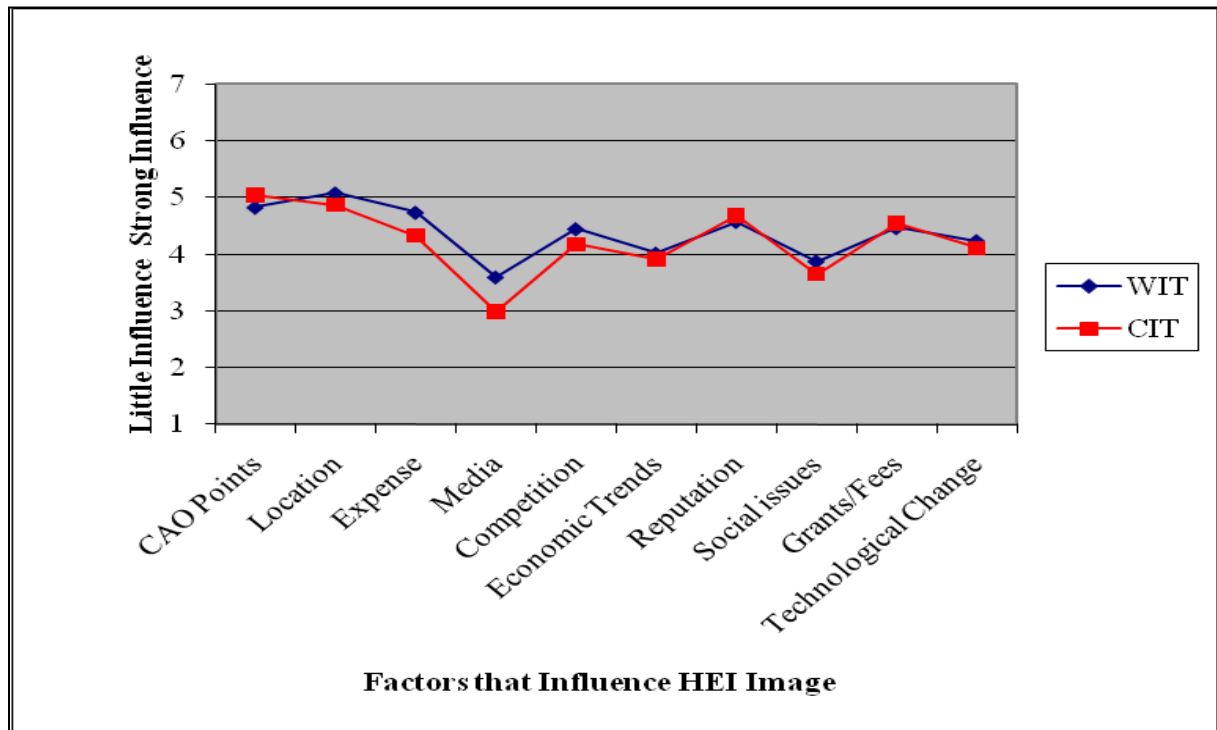
5.7.6 WIT and CIT personal image influencers

When respondents were asked what personal factors influence WIT or CIT image, the responses indicated that the most influential factors for Waterford respondents were 'independence' with a mean value of 4.95. The next highest were, 'friends' and 'education' jointly at 4.79, 'experiences' with a value of 4.55 and then 'word-of-mouth' at 4.5. These elements came under the slightly strong range of the scale. 'Gender' was seen to have less influence with a mean value of 3.49. Cork respondents deemed that 'education' was most influential on their image of CIT having a mean value of 4.94, followed by 'independence' at 4.92, 'friends' at 4.62 and then 'word-of-mouth' at 4.5. 'Length of time residing in Cork' was viewed as having less influence with a value of 3.27 and this was followed by 'gender' at 3.11. The results are shown in figure 5.12.

Figure 5.12 Personal Factors that Influence Senior Second Level Students WIT and CIT Image
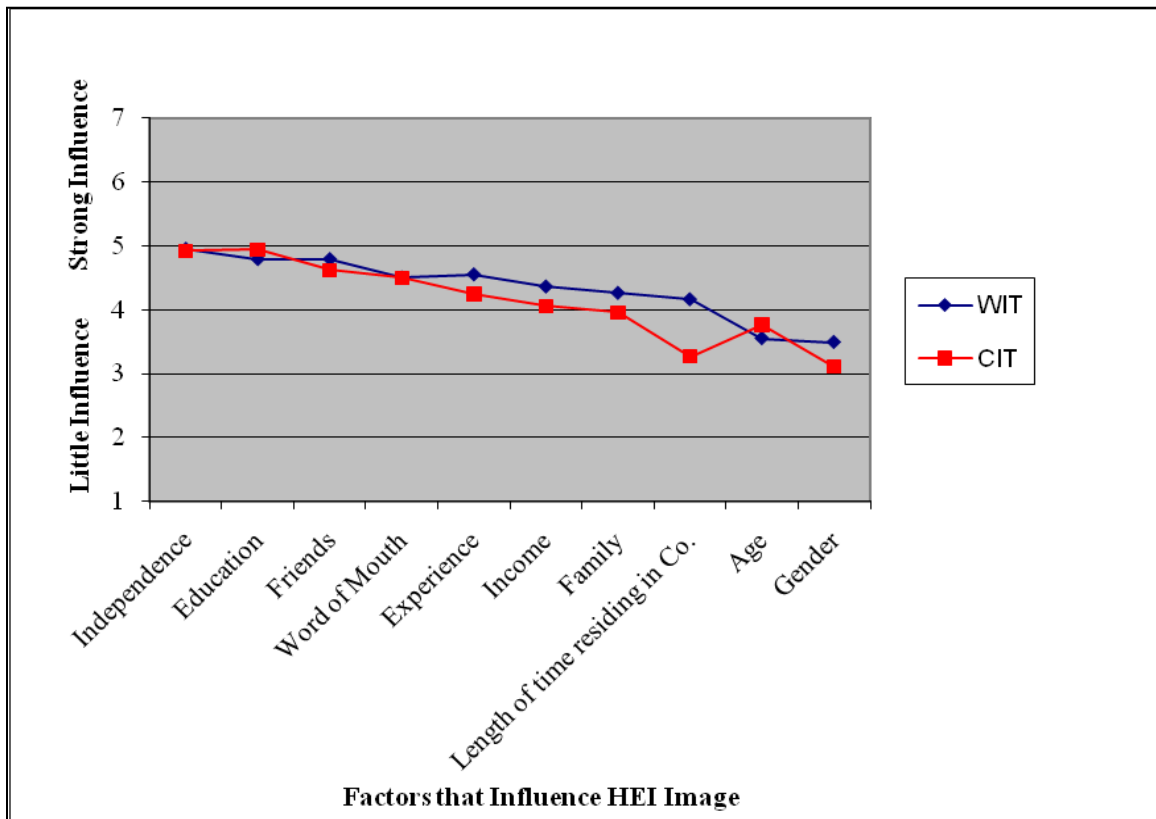
5.8 Students (qualitative) perceptions of institutions

At the end of the survey, respondents were given the opportunity to offer any additional perceptions they had of the image of WIT or CIT. An opinion was expressed by 30% (n=47) of Cork respondents while 40% (n=64) of Waterford respondents completed this section. The responses have been categorised under the positive, negative, insights and suggestions thematic headings. Table 5.10 presents secondary school students' positive perceptions of WIT and CIT.

Table 5.10 Secondary School Students' Positive Perception of WIT and CIT

WIT positives	CIT positives
'The new nursing building is amazing, I want to attend'.	*'Good college very close to home. There are a lot of good things about their sports which have a good influence on me. Would love to go to CIT, it has a good library'.*
'Hope to create my own image of WIT next year as I hope to study in WIT after the Leaving'.	*'I think that it is a very good college for those doing science careers but there is little offered for other areas e.g. business. And I think that it has a reputation for that. I think that it is unfair that it has an inferior status to UCC as many of the CIT courses give you higher and better degrees than you get in UCC'.*
'It's a good hurling college and has good facilities'.	*'Overall, I think that CIT is a student friendly college where great friends are made and good education is provided'.*
'I have never heard anything that would damage WIT's reputation. I would be proud to become a WIT student'.	*'The place is unreal, good facilities, good atmosphere and plenty of boys'.*
'It seems to be a very good college, in a good location. It's my first choice on the CAO and I know a lot of people attending and they say it is a good college. I hope I get in'.	*'CIT has many facilities. The CAO points are lower and easier to achieve. Many courses are available for everyone. It has helpful staff. It is inexpensive and easy to get to'.*
	'I really don't think that enough influence has been placed on how really great CIT actually is. People compare it to UCC because of tradition however after a visit my opinion has improved but CIT is still not equal to UCC'.

Table 5.11 presents secondary school students' negative perceptions of WIT and CIT.

Table 5.11 Secondary School Students' Negative Perception of WIT and CIT

WIT negatives	CIT negatives
'WIT is not advertised enough and is not portrayed in an inviting way'.	*'It's seen as a trade school which has much more boys attending than girls which is daunting'.*
'The image I have of WIT is of a dirty, unappealing campus but facilities are good. WIT seems more sports that academically focused and Waterford itself is less attractive, lively, cosmopolitan than other cities in which we could go to college'.	*'I feel it is very like school and I heard it has a role call and small classes and I don't want that. I'm not sure on the courses it has or if it has good work experience. I'm also not sure of the chance to do a doctorate there. I don't know why but I would prefer to go to another college'.*
'Personally, it's too close to home for me. WIT has very low points, courses are off putting. Waterford is too small'.	*'Bad, UCC is better'.*
'Courses in universities seem to provide a better broader education with their more varying choice of courses. WIT seems to lack the clubs and societies that make college life fun, causing the WIT experience to be too academic without personal initiatives'.	*'Maybe I would go to CIT if it offered a course that I was interested in but I don't like its campus. UCC's campus is far nicer. I wouldn't like having a situation similar to school when in college.'*
'It just does not have as good a reputation as CIT e.g. mechanical engineering course in CIT is better than WIT mechanical engineering course.	

Table 5.12 presents secondary school students' insights and suggestions regarding perceptions of WIT and CIT.

Table 5.12 Secondary School Students' Insights and Suggestions regarding Perception of WIT and CIT

WIT insights and suggestions	CIT insights and suggestions
'Have to move away for college'.	*'Well it is a good male college but it's overshadowed by UCC'.*
'Needs to be advertised more over radio, websites, newsletters and TV'.	*'Even though I don't plan on attending CIT, I think it offers great opportunities for people but unfortunately there is a stigma that it is 'second best' to the likes of UCC. It offers equally excellent courses and deserves better recognition'.*
'I think WIT needs to show second level students what they are, what they have, where they are because I haven't an idea'.	*'Reputation needs to be improved to balance the scales. CIT is not a fall back college and should not be seen as one'.*
'It seems to be a nice college but I will never attend as it doesn't offer my course'.	*'Get rid of prefabs'.*

'Reduce college fees due to the current downturn in the world's economy. This has lead to an economic recession which means there is less money for young people resulting in students not having money to pay for fees'.	*'Considered by many as a last resort if CAO points needed for UCC and other universities are not acquired'.*
'I think WIT needs to increase its exposure to other types of courses like arts courses to give a broader and more open view of the college to prospective students'.	*'I think CIT should have not only technical subjects, it should have more level eight subjects.'*
'Well I have never been there or seen the inside of it. I don't hear much about it either. Maybe you should open it more for school trips to use the sports facilities. If it got university status this would improve its overall image greatly'.	
'If it became a university more people would go there because people stereotype that ITs' are not as good as universities even though they might be, so keep pushing to get university status'.	

Following on from the descriptive survey finding the next section will examine the results of the hypotheses testing.

5.9 Results of hypotheses testing

The following section statistically tests the relationship between the HEI image influencers and HEI image components (figure 5.13). Thus the results of backward stepwise regression significance testing are presented for each of the six HEI image influencers on each of the five HEI image components. Due to problems with multicollinearity, the demographic factors were dropped during the regression analysis.

Figure 5.13 represents the influencer model of HEI image. This model diagrammatically explains the statistical testing which was undertaken in this research.

Figure 5.13 The Influencer Model of HEI Image
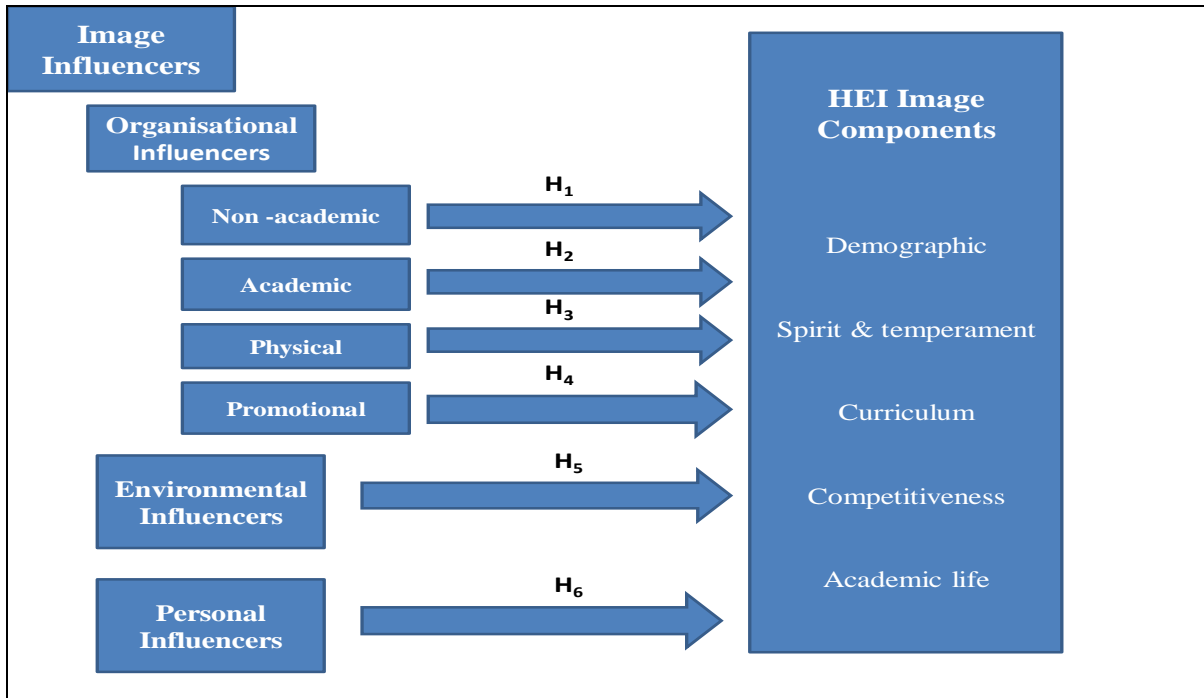
The backward stepwise regression result (table 5.13) indicates that the influencing variables non-academic, academic and promotional factors are making a significant prediction of the dependant variables of spirit and temperament, curriculum, competitiveness and academic life when overall Institute of Technology (IT) image is analysed. The level of significance is less than the threshold of .05. 4.7% of the variability in the spirit and temperament element of overall IT image is explained by the image influencer, non-academic. 8.2% of the variability in the curriculum component of overall IT image is explained by the image influencer, academic and non-academic. 5% of the variability in the competitiveness aspect of overall IT image is explained by the image influencer, promotional factors. 20% of the variability in the academic life element of overall IT image is explained by the image influencer, promotional and non-academic. The demographic component of the dependant variable, HEI components, does not appear as no statistically significant results emerged for this component.

Table 5.13 Presents the Regression Results for Overall IT Image

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Non-academic	**Spirit and temperament**	**.047**	**.041**	**.004**
Academic				.820
Physical				.866
Promotional				.476
Environmental				.240
Personal				.116
Academic and Non-academic	**Curriculum**	**.082**	**.073**	**.028**
Physical				.976
Promotional				.173
Environmental				.713
Personal				.120
Promotional	**Competiveness**	**.050**	**.045**	**.002**
Non-academic				.171
Academic				.864
Physical				.150
Environmental				.953
Personal				.373
Promotional and Non -academic	**Academic Life**	**.199**	**.191**	**.004**
Academic				.521
Physical				.710
Environmental				.876
Personal				.051

The backward stepwise regression analysis (table 5.14) explains that the influencing variables physical factors, academic, non-academic and promotional are producing a significant contribution to the prediction of the dependant variables of spirit and temperament, curriculum, competitiveness and academic life, when WIT image is analysed. 4.8% of the variability in the spirit and temperament part of WIT image is explained by the image influencers, physical factors. 10% of the variability in the curriculum element of WIT image is explained by the image influencer, academic. 11.2%

of the variability in the competitiveness component of WIT image is explained by the image influencer, non-academic. 23.2% of the variability in the academic life element of WIT image is explained by the image influencer non-academic and promotional.

Table 5.14 Presents the regression results for WIT

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Physical	**Spirit and temperament**	**.048**	**.038**	**.036**
Non-academic				.254
Academic				.851
Promotional				.320
Environmental				.228
Personal				.440
Academic	**Curriculum**	**.100**	**.091**	**.002**
Non-academic				.072
Physical				.166
Promotional				.125
Environmental				.758
Personal				.842
Non-academic	**Competiveness**	**.112**	**.103**	**.001**
Academic				.641
Physical				.906
Promotional				.275
Environmental				.176
Personal				.559
Non-academic + promotional	**Academic Life**	**.232**	**.216**	**Non aca .003 Promo .007**
Academic				.862
Physical				.088
Environmental				.953
Personal				.816

The backward stepwise regression analysis (see table 5.15) highlights that the influencing variables non-academic, promotional factors, physical and personal make a significant contribution to the prediction of the dependant variables of spirit and temperament,

curriculum, competitiveness and academic life, when CIT image is analysed. 4.9% of the variability in the spirit and temperament aspect of CIT image is explained by the image influencer, non-academic. 5.5% of the variability in the curriculum element of CIT image is explained by the image influencer, promotional factors. 11.3% of the variability in the competitiveness element of CIT image is explained by the image influencer, promotional and physical. 20.9% of the variability in the academic life part of CIT image is explained by the image influencer, promotional and personal.

Table 5.15 Presents the regression results for CIT

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Non-academic	**Spirit and temperament**	**.049**	**.038**	**.039**
Academic				.201
Promotional				.940
Environmental				.602
Personal				.233
Physical				.225
Promotional	**Curriculum**	**.055**	**.045**	**.019**
Non-academic				.422
Physical				.516
Environmental				.562
Personal				.314
Academic				.403
Promotional and physical	**Competiveness**	**.113**	**.094**	**.009**
Academic				.602
Environmental				.905
Personal				.445
Non-academic				.993
Promotional and personal	**Academic Life**	**.209**	**.194**	**Promo .000 Per .034**
Academic				.269
Physical				.170
Environmental				.487
Personal				.101

The backward stepwise regression analysis (see table 5.16) shows that the influencing variables non-academic and promotional factors are making a significant contribution to the prediction of the dependant variables curriculum, competitiveness and academic life when IT image among high feeder schools (HFS) is analysed. 6.9% of the variability in the curriculum element of IT image among HFS is explained by the image influencer, non-academic. 8% of the variability in the competitiveness part of IT image among HFS is explained by the image influencer promotional factors. 9.9% of the variability in the academic life component of IT image among HFS is explained by the image influencer promotional.

Table 5.16 Presents the Regression Results for IT Image among High Feeder Schools

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Non-academic	**Curriculum**	**.069**	**.061**	**.004**
Academic				.063
Physical				.358
Promotional				.269
Environmental				.831
Personal				.345
Promotional	**Competiveness**	**.080**	**.072**	**.002**
Non-academic				.846
Academic				.594
Physical				.051
Environmental				.788
Personal				.471
Promotional	**Academic Life**	**.099**	**.091**	**.000**
Non-academic				.076
Academic				.753
Physical				.733
Environmental				.657
Personal				.511

The backward stepwise regression analysis (table 5.17) concludes that the influencing variables environmental factors, academic, personal factors, promotional and non-academic are making a significant contribution to the prediction of the dependant variables spirit and temperament, curriculum, competitiveness and academic life when IT image among low feeder schools (LFS) is analysed. 14.1% of the variability in the spirit and temperament component of IT image among LFS is explained by the image influencer of environmental factors. 6.4% of the variability in the curriculum element of IT image among LFS is explained by the image influencer of academic. 8.5% of the variability in the competitiveness part of IT image among LFS is explained by the image influencer, personal factors. 33.6% of the variability in the academic life element of IT image among LFS image is explained by the image influencer, promotional and non-academic.

Table 5.17 Presents the Regression Results for IT Image among Low Feeder Schools

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Environmental	**Spirit and temperament**	**.141**	**.128**	**.001**
Non-academic				.050
Academic				.666
Physical				.991
Promotional				.552
Personal				.623
Academic	**Curriculum**	**.064**	**.051**	**.027**
Physical				.908
Promotional				.254
Environmental				.712
Non-academic				.396
Personal				.368
Personal Factors	**Competiveness**	**.085**	**.073**	**.010**
Non-academic				.272
Academic				.768
Physical				.799
Environmental				.812
Promotional				.984

Promotional and Non-academic	Academic life	.336	.319	Promo .001 Non aca .013
Academic				.276
Physical				.766
Environmental				.971
Personal				.089

The backward stepwise regression analysis (table 5.18) illustrates that the influencing variables non-academic and promotional factors are making a significant contribution to the prediction of the dependant variables spirit and temperament, curriculum, competitiveness and academic life when IT image among high proximity school (HPS) is analysed. 13.5% of the variability in the spirit and temperament part of IT image among HPS is explained by the image influencer of non-academic. 5.7% of the variability in the curriculum element of IT image among HPS is explained by the image influencer of promotional. 7.4% of the variability in the competitiveness dimension of IT image among HPS is explained by the image influencer promotional factors. 18.5% of the variability in the academic life component of IT image among HPS is explained by the image influencer promotional.

Table 5.18 Presents the Regression Results for IT Image among High Proximity Schools

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Non-academic	**Spirit and temperament**	**.135**	**.122**	**.002**
Academic				.109
Physical				.092
Promotional				.892
Environmental				.281
Personal				.112
Promotional	**Curriculum**	**.057**	**.045**	**.030**
Non-academic				.399
Academic				.519
Physical				.658
Environmental				.769

				.423
Promotional	**Competiveness**	**.074**	**.063**	**.012**
Non-academic				.633
Academic				.274
Physical				.134
Environmental				.361
Personal				.949
Promotional	**Academic life**	**.185**	**.175**	**.000**
Non-academic				.698
Academic				.395
Physical				.823
Environmental				.527
Personal				.136

The backward stepwise regression analysis (table 5.19) shows that the influencing variables of non-academic, promotional and academic are making a significant contribution to the prediction of the dependant variables of curriculum and academic life, when IT image among low proximity schools (LPS) is analysed. 14.6% of the variability in the curriculum component of IT image among LPS is explained by the image influencer of academic. 23.2% of the variability in the academic life element of IT image among LPS is explained by the image influencer promotional and non-academic.

Table 5.19 Presents the Regression Results for IT Image among Low Proximity Schools

Independent Variable	Dependent Variable	R Sq	Adj. R^2	Sig
Academic	**Curriculum**	**.146**	**.138**	**.000**
Non-academic				.210
Physical				.896
Environmental				.417
Personal				.400
Promotional				.133
Promotional and non-academic	**Academic life**	**.232**	**.218**	**Promo .001** Non-

				academic .003
Academic				.774
Physical				.950
Environmental				.780
Personal				.228

5.10 Hypotheses support

Table 5.20 presents the six research hypotheses support levels.

Table 5.20 Research Hypotheses Support Level

Hypotheses	Supported
H_1: The greater the non-academic image influence, the greater the HEI image components amongst senior second level students.	Partially
H_2: The greater the academic image influence, the greater the HEI image components amongst senior second level students.	Partially
H_3: The greater the physical image influence, the greater the HEI image components amongst senior second level students.	Partially
H_4: The greater the promotional image influence, the greater the HEI image components amongst senior second level students.	Partially
H_5: The greater the environmental image influence, the greater the HEI image components amongst senior second level students.	Partially
H_6: The greater the personal image influence, the greater the HEI image components amongst senior second level students.	Partially

5.11 Summary

The sections of this chapter presented and summarised the key findings of the focus groups and surveys.

- Respondents have a low level of knowledge:

'Knowledge' of the HEIs is not strong with 79.3% of Waterford respondents rating their knowledge of WIT as average to low while 78.4% of Cork respondents rated their knowledge in this category.

- Image is multifaceted:

It is defined by the amalgamation of many different and varied elements, many of which are common to HEIs.

- The HEI image components are not too dissimilar:

The institutions mirror each other with regard to the demographic component of image. There was a slight variation with regard to spirit component; most notably Cork respondents viewed CIT as more of a 'male college', with more 'interested students' and more of a 'range of course on offer' than Waterford respondents rated WIT. Many curriculum, competitiveness and academic life components composed WIT and CIT image. Some points which Waterford respondents highlighted regarding WIT are it is less 'innovative' and 'quick to change', while it was more 'local' and 'inferior to universities'.

- HEI image was primarily sourced externally:

Waterford respondents ranked 'word-of-mouth', 'reputation', and 'friends' as their three primary sources of WIT image, while Cork respondents rated 'word-of-mouth', 'students' and 'friends' as the three main sources for CIT image.

- HEI image can be influenced:

The HEI image is influenced by organisational attributes (academic, non-academic, physical and promotional), environmental factors and life experiences. The role each influence has varies with some more and others less influential.

- Organisational factors have the greatest influence on HEI image:

Academic influencers prove not to be as influential among this cohort. Non-academic factors were influential with the factor of 'social life' holding precedence. Regarding the

physical factors, the intangible factor of 'atmosphere' was influential with the 'prospectus' being deemed as the most influential promotional factor. 'Points' and 'location' are important environmental influencers of HEI image while 'independence', 'education' and 'friends' were strong influencers of HEI image.

- Hypotheses partially supported:

The hypotheses testing showed that all three independent variables organisational (non-academic, academic, physical and promotional), environmental and personal played a part in influencing the dependant variables of image (spirit, curriculum, competitiveness, academic life). When overall HEI image was examined, the promotional and non-academic factors combined produced the most significant influence on the academic life component of image. Environmental and personal influencers did not provide a level of significance in overall HEI image, but environmental factors did when low feeder schools were examined. Personal factors were also significant when tested with regard to CIT image and low feeder schools.

The following chapter analyses and discusses the research findings in the context of the information gathered in the literature review and serves to illustrate the similarities between the literature and the empirical findings.

Chapter Six - Discussion

6.1 Introduction

This study centres upon identifying and exploring the key components of HEI image and relationships between image influencers and image components. The initial primary research objective was to determine the constituent components of HEI image amongst senior second level students. This involved: (1) examining the components that represented sources of HEI image, (2) gaining an understanding of the factors that influenced HEI image formation and (3) exploring each factor's influence on various HEI image components. The literature reviewed highlighted that HEI image has five components, namely: demographic, spirit and temperament, curriculum, competitiveness and academic life. In addition, three factors were identified as influencing HEI image. These factors were: organisational (non-academic, academic, physical and promotional), environmental and personal. These variables also formed the basis for the conceptual model of HEI as presented in figure 3.12 of the literature review.

The literature, the research findings and hypotheses will be revisited and discussed under each of the influencing factors: organisational, environmental and personal.

6.2 Perceptions of HEIs

This section presents the discussion on HEI image dimensions.

6.2.1 Components of HEI image

The focus group findings highlighted that HEI image was defined by many factors. Some of these factors included 'reputation', 'experiences' (individual experiences with the HEI), 'expense', 'competition', 'students', 'facilities', 'campus', 'location', 'sports', 'social', 'impressions' and 'academic'. The survey findings indicated that CIT and WIT image has common and diverse elements. Some common elements included courses that are available, the size of the institute, university issues such as. the quest for university status and facilities. WIT image was perceived as being composed of the image dimensions of location, sports, buildings, friendly, business (course available) and viewed

as a new place. CIT image was represented by UCC, practical, inferior, engineering, school and education (see figure 5.3 and 5.4, findings chapter).

For Cork respondents, CIT courses were the first factor to represent CIT image while WIT courses were the ninth factor to represent WIT image. Courses are what WIT provides yet it was down the list of factors that comprise respondents' image. For respondents university – that WIT is not a university was the third factor to represent WIT's image but for CIT it was the tenth factor to represent CIT image. A reason for this is perhaps WIT's call for university status. Participants were aware of this and spoke of it during the focus groups. UCC was the third factor to represent CIT image. UCC is likely to impact on CIT image due to the close proximity of the university as both are based in Cork. These findings support the literature presented by Arpan *et al*. (2003) and Treadwell and Harrison (1994) which highlighted that when publics identify HEI image, a multitude of varied factors are utilised.

6.2.2 Demographic factors

The focus group findings showed that participants viewed HEIs as being 'large', 'new', 'in a convenient location' (easy to reach, accessible) and 'clean'. The survey findings show that respondents disagreed that small, old and dirty best represented their image of HEIs. Respondents agreed that convenient location best represented their image of HEIs (figure 5.5). WIT and CIT seem to mirror each other with regard to the demographic component representing respondents' image of ITs. There was a gap on small; Waterford respondents disagreed more strongly that WIT wasn't small when compared to Cork respondents view of CIT. A reason for this finding may be that Waterford respondents only have one institute to judge as there is only one HEI based in Waterford while Cork respondents may judge the size of CIT based on their appraisal of UCC. Collectively the focus group and survey findings are supported by the work of Terkla and Pagano (1993) in their study that highlights the demographic factors of large size and urban location as being components of HEI image.

6.2.3 Spirit factors

During the focus groups, participants disclosed that their image of HEIs encompassed the following spirit factors: 'social'- social life available, 'academic', 'reputation', 'school like' – similar to school and 'male-orientated' – courses on offer very male orientated i.e. engineering. The survey findings show that respondents disagreed that a 'grind', 'impersonal', 'weak reputation', 'limited social life' – little social life available at the HEI, 'overrated'- the HEI is perceived as   better than really is, 'average', 'unsafe', 'no sense of institutional pride amongst graduates', 'like school' and 'unhelpful employees' represented their image of HEIs. Respondents agreed in the survey that 'impersonal', 'wide range of courses on offer', 'enthusiastic', 'campus centred', 'male students attend' and 'interested students' best represented their image of HEIs (see figure 5.6, findings chapter).

There were differences in WIT and CIT image regarding the spirit component. The factors that this was evident in included 'limited social life', 'unsafe', 'males students attend', 'interested students' and 'likes school' – similar to school. Cork respondents' disagreed more strongly regarding limited social life and respondents felt 'safer' in Cork than Waterford respondents did in Waterford. A reason for these findings is that Cork City has a larger student population than Waterford City as both CIT and UCC are situated there. One could therefore infer that there would be more student social facilities available within the city as there is a greater population to demand these services. This supports Arpan *et al's* (2003) study which highlighted the contribution which 'social life' makes to HEI image. It also concurs with the work of Terkla and Pagano (1993), which utilised the factor of 'wide social options' and 'safe' as an image component in their research.

CIT was viewed as very 'male oriented'. One explanation for this is CIT offers more courses that are male orientated such as engineering and trades. CIT students were perceived as 'more interested'. It is unclear as to why these senior second level students perceived different levels of interest for students in WIT and CIT. As with other dimensions of image, it may relate to the larger body of students across two HEIs.

Respondents may be more aware of the student population that exists in Cork due to its size. Further research may be undertaken to gain a deeper understanding of this perception. Cork respondents believed CIT to be more 'like school'. A possible justification for their view may be that respondents are comparing CIT to UCC. As Waterford respondents have nothing to compare WIT to, WIT is seen as an institute which is less like school than CIT. The factor of 'male students attend', 'interested students' and 'like school' was not highlighted in the literature but developed in the focus groups thus adding to the research in this area.

6.2.4 Curriculum factors

The focus group findings identified that participants' images of HEIs included the curriculum factors of 'sports', 'career', 'leisure facilities' and 'local'. Respondents ranked the same factors for both WIT and CIT when describing their image of the institution with little variation. The survey findings convey that respondents' image of WIT and CIT was innovative, local, quick to change, the ITs possessed satisfactory facilities for leisure activities, sports focused, career focused and courses are neither difficult nor easy (see table 5.7 and 5.8, findings chapter). The focus group and survey findings are supported by the work of Terkla and Pagano (1993) who found many of the same variables contributed to the HEI image for example 'innovative versus traditional' and 'international versus provincial'. Fram (1982) concurred that publics' university images are often composed of ideas about curriculum.

6.2.5 Competitiveness factors

The focus group findings indicated that participants' image of HEIs encompassed the competitiveness factors of 'expense', 'relaxed' and 'CAO points'. The survey findings show that respondents' image of WIT and CIT was neither cut throat nor non-competitive and neither non-selective nor selective. These HEIs were viewed as having a relaxed atmosphere. Respondents viewed WIT as being more expensive (see table 5.7 and 5.8, finding chapter). The response of Cork respondents may be related to the fact that most respondents can live at home. One would think that Waterford respondents should have the same opinion as respondents based in Waterford City and County but the institute was

viewed as expensive. Further study may need to be carried out to understand this issue. The focus group and survey findings are reinforced by Terkla and Pagano's (1993) study where some of the same variables were thought to form HEI image, namely, 'high pressure versus relaxed'.

6.2.6 Academic life factors

There was a similar response in the focus groups and in the surveys regarding the academic life component of image. The focus group findings indicated that participants' image of HEIs included academic life factors. These included: 'course length', 'facilities for learning', 'courses available', 'lecturing staff' and 'competitive with universities'. The survey findings showed that respondents perceived that WIT and CIT image was represented by 'approachable lecturers', 'research focus', 'satisfactory facilities for student learning' and 'courses available for professional qualifications' (see table 5.7 and 5.8, finding chapter). This is supported by Fram's (1982) research which highlighted that HEI image is often composed of ideas about academic life factors such as approachable lecturers. Many of Terkla and Pagano's (1993) variables are also evident in the findings namely, 'not research orientated versus research orientated' and 'liberal arts emphasis versus pre-professional'.

The survey findings revealed that respondents' image of CIT was more focused on certificates, diplomas and degrees. WIT offers more honours degrees, than CIT (see figure 2.4, literature review). A probable explanation for this focus is that WIT is an institute which is campaigning for university status; respondents may perceive that the focus is more on Masters and PhD qualifications. It also concurred with the work of Terkla and Pagano (1993) which utilised the factor of 'graduate emphasis versus undergraduate emphasis as an image component in their research.

The findings indicated that WIT image is represented by 'long courses' and 'inferior to universtities'. This is evident as 38 of WIT's courses are four years or longer as opposed to 25 of CIT's courses (see figure 2.4, literature review). It also concurred with the work of Stevens *et al.* (2008) which utilised the factor of 'gets students through their

programmes quickly' as an image component in their research. A reason why WIT is seen as more inferior to a university is that WIT has been campaigning for university status. Participants are aware of this and mentioned it several times during the focus group interviews. This factor was not highlighted in the literature but was brought to the fore in the focus group interviews. This study identifies an additional dimension to the academic life factors as components of HEI image.

Budd (1969) found that confusion exists around the subject of image and this is also evident in the work of Hutton *et al*. (2001). This study presents further evidence of this. This confusion may be linked to image being defined as a multifaceted concept by Kolter and Fox (1995). This study provides evidence of this with 38 factors being utilised to define the HEI image concept. The image that emerges is far from precise. Terkla and Pagano's (1993) study is one of the few studies that explored the components of HEI image, namely, demographic, spirit and temperament, competitiveness, curriculum and academic life. This study demonstrates that each of Terkla and Pagano's components has a part to play in defining the overall HEI image. It is evident that these components are common to both HEIs but there are variations with regard to individuals' interpretation of these components. This study adds to the understanding of Irish HEI image components among senior second level students, an area which has been unexplored in the literature.

6.3 Sources of HEI image

This section of the discussion examines sources of HEI image.

6.3.1 Word-of-mouth

All focus groups participants spoke about their HEI image stemming from 'word-of-mouth'. The survey findings concurred with the focus group findings. Word-of-mouth was a key source of HEI image receiving a first ranking from Waterford and Cork respondents (see table 5.9, findings chapter). As the majority of respondents were in an exam year, it is possible that respondents were busy with exam preparation. Respondents valued information which perhaps was received informally with little research time required. It is also reasonable to assume that word-of-mouth may be an extremely

believable source as respondents have little life experience and may be more inclined to believe hearsay. This is in agreement with Nygugen and Le Blanc (2001) and Arpan *et al.* (2003) who indicated that word-of-mouth was an important source of HEI image.

6.3.2 Reputation

There was little mention of reputation as a source of HEI image during the focus groups. The survey findings revealed that reputation was ranked highly by all respondents (see table 5.9, findings chapter). One reason perhaps why reputation was not evident in the focus groups was that participants were school going and may not have been able to articulate this point. Participants did refer on several occasions to 'what people say'. This could be seen as some attempt by the participants to introduce reputation. The survey findings strengthen the work of Williams and Moffitt (1997) who found that reputation for service is an influential source in forming overall image. Further research may be needed with regard to this factor.

6.3.3 Students

The focus group findings revealed that 'students' were a source of HEI image. The survey findings concurred reporting students as a key source of HEI image (see table 5.9, findings chapter). Respondents would likely have friends and acquaintances that would have attended these HEIs. It is reasonable to assume that friends would have told respondents about the institution. There seemed to be a gap between WIT and CIT with regard to this source. One reason for this is Cork's larger student population. It can be inferred that Cork respondents may have greater contact with third level students than Waterford respondents. This reinforces the work of Arpan *et al*. (2003) who found that word-of-mouth via students is a source of HEI image.

6.3.4 Friends

At the focus group, participants spoke of 'friends' being a source of HEI image. The survey findings concurred with the focus group findings ranking friends as an important source of HEI image (see table 5.9, findings chapter). It is likely that these respondents have college choice very much in their thoughts. It can be assumed that respondents

would chat with friends on this subject. As this age cohort are likely to value friends' opinions, friends could be extremely influential. This is in line with the work of Arpan *et al.* (2003) who found that word-of-mouth via friends is a source of HEI image.

6.3.5 Other sources of HEI image

The focus group findings established that 'personal experiences' and 'family' was a source of HEI image but there was a mixed reaction to the 'media' and 'institute staff'. These factors were ranked from sixth to ninth by survey respondents (see table 5.9, findings chapter). One reason for this lower ranking of personal experiences in the survey is that respondents are school going and may not yet have had a personal experience of the HEI. This adds strength to William and Moffitt's (1997) study which found that direct business with an organisation is an important source of image. Regarding the source of 'family', the work of Arpan *et al.* (2003) finds strong support in the focus groups than in the survey. Arpan *et al.* (2003) found that publics rely on word-of-mouth through family as a source of information about the HEI. It must be remembered that Arpan's research involved different stakeholders i.e. adult non-learners and students.

These groups may hold a different perception regarding sources of HEI image found in this study. One possible explanation for respondents' views regarding media is that the respondents are teenagers who may not be media savvy with regard to traditional media i.e. newspapers. This finding differs from the work of Arpan *et al.* (2003) who found that publics rely on media as a source of gathered information about the HEI but this was in the context of mature or older stakeholder groups. Institute staff were the least ranked source of HEI image for both sets of respondents. One explanation for this is that respondents were school students who are not likely to have had much interaction with institute staff. Institute staff may not be as important to this group as other stakeholders. This supports Williams and Mofitt's (1997) work where it was found that employees of a company were the least influential factor on an organisations image.

Cornelissen (2000) advised that word-of-mouth is a source of HEI image and this study presents evidence that word-of-mouth is the most strongly perceived source of HEI

image. It is evident in the study that there is a linkage between many of the source factors such as word-of-mouth, reputation and friends but this linkage is also highlighted in the work of Arpan *et al*. (2003) who found word-of-mouth via friends and students is a source of HEI image. This research uncovered that the majority of the classified 'important' HEI image sources are external to the HEI. The organisational controlled sources such as institute staff and media are not as significant among the cohort of senior second level students. This may be a challenge for the HEI.

6.4 Image Formation

This section of the discussion examines non-academic, academic, physical, promotional, environmental and personal factors that influence HEI image.

6.4.1 Non-academic factors that influence HEI Image

This section discusses the non-academic factors of leisure, achievements of graduates and summer camps**.**

6.4.1.1 Leisure

The focus group findings showed that 'social life' and 'leisure facilities' were an influencing factor on participants' HEI image. The survey findings concurred with the focus group interviews (see figure 5.7, findings chapter). This is not surprising as respondents are in an age bracket where it is assumed social life should be particularly important. Social life is arguably viewed as an integral part of the college life experience; this may influence the image of the HEI that an individual holds. This is in agreement with Arpan *et al.* (2003) who established that individuals consider social life when assessing HEI image. These respondents are in schools where leisure facilities such as those available at HEIs are typically not available. Respondents may be initially impressed to know that such facilities are on campus. This concurs with the work of Nguyen and LeBlanc (2001) and Kazoleas *et al.* (2001) who found that facilities on campus may be considered critical factors which determine the students' perception of the image of HEIs.

6.4.1.2 Achievements of graduates

At the focus groups, participants knew students that had attended the HEIs. Particular reference was made to GAA personalities that had graduated. The survey findings found that achievements of graduates was an influence with both sets of respondents (see figure 5.7, findings chapter). It is reasonable to assume that respondents were interested in the achievements of graduates, as respondents may feel that the same opportunities are available to them. This is in line with Theus (1993) and Wajeeh and Micceri (1997) who found achievements of graduates was a factor which impacts on university image.

6.4.1.3 Summer camps

'Summer camps' were perceived as an influence on HEI image at the focus groups. The survey findings indicated summer camps to be a weak influence for both respondents (see figure 5.7, findings chapter). There was a wide gap between WIT and CIT image with regard to the influence which summer camps have on respondents' image. More people may have knowledge of the WIT summer camps as there is only one institute in Waterford City with this facility while Cork has the choice of two, UCC or CIT. Summer camps are generally something that young people attend so it may be something that this young cohort may be interested in but may not be applicable to other age profiles. This issue is not referred to in the literature review possibly because there have been few HEI image studies conducted with this particular age cohort. Summer camps may be a way to develop and influence an image for a HEI formed by individuals from an early age. Summer camps may not be the most influential factor but could possibly be beneficially used with other sources.

6.4.2 Academic factors that influence HEI Image

This section of the discussion examines academic factors that influence HEI image.

6.4.2.1 Academic programmes

The focus group findings showed that academic programmes were an influencing factor on participants' HEI image. The survey findings indicated that academic programmes scored around the middle of the scale (see figure 5.8, findings chapter). There was a gap

between WIT and CIT with regard to the influence which academic programmes had on respondents' image. Academic programmes had a greater impact on CIT image than WIT. Further research may be required to gain a deeper understanding of this issue. This is somewhat in agreement with Kazoleas *et al*. (2001) who informs that the existence of particular programmes were strong predictors of overall image.

6.4.2.2 Lecturers working at IT

'Lecturers working at the IT' were found in the focus groups to be an influencing factor on participants' HEI image. The survey findings showed that lecturers working at the IT scored around the middle of the scale (see figure 5.8, findings chapter). These results should be understood in the context that secondary school students are not likely to have had much opportunity to interact with lecturers. This is also consistent with the pervious discussion of institute staff not being a major source of HEI image (see section 6.3.6). This diverts from Theus's (1993) work who found that the quality of faculty impacts upon university image. A possible reason for this is Theus's work was with a different stakeholder than this study that being HEI management (presidents and vice presidents).

6.4.3 Physical factors that influence HEI Image

This section of the discussion examines physical factors that influence HEI image

6.4.3.1 Campus

'Campus' (physically) and 'campus atmosphere' (the feeling surrounding the campus) were highlighted as influencing factors on participants' HEI image in the focus groups. The survey findings concurred with this. Campus atmosphere was slightly more influential for Cork respondents and campus for Waterford respondents (see figure 5.9, findings chapter). It is understandable as to why the influence of campus affects the respondents' view of HEIs as it is a very tangible aspect of HEI image. This is supported by Contant (1992) who found that that size of an institute affects image. Moreover, Mofitt (1992, 1994) identifies exposure to facilities and buildings as influencing stakeholders' image of HEI's. 'Campus atmosphere' had an influence on the respondents HEI image although respondents have had limited experience of the HEI. In the

literature, Kennedy (1977) explains that the emotional component of image is associated with psychological dimensions that are manifested by feelings and attitudes towards the organisation. Campus atmosphere was not highlighted in the HEI literature but was brought to the fore in the focus group interviews. Thus this study draws attention to this dimension of HEI image.

6.4.3.2. Facilities

At the focus groups, 'technical facilities' such as computer labs and 'academic facilities' were seen as an influence on HEI image. The survey findings demonstrated that technical facilities were an influence on Cork respondents while academic facilities scored near the middle of the scale for both sets of respondents (see figure 5.9, findings chapter). It is possible that technical facilities were influential as respondents may have witnessed these computers either during visits to the HEI or maybe in prospectus photographs. Schools may not have such technical equipment so it is understandable that these facilities could impact on respondents' image of HEIs. This is in line with Kazoleas *et al*. (2001) who found that technical facilities were strong predictors of the overall image rating of a HEI. Regarding academic facilities this is plausible as the respondents have little knowledge of the academic workings of the institute having never studied there themselves. If we were to survey a group of current students one could anticipate that the result might be somewhat different. This is in agreement with Arpan *et al*. (2003) who stated: 'it was discovered that academic attributes, affect image ratings by current university students'. Moreover, Theus (1993) and Wajeeh and Micceri (1997) note that the library facilities impact on university image.

6.4.4 Promotional factors that influence HEI Image

This section of the discussion examines promotional factors that influence HEI image

6.4.4.1 Open days

The focus groups findings illustrated that there was a mixed reaction with regard to 'open days' as a HEI image influence. The survey findings point out that open days were an influence on both institute's image (see figure 5.10, findings chapter). Open days were

ranked as the most influential factor for WIT image and the second most influential for CIT image. It is understandable why open days were so influential on the respondents HEI image as they give respondents a chance to use the facilities, sit in on class and really get a feel for the institution. This is in agreement with Moffitt (1992, 1994) who stated that exposure to the organisation's facilities and buildings is a factor that can influence the stakeholder's image of an organisation. Tapp *et al*. (2004) noted that the period of focusing marketing primarily on recruitment open days has ceased. This is in contradiction to the research findings as open days were found to be the most influential factor on HEI image. Tapp's study was conducted in a UK context and perhaps open days are used less in this different context.

6.4.4.2 The Prospectus

The focus group findings showed that 'the prospectus' was an influence on HEI image. The survey findings demonstrated that the prospectus was an influential factor for both WIT's and CIT's image. It was placed as second most influential for WIT's image and most influential for CIT's image (see figure 5.10, findings chapter). These findings are in agreement with Seidman (1995) and Treadwell and Harrison (1994) who identify organisational literature as significant in developing students pre-entry image. Tapp *et al*. (2004) found the period of focusing marketing primarily on the quality of the prospectus has ceased. This contradicts the research findings of this study where the prospectus was found to be a key influential factor on HEI image.

6.4.4.3 Career Exhibitions

The focus group findings showed that some participants had attended 'career exhibitions' and these were an influence on HEI image. The survey findings indicated that career exhibitions were more of an influencing factor on CIT image then WIT image (see figure 5.10, findings chapter). One possible explanation as to why careers exhibitions were influential on CIT image is that these respondents had exposure to more than one institution in their locality and therefore a choice had to be made. These findings are in agreement with Beckernick (1999) and Breland *et al*. (2002) who identify that institutions have increased participation in HEI fairs which students attend.

6.4.4.4 Other promotional influences on HEI image

During the focus groups, the HEI 'websites' were discussed as a HEI image influencer but with mixed results. While 'advertising' was viewed as influential, 'promotional videos' and 'newsletters' were not influential. The survey findings showed that the HEI website scores around the middle of the scale for both institutions while advertising, newletters and videos have little influence (see figure 5.10, findings chapter). Regarding websites, respondents were school goers who would be technologically savvy so it is perhaps surprising that websites were not perceived as a stronger influence. This seems to be in agreement with Hartman (1997) who verified that although applicants use the internet to search for HEI information, applicants rate printed material more highly. The findings concurred with Klassen (2002) who reported than many HEIs have built websites but are failing to use them successfully.

One would have thought that advertising would have been more influential in this competitive market place. In the literature Abrahamson and Hossler (1990), Van der spoel (2003) and Schwartz (2004) note that HEIs now advertise through various means. Further study may be required in order to gain a deeper understanding of the influence of advertising among senior second level students as a lot of resources are being employed into this influencer and one has to question the return.

Promotional videos were found not to be influential. For promotional videos to be influential students would need to have viewed this material. This diverges from Gray's (1986) work where Gray highlights that promotional videos were a practical method of communicating with publics. A plausible reason as to why promotional videos do not work for these respondents is that HEIs are not contacting the respondents directly. HEIs contact the school and then it is their decision to show the respondents this information or not. From the literature, Mofitt (1992, 1994) advised that persuasive messages released by the organisation can influence the stakeholder's image. However, the findings of this study suggest that HEI promotional videos are not the most effective means of reaching the target school audience. This study suggests that promotional videos may not be the best method to employ for this target audience.

There is a gap between WIT and CIT with regard to the influence which newsletters sent to career guidance counsellors have on the respondents' image. A reason for this is Cork respondents may be receiving information regarding career choices based mainly in Cork and are getting information from both UCC and CIT. This contradicts Gray's (1986) work who noted that a monthly newsletter to stakeholders is a method of communicating with this group. Tapp *et al*. (2004) and Hoyt and Brown (2003) suggested that much of the direct marketing endeavors are not aimed at the students themselves rather it is concentrated at key opinion formers i.e. careers offices. Seidman (1995) recommended that HEIs publish and distribute a quarterly guidance newsletter. The challenge is directing and ensuring that potential students receive the HEI message. From the focus group it can be inferred that career guidance counsellors are a vehicle for this but the survey findings show us that this avenue has little influence. This method of communicating needs to be examined in further research.

Kazoleas *et al*. (2001) found that image is very much controlled by the organisation and this study provides evidence of this. Regarding senior second level students the onus seems to be on the non-academic, physical and promotional influencing factors. Academic is not as influential due to the fact that respondents have not experienced the HEIs' teaching function. Tapp *et al*. (2004) believed that marketing in HEIs has become more sophisticated but this research provides evidence that promotional factors which have the greatest influence are those that have a human input i.e. attending open days, career exhibitions. This study shows that the value of the prospectus cannot be dismissed. Significant resources are being employed into advertising and websites and this needs to be re-examined as this study found they were not very influential.

6.4.5 Environmental factors that influence HEI Image
This section of the discussion examines environmental factors that influence HEI image

6.4.5.1 CAO points

The focus group research showed that admission standards, referred to as 'CAO points', are an influence on HEI image. The survey findings reported that admission standards were more influential for Cork respondents (see figure 5.11, findings chapter). The respondents were senior second level students and for these respondents the system of gaining entry to third level institutions in Ireland is through CAO points. These are points which respondents receive by sitting the Leaving Certificate examination. This examination is at the forefront of the respondents' thoughts as CAO points are the key to college enrolment. It is reasonable to assume that students would have a different image of an institution that has extremely high CAO entry points versus one with low CAO points. This is evident in the focus group in the case of UCC versus CIT. CIT is viewed as an IT with lower admission standards in comparison to UCC. This somewhat supports the work of Theus (1993) who found that admission selectivity impacts on university image.

6.4.5.2 Location

'Location' was perceived as an influence on HEI image in the focus groups. The survey findings coincided with those of the focus groups. Location was an important influence for both sets of respondents but more influential for Waterford respondents (see figure 5.11, findings chapter). It is likely that an individual would have a different image of an HEI that is located in their city than one located in a different county. It can be inferred that many students would pick a HEI that is near home so that the support of home is available to them going through their studies. Cork respondents have a choice of HEIs in their county, CIT or UCC, so it is reasonable to assume that their close proximity would likely be an influence. This is in agreement with Contant (1992) who found that geographic location of a HEI in a country affects HEI image.

6.4.5.3 Other environmental influences on HEI image

A varied response was evident in the focus groups with regard to the influence which 'expense', 'reputation' and 'media' had on HEI image. The survey findings illustrated that Waterford respondents reported expense as more influential while Cork respondents

felt reputation was more influential and media had little influence (see figure 5.11, findings chapter). A possible reason as to why expense was more influential on Waterford respondents' HEI image is there are not as many third level options in Waterford. Students may have to travel to study so expense would impact on them. An alternative explanation, maybe that in recent times the Irish economy has taken a downward turn. This is evident in Waterford with the closure of some high profile businesses. It is logical that respondents are conscious of this situation with scarce financial resources and expense influencing their image. At the time of data collection in this study the economy was enjoying a period of strong growth and prosperity which could imply that expense was less influential. One would assume in the 'Celtic tiger' years, expense would not have been as big an influence on HEI image. Individuals are more aware of financial issues of late. This is in line with the research undertaken by Kazoleas *et al*. (2001) that expense is a factor that impacts on overall university image.

Regarding reputation, CIT lies in the shadow of UCC; one might say that CIT's image is obscured because of its' close proximity to UCC. This strengthens the work of Theus (1993) who reports that a reputation does impact on university image. WIT has invested considerably in recent times in the media due to the university status issue. It must be recognised that media still scores near the centre of the scale as an influence on WIT image but when one compares the influence to that of CIT it does seem as if the WIT message is getting out there. Media is therefore more influential to the Waterford respondents than Cork respondents. The challenge for the HEI is to get media coverage for the HEI that is of interest to this target audience. This strengthens the work of Kazoleas *et al*. (2001) who highlights that media may not produce the greatest influence on overall university image.

6.4.6 Personal factors that influence HEI Image
This section of the discussion examines personal factors that influence HEI image

6.4.6.1 Independence

The focus group findings showed that 'independence' was an influencing factor on HEI image. The survey findings demonstrated that independence was more influential with Waterford respondents (see figure 5.12, findings chapter). It can be argued that independence is particularly relevant to this age cohort as it may be seen as part of the college life experience, be that going away to study or moving away from the school system. For Cork respondents their image of CIT is very much attached to CIT being like school. This may be because they compare it to UCC while for Waterford respondents this is not the case as respondents have nothing to compare WIT to locally. There is little reference to 'independence' as an influencing variable on HEI image in the literature. This factor emerged from the focus groups and adds a dimension to the HEI image influencing literature.

6.4.6.2 Friends

Friends were discussed as an influencing variable on HEI image during the focus groups. The survey research found that friends are a key influence but slightly more so with Waterford respondents (see figure 5.12, findings chapter). An explanation for the influence of friends on this particular study is the age profile of respondents. Respondents are at an age when friends are extremely important. This influence was evident with the word 'peer pressure' having been used in the focus group. Conformity with ones peer group is likely to be strong during adolescence. Work undertaken by Mofitt (1992, 1994) provides evidence of the influence of friends on image. Friends as an influence was also identified as a source of image (see section 6.3.4).

6.4.6.3 Education

The focus group findings revealed education influences HEI image. The survey findings showed education was more influential for Waterford respondents (see figure 5.12, findings chapter). The respondents are of school going age thus with a high education focus and it is highly likely that exams and college choice preoccupy their thoughts. Education does influence HEI image of a particular HEI. Further research may be undertaken to gain a deeper understanding of this influence between Cork and Waterford

respondents. This is in line with Arpan *et al*. (2003) and Siegfried and Getz (2002) who note that education level does affect image.

6.4.6.4 Other personal influences on HEI image

The focus group findings showed that there was a mixed reaction to 'gender' and 'age' while 'length of time residing in a county' was perceived to be an influence on HEI image. The survey revealed that Cork respondents reported little influence with regard to gender and length of time residing in the county. Age had little influence on both institutions image (see figure 5.12, findings chapter). In the focus groups CIT was labelled a 'boys college'. Further study may be required to fully understand this issue. Gender had little influence on the HEI image as HEIs offer programmes for all. Today, there is more equality between the sexes. It is quite the norm to have a female engineer or male nurse, roles which would traditionally have been more limited to a certain gender. Society has changed and these professions are now open to all. This supports Kazoleas's (2001) study which found that gender shows a low impact on image. It should be noted that some participants stated that they themselves and their parents held the same view with regard to the image of WIT. The WIT message seems to be impacting on both parties. As these are local institutions, age may not be as influential a factor. If students were selecting a college away from home age may influence their image more dramatically. This strengthens Kazoleas's (2001) finding that age shows a low impact on image. At the Cork focus groups, participants didn't have an image of WIT because of its more distant location. Focus group participants spoke about attending institutes in their county yet the survey found that length of time residing in Cork was a weak influencing factor. This variable is put forward in the literature in the work of Kazoleas *et al*. (2001) and Williams and Moffitt (1997) but is found not to be overly influential in this study. Length of time residing in a county was an influence on HEI image but not the most important factor.

Kazoleas *et al*. (2001) highlight the importance of organisational, environmental and personal influencers on HEI image. This study presents evidence that these influencers do influence HEI image. Organisational influencers were the most significant with 25 factors

divided between non-academic, academic, physical and promotional influencers. Environmental and personal influencers were not as significant but yet do have a role to play in influencing HEI image. This in an area this has been relatively unexplored in the literature but this research has highlighted some new factors which should be taken into consideration when examining the HEI image influencers e.g. summer camps, campus atmosphere, open days and independence.

6.5 Results of the hypotheses testing

This study explores the relationships that may exist between the independent variable, image influencers (i.e. non-academic, academic, physical, promotional, environmental and personal) and the dependent variable, HEI image (i.e. spirit and temperament, curriculum, competitiveness and academic life).

6.5.1 Organisational influencers – non-academic, academic, physical and promotional

The four hypotheses relating to organisational image influencers will be discussed in relation to this study's findings and the literature review.

H$_1$: The greater the non-academic image influence, the greater the HEI image components amongst senior second level students.

H$_2$: The greater the academic image influence, the greater the HEI image components amongst senior second level students.

H$_3$: The greater the physical image influence, the greater the HEI image components amongst senior second level students.

H$_4$: The greater the promotional image influence, the greater the HEI image components amongst senior second level students.

The primary research results partially support H$_1$, indicating that the greater the non-academic image influencers, the greater the HEI image components amongst senior second level students. This, therefore, suggests that non-academic influencers are an influential contributor towards HEI image components. The results indicate that non-

academic influencers have an influence on overall HEI image through the spirit and temperament, curriculum and academic life components. These variables hold a p value of <.05 (see table 5.13, findings chapter). Regarding the spirit and temperament component of image, non-academic influencers explain 4.7% of the variation in overall HEI image. Furthermore, with regard to the curriculum component of image, combined non-academic and academic influencers explain 8.2% of the variation in overall HEI image. In addition, the academic life component of image when combined with non-academic and promotional influencers explains 19.9% of the variation in overall HEI image. This finding supports the work of Kazoleas *et al*. (2001), Ivy (2001*)* and Arpan *et al*. (2003) who found that non-academic influencers such as sports and social life can influence the stakeholders' image of a HEI. In this context, we partially accept the alternative hypothesis H_1 and reject the null hypothesis.

The qualitative research further supports the literature and the quantitative findings in relation to non-academic influencers influence on HEI image. Participants spoke about numerous items influencing their HEI image which included sports and social life. Non-academic influencers may be more influential to these respondents' HEI image as they are not students of the IT and so they may be interested in the sports, social life and leisure facilities available.

H_2 is partially supported. The results indicate that academic influencers when combined with non-academic influencers have an influence on overall HEI image namely the curriculum component. This component has a p value of .028. When these influencers are combined they explain 8.2% of the variation in the curriculum component of overall HEI image. Academic influencers explain 10% of the variation in the curriculum component of WIT image. Furthermore, academic influencers were significant on the curriculum component of image for low feeder schools (see table 5.17, findings chapter) and low proximity schools (see table 5.19, findings chapter). Academic influencers explain 6.4% of the variation in the curriculum component of HEI image among the low feeder schools and 14.6% of the variation in low proximity schools. This finding supports the work of Kazoleas *et al*. (2001), Arpan *et al*. (2003) and Theus (1993) who found that academic

influencers such as academic programmes and quality of faculty can influence the stakeholders' image of a HEI. The qualitative research further supports the literature and the quantitative findings in relation to academic influence on HEI image. Participants spoke about numerous items influencing their HEI image which included references to courses available and the approachable lecturers at the ITs. Academic influencers were influential but not exclusive influencers with regard to overall image. It is interesting to note that academic influencers were statistically significant for WIT, low feeder and low proximity school's HEI image. This may require further research to understand why this is so. In this context we partially accept the alternative hypothesis H_2 and reject the null hypothesis.

The results of H_3 testing indicate that physical influencers do not have a statistically significant relationship with overall HEI image components. These variables hold a p value of greater than .05 (see table 5.13, findings chapter). When WIT image is tested, the spirit component of image is influenced by physical influencers. It explains 4.8% of the variation in WIT image. When CIT image is analysed with regard to the competitiveness component of image, promotional and physical when combined explains 11.3% of the variation in CIT image. This finding partially supports the work of Kazoleas *et al*. (2001) and Arpan *et al*. (2003) who found that physical influencers such as building, technical facilities and landscape can influence the stakeholders image of a HEI.

The qualitative research further supports the literature and the quantitative findings in relation to physical influencers influence on HEI image. Participants spoke about numerous items influencing their HEI image which included references to the campus atmosphere, buildings, campus and laboratories at the HEIs. Physical influencers do not have a statistically significant relationship with regard to overall image and thus for the hypothesised relationship between physical influencers and HEI image, H_3, no statistically significant relationship was found for overall HEI image. It is interesting to note that physical influencers are significant for WIT image. Further research may be needed to gain an understanding of this. How physical and promotional are combining to influence the image of CIT also warrants further research. One possible explanation may

be that students may have been exposed to the physical influencers through the CIT promotional material. In this context we partially accept the alternative hypothesis H_3 and reject the null hypothesis.

The results indicate with regard to H_4 that promotional influencers have a significant influence on overall HEI image with regard to competiveness and academic life. These variables hold a p value of $<.05$ (see table 5.13, findings chapter). Promotional influencers explain 5% of the variation in the competitiveness component of overall image. With regard to the academic life component of image, promotional and non-academic influencers combine to explain 19.9% of the variation in overall HEI image. Promotional was a significant influence on many of the tests that were undertaken (see tables 5.13 to 5.19, findings chapter). This finding supports the work of Ivy (2001) who found that promotional influencers such as open days and school visits can influence the stakeholders' image of a HEI. This may be attributed to the fact that according to Kazoleas *et al*. (2001), corporate image is adapted through communication. In this context we partially accept the alternative hypothesis H_4 and reject the null hypothesis.

The qualitative research further supports the literature and the quantitative findings in relation to promotional influencers influence on HEI image. Participants discussed a variety of items with regard to promotional influencers as reference was given to attending career exhibitions and open days which helped to form their image of the HEI. It is plausible to believe that these respondents would also have received promotional material from the HEIs. They would have been targeted with prospectuses, career exhibitions, open days and school visits. These promotional initiatives should have had an influence on their HEI image.

This research is supported by Dowling (1986) who advises that in advertising and marketing, image has been conceived as primarily determined and controlled by the organisation. Williams and Moffitt (1997) found that images controlled by the organisation have a more significant influence on image received by the respondent. Furthermore, Kazoleas *et al*. (2001) highlights that organisational factors, which are basic

infrastructure and strengths of the organisation should be primarily targets for image building.

Due to the lack of previous research, the empirical results of this study offer valuable insights for both practitioners and researchers in the area of HEI image with particular focus on organisational influencers.

6.5.2 Environmental influencers

The following hypothesis is in relation to the environmental influencers which were examined.

H$_5$: The greater the environmental image influence, the greater the HEI image components amongst senior second level students**.**

The results partially support H$_5$, although the environmental influencers do not have a statistically significant influence on overall HEI image components among senior second level students. The results from the investigation of H$_5$ indicate that the spirit, curriculum, competitiveness and academic life components are not significant in the environmental influencer of overall HEI image with p $>$.05 for each dimension (see table 5.13, findings chapter). Interestingly, when the respondents were analysed with regard to low feeder schools, environmental was an influencer which was significant as an influence on the spirit component of HEI image. It explains 14.1% of the variation in low feeder schools' HEI image. Kazoleas *et al*. (2001) found that people can be affected by environmental influencers in the process of image making in identifying that the item of university location was an influential environmental factor when determining his / her image at a point in time. Furthermore, Alvesson (1998) notes that environmental factors contribute significantly to the dependant measure of overall image. In this context we partially accept the alternative hypothesis H$_5$ and reject the null hypothesis.

The qualitative research shows that environmental influencers did influence WIT and CIT image. Reference was given to CAO points, location, expense and reputation as

being influential items on the participants' HEI image. It is therefore surprising that environmental influencers were not a statistically significant influence on HEI image for WIT and CIT in the regression analysis. The inconsistency between the focus group and survey findings merit further research to understand this issue. Furthermore, Kazoleas (2001) and Williams and Moffitt (1997) studies are US based. Williams and Moffits' (1997) work examined image for an insurance company which differs from this study. Kazoleas's (2001) work was based on a university but respondents were members of the general public and not school students randomly selected from the general public across the home state. This study specifically examines one particular age cohort, that being senior second level students. Environmental influences may not be as influential for this group due to them having limited life experiences. Items such as economic trends, the media, and social issues may be more influential on HEI image with individuals that are older. Williams and Moffitt (1997) suggest that environmental factors can never be controlled by the organisation, but they can be recognised as important in contributing to HEI image.

6.5.3 Personal influencers

Finally, the hypothesis relating to personal influencers is discussed in relation to this study's findings and literature review.

H_6: The greater the personal image influence, the greater the HEI image components amongst senior second level students.

The results from the investigation of H_6, partially support H_6, indicating that personal influencers do not influence overall HEI image significantly as $p > .05$ (see table 5.13, findings chapter). However, the findings confirm that personal influencers do influence senior second level students' CIT image. Promotional and personal influencers when combined have explanatory power, explaining 20.9% of the variation in CIT image component of academic life. When the respondents were analysed with regard to low feeder schools, 'personal' is a factor which is a significant influence on the competitiveness component of HEI image. It explains 8.5% of the variation in low feeder

schools HEI image. One would question why this component is significant for CIT and low feeder schools but not significant for overall image or WIT image. Further research may be required to investigate the personal influencers influence on HEI image. This mixed result can be compared to the work of Kazoleas *et al*. (2001) where personal factors are shown to have a low impact on image. Furthermore Fombrun and Shanley (1990), Moffitt and Williams (1997) and Treadwell and Harrison (1994) acknowledge messages about the organisation delivered by media and other observers, such as family, friends, or employees of a firm, also factor into the images of organisations held by those who evaluate the organisation. Furthermore, Fombrun and Shanley (1990) highlight that a person's lived experiences affects their image. In this context, we partially accept the alternative hypothesis H_6 and reject the null hypothesis.

The qualitative research for this somewhat supports the literature and the quantitative findings in relation to personal influencers influence on HEI image. Both sets of participants spoke about the influence of age, background, family, friends, gender, personal experiences and word-of-mouth on HEI image. Some participants felt that some influencers such as gender had little influence while influencers such as independence, friends and word-of-mouth were perceived to have had a greater influence on HEI image. The qualitative findings are somewhat supported by William and Moffitt (1997) where they found that personal factors impacted on overall image. Furthermore, Kazoleas *et al*. (2001) reveals that personal experience with the university in question had a greater impact on overall image than did media related to the university.

For respondents in this study personal influencers were not a significant influence on HEI image. This factor includes some items that are very individualistic such as experience. Further research may be required to gain a greater understanding of this influencer.

6.6 Summary

The findings from both the focus groups and the surveys show that HEI image is a multifaceted concept composed of a multitude of factors. Although there has been a substantial amount of research undertaken as regards corporate image, no study has to

date investigated the components of HEI image in the context of second level students in Ireland.

Five key components of image were identified in the literature (Terkla and Pagano, 1993): demographic, spirit and temperament, curriculum, competitiveness and academic life. The impact of image influencing factors on HEI image components remains fairly unexplored and to the best of the researchers knowledge has not been previously empirically tested in relation to its influence on HEI image components. This study utilised Kazoleas *et al*. (2001) work on the image influencers of organisational (non-academic, academic, physical and promotional), environmental and personal factors and Terkla and Pagano's (1993) components of image as the basis for the influencer model of HEI image as presented in figure 3.12.

Hypotheses 1 to 4 investigated the influence of organisational influencers (academic, non-academic, promotional and physical) on HEI image components. The results indicated that overall HEI image among senior second level students was influenced by academic, non-academic and promotional factors. Hypothesis 5 examined the influence of environmental influencers on the HEI image components and it was found that the influence was not statistically significant for overall HEI image. It was significant for low-feeder schools. Hypothesis 6 investigated the influence of personal factors on HEI image components and it was found that the influence was not significant for overall HEI image. It was however significant for CIT image and low feeder schools.

It is evident from the foregoing that organisational influencers are the most influential of all three influencing factors as regards the overall HEI image components. Promotional factors when combined with non-academic were the most significant in terms of explaining HEI image (R^2 = .199, see table 5.13, findings chapter).

This study allows a clearer understanding of how the various sources of HEI image are perceived among senior second level students. The most highly ranked sources of HEI image included word-of-mouth, reputation, current students and graduates and friends.

The next and concluding part of this thesis examines the results in light of the research objectives. The chapter then closes with a presentation of the study's recommendations, limitations and future directions.

Chapter Seven – Conclusions and Recommendations

7.1 Introduction

Chapter six has examined the research objectives, hypotheses, findings and a discussion integrating the literature with the hypotheses and findings. The purpose of this chapter is to present a summary of the conclusions of this research study in relation to the research objectives. Recommendations are also provided. It then concludes with suggestions for further research direction and the limitations of the research.

7.2 Perceptions of HEIs

Evidence from the research suggests that HEI image is not strongly perceived by the audience of senior second level students. Knowledge of WIT was rated as average to below average by 79.3% of Waterford respondents while 78.4% of Cork respondents rated their knowledge of CIT average to below average. There seems to be a low level of exposure for these students to these institutions.

From the research, it was established that senior second level students have both positive and negative opinions regarding their image of WIT and CIT. For WIT, positive image factors stemmed from the buildings, facilities and reputation and negative images concerned advertising, the surrounding area of Waterford, the institute not being perceived as academic enough and lack of university status. Respondents highlighted WIT's lack of university status as an issue negatively affecting their image of the institution. CIT's positive image factors included science, facilities, lower CAO points and negative image factors included a trade school, similar to school and UCC. CIT was compared repeatedly to the nearby UCC.

7.2.1 Research objective one: to determine the constituent components of HEI image

Overall, evidence from the focus groups and surveys suggests that HEI image is multifaceted. HEI image seems composed of a variation of different factors which vary in importance. Some of the items that can be included are the institution's location, size,

sport, facilities and courses. For Waterford respondents, location and size were most important, while Cork respondents claimed courses and size were the most significant.

The literature advised HEI image as having five components i.e. demographic, spirit and temperament, curriculum, competitiveness and academic life. The research findings generally support this analysis. Overall both institutions, WIT and CIT, vary very slightly on these image components. The study shows that the main demographic components that create HEI image are convenient location, big, new and clean. Waterford respondents perceived WIT as smaller when compared to the Cork respondents' view of CIT. With regard to the spirit and temperament component, there was a slight variation between both institutions. The main items creating this variation were limited social life, unsafe, more male students attend than female and interested students. Cork respondents disagreed more strongly that CIT has a limited social life, is unsafe while they agreed more strongly that CIT had male students attending and interested students when compared to the Waterford respondents view of WIT on this component.

There was a slight variation on the curriculum component e.g. local, satisfactory leisure facilities and career focused. WIT was perceived as more local than CIT. CIT was seen as having more satisfactory leisure facilities and being more career focused than WIT. The study shows that the 'expense' - cost of attending and the relaxed atmosphere were the only competiveness components which varied between WIT and CIT. WIT was perceived by respondents to be an expensive college to attend but was more relaxed. Yet again, there were no major differences with regard to the academic life component i.e the approachability of lecturers and courses on offer, that represented the image of the HEIs examined in this study. One can conclude that the respondents viewed WIT as having longer courses and being more inferior to a university than CIT. CIT was perceived as having more of a focus on certificates, diplomas and degree courses with more of an emphasis on courses available for professional qualifications than WIT. It is perhaps surprising that while WIT was perceived as having less of a university image than CIT, it never the less had many more programmes at postgraduate level i.e. those more associated with universities.

In summary, evidence from the research suggests that all five image components are utilised to create WIT's and CIT's image. These components are similar across the HEIs. There is not a strongly distinguished image of the specific HEIs amongst the respondents. The HEI image encompasses a variety of factors.

7.2.2 Research objective two: to investigate the source of HEI image as perceived by senior second level students.

Little research exists, and none in the Irish context, which investigates the source components of WIT and CIT image as perceived by the senior second level student, with the exception of Nguyen and Le Blanc (2001), Arpan (2003), Williams and Moffitt (1997). Waterford and Cork respondents ranked sources of HEI image for both institutions with little variation. It is evident that word-of-mouth is the most emphasised source component of HEI image. This may be attributable to the age group that were examined in the study. This age group may be preoccupied with exam preparation and therefore may value information received via these informal channels. Senior second level students do not view institute staff as an important source of their HEI image. In this research, this is evident. This is perhaps attributable to the lack of significant contact which respondents currently have with institute staff. From the research it was established that the media as a source of HEI image was not an important source of HEI image. Contradictory views were portrayed in the study regarding media as a source of HEI image. The overall conclusion was that the media as a vehicle does not seem to be getting a HEI image message conveyed to the target audience of senior second level students.

7.2.3 Research objective three: to determine the components that contribute to the formation of HEI image from the senior second level students' view point.

Evidence from the findings suggests that a combination of organisational, environmental and personal factors influence HEI image. Each of these factors' degree of influence varies. Many commonalities exist between the two ITs in terms of the factors that affect image, e.g. promotional influencers were the prospectus, while non-academic influencers

were sports. Organisational factors were identified as most influential e.g. non-academic and promotional factors.

Non-academic influencers were found to be the strongest influence on HEI image. The factors found to create this were social life, achievements of graduates and leisure facilities. Interestingly summer camps were not viewed as a strong influence on HEI image formation. This may be different if research was undertaken to target national school students.

Evidence from the study suggests that academic influencers have a weak influence on HEI image. Respondents scored this around the middle of the scale on a number of academic variables. This may be due to the fact that respondents were not studying at the institute yet and have had little exposure to the academic workings of the HEI. The only factor in this category that can be seen to have any influence is CIT's academic programmes. Further research is needed to understand this weak influence overall and for WIT in particular. Physical influences were evident as contributing to HEI image. The main factors were campus atmosphere, the campus and technical facilities. Academic facilities were not viewed as influencing the HEI image amongst respondents. The findings confirm that many of the promotional factors that influence HEI image as per the literature were not found to be as influential in this study. Open days and the prospectus were viewed by respondents as most influential. This contradicts Tapp *et al's*. (2004) view that the period of focusing marketing primarily on these elements has ceased. Advertising and promotional videos of the IT were not perceived as having an influential effect on HEI image.

From the research, it was established that environmental influencers do contribute to HEI image. The amount of influence waivers from some very influential factors such as CAO points, location and expense to factors which have less influence on HEI image such as the media. Personal influences do contribute to the HEI image formed. The main factors composing these influences were independence, education, friends, word-of-mouth and

experience. Gender was viewed as a weak influencing contributor to HEI image amongst respondents.

This study statistically examines the relationship that exists between the image formation influencers (i.e. academic, non-academic, physical, promotional, (collectively organisational) environmental and personal) and HEI image (i.e. spirit and temperament, curriculum, competitiveness and academic life).

Based on these elements the research presented a number of hypotheses. The first four hypotheses are related to the organisational factors and HEI image:

H₁: The greater the non-academic image influence, the greater the HEI image components amongst senior second level students.

H₂: The greater the academic image influence, the greater the HEI image components amongst senior second level students.

H₃: The greater the physical image influence, the greater the HEI image components amongst senior second level students.

H₄: The greater the promotional image influence, the greater the HEI image components amongst senior second level students.

Hypotheses H_1, H_2, H_3, H_4 were partially supported i.e. the greater the organisational factors image influence, the greater the HEI image components amongst senior second level students. H_1 was statistically significant for all components of HEI image, spirit and temperament, curriculum, competitiveness and academic life. H_2 was statistically significant for the curriculum component of HEI image. H_3 was statistically significant for the spirit and temperament and competitiveness component of HEI image. H_4 was statistically significant for the curriculum, competitiveness and academic life component of HEI image. This level of statistical significance was evident when the data was analysed overall, split between WIT and CIT, high / low feeder school and high / low proximity schools. Organisational factors have an influence on overall HEI image and in

the model, non-academic, academic and promotional influencers have the highest explanatory power.

The next hypothesis related to environmental factors and HEI image:

H$_5$: The greater the environmental image influence, the greater the HEI image components amongst senior second level students.

Hypothesis H$_5$, was partially supported. There was no significant influence found between the environmental dimension of image and overall HEI image but there was with regard to low feeder schools' HEI image on the spirit and temperament component.

The final hypothesis relates to personal factors and HEI image:

H$_6$: The greater the personal image influence, the greater the HEI image components amongst senior second level students.

Hypothesis H$_6$ was partially supported. There was no significant influence found between the personal influencers and overall HEI image. Personal influencers do influence CIT image using personal and promotional influencers on the academic life component of HEI image. Personal influencers also influence low feeder respondents HEI image with the competitiveness component of HEI image.

7.3 Recommendations for practice

The findings of this study have a number of implications for HEIs in their understanding of school students' perceptions of HEIs' image and in their attempts to convey this image.

In the findings it was evident that school students do not have a strongly formed image of HEIs. This problem needs to be addressed. Initiatives need to be developed in order for this audience to have a greater level of knowledge about the institutions. The respondents' level of knowledge affects the image which they have of the HEI.

In the primary research both HEIs were perceived under the same literature image components i.e demographic, spirit and temperament, curriculum, competitiveness and academic life. The institutions vary very slightly on these perception factors. HEIs were perceived as not being that dissimilar to each other. HEIs should be examining ways to be perceived as different from other ITs in the sector. This is necessary due to the current competition that exists in the HEI marketplace.

It is evident in the primary research findings that word-of-mouth was the primary source of HEI image. HEIs need to be aware of the information that is being carried via word-of-mouth. Through strategic marketing and communication plans, HEIs can tap into informal networks and shape information into a format that is compatible with their desired image of the HEI.

The findings indicate that organisational influencers are significant contributors to the formation of HEI image. Therefore, it is important to include some of these factors that were highlighted in developing marketing strategies for HEI. This would include references being made to the social life at the HEI and the facilities that are available. As organisational factors can be influenced by HEIs the findings of this study suggest HEIs could benefit from paying particular attention to these.

The hypotheses testing results confirm that there are a number of variables that influence HEI image. The researcher feels that when the HEIs are developing plans regarding their image they should examine these organisational (non-academic, academic, physical, promotional), environmental and personal factors. WIT should give considerable attention to non-academic factors such as sports, achievements of graduates, social life and leisure facilities. CIT should examine both promotional adverts, career exhibitions, open days and personal factors (word-of-mouth, independence and experience) factors. These are the factors that influence the HEI image as the research has found this to be the case amongst the target market of senior second level students.

The primary research findings show that secondary school students perceived that the traditional marketing tools of open days and the prospectus were the most influential organisational promotional components on HEI image. It is generally understood/accepted that the HEIs primarily devote resources to school visits and advertising; this study's findings would raise questions regarding the merits of these tactics. The researcher feels that an evaluation of the promotional tools employed in the HEI may be necessary.

HEIs need to create ways of addressing negative perceptions which senior second level students may hold about HEIs. CIT was seen as less research focused and WIT less career focused. A communication plan could be developed and delivered to the target audience that could try to address these perceptions to alter this mind set. In the findings, Cork respondents constantly compared CIT to UCC. CIT's image seems to be in the shadow of UCC. A communication strategy could be developed and implemented for this audience based on the CIT and UCC relationship.

Waterford respondents perceived WIT as being an inferior institution that does not hold university status. The university status debate seems to be having a negative impact on the WIT image. A plan could be developed and implemented as to how WIT would like to be perceived with regard to university status among this cohort. Does WIT want to be perceived as an excellent IT or an IT that is debating university status and therefore perceived as inferior to universities?

It is evident in the findings that some sources of image are ranked highly and others not so highly. HEIs need to align their resources to work with those sources that are creating the biggest impact as a source of HEI image e.g expending a lot of resources on media would not appear to yield much benefit as regards this student cohort.

The primary research highlights that organisational controlled influencers contribute most to the formation of WIT and CIT image. Due to the significance which organisational influencers have on HEI image, this allows HEIs to control their image. The HEI has

control of these organisational influencers and should employ tactics as they see fit to bring about the desired HEI image through promotion and non-academic activities. Although the other components, environmental and personal, didn't make as significant a contribution, it would be necessary to examine these components when reviewing the elements that contribute to the formation of HEI image.

7.4 Potential directions for future research

The study presents a number of potential avenues for further research. One avenue being the factor of interested students as part of spirit and temperament component of image should be further examined to uncover why it diverges between Waterford and Cork respondents. There was a significant difference between reputation as a source of HEI image and academic programmes as a HEI image influencer between the focus group findings and survey results: it would be interesting to explore this further. The HEI image influencer of education should also be examined as it was more influential for Waterford respondents.

The hypotheses contained in the study provide many possibilities for further research. Many of the influencers were only statistically significant when the data was divided into WIT/CIT, high/low feeder, high/low proximity. One such influencer is 'personal' which was statistically significant for CIT and low feeder schools' image. Further research should be conducted to gain a deeper understanding of these findings.

Further research is needed to better understand some of the inconsistencies in the findings and in the context of the literature. This could include further research on environmental influences and on promotional influences such as advertising.

A possible route for further research could be the expansion of the present study to cover a wider sample and longer more extensive time frame. Given that this study has been conducted using questionnaire data at one point in time, a future study could be conducted using the same questionnaire with the same group of students pre and post

enrolment. Furthermore the sample size could be extended to encompass additional school and counties.

An advancement of the study would be the investigation of the other stakeholders that play a role in HEI image. Interviews with various stakeholders such as career guidance counsellors and staff within the HEIs that work in student recruitment, could result in the establishment of a more comprehensive picture of HEI image.

This study has focused on Irish HEI image and so future research in this area could possibly examine senior second level students from different international regions e.g. America or Asia and personal factors influence on their image of their HEI. This could possibly highlight factors that may not be perceived by Irish senior second level students when examining HEI image.

7.5 Limitations

In assessing the findings of this thesis, it must be borne in mind that there are a number of limitations to the research.

Firstly, the sampling frame used was randomly selected secondary schools located in Cork and Waterford. When the researcher made initial contact with some schools to conduct the research, access was denied. This resulted in the researcher having to contact other schools from the locality in the sampling frame that would permit their students to participate in the study. The sample researched examines Cork and Waterford senior second level students' perceptions of HEI image in the context of WIT and CIT. Therefore, WIT and CIT institutional image was only examined from the viewpoint of these students. Had the researcher the opportunity to research other stakeholders such as career guidance counsellors and employees from the institutions involved in student recruitment, the researcher would have achieved a more elaborate picture of HEI image.

Secondly, as a lone researcher, conducting focus groups and the surveys in 14 schools across two counties was labour intensive. Had there been a team of researchers, more

information may have been collected and analysed by a research team. As the study was subject to resource constraints only one survey was distributed. Hence the results represent a 'snapshot' of HEI image at the time of the survey. It would be useful to administer the survey again in the future to allow for comparison over time and to show the evolution of HEI image. A more comprehensive study of all senior second level students that attend feeder schools for these institutions would make a more sizeable contribution. These proposals offer opportunities for further research.

During the survey, the Cork respondents were only asked about CIT and the Waterford respondents were asked about WIT. As a result the surveys are only representative of the senior second level students that are based in the county where the IT is situated. This was justified as at the focus groups, Cork respondents were asked about WIT and vice versa and respondents seemed to have an extremely limited and vague image of the other institution.

7.6 Summary

The main objectives and findings of the study are summarised in this chapter. There was a lack of knowledge regarding HEIs amongst senior second level students. The senior second level students' perception of HEIs was not based on one component but a combination of different factors. The findings show that word-of-mouth was the most important source of HEI image among senior second level students. Organisational, personal and environmental factors contributed to the formation of HEI but organisational factors were most influential. The hypotheses on organisational, environmental and personal factors that influenced senior second level students HEI image were significant which supports the argument that these factors influence HEI image. A number of practical recommendations and directions for further research have been outlined.

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Appendix 1

Number of full time -students in third-level education 1964-1997

	'64/'65	'65/66	'66/'67	'67/'68	'68/'69	'69/'70	'70/'71	'71/'72	'72/'73	'73/'74	'74/'75
Universities	12,984	15,441	15,845	16,266	17,504	18,570	19,652	19,959	20,518	20,360	20,711
Vocational/Technological	852	1,007	1,067	1,202	1,449	1,704	2,128	2,447	2,707	2,907	2,561
RTC	-	-	-	-	-	-	194	590	1,214	1,600	2,694
Other	4,361	4,250	4,429	4,469	4,190	4,222	4,244	4,140	4,275	4,773	5,023
Total	18,197	20,698	21,341	21,737	23,143	27,496	26,218	27,136	28,614	29,640	30,989
	'75/76	'76/'77	'77/'78	'78/'79	'79/'80	'80/'81	'81/'82	'82/'83	'83/'84	'84/'85	'85/'86
Universities	21,317	21,921	22,776	22,885	22,937	23,205	23908	24,553	25,249	25,912	26,146
Vocational/Technological	3,097	3,313	3,434	335	3,937	4,945	5,384	5,921	6,459	7,306	7,814
RTC	3,235	3,523	3,753	4,274	4,945	5,965	7,119	8,493	9,107	9,885	11,139
Other	5,499	6,290	6,835	6,632	7,071	7,813	8,130	8,727	8,999	061	9,989
Total	33,148	35,047	36,798	37,156	38,890	41,928	44,541	47,674	49,814	52,164	55,088
	'86/'87	'87/'88	'88/'89	'89/'90	'90/'91	'91/'92	'92/'93	'93/'94	'94/'95	'95/'96	'96/'97
Universities	26,819	27,448	33,811	35,477	37,917	42,213	46,540	50,662	52,760	55,142	57,389
Vocational/Technological	8,105	8,416	9,382	9,956	10,470	11,745	9,834	10,713	10,523	10,557	10,841
RTC	11,376	12,411	13,886	15,353	16,801	17,903	22,364	23,960	24,952	27,573	30,159
Other	10,279	11,120	5891	5,163	4,800	4,984	5,402	7,290	8,446	9,390	9,112
Total	56,579	59,395	62,970	65,949	69,988	76,809	84,140	92,595	96,681	102,662	107,501
	'97/'98										
Universities	60,562										
Vocational/Technological	10,602										
RTC	31,307										
Other	9,711										
Total	112,182										

Source: White (2001)

Appendix 2

Designated Institutions under the HEA

Universities
University College Cork (UCC)
University College Dublin (UCD)
National University of Ireland (NUIG)
National University of Ireland (NUIM)
The University of Dublin (TCD)
The university of Limerick (UL)
Dublin City University (DCU)

Institute of Technology
Athlone Institute of Technology
Institute of Technology, Blanchardstown
Institute of Technology, Carlow
Cork Institute of Technology
Dundalk Institute of Technology
Dun Laoghaire Institute of Art, Design and Technology
Galway-Mayo Institute of Technology
Letterkenny Institute of Technology
Limerick Institute of Technology
Institute of Technology, Silgo
Institute of Technology, Tallaght
Institute of Technology, Tralee
Waterford Institute of Technology
Dublin Institute of Technology

Other (designated) Institutions
Royal College of Surgeons Ireland (RCSI)
National College of Art and Design (NCAD)
Royal Irish Academy (RIA)
Mater Dei Institute of Education
Mary Immaculate College, Limerick
St. Patrick's College, Drumcondra
St. Angela's College of Education, Silgo

Source: HEA (2009)

Appendix 3

WIT and CIT Honours Bachelor Degrees - Level 8

WIT

WD025	Construction Management (and Engineering)
WD027	Music *(Restricted)*
WD028	Applied Computing
WD048	Business
WD049	Business (with French)
WD080	Business Studies (with German)
WD084	Accounting
WD085	Mechanical and Manufacturing Engineering
WD086	Electronic Engineering
WD091	Hospitality Management
WD095	General Nursing
WD117	Psychiatric Nursing
WD120	Intellectual Disability Nursing
WD124	Health Promotion
WD125	Exercise and Health Studies
WD127	Retail Management
WD134	International Business
WD135	Applied Social Studies in Social Care
WD137	Design (Visual Communications)
WD140	Law
WD144	Architecture
WD147	Pharmaceutical Science
WD148	Tourism Marketing
WD149	Early Childhood Studies
WD150	Criminal Justice
WD152	Visual Arts
WD160	Finance and Investment
WD161	Computer Forensics
WD162	Quantity Surveying
WD163	Psychology
WD168	Entertainments Systems
WD171	Sustainable Energy Engineering
WD179	Business (with Irish)
WD200	Arts
WD816	Mature Applicants General Nursing *(Restricted)*
WD817	Mature Applicants Psychiatric Nursing *(Restricted)*
WD820	Mature Applicants Intellectual Disability Nursing *(Restricted)*

CIT

CR105	Chemical and Biopharmaceutical Engineering
CR106	Software Development
CR108	Mechanical Engineering
CR109	Structural Engineering
CR112	Multimedia
CR116	Software Development and Computer Networking
CR121	Music at CIT Cork School of Music *(Restricted)*
CR150	Business Information Systems
CR210	Applied Art, Ceramics (Crawford College of Art & Design) *(Restricted)*
CR220	Fine Art, Ceramic Design at CIT Crawford College of Art and Design
CR305	Science (Common entry)
CR310	IT Management
CR312	Web Development
CR320	Biomedical Science - Joint CIT and UCC programme
CR325	Pharmaceutical Biotechnology
CR330	Herbal Science
CR333	Nutrition and Health Science
CR340	Analytical Chemistry with Quality Assurance
CR360	Instrument Engineering
CR365	Environmental Science and Sustainable Technology
CR400	Accounting
CR420	Marketing
CR500	Engineering (Common entry)
CR510	Sustainable Energy
CR520	Biomedical Engineering
CR560	Architectural Technology
CR565	Interior Architecture
CR570	Quantity Surveying
CR572	Construction Management
CR580	Electrical Power Systems
CR590	Electronic Systems Engineering
CR600	Visual Communications *(Restricted)*
CR660	Tourism

Source: CAO (2011)

Appendix 4

WIT and CIT Ordinary Bachelor Degrees/Higher Certificates - Level 7/Level 6

WIT

WD003	Business Studies
WD010	Electronics Engineering
WD011	Mechanical Engineering
WD013	Legal Studies
WD018	Applied Social Studies in Social Care
WD019	Recreation and Sport Management
WD040	Building Services Engineering
WD076	Forestry
WD078	Agricultural Science
WD094	Architectural Technology
WD096	Horticulture (Waterford - Kildalton)
WD097	Horticulture (Dublin - National Botanic Gardens)
WD126	Agriculture
WD139	Civil Engineering
WD151	Software Systems Development
WD153	Multimedia Applications Development
WD155	Information Technology
WD159	Business
WD164	Food Science with Business
WD172	Culinary Arts
WD173	Hospitality Studies
WD174	Tourism
WD175	Pharmaceutical Science
WD176	Applied Biology
WD177	Science (Pharmaceutical Science/Applied Biology/Food/Agricultural)

CIT

CR001	Applied Physics and Instrumentation
CR006	Applied Biosciences
CR007	Analytical and Pharmaceutical Chemistry
CR010	Agriculture
CR011	Horticulture
CR016	Computing
CR021	Business Studies
CR022	Business Administration
CR023	Accounting
CR031	Social Care
CR032	Recreation and Leisure
CR041	Tourism
CR042	Hospitality Management
CR046	Transport Management and Technology (Automobile Technology)
CR051	Civil Engineering
CR052	Construction
CR053	Interior Architecture
CR061	Electronic Engineering
CR062	Electrical Engineering
CR071	Mechanical Engineering
CR072	Building Services Engineering
CR075	Biomedical Engineering
CR090	Architectural Technology
CR094	Nautical Science at National Maritime College of Ireland
CR095	Marine Engineering at National Maritime College of Ireland
CR300	Science (Common entry)
CR620	Early Childhood Care and Education
CR640	Culinary Arts
CR650	Bar Management
CR655	Culinary Studies
CR657	Hospitality Studies
CR805	Marine Electrotechnology at National Maritime College of Ireland
CR888	Information Technology Support

Source: CAO (2011)

Appendix 5

Dear XXXX,

I am writing to you regarding me seeking your permission to meet with XXXX School 6th year students to complete a short 30 minute focus group.

I am undertaking a Masters by Research at Waterford Institute of Technology (WIT) which focuses on the image of Waterford / Cork Institute of Technology as seen through the eyes of leaving certificate students. The focus group will discuss image recognition, the third level education environment, defining the image, sources of image and image formation with regard to WIT / CIT. I have attached a copy of the focus group discussion guide for your information.

The views of your senior students are of huge importance to WIT / CIT in understanding how we might serve, or might better serve, their needs notwithstanding the significant contribution that these views make to the study at hand. I am very, very mindful of the time pressures on leaving certificate students at this time and I very happy, pending your consent, to be as flexible as possible in facilitating this e.g. use of non-exam classes such as P.E., Religion and Career Guidance as has occurred with other schools in the locality.

I will give you a ring in the next day or two to discuss whether it is possible to facilitate this request and thank you kindly for taking the time to consider it.

Yours sincerely,

Ruth Hennebry,
Researcher

Appendix 6

Focus group discussion guide for Waterford / Cork schools

Section A Image recognition

Each person is presented with a picture of the Waterford Institute of Technology (WIT) and Cork Institute of Technology (CIT) logo. Respondents are to respond to the following questions for each logo. Do you recognise this logo? What does it mean to you? What do you associate with it? Where have you seen it?

Section B The third level education environment

What comes to mind when you hear the term third level education? Why is this so?

Prompts for facilitator:

- Courses on offer
- Further study, qualifications, better career prospects
- Social life
- Location

In terms of ITs which ones comes to mind, why is this?

Section C Defining the Image

What image (overall view, picture) do you have of WIT / CIT?

Prompts for facilitator :

- What's the first thing that comes to mind? Why is this?
- If you were to describe this institute what would you say? How would you describe the buildings, the students, the qualifications etc.

Section D Sources of Image

Where has your image of WIT/ CIT come from?

Have you had exposure to any of the following regarding WIT /CIT- give examples.

What effect has this had on your view of WIT / CIT?

What is the biggest influence on your image of WIT/CIT?

Prompts for facilitator:		
• Word of mouth	• Literature (Prospectuses)	• Students
• Media	• Promotional Material	• Family

Section E Image Formation

What do you feel forms the image you have of WIT /CIT? Can you give examples?

What components form the image of WIT / CIT for you?

What dimensions do you perceive to this image?

Prompts for facilitator:
• Organisational factors- programmes, academic programme strengths, sports, libraries, technical facilities, campus size/ landscape,   • Environmental factors – location, expense compared with other HEI's, admission standards compared with other HEI's (entry point requirements) , demographic (race, age, income, educational attainment, home ownership, employment status, and even location.), economic, social, technology change, public policy (grants, fees etc)   • Personal experience, education, age, gender, income, experience of family, friends

Appendix 7

Free Nodes and Tree Nodes

Exploratory Research - NVivo

File Edit View Go Project Links Code Tools Window Help

Look for: ▾ Search In ▾ Free Nodes Find Now Clear Options ▾

Free Nodes

Name	Sources	Reference	Created	Modified
dublin	2	4	14/07/2007 1	21/07/2007 1
cork	2	4	14/07/2007 1	21/07/2007 1
age	4	5	14/07/2007 1	21/07/2007 1
Exposure	3	5	14/08/2007 2	21/08/2007 1
atmosphere	3	6	14/07/2007 1	16/08/2007 2
education	4	6	14/07/2007 1	21/07/2007 1
gender	4	6	14/07/2007 1	21/07/2007 1
academic	2	6	16/07/2007 0	16/08/2007 2
associate wit wit	3	7	14/07/2007 1	16/07/2007 1
clothing	4	7	14/07/2007 1	21/08/2007 1
associate wit cit	4	7	14/07/2007 1	30/07/2007 1
quals	3	7	14/07/2007 1	21/07/2007 1
employment	4	7	14/07/2007 1	21/07/2007 1
background	4	7	14/07/2007 1	30/07/2007 2
grants fees	4	7	14/07/2007 1	16/07/2007 1
competition	3	7	16/07/2007 0	16/07/2007 1
positive exp	4	7	30/07/2007 1	30/07/2007 2
attend cit	4	8	14/07/2007 1	30/07/2007 2
positive impression	3	8	30/07/2007 1	30/07/2007 1
recognition of cit logo	4	9	14/07/2007 1	16/07/2007 1
modern	4	9	14/07/2007 1	21/07/2007 1
university	3	9	14/07/2007 1	16/07/2007 1
media	4	10	14/07/2007 1	30/07/2007 2
reputation	4	10	30/07/2007 1	21/08/2007 1
wit logo recognition	4	10	30/07/2007 1	21/08/2007 2
attending wit	4	11	14/07/2007 1	16/07/2007 1
buildings	4	12	14/07/2007 1	01/08/2007 1
image of wit	3	12	14/07/2007 1	30/07/2007 2
admissions	4	13	14/07/2007 1	01/08/2007 1
social life	4	14	14/07/2007 1	21/08/2007 2
fun	4	14	14/07/2007 1	21/08/2007 1

78 Items

start | primary research | Exploratory Research... | 14.08.07 free nodes ... | Document1 - Microsof... | EN | 10:14

File   Edit   View   Go   Project   Links   Code   Tools   Window   Help

Look for: ▼   Search In ▼ Free Nodes   Find Now   Clear   Options ▼

Free Nodes

Name	Sources	Reference	Created	Modified
expense	4	14	14/07/2007 1	01/08/2007 1
technology	4	16	14/07/2007 1	01/08/2007 1
campus	4	16	14/07/2007 1	08/08/2007 1
facilities	4	17	14/07/2007 1	01/08/2007 1
word of mouth	4	20	14/07/2007 1	16/08/2007 2
sports	4	21	14/07/2007 1	01/08/2007 1
students attending	4	21	14/07/2007 1	16/08/2007 2
personal exp	4	23	14/07/2007 1	22/08/2007 0
Image of CIT	4	24	14/07/2007 1	01/08/2007 2
promotional material	4	34	14/07/2007 1	01/08/2007 2
family friends	4	35	14/07/2007 1	21/08/2007 2
wit	4	37	14/07/2007 1	01/08/2007 2
ucc	4	40	14/07/2007 1	01/08/2007 2
programmes on offer	4	46	14/07/2007 1	21/08/2007 1
location	4	51	14/07/2007 1	21/08/2007 2
cit	4	51	14/07/2007 1	02/08/2007 1

78 Items

start   primary research   Exploratory Research...   14.08.07 free nodes ...   Document1 - Microsof...   EN   10:14

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Tree Nodes

Name	Sources		References	△ Created	Modified
⊟ Institutional Image	0		0	02/08/2007 20:13	08/08/2007 13:50
⊟ En	0		0	08/08/2007 13:47	08/08/2007 10:08
admissions	4		13	22/08/2007 10:32	22/08/2007 10:35
competition	3		7	22/08/2007 11:20	22/08/2007 11:20
economic factors	2		4	22/08/2007 10:36	22/08/2007 10:37
expense	4		14	22/08/2007 10:38	22/08/2007 10:39
grants fees	4		7	22/08/2007 10:40	22/08/2007 10:40
location	4		51	22/08/2007 10:40	22/08/2007 10:40
media	4		10	22/08/2007 10:41	22/08/2007 10:41
reputation	4		10	22/08/2007 10:42	22/08/2007 10:42
⊟ Lif	0		0	08/08/2007 13:47	08/08/2007 11:41
age	4		5	22/08/2007 10:46	22/08/2007 10:46
background	4		7	22/08/2007 10:46	22/08/2007 10:46
education	4		6	22/08/2007 10:47	22/08/2007 10:47
employment	4		7	22/08/2007 10:47	22/08/2007 10:47
family friends	4		35	22/08/2007 10:47	22/08/2007 10:47
gender	4		6	22/08/2007 10:48	22/08/2007 10:48
independence	2		4	22/08/2007 10:50	22/08/2007 10:50
⊟ personal exp	4		23	22/08/2007 10:48	22/08/2007 10:48
Exposure		3	5	22/08/2007 11:21	22/08/2007 11:21
positive impression	3		8	22/08/2007 10:49	22/08/2007 10:49
race	1		1	22/08/2007 10:50	22/08/2007 10:50
⊟ word of mouth	4		20	22/08/2007 10:51	22/08/2007 10:51
positive exp		4	7	22/08/2007 10:51	22/08/2007 10:51
⊟ Or	0		0	08/08/2007 13:47	08/08/2007 09:30
⊟ Academic	0		0	08/08/2007 13:47	08/08/2007 09:43
academic		2	6	22/08/2007 11:20	22/08/2007 11:20
lecturers		3	4	22/08/2007 10:55	22/08/2007 10:55

55 Items

start primary research Exploratory Research... 14.08.07 free nodes ... EN 11:25

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Tree Nodes

Name	Sources	References	Created	Modified
lecturers	3	4	22/08/2007 10:55	22/08/2007 10:55
length	1	2	22/08/2007 10:55	22/08/2007 10:55
programmes on offer	4	46	22/08/2007 10:56	22/08/2007 10:56
quals	3	7	22/08/2007 10:56	22/08/2007 10:56
secondary school	1	3	22/08/2007 10:57	22/08/2007 10:57
students attending	4	21	22/08/2007 10:57	22/08/2007 10:57
study	1	1	22/08/2007 10:58	22/08/2007 10:58
Non Academic Activities	0	0	08/08/2007 13:47	08/08/2007 09:57
fun	4	14	22/08/2007 11:01	22/08/2007 11:01
social life	4	14	22/08/2007 11:19	22/08/2007 11:19
sports	4	21	22/08/2007 11:02	22/08/2007 11:02
summer camps	1	2	22/08/2007 11:02	22/08/2007 11:02
Physical Attributes	0	0	08/08/2007 13:47	08/08/2007 09:30
Intangible	0	0	08/08/2007 13:47	08/08/2007 12:21
atmosphere	3	6	22/08/2007 11:05	22/08/2007 11:05
biggest	1	1	22/08/2007 11:05	22/08/2007 11:05
modern	4	9	22/08/2007 11:06	22/08/2007 11:06
technology	4	16	22/08/2007 11:06	22/08/2007 11:06
Tangible	0	0	08/08/2007 13:47	08/08/2007 12:20
buildings	4	12	22/08/2007 11:08	22/08/2007 11:08
campus	4	16	22/08/2007 11:18	22/08/2007 11:18
college	3	4	22/08/2007 11:09	22/08/2007 11:09
facilities	4	17	22/08/2007 11:09	22/08/2007 11:09
sign	1	2	22/08/2007 11:10	22/08/2007 11:10
Promotional Activities	0	0	08/08/2007 13:47	08/08/2007 10:02
clothing	4	7	22/08/2007 11:14	22/08/2007 11:14
promotional material	4	34	22/08/2007 11:14	22/08/2007 11:14
radio adverts	1	1	22/08/2007 11:14	22/08/2007 11:14

55 Items

start   primary research   Exploratory Research...   14.08.07 free nodes ...   Document2 - Microsof...   EN   11:26

Appendix 8

Section B: Your Perceptions of Cork Institute of Technology (CIT)

This scale was developed by primarily utilising the work of Terkla and Pagano (1993)[1]. Many of the scale items do overlap with the work of Stevens (2008)[2] and Belanger (2002)[3]. The items highlighted below were introduced due to the focus groups.

Q4. For this section rate each characteristic as it applies to _your picture of CIT_.

INSTRUCTION

Please CIRCLE the number from the scale below that best represents your picture of CIT.

Example:

	Completely Disagree						Completely Agree
Small	1	(2)	3	4	5	6	7

If you almost completely disagree with the statement, circle this number

If you substantially agree with the statement, circle this number

	1	2	3	4	5	(6)	7

Please CIRCLE the number from the scale below that best represents your picture of CIT.

		Completely Disagree						Completely Agree
4.1	Small[1]	1	2	3	4	5	6	7
4.2	Urban[1]	1	2	3	4	5	6	7
4.3	Old	1	2	3	4	5	6	7
4.4	Convenient location	1	2	3	4	5	6	7
4.5	Dirty	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents your picture of CIT.

		Completely Disagree						Completely Agree
4.6	A grind[1]	1	2	3	4	5	6	7
4.7	Wide range of courses on offer[1]	1	2	3	4	5	6	7

4.8	**Impersonal**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.9	**Enthusiastic**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.10	**Weak reputation**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.11	**Limited social life**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.12	**Overrated**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.13	**Average**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.14	**Unsafe**[1]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.15	**No sense of institutional pride amongst graduates**[3]	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.16	**Like school**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.17	**Campus centred**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.18	**Unhelpful employees**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.19	**Male students attend**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4.20	**Interested students**	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Please TICK the box from the scale below that best represents your picture of CIT.

Example:

	Very	Moderately	Neither	Moderately	Very	
Innovative		✓				Traditional

In this case the individual felt that CIT is "moderately innovative": therefore "Moderately" is checked

Please TICK the box from the scale below that best represents your picture of CIT.

		Very	Moderately	Neither	Moderately	Very	
4.21	Innovative[1]						Traditional
4.22	Local[1]						International
4.23	Quick to change[1]						Slow to change
4.24	Satisfactory facilities for leisure activities (gym, pub)						Unsatisfactory facilities for leisure activities (gym, pub)
4.25	Not sports focused						Sports focused
4.26	Career focused						Not career focused
4.27	Courses are difficult[1]						Courses are easy
4.28	Inexpensive[1]						Expensive
4.29	Relaxed[1]						High Pressure
4.30	Cut-throat[1]						Non-competitive
4.31	Non-selective[1]						Selective
4.32	Focus on certificates, diplomas and degree courses[1]						Focus on Masters, PhD courses
4.33	Courses available on philosophy, politics and history[1]						Courses available for professional qualifications e.g. accounting
4.34	Not research focused (few research degrees and funded research) [1]						Research focused (many research degrees and funded research)
4.35	Has approachable lecturers						Has unapproachable lecturers
4.36	Long courses[2]						Short courses
4.37	Unsatisfactory facilities for student learning (classrooms, labs)						Satisfactory facilities for student learning (classrooms, labs)
4.38	Inferior to universities						Superior to universities

Q5. Rate each factor as to how much each contributes to your opinions of CIT?

INSTRUCTION

Please CIRCLE the number from the scale below that best represents how much each factor contributes to your perceived image (picture) of CIT

	Completely Disagree				**Completely Agree**
Word of Mouth (i.e. talking to others)	1	(2)	3	4	5

If you almost completely disagree with the statement, circle this number

	1	2	3	(4)	5

If you substantially agree with the statement, circle this number

Please CIRCLE the number from the scale below that best represents how much each factor contributes to your perceived image (picture) of CIT.

		Completely Disagree				**Completely Agree**
5.1	Word of mouth (i.e. talking to others)	1	2	3	4	5
5.2	Personal experiences (e.g. campus visits and career exhibitions)	1	2	3	4	5
5.3	Media (e.g. radio adverts, television and newspaper)	1	2	3	4	5
5.4	Students (current and graduates)	1	2	3	4	5
5.5	Career guidance counsellors	1	2	3	4	5
5.6	Promotional material (e.g. prospectus, videos and websites)	1	2	3	4	5
5.7	Family	1	2	3	4	5
5.8	Friends	1	2	3	4	5
5.9	Institute staff (e.g. school liaison officers)	1	2	3	4	5
5.10	CIT physical image: buildings, offices	1	2	3	4	5
5.11	CIT's reputation	1	2	3	4	5

Section D: CIT Image Formation

This scale was developed by combing the work of Kazoleas (2001)[1], Arpan (2003)[2], Ivy (2001)[3], Theus (1993)[4] and others[5]. Many of the scale items overlapped between studies. The items highlighted below were introduced due to the focus groups.

INSTRUCTION

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

	Little Influence						Strong Influence
Example:							
Sports	1	(2)	3	4	5	6	7

If you believe that the statement has little influence on your current picture of CIT, circle this number

	1	2	3	4	5	(6)	7

If you believe that the statement has big influence on your current picture of CIT, circle this number

---

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
6.1	Sports[1]	1	2	3	4	5	6	7
6.2	Achievements of graduates (i.e. they have good jobs)[2]	1	2	3	4	5	6	7
6.3	Students that attend[2]	1	2	3	4	5	6	7
6.4	Social life[2]	1	2	3	4	5	6	7
6.5	Staff (e.g. Administration)[5]	1	2	3	4	5	6	7
6.6	Summer camps	1	2	3	4	5	6	7
6.7	Leisure facilities (e.g. pub, gym)[4]	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following item have on your current image (picture) of CIT

		Little Influence						Strong Influence
6.8	Academic programs[1]	1	2	3	4	5	6	7
6.9	Research[5]	1	2	3	4	5	6	7

6.10	Small class size	1	2	3	4	5	6	7
6.11	Lecturers working at CIT[2]	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
6.12	Academic facilities (e.g. library)[1]	1	2	3	4	5	6	7
6.13	Campus (i.e. buildings and grounds)[1]	1	2	3	4	5	6	7
6.14	Technical facilities(e.g. computers, labs)[1]	1	2	3	4	5	6	7
6.15	Campus atmosphere	1	2	3	4	5	6	7

PLEASE KEEP GOING YOUR HELP IS APPRECIATED!

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
6.16	Adverts (radio, print, TV, cinema, billboards, buses and taxis)[3]	1	2	3	4	5	6	7
6.17	Career exhibition	1	2	3	4	5	6	7
6.18	Newsletters sent to career guidance Counsellors (Direct marketing)[3]	1	2	3	4	5	6	7
6.19	Open days[3]	1	2	3	4	5	6	7
6.20	Prospectus[5]	1	2	3	4	5	6	7
6.21	Public relations (e.g. recognition of student achievements, i.e. Artsfest)[5]	1	2	3	4	5	6	7
6.22	School visits (school liaison officer)[3]	1	2	3	4	5	6	7
6.23	Promotional videos of CIT[5]	1	2	3	4	5	6	7
6.24	CIT merchandise (e.g. clothing)[5]	1	2	3	4	5	6	7
6.25	CIT website[5]	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
7.1	CAO Points[1]	1	2	3	4	5	6	7
7.2	Location[1]	1	2	3	4	5	6	7
7.3	Expense[1]	1	2	3	4	5	6	7
7.4	Media (newspaper, TV etc)[2]	1	2	3	4	5	6	7
7.5	Competition (other colleges)	1	2	3	4	5	6	7
7.6	Economic trends (e.g. recession)[4]	1	2	3	4	5	6	7
7.7	Reputation	1	2	3	4	5	6	7
7.8	Social issues (e.g. crime, bullying)[4]	1	2	3	4	5	6	7
7.9	Grants/fees[4]	1	2	3	4	5	6	7
7.10	Technological change (e.g. e-learning)[4]	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
8.1	Age[1]	1	2	3	4	5	6	7
8.2	Income[1]	1	2	3	4	5	6	7
8.3	Gender[1]	1	2	3	4	5	6	7
8.4	Length of time residing in Cork[1]	1	2	3	4	5	6	7
8.5	Education[1]	1	2	3	4	5	6	7
8.6	Experiences (e.g. exposure to CIT)	1	2	3	4	5	6	7
8.7	Family[2]	1	2	3	4	5	6	7
8.8	Friends[2]	1	2	3	4	5	6	7
8.9	Word of mouth[2]	1	2	3	4	5	6	7
8.10	Independence	1	2	3	4	5	6	7

Further thoughts on the image of CIT:

_____
_____
_____
_____

THANK YOU FOR COMPLETING THIS SURVEY!

Appendix 9

Survey of Second Level Students' College Image

PLEASE NOTE THAT ALL DETAILS ARE STRICTLY CONFIDENTIAL

Researcher: Ruth Hennebry
Your participation is much appreciated

Section A: Respondent Information

Q1. Are you male ☐ **or female** ☐ (please tick as appropriate to you)

Q2. My Knowledge of CIT is: (please circle a number between one and five as appropriate to you)

Low	1	2	3	4	5	High

Section B: Your Perceptions of Cork Institute of Technology (CIT)

Q3. What is your image (picture) of CIT?

_____
_____
_____

Q4. For this section rate each characteristic as it applies to _your picture of CIT_.

INSTRUCTION

Please CIRCLE the number from the scale below that best represents your picture of CIT.

Example:

	Completely Disagree						Completely Agree

Small   1   ②   3   4   5   6   7

If you almost completely disagree with the statement, circle this number

If you substantially agree with the statement, circle this number

1   2   3   4   5   ⑥   7

Please CIRCLE the number from the scale below that best represents your picture of CIT.

		Completely Disagree						Completely Agree
4.1	Small	1	2	3	4	5	6	7
4.2	Urban	1	2	3	4	5	6	7
4.3	Old	1	2	3	4	5	6	7
4.4	Convenient location	1	2	3	4	5	6	7
4.5	Dirty	1	2	3	4	5	6	7

		Completely Disagree						Completely Agree
4.6	A grind	1	2	3	4	5	6	7
4.7	Wide range of courses on offer	1	2	3	4	5	6	7
4.8	Impersonal	1	2	3	4	5	6	7
4.9	Enthusiastic	1	2	3	4	5	6	7
4.10	Weak reputation	1	2	3	4	5	6	7
4.11	Limited social life	1	2	3	4	5	6	7
4.12	Overrated	1	2	3	4	5	6	7
4.13	Average	1	2	3	4	5	6	7
4.14	Unsafe	1	2	3	4	5	6	7
4.15	No sense of institutional pride amongst graduates	1	2	3	4	5	6	7
4.16	Like school	1	2	3	4	5	6	7
4.17	Campus centred	1	2	3	4	5	6	7
4.18	Unhelpful employees	1	2	3	4	5	6	7
4.19	Male students attend	1	2	3	4	5	6	7
4.20	Interested students	1	2	3	4	5	6	7

INSTRUCTION

Please TICK the box from the scale below that best represents your picture of CIT.

Example:

	Very	Moderately	Neither	Moderately	Very	
Innovative		✔				Traditional

In this case the individual felt that CIT is "moderately innovative": therefore "Moderately" is checked

Please TICK the box from the scale below that best represents your picture of CIT.

		Very	Moderately	Neither	Moderately	Very	
4.21	Innovative						Traditional
4.22	Local						International
4.23	Quick to change						Slow to change
4.24	Satisfactory facilities for leisure activities (gym, pub)						Unsatisfactory facilities for leisure activities (gym, pub)
4.25	Not sports focused						Sports focused
4.26	Career focused						Not career focused
4.27	Courses are difficult						Courses are easy
4.28	Inexpensive						Expensive
4.29	Relaxed						High Pressure
4.30	Cut-throat						Non-competitive
4.31	Non-selective						Selective
4.32	Focus on certificates, diplomas and degree courses						Focus on Masters, PhD courses
4.33	Courses available on philosophy, politics and history						Courses available for professional qualifications e.g. accounting
4.34	Not research focused (few research degrees and funded research)						Research focused (many research degrees and funded research)
4.35	Has approachable lecturers						Has unapproachable lecturers
4.36	Long courses						Short courses
4.37	Unsatisfactory facilities for student learning (classrooms, labs)						Satisfactory facilities for student learning (classrooms, labs)
4.38	Inferior to universities						Superior to universities

Section C: Where Does Your Image Of CIT Come From?

Q5. Rate each factor as to how much each contributes to your opinions of CIT?

	Completely Disagree				Completely Agree
Word of Mouth (i.e. talking to others)	1	(2)	3	4	5

If you almost completely disagree with the statement, circle this number

	1	2	3	(4)	5

If you substantially agree with the statement, circle this number

Please CIRCLE the number from the scale below that best represents how much each factor contributes to your perceived image (picture) of CIT.

		Completely Disagree				Completely Agree
5.1	Word of mouth (i.e. talking to others)	1	2	3	4	5
5.2	Personal experiences (e.g. campus visits and career exhibitions)	1	2	3	4	5
5.3	Media (e.g. radio adverts, television and newspaper)	1	2	3	4	5
5.4	Students (current and graduates)	1	2	3	4	5
5.5	Career guidance counsellors	1	2	3	4	5
5.6	Promotional material (e.g. prospectus, videos and websites)	1	2	3	4	5
5.7	Family	1	2	3	4	5
5.8	Friends	1	2	3	4	5
5.9	Institute staff (e.g. school liaison officers)	1	2	3	4	5
5.10	CIT physical image: buildings, offices	1	2	3	4	5
5.11	CIT's reputation	1	2	3	4	5

Section D: CIT Image Formation

INSTRUCTION

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

Example:

	Little Influence						Strong Influence
	▼						▼
Sports	1	(2)	3	4	5	6	7

If you believe that the statement has little influence on your current picture of CIT, circle this number ⟶ ↑

	1	2	3	4	5	(6)	7

If you believe that the statement has big influence on your current picture of CIT, circle this number ⟶ ↑

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
		▼						▼
6.1	Sports	1	2	3	4	5	6	7
6.2	Achievements of graduates (i.e. they have good jobs)	1	2	3	4	5	6	7
6.3	Students that attend	1	2	3	4	5	6	7
6.4	Social life	1	2	3	4	5	6	7
6.5	Staff (e.g. Administration)	1	2	3	4	5	6	7
6.6	Summer camps	1	2	3	4	5	6	7
6.7	Leisure facilities (e.g. pub, gym)	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following item have on your current image (picture) of CIT.

		Little Influence						Strong Influence
		▼						▼
6.8	Academic programs	1	2	3	4	5	6	7
6.9	Research	1	2	3	4	5	6	7
6.10	Small class size	1	2	3	4	5	6	7
6.11	Lecturers working at CIT	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
6.12	Academic facilities (e.g. library)	1	2	3	4	5	6	7
6.13	Campus (i.e. buildings and grounds)	1	2	3	4	5	6	7
6.14	Technical facilities(e.g. computers, labs)	1	2	3	4	5	6	7
6.15	Campus atmosphere	1	2	3	4	5	6	7

PLEASE KEEP GOING YOUR HELP IS APPRECIATED!

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
6.16	Adverts (radio, print, TV, cinema, billboards, buses and taxis)	1	2	3	4	5	6	7
6.17	Career exhibition	1	2	3	4	5	6	7
6.18	Newsletters sent to career guidance Counsellors (Direct marketing)	1	2	3	4	5	6	7
6.19	Open days	1	2	3	4	5	6	7
6.20	Prospectus	1	2	3	4	5	6	7
6.21	Public relations (e.g. recognition of student achievements, i.e. Artsfest)	1	2	3	4	5	6	7
6.22	School visits (school liaison officer)	1	2	3	4	5	6	7
6.23	Promotional videos of CIT	1	2	3	4	5	6	7
6.24	CIT merchandise (e.g. clothing)	1	2	3	4	5	6	7
6.25	CIT website	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
7.1	CAO Points	1	2	3	4	5	6	7
7.2	Location	1	2	3	4	5	6	7
7.3	Expense	1	2	3	4	5	6	7
7.4	Media (newspaper, TV etc)	1	2	3	4	5	6	7
7.5	Competition (other colleges)	1	2	3	4	5	6	7
7.6	Economic trends (e.g. recession)	1	2	3	4	5	6	7
7.7	Reputation	1	2	3	4	5	6	7
7.8	Social issues (e.g. crime, bullying)	1	2	3	4	5	6	7
7.9	Grants/fees	1	2	3	4	5	6	7
7.10	Technological change (e.g. e-learning)	1	2	3	4	5	6	7

Please CIRCLE the number from the scale below that best represents the influence which the following items have on your current image (picture) of CIT.

		Little Influence						Strong Influence
8.1	Age	1	2	3	4	5	6	7
8.2	Income	1	2	3	4	5	6	7
8.3	Gender	1	2	3	4	5	6	7
8.4	Length of time residing in Cork	1	2	3	4	5	6	7
8.5	Education	1	2	3	4	5	6	7
8.6	Experiences (e.g. exposure to CIT)	1	2	3	4	5	6	7
8.7	Family	1	2	3	4	5	6	7
8.8	Friends	1	2	3	4	5	6	7
8.9	Word of mouth	1	2	3	4	5	6	7
8.10	Independence	1	2	3	4	5	6	7

Further thoughts on the image of CIT:

_____
_____
_____
_____
_____

THANK YOU FOR COMPLETING THIS SURVEY!

Appendix 10

Dear XXXX,

I am writing to you regarding me seeking your permission to meet with xxxx School 6th year students to complete a short 15 minute survey.

I am undertaking a Masters by Research at Waterford Institute of Technology (WIT) which focuses on the image of Waterford / Cork Institute of Technology as seen through the eyes of leaving certificate students. The survey examines what WIT / CIT image exists amongst this cohort, where this image comes from and how it is formed. I have attached a copy of the survey for your information. The survey is anonymous.

The views of your senior students are of huge importance to WIT / CIT in understanding how we might serve, or might better serve, their needs notwithstanding the significant contribution that these views make to the study at hand. I am very, very mindful of the time pressures on leaving certificate students at this time and I very happy, pending your consent, to be as flexible as possible in facilitating this e.g. use of non-exam classes such as P.E., Religion and Career Guidance as has occurred with other schools in the locality.

I will give you a ring in the next day or two to discuss whether it is possible to facilitate this request and thank you kindly for taking the time to consider it.

Yours sincerely,

Ruth Hennebry,
Researcher

Appendix 11

Independent variables in study

Organisational variables

<u>Non-academic</u>

Sports, achievements of graduates, students that attend, social life, staff, summer camps and leisure facilities.

<u>Academic</u>

Academic programs, research, small class size and lecturers working at IT.

<u>Physical</u>

 Academic facilities, campus, technical facilities and campus atmosphere.

<u>Promotional</u>

Adverts, career exhibitions, newsletters sent to career guidance counsellors, open days, prospectus, public relations, school visits, promotional videos of IT, IT merchandise and IT website.

Environmental variables

CAO points, location, expense, media, competition, economic trends, reputation, social issues, grant/fees and technological change.

Personal variables

Age, income, gender, length of time residing in County, education, experience, family, friends, word of mouth and independence.