Determining the critical elements of the customer intimacy framework

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Determining the Critical Elements of the Customer Intimacy Framework

by

FRANK RAYMOND JASPER
0962695

A Thesis Submitted in Partial Fulfillment of the Requirements for the award of

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
Abstract

Currently the field of marketing is undergoing a transformation concerning the appropriate marketing model to use in business. This transformation arose due to the mounting problems of the existing 4Ps Marketing Model, the heightened importance of customer retention, the requirement to continually add value to business processes and recent advancements in Internet technology. An alternate approach to the 4Ps Marketing Model began to emerge in the 1970's and was termed relationship marketing.

This study is exploratory in nature and investigates consumer perceptions concerning customer intimacy. A self-administered mail questionnaire was employed to gather the necessary data from 300 solely external students from Edith Cowan University. In the analysis of the data, descriptive and multivariate statistics were used. The multivariate techniques include Factor Analysis, Stepwise and Multiple Regression and T-Tests.

The study found interesting differences regarding the perceptions held by participants concerning customer intimacy at the university. The findings suggest that participants have highly positive perceptions regarding university contact, service continuance and service withdrawal. The study also indicates that participants have positive perceptions concerning external tutors' knowledge, trust and comfort. Participants indicated moderately strong perceptions concerning the information they receive from the university due to the university's reliability, relevance and cooperation. However,
participants had low positive perceptions concerning the personal relationship with tutors and with the university protecting and caring for students.

Further analysis of the data with factor analysis, revealed there were four important dimensions in the perception of customer intimacy. The four dimensions are Care, Communication, Trust and Comfort. Cronbach's Alpha coefficient was used to test the reliability of the scale, resulting in coefficients of 0.90, 0.80, 0.65, and 0.70 respectively.

Stepwise Regression was used in the analysis to quantify how the four dimensions affected how students rate their relationship with the university and multiple regression was used to determine the dimensions effect on the Internet. The results revealed that Care was a significant predictor of how students rated their relationship with the university. T-Tests were also utilised to determine if gender influenced how students rated their relationship with the university.

The implications of these findings for marketers are discussed in the final chapter.
Declaration

I certify that this thesis does not, to my knowledge, incorporate any of the following:

a) Material previously submitted for a degree or diploma in any institution of higher education.

b) Material previously published or written by another person except where due reference is made in the text.

c) Contain any defamatory material.

Signature: .............................................

Date: 8-02-01
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For their love, support and belief in me.
I could never thank you enough for the opportunities you have given me.

My Girlfriend Kerrin

For her love and support,
Thankyou for sharing my anguish and triumphs.
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Chapter 1

Introduction

1.0 Introduction

Since the early 1960's, the marketing mix management approach with its 4Ps model (Voss & Voss, 1997) has dominated the marketing literature, marketing research and marketing practice (Webster, 1992; Berry, 1995; Gronroos, 1995, 1996, 1997; Gummesson, 1998). Along with this dominant model have come ideas and theories that have entrenched many businesses into a transactional way of marketing. At the time the model was developed, "the 4Ps approach made sense for producers of consumer goods with their nonrelational customer contact" (Gronroos, 1995) and large, hierarchical, integrated corporate structures (Webster, 1992).

Although the 4Ps are useful as marketing variables, the marketing mix and its Ps are not well suited to the competitive situation and rapidly changing business environment that has been emerging in most industries in the Western world (Garbarino & Johnson, 1999). This is particularly true in the service sector where the 4Ps model does not suit service firms' customer relations and relational marketing approach (Berry & Parasuraman, 1993; Gronroos, 1995; Lovelock, 1996). These problems in the traditional marketing paradigm have resulted in the criticism of mass marketing and the transaction
orientation due to their low yield and marketing inefficiencies (Sheth & Parvatiyar, 1995). Peppers and Rogers (1998) argue the old paradigm, "a system of mass production mass media and mass marketing is being replaced by a totally new paradigm" (p. 30). The overall criticism of the traditional marketing mix approach is that it does not allow companies to adjust their market performance to the demands of customers. These demands include enhanced value around the core product, reliable service to accompany the product and a trustworthy relationship with customers, suppliers and distributors (Gronroos, 1996).

Simultaneously, the benefits of establishing relationships with customers and the benefits of technology are being recognised. These benefits include higher barriers to customer switching, decreased price sensitivity (Gronroos, 1994) and lower marketing costs (Sheth & Parvatiyar, 1995). While the benefits of technology include greater price competition for relatively generic products (Elofson & Robinson, 1998). Overall, marketing as a discipline requires business to get closer to their customers and establish long-term value adding relationships. Such a strategy entails shifting from a transaction to a relational focus, where customers become partners and the firm must make long-term commitments to maintaining those relationships with quality, service and innovation (Anderson & Narus as cited in Webster, 1992; Larrew 1998). Customer intimacy is a way of achieving these objectives.
1.1 Background

In recent years, customer intimacy has emerged as a way by which business can enact and profit from establishing close relationships with its customers. Customer intimacy promotes close relationships and allows businesses to utilise information to tailor and shape products and services to fit an increasingly fine definition of the customer (Treacy & Wiersema, 1992). With recent advancements in technology, specifically the Internet, communication with mass markets is now possible at a personal level (Peppers, 1998).

With this knowledge of customer intimacy and the Internet, marketers can determine whether the principles of customer intimacy are applicable over this medium. If it is applicable, a business could establish close relationships and fuel them over the Internet, while simultaneously reducing the costs to do so.

1.2 Significance of the Study

The significance of the study lies in the formation of a measurement instrument that measures customer intimacy and provides an insight into the effect of customer intimacy on consumer relationships and technology. These concepts are relevant, as customer intimacy will continue to rise in stature, as marketers persevere to develop a new marketing model that is applicable in multiple service contexts and the benefits of relationship marketing continue to be highlighted in the literature.
1.4 Motivation for the Study

The motivation for this thesis is in the lack of conceptual and empirical research concerning customer intimacy in the marketing and business literature. This study is motivated by the gap in research regarding exactly what customer intimacy is and the lack of a measurement instrument for the concept.

1.4.1 The Gap in the Research

There is a notable gap in the research concerning customer intimacy. Presently, there is only one empirical study regarding customer intimacy and that study used five of eight components of intimacy, initially proposed by Waring et.al (1980), to measure advertising messages. However, no standard measurement instrument to measure customer intimacy has been developed and due to the minimal research, the effect of customer intimacy on consumer relationships and technology was previously unknown.

1.4.2 Lack of Consumer Research

A further gap in the research may be found in the lack of consumer research pertaining to business relationships. Currently, the majority of literature concerning business relationships is researched from a business-to-business perspective (Dwyer, 1987), mainly focusing on the factors that hold buyers and sellers together. Literature pertaining
to business-to-consumer relationships, however, is limited (Palmer & Bejou, 1994). Therefore, the study addresses the problem concerning the lack of literature regarding business relationships from a consumer point of view.

1.5 Research Objectives

The purpose of this study is to gain a deeper understanding of how customer intimacy affects consumer relationships and determine whether the Internet intensifies customer intimacy by making contact quicker and more frequent. The study aims to develop a research instrument to measure customer intimacy. Independent variables in the questionnaire include how the students' perceived their relationship with the university and how the Internet affects customer intimacy at Edith Cowan.
1.6 Research Questions

The study focuses on the following research question:

What are students' perceptions concerning customer intimacy at Edith Cowan University.

This study addresses the following specific aims:

1. Develop a generic questionnaire that will measure factors of customer intimacy for business applications.

2. Investigate the determinants that affect consumer relationships with service providers.

3. Investigate the impact of the use of the Internet on customer intimacy.

4. Investigate the effect of gender on levels of student intimacy.


1.7 Organisation of the Study

This chapter has outlined background information on the issues within marketing that have led to the emergence of customer intimacy, identified the significance of the research and the motivation for the study. In addition, research objectives and research questions were also identified in the chapter.

The remainder of this thesis is organised as follows:

➢ Chapter 2 provides a review of the relevant literature relating to customer intimacy. Sections in this chapter include relationship marketing, buyer-seller relationships, emotions in marketing, customer intimacy and external education in Australia. The relevance of the conclusions from the results of theoretical and empirical studies to this study are identified.

➢ Chapter 3 presents the conceptual framework for the study. The conceptual framework provides a theoretical relationship of the components of intimacy.

➢ Chapter 4 presents the research method used in the study. The sample selection, measurement instrument and data collection procedures are all explained and
justified. The limitations of the methodology are also identified, along with the ethical considerations.

> Chapter 5 presents the findings of the study and is comprised of five sections. The first section presents the demographic profile of participants. The second section measures the participants' perceptions concerning customer intimacy at the university. The third section uses factor analysis to determine the number of dimensions in the study. Stepwise and multiple regression is then used in the fourth section in order to quantify how the dimensions from the factor analysis affect the research questions. The final section includes T-Tests, which are used to examine the effect of gender. The reliability and validity of data analysis is also examined in this chapter.

> Chapter 6 consists of a summary of the study followed by a discussion of the findings and implications of the results. The study's contributions to the literature, its limitations and further research avenues are identified.
Chapter 2

Literature Review

2.0 Introduction

This chapter explores the existing literature relating to five major areas. The areas include: 1) relationship marketing, 2) buyer-seller relationships, 3) emotions in marketing 4) customer intimacy and 5) external education in Australia.

The main objectives of this chapter are to identify the areas where customer intimacy has emerged from in the literature, highlight the lack of conceptual and empirical evidence in the marketing literature and determine the factors that make up customer intimacy. The chapter achieves this by introducing relationship marketing to highlight the need for close business relationships. The chapter then focuses on buyer-seller relationships to highlight the need for more research from a consumer's point of view. The chapter then introduces emotion in marketing to highlight the importance of emotions in decision making. Customer intimacy is in the next section, paying particular attention to intimacy and the disciplines in which it originated. Finally, the chapter finishes with an overview of external education in Australia.
2.1 Relationship Marketing

Since the 1970s, an alternate approach to marketing, based on the establishment and management of relationships, has emerged in order to focus on customers and reorient the business to face the market (Voss & Voss, 1997). This alternate approach emanated from the Nordic School of Service (Gronroos, 1985; Berry & Parasuraman, 1993), which looks at marketing from a service perspective, and the Network Approach to Industrial Marketing (Gummesson, 1998), which takes a network and interaction approach to understanding industrial business. A common denominator of these two schools of thought is that marketing is more a management issue than a function and that marketing management has to be built on relationships rather than transactions (Gronroos, 1996; Webster, 1997). This concept of building and maintaining relationships has been a philosophical cornerstone of both the Nordic School of Service and the Network Approach to Industrial Marketing since the 1970s. However, relationship marketing as a term was not used until the early part of the 1980s.

Although there is continuing increased interest in the area of relationship marketing, there is no consensus on a definition. Berry (1983) introduced the term "relationship marketing" to the services marketing literature, defining it as attracting, maintaining and enhancing customer relationships. Gronroos (1996) extends the definition and states that relationship marketing "is to identify and establish, maintain and enhance relationships with customers and other stakeholders, at a profit, so that the objectives of all parties involved are met. This is achieved by a mutual exchange and fulfillment of promises" (p.
7). Hunt & Morgan (1994) define relationship marketing slightly differently, "it refers to all marketing activities directed toward establishing, developing and maintaining successful relational exchanges" (p. 22). Sheth & Parvatiyar (1995) focus on a similar perspective when they refer to relationship marketing as ongoing efforts at gaining customer loyalty. Shani and Chalasani (1992) focus on individualism when they define relationship marketing as "an integrated effort to identify, maintain and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualized and value-added contacts over a long period of time" (p. 44). These different definitions of Relationship Marketing highlight the increasing number of theorists who continue to push for its recognition as an emerging marketing model.

2.2 Buyer-Seller Relationships

As companies strive to practice relationship marketing, buyer seller relationships have come under the microscope as an important way to understand customers needs and provide competitive advantage. Considerable research has been reported into the factors that hold buyers and sellers together in a relationship (Palmer, 1994). However, most research has come from a business perspective, with most theorists choosing to ignore buyer seller relationships from a consumer perspective (Dwyer, Schurr & Oh, 1987; Sheth & Parvatiyar, 1995). This is somewhat surprising, because even from a consumer perspective relationships are often a necessity (Palmer & Bejou, 1994). This is the case with education, where the stream of services are produced and consumed over a period
of time. Where services are complex and involve a high degree of uncertainty on the part of the buyer, the likelihood of customers seeking a relationship is increased (Berry, 1983; Lovelock, 1996). Buyers and sellers then proceed with the relationship if they believe that staying in it will enable them to achieve their goals better than if they were not in the relationship at all (Palmer, 1994).

To better understand buyer seller relationships, it is important to understand the role of emotions in marketing and its affect on business relationships.

2.3 Emotions in Marketing

Currently there is little research addressing emotional behavior in marketing. Furthermore the research that is available mostly measures the role of emotions in marketing from a consumer behavior perspective (emotions and buying responses; see Gardner 1985; Hill and Gardner, 1987) as opposed to emotions role in the development of close relationships (Bagozzi, Gopinath & Nyer, 1999). Nevertheless, emotions are central to the actions of consumers regarding all aspects of decision-making and play an important role in the establishment and continuance of close relationships.

Bagozzi, Gopinath & Nyer (1999) define emotions as a "mental state of readiness that arises from cognitive appraisals of events or thoughts; has phenomenological tone; is accompanied by physiological processes; is often expressed physically (eg in gestures, posture, facial features) and may result in specific actions to affirm or cope with the
emotion, depending on its nature and meaning for having it" (p.1). Lazarus (1991) and Oatley (1992) offer similar perspectives on the definition of emotion.

If emotions are defined as "mental states of readiness", then how do emotions differ from affective states like attitudes and moods? Bagozzi (1999) highlights that the most important factor differentiating emotions from attitudes and moods is the way emotions arise. Emotions are said to have a specific referent (e.g. he or she becomes angered at poor service in a restaurant) and arise in response to appraisals one makes for something of relevance to one's well being.

The central role of appraisals in the formation of emotions has come to define what are called appraisal theories in psychology (Lazarus, 1991; Roseman, 1991). Appraisal theorists compare an actual state with desired state and maintain the critical component of an emotion is the evaluation and interpretation that arises because of it. An elaboration of appraisal theories relevant for marketing is the treatment of goals. Oatley & Johnson (1987) proposed what they termed a communicative theory of emotions wherein events are evaluated in relation to a person's goals. The self-regulation of goals is believed to be the main function of emotions, with positive emotions (e.g. happiness, elation, joy) being associated with the attainment of a sub (goal), which usually leads to a decision to continue with the plan, whereas negative emotions (e.g. frustration, disappointment, anxiety) result from problems with ongoing plans and failures to achieve desired goals (Stein, Liwag & Wade, 1996).
Similar to the role of emotions in marketing, customer intimacy is very much unexplored in relation to its impact upon marketing and business relationships.

2.4 Customer Intimacy

Within the marketing literature, there is little research into customer intimacy. This seems somewhat surprising as it is estimated that the largest source of growth, advantage and profit resides in the design and development of intimacy with customers (Wiersema, 1997). The term 'customer intimacy' emerged from the management field as one of the four broad, generic, marketing strategies used to gain competitive advantage and market leadership (Treacy & Wiersema, 1992, 1995; Slater, Olson & Reddy, 1997). Treacy and Wiersema (1992, p.85) state, "that those pursuing a strategy of customer intimacy continually tailor and shape products and services to fit an increasingly fine definition of the customer". Such a strategy requires segmenting and targeting markets precisely and then tailoring offerings to match exactly the demands of those niches. In doing so, companies create a detailed understanding of the customer to the point of understanding buying habits and behavior in order to provide better products and services. This then allows each segment to be assessed individually in order to determine the customer's lifetime value to the company, not the value of any single transaction (Slater, Olson & Reddy, 1997). It makes sense then, that the more intimate the customer relationship, the greater the potential to service that customer for their lifetime.
The core of customer intimacy involves providing complete solutions for customers' needs. In doing so, customer intimate companies craft relationships of openness, confidence, sharing and cooperation, based on the premise of mutual benefits (Wiersema, 1997). Wiersema (1997) goes on to say, "such a relationship does not happen instantly, intimacy demands connection and a working relationship grounded in trust and built over time. A relationship grounded in trust takes honesty and openness, with an eagerness to understand the other parties' strengths and weaknesses and a willingness to share information, intelligence and resources" (p. 38).

With the rise of relationship marketing and the changing of the dominant marketing paradigm, questions may arise as to the difference between customer value and customer intimacy as theoretical approaches. As a marketing strategy, customer intimacy primarily revolves around relationships and closeness to the customer (Treacy & Wiersema, 1992, 1995; Treacy, 1997). Utilising this relationship and the established closeness, customer intimacy allows businesses to predict customer's behavior in order to reduce consumer choice and ambiguity, while simultaneously increasing profits and your market share (Wiersema, 1997).

Customer value is similar to customer intimacy with respect to its outward orientation towards customers (Sheth & Parvatiyar, 1991). However, customer value tends not to focus on intimacy or closeness in the relationship, but attempts to break customers' business into value elements. According to Anderson and Narus (1998, p.3), "value elements are anything that affects the costs and benefits of the offering in the customer's
business”. This then allows the business to identify gaps in its value elements and in turn develop strategies to increase customer value (Anderson & Narus, 1998). Overall, customer intimacy measures the level of intimacy in a relationship, while customer value searches for value element deficiencies and ways to increases value. Another difference between customer intimacy and customer value, is that value creation can be copied by competitors (Shapiro, 1997). Competitors can use and apply the same customer value model and increase the same areas of value resulting in equality in consumers minds again. Customer intimacy is based on the intimacy and closeness of customer relationships, something that is not easy to replicate for competitors.

Currently, there is little exploratory and empirical evidence regarding the variables that make up customer intimacy in the marketing literature. However, within the social sciences and psychology literature, intimacy is covered extensively within marital intimacy (Waring et al, 1980; Chelune & Waring, 1984; Brehm, 1985; Perlman, 1987). The term intimacy is derived from the term intumus, the Latin term for "inner" or "inmost" (Perlman, 1987). Chelune, Robison & Kommer (1985, p. 35) define intimacy "as a subjective appraisal that emerges out of a rational process between two individuals in which each comes to know the "inner-most" aspects of the other, and each is known in a like manner". Brehm (1995) notes that the defining characteristic of an intimate relationship is one or more of the following: behavioral interdependence, need fulfillment and emotional attachment (p. 4-5). Intimacy has also been defined as a quality of interactions between partners (Brouche, Vandereycken and Vertommen, 1995). However, Register and Henley (1992) describe a disturbing divergence in how
the term intimacy is used, given the use of over 20 substantially different definitions. Waring et al. (1980) go on to say that development of operational definitions of intimacy will benefit the concept by facilitating the development of reliable and valid measurement instruments.

The importance of intimacy as a construct may be estimated from its prevalence in psychological theories and research pertaining to such diverse issues as motivation, personality development, communication and well being (Reis, 1990). While many theorists emphasize intimacy as a state, others have attempted to delineate intimacy as a process (Chelune & Waring, 1984). With intimacy as a process, the emphasis is on how individuals relate to one another rather than on what they relate to. This is a similar view to that of Perlman and Fehr (1987). They investigated intimacy as a broader construct, referring to the quality of an ongoing relationship. In doing so, they identified four major theoretical approaches to the area of intimacy as a psychological construct. Of the four models, the Equity Model is well documented for casual relationships (Broucke, Vandereycken and Vertommen, 1995) and best represents the relationships formed between business and customers.

Previous research evidence in marital intimacy, led to the identification of eight distinct components of marital intimacy, (Waring et. al, 1980; Waring et. al, 1981). The eight components of intimacy are: affection, cohesion, expressiveness, compatibility, conflict resolution, sexuality, autonomy and identity (Waring et. al, 1980). The eight facets of intimacy are defined in Table 2.1. From the eight facets of intimacy, four themes were
identified. First, sharing private thoughts, dreams and beliefs was mentioned as an important component of intimacy. Second, sexuality was considered important, with the emphasis being on affection and commitment. Third, respondents noted that anger, resentment and criticism are not part of intimacy as they result in interpersonal distance, and the final theme involved having a stable personal sense of identity or knowing one's needs and having adequate self-esteem (Perlman & Fehr, 1987).

Table 2.1 The Eight Components of Marital Intimacy

<table>
<thead>
<tr>
<th>Component of Intimacy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affection</td>
<td>The expression of feelings and emotional closeness</td>
</tr>
<tr>
<td>Cohesion</td>
<td>A feeling of commitment</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>The degree to which thoughts and feelings are shared</td>
</tr>
<tr>
<td>Compatibility</td>
<td>The degree to which a couple is able to work and play together</td>
</tr>
<tr>
<td>Conflict Resolution</td>
<td>The ease in which differences of opinion are resolved</td>
</tr>
<tr>
<td>Sexuality</td>
<td>The degree to which sexual needs are fulfilled</td>
</tr>
<tr>
<td>Autonomy</td>
<td>The success of interpersonal relationships outside the marriage</td>
</tr>
<tr>
<td>Identity</td>
<td>The couple's level of self-confidence and self-esteem</td>
</tr>
</tbody>
</table>

(Source: Chelune & Waring, 1984, p. 294)

Stern (1997) used five of the eight facets to present intimacy attributes relevant to services relationships communicated by advertising. She termed the five facets of
Masters Thesis

intimacy the "Five C's". The five attributes are communication (self-disclosure), caring, commitment, comfort (computability) and conflict resolution (trust). These five attributes, as initially identified by Waring et al. (1980), are shared by all intimate relationships (Waring et al., 1980; Waring et al., 1983).

2.5 External Education

2.5.1 Origins

The notion of external education has been around for many years. In the mid eighteen hundreds, Sir Issac Pitman first invented correspondence courses by mail and in 1911 the University of Queensland established a Department of External Studies, (Mathews, 1999).

Despite these early foundations, it was the forming of the United Kingdom's Open University (OU) in 1969 that marked a significant development in the supply of external education (Mathews, 1999). According to Curran, the OU and other open universities were important in raising the profile of distance education, effectively bringing distance teaching to the centre stage of higher education, (Curran, 1997). Since the OU was established, distance education has continued to experience strong growth in the educational sector with many more universities offering external education worldwide.
2.5.2 External Education in Australia

External education or distance learning has been a major part of Australia's education system for many years, however it has received subsidiary status in the tertiary education system until recently (Gorman, 1986). In the last two decades, this attitude has changed with many universities realising that external education is an important way to maintain student numbers in a time of decreasing enrollments for on campus education (Day & Angus, 1986). By offering distance education, the problems of scarcity and exclusivity are reduced, problems that had plagued traditional on campus universities for years (Mathews, 1999). Mathew's (1999) argues that distance education solves the problem of too many students in a single space and allows the university to reach students and not offer seats, but the opportunity to learn.

In Australia, this growing acceptance of distance education has resulted in a growing number of students, committed educators, increased professional interest and an increasingly strong body of literature (Gorman, 1986). Much of this literature surrounds improving the delivery of library services to external students, which has been identified as an integral component in the delivery of services to external students (Wilson, 1978; Store, 1981; Haworth, 1982), along with communication and the use of technology (Day & Angus, 1986; Schmude & Luxton, 1986).

Within the literature, it seems that distance education will continue to take a backseat to traditional on campus education until the associated problems of distance learning are absolved. Some of these problems include increasing costs, lack of on-going
communication and increased access to resources by different students (Day & Angus, 1986). However, many of the problems currently impeding distant education can be reduced with technological advancements (Schmude & Luxton, 1986). For example, many university's now allow external students to dial directly into the universities online computer catalog and search the complete book holdings of the library (Day & Angus, 1986). Some universities are also using interactive videoconferencing, which allows a faculty member to conduct online lectures and tutorials (Mathews, 1999). Such facilities, supported by the electronic transmission of requested documents, begin to minimise the associated problems of distance learning and continue to bring distance education to the forefront of education.

2.7 Conclusion

This chapter outlined relevant and previous research pertaining to customer intimacy. Significant research was discussed outlining where the idea of customer intimacy has emerged from and the areas that have affected its development.

Little research, however, has been conducted in the area of customer intimacy in the marketing and/or business literature. This has resulted in the extensive cover of intimacy from a psychological and social scientists point of view, resulting in the identification of eight attributes shared by all intimate relationships (Waring et al., 1980). According to Perlman & Fehr (1987), casual relationships, such as those between a buyer and seller,
are a form of intimate relationships that can be measured using the five identified attributes of intimacy.
Chapter 3

Model and Conceptual Framework

3.0 Introduction

A conceptual framework is useful for explaining the major dimensions to be studied, in a graphical or narrative form. The development of a conceptual framework assists in focusing the research and bounding the study. The conceptual framework for this study is presented in Figure 1. The framework draws on the five variables Stern (1997) used in her study of intimacy in advertising messages. The five variables are part of the eight components of intimacy that Waring et. al. (1980) identified as being present in all intimate relationships. The initial eight components of intimacy were reduced to five due to their applicability in a business context. Previous research had shown that the Sexuality facet is a relatively independent dimension and that the Autonomy facet has both low interrelater reliability and validity (Waring et. al, 1981). Identity was not used as a facet of intimacy, as it is assumed that each of the participants involved in the study had developed a sense of identity, making it possible for intimacy to be developed.

The chapter also includes a review of the five identified components of intimacy and presents the conceptual model.
Proposed Model of the Variables that make up Customer Intimacy.

Communication
Caring
Commitment
Comfort (Compatibility)
Conflict Resolution (Trust) → Customer Intimacy

3.1 Communication

Communication is defined as both the informal and formal sharing of meaningful and timely information (Morgan & Hunt, 1994). Self-disclosure constitutes one of the most important determinants of intimacy (Waring et al., 1980; Van den Broucke, 1995) and is the most widely agreed upon component of intimacy (Waring & Reddon, 1983; Helgeson, 1987). According to Fischer, Munsch & Greene (1995, p.225) “self-disclosure involves the process of making oneself known to another person by revealing information”. Broucke, Vandereycken & Vertommen (1995, 98) propose “the information that is revealed in this process may vary as to its affective value and degree of confidentiality”. Stern (1997, p.10) goes further and highlights that the information revealed includes “cognitive self-disclosure (the revelation of private thoughts and ideas) and affective self-disclosure (the revelation of feelings)".
The importance of communication or self-disclosure in the enhancement of intimacy is further heightened with Altman and Taylor’s (1973) social penetration theory. Social penetration theory proposes that interpersonal relationships continue to increase in intimacy, as information of increasing confidentiality is exchanged by the partners (Altman & Taylor, 1973). Jourard (1971) argued that self-disclosure is an important means for decreasing interpersonal distance and is a prerequisite for developing intimate relationships. Other theorists have agreed that self-disclosure is likely to increase intimacy by promoting mutual liking and by reducing uncertainty about the partner (Vanden Broucke, Vandezeycken & Vertommen, 1995). In established relationships, the effect of communication on intimacy is less certain. The literature seems to indicate that ongoing communication in already established relationships does not have the same effect, as communication in new relationships (Bochner, 1984).

Communication is the most important variable of customer intimacy, as it is communication that allows the firm to discover exactly what the customer wants (Wiersema, 1997). With recent advancements in technology, mainly in the Internet arena, communication is becoming cheaper and more efficient for business. This is good for business, as it allows the business to conduct ongoing, one-to-one dialogues with each of its customers, using a medium that consumers are increasingly becoming comfortable with using (Schonfeld, 1998).
3.2 Caring

Caring is another component of intimacy identified by Waring et. al, (1980) and is evidenced by qualities of affection, warmth and protectiveness. Caring facilitates feelings of comfort, which Stern (1997, p. 12) states, "flow from the consumer's sense of security in a relationship with a reliable and responsive partner". Kunce & Shaver (1994) defined care as noticing and responding to another's needs, as opposed to the seeking of support. In their study they found that individuals who were comfortable with intimacy scored significantly higher regarding caring than those that were not comfortable with intimacy (Kunce & Shaver, 1994). In customer intimate strategies, caring involves protecting partners' and stakeholders' interests (Treacy & Wiersema, 1992; 1995).

3.3 Commitment

Similar to the other components of customer intimacy, commitment is recognised as an essential element for successful long-term relationships (Morgan & Hunt, 1994). Traditionally, commitment was viewed as a sense of bonding. Levinger & Snoek (1972) argue that partners who are motivated by consideration of other's welfare, not merely their own self-satisfaction, share bonding in this sense. Stern (1997, p. 11) highlights "bonding is an increasingly popular marketing strategy in which services marketers seek to establish personal long-term bonds with customers so that those customers are retained". The retention of customers was highlighted in the previous chapter, with
customer retention now considered to be a more cost-effective strategy than continual prospecting for new customers (Gronroos, 1995).

Commitment has been investigated from a social exchange point of view, an organisational and buyer behaviour point of view and from a services point of view (Lovelock, 1996). Morgan & Hunt (1994, p. 23) encompass these influences and define relationship commitment "as an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum effort at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely". More recently, commitment has been identified as having three distinct components: an instrumental component of some form of investment, an attitudinal component including psychological attachment and a temporal dimension indicating that the relationship exists over time (Gunlach, Achrol & Mentzer, 1995).

According to Garbarino and Johnson (1998), one approach for defining the nature of a consumer's commitment to an organisation is to apply models from organisational theory that pertain to an employee's commitment to an organisation. The few studies of consumer commitment to an organisation modify the scales of employee commitment to measure the construct of consumer commitment to a health club (Kelley & Davis, 1994) or to a grocery store (Bettencourt, 1997). The employee commitment literature suggests several facets are critical, such as personal identification with the firm, psychological attachment, concern for the future welfare of the organisation and loyalty.
3.4 Comfort (Compatibility)

According to Bowlby (1982), security in a relationship with a reliable and responsible partner facilitates feelings of comfort. Comfort or compatibility is the degree to which partners can work together and is characterised by a zone of comfort between "the other in relation to me" and "me in relation to the other" (Waring et al., 1983).

3.5 Conflict Resolution (Trust)

Trust is generally viewed as the binding force in most productive buyer/seller relationships (Hawes, 1989; Morgan, 1994; Berry, 1995) and is critical in customer intimate strategies. Moorman, Deshpande and Zaltman (1993) define trust as a "willingness to rely on an exchange partner in whom one has confidence" (p. 82). Moorman et. al. (1993) go on to propose that trust results from the ability to perform expertise, reliability and intentionally when offering a product or service. Morgan and Hunt (1994, p. 23) define trust as the perception of "confidence in the exchange partner's reliability and integrity". Both definitions highlight the importance of confidence and reliability in the concept of trust.

Bendapudi & Berry (1997) argue the primary role of trust for consumers is that it lessens transactions cost. This was supported by Williamson's (1985) study that indicated that
consumers enter into on-going exchange arrangements (long-term relationships) to reduce costs.

Previous research regarding trust has been covered in almost every field of study (Morgan, 1994), with much of the research tending to emphasise trust as confidence in the honesty and integrity of the other party, such as a salesperson (Crosby & Stephens, 1987; Hawes, 1989). This study aims to measure trust as one component of customer intimacy measured in terms of customer confidence in the quality and reliability of the services offered by the university. Trust in a service context such as the supply of education is critical. According to Berry & Parasuraman (1993), services' marketing depends on trust because the customer typically must buy the service before experiencing it.

Within the literature, a number of interesting findings have been founded, regarding the effect of trust on business relationships. Gwinner, Gremler and Bitner (1988) found the psychological benefits of confidence and trust to be more important than special treatment or social benefits in consumer relationships with service firms. Hawes and Barnhouse (1987) found that consumers are more likely to concentrate purchases with exchange partners when they feel they can trust the exchange partner. Research has also established that trust facilitates cooperation (Hawes, Mast & Swan, 1989) and is essential in the development and maintenance of a long-term business relationship (Prus, 1987). The literature also suggests that commitment cannot exist without trust first being established (Morgan & Hunt, 1994). Moorman, Zaltman and Deshpande (1992)
supported this finding, when they found that trust affected user commitment to the relationship involving marketing research.

The literature on trust in social psychology is extensive (Lindskold, 1978). Recently, research on trust has explored such concepts as its affect on self-disclosure, first impressions (Tedeschi, 1983), feedback received from others and marital intimacy (Waring et al, 1980; Waring et al, 1981).

In conclusion, the conceptual framework highlights the importance of determining the components of intimacy, relevant within a business context, in order to determine what customer intimacy is.
Chapter 4

Methodology

4.0 Introduction

This chapter describes the research design of the study. Following a discussion regarding the design of the research and choice of samples used in the study, the resultant quantitative study is described. The research instrument, data collection and sampling procedures as well as the techniques used to analyse the data are outlined in this chapter. Justification for the research design is discussed throughout the chapter.

4.1 Research Design

An exploratory research design will be utilised in this study in order to gain a richer understanding of what constitutes customer intimacy and how it affects technology and student relationships with the university. The major emphasis with exploratory research is on discovering the general nature of the problem and variables that relate to it (Burns & Bush, 1993). Due to the area being largely unexplored within a marketing context, the exploratory design offers some flexibility in the research process (Churchill, 1996). While there is a notable gap in the literature concerning customer intimacy, this research attempts to reduce this gap, by exploring customer intimacy in a service context. Specifically, the research will investigate the impact of customer intimacy on how
external students rate their relationship with Edith Cowan University and the use of technology.

4.2 Research Sample

The sample for this study is a convenience sample comprising 962 fully external undergraduate students, based in Australia, from Edith Cowan University. External students were used in the study in order to determine the effect of customer intimacy on the Internet. External students were deemed more appropriate, because unlike on-campus students who can get information at the university, much of external students' contact and feedback is via different mediums (e.g. telephone, mail and fax) and the Internet is rapidly making contact with universities more viable (Gorman, 1986). Therefore, external students rather than on-campus students were utilised in the study, in order to suitably investigate the impact of technology on customer intimacy.

The large number of students used in the sample was justified due to the expected response rate. Realistic response rates for a student survey such as this, was anywhere between 15% - 20% (Waugh, 1999). The response rate for the study was 32%, which is adequate, considering current response rates for university surveys are approximately 40% (Waugh, 1999).
4.2.1 Use of a Student Sample

Student samples have been widely used in research across many disciplines. Traditionally, the use of student samples were used for convenience and cost considerations (Morgan, 1979). Similar motivations stemmed the use of a student sample in this study.

The practice of using student samples is surrounded in controversy regarding its external validity (Cunningham, Anderson & Murphy, 1974). Other theorists have found mixed results when determining whether students function as surrogates (Enis, Cox & Stafford, 1972). However, these studies compared students with businessmen (Morgan, 1979) and housewives (Cunningham, et. al, 1974), who were determined as being typical consumers. In many cases, it can be questioned whether student surrogates are "typical consumers", due to the high rates of literacy and rationality of university students (Zikmund, 1997). Meanwhile other researchers concede that a student sample may be appropriate if the context is taken into consideration (Khera, 1970).

Several factors make the use of a student sample in this study appropriate. Firstly, because the study is exploratory in nature, this allows flexibility in the methods of gaining the perceptions concerning customer intimacy at the university. The flexibility lies in the convenience, time and cost savings in using a student sample. Secondly, one of the research questions determined the effect of the Internet on customer intimacy. In order to measure this, the required sample needed some experience in using the Internet to contact a service provider or business and students have been identified as
representing a large proportion of on-line users (Fram & Grady, 1995), with the service provider being the university they are attending.

Though this research may have limitations concerning the generalisation of the findings to the larger population, its contribution is beneficial.

4.3 The Pilot Study

The purpose of a pilot study is to test the research instruments and gain an indication of the time that would be required for the phases of the main study. The pilot study also identifies unforeseen problems in the flow and structure of questions and ensures that the ultimate subject understands the questions (Zikmund, 1997).

The necessity of a pilot study to the process of the development of an accurate instrument can be seen from the need to generate an appropriate questionnaire, test the questionnaire, analyse the results and modify the questionnaire if required in preparation for the major study.

4.3.1 Procedures

The pilot study comprised six university students studying externally at Edith Cowan University. Of the six, two were male and four were female. More females were surveyed to more closely represent the university population, however the students were mainly selected because of the similarities with the expected students in the sample. The
findings from student responses, as well as discussions with external studies personnel regarding previous research, resulted in the customer intimacy questionnaire being developed.

4.4 The Main Study

4.4.1 Introduction

The main study adopted a quantitative approach to the main research process. The research procedure resembled a self-administered mail questionnaire and measured student perceptions of customer intimacy at the university. The main study comprised 962 students from Edith Cowan University. The response rate was 32% resulting in 300 responses. The techniques used to analyse the data include T-Tests, Factor Analysis, Stepwise and Multiple Regression.

4.4.2 Procedures

The research procedure for the administration of the customer intimacy questionnaires involved mailing the questionnaires, cover letters and reply paid envelopes to the 962 external students. Students, who participated in the study did so by returning the self-administered questionnaire to the external studies department using a university self-addressed envelope, which was marked with identification, and placed in a box for collection.
Data collection occurred over a six-week period. This allowed a week either way for the mailing of the questionnaire as well as time to complete the survey. After four weeks a reminder letter was mailed to all participants reminding them about the customer intimacy questionnaire. The student responses elicited from the major study will form part of Chapter five.

4.5 Research Instrument

Due to the large number of variables and the number of questions required to explore these variables, a questionnaire was determined as the most appropriate data collection instrument. According to Zikmund (1997, p. 203), questionnaires are used in research to provide a "quick, inexpensive, efficient and accurate means of assessing information about the population". The questionnaire was used in this study to obtain information concerning customer intimacy at the university.

Questionnaires were mailed to the sample for a number of reasons. Firstly, a questionnaire allowed geographical flexibility in that the sample was Australia wide so there were many students in other states. This made personal and telephone interviews very expensive. In addition, a questionnaire was relatively inexpensive and allowed the respondent to think about the answers before returning it.
### 4.5.1 Summated Likert's Scale

The measures for this study used the Likert method of summated ratings for measuring student perceptions concerning customer intimacy at the university. Participants were required to indicate their degree of agreement or disagreement with each statement by circling the response that best described their feeling concerning the statement. A five point scale was used to measure the student's perceptions. The five-point Likert scale comprised the following response categories:

1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5= Strongly Disagree

A five-point scale was used in the research instrument to reflect the full range of perceptions toward each statement. The scale was also chosen as it is considered the best scale to measure attitudes or perceptions (Churchill, 1996).

### 4.6 Questionnaire Content

The final questionnaire was divided into seven main sections. The first section measured student perceptions of customer intimacy at the university. The second section of the questionnaire measured students' actual and perceived levels of intimacy with the university. The third section measured the participants' attitudes towards the Internet and the fourth section measured the different services offered to external students at Edith Cowan University. The fifth section focused on future study, while the sixth section
measured the participants' psychographic profile. The final section of the questionnaire captured the participants' demographic profiles.

4.6.1 Customer Intimacy

The first section of the questionnaire measured students' perceptions regarding customer intimacy at the university. As previously mentioned, there is limited research in the marketing literature on customer intimacy; however, intimacy has been explored extensively in the social science and psychological disciplines. Intimacy in this context has been examined mainly from a marital point of view, resulting in many methods of measuring intimacy in marriage. To that effect, some elaborate standardised interview techniques have been developed, such as the *Victoria Hospital Intimacy Interview* (VHII; Waring et al., 1980) and the *Intimacy Maturity Scales* (IMS; White, Speisman, Jackson, Bartis & Costos, 1986). In addition, a number of questionnaires have been proposed, of which the most important are as follows:

1. The *Personal Assessment of Intimacy in Relationships* (PAIR; Schaeffer & Olson, 1981) is a 36 item questionnaire which measures expected and perceived degrees of intimacy in five areas: emotional, social, sexual, intellectual, and recreational. This item allows an analysis of perceived and expected levels of intimacy.
2. The *Miller Social Intimacy Scale* (MSIS: Miller & Lefcourt, 1982) is a 17 item questionnaire which assesses the maximum level of intimacy experienced in a relationship.

3. The *Waring Intimacy Questionnaire* (WIQ: Waring & Reddon, 1983) is a 90 item questionnaire measuring the eight dimensions implied in Waring's marital intimacy model.

Although there are a number of research instruments to measure intimacy in marriage, intimacy in a business context is more difficult. Due to the above questionnaires' inapplicability to measure intimacy in a business context, a questionnaire was developed based on the five components of intimacy initially identified by Waring (1980) and used by Stern (1997). Treacy & Wiersema's (1995) attitude on customer intimacy in their books also helped in the development of the research instrument. See Appendix A.

4.6.2 Reliability and Validity

Throughout the research process, the researcher considered measures to enhance the validity and reliability of the study. To ensure content validity was minimised, a pilot study was utilised to ensure any problems in the measuring instrument were overcome. The questionnaire was also shown to members of the marketing and external studies staff to confirm the instrument logically measured what it purported to measure.
Criterion validity was difficult to determine for the research instrument because the customer intimacy questionnaire (CIQ) is the first measurement instrument that purports to measure customer intimacy. However, other research instruments measuring intimacy have focused on the same five components of intimacy, but focused on intimacy from a more personal perspective.

Construct validity is the ability of a measure to confirm a number of hypothesis generated from a theory based on the concepts (Zikmund, 1997). This study used a questionnaire to measure participants' perceptions concerning customer intimacy from a service provider. Carmine and Zeller (1979) observed that "construct validity ideally requires a pattern of consistent findings involving different researchers using different theoretical structures across a number of different studies". Due to the lack of empirical research in the area of customer intimacy, construct validity is difficult to determine. However, according to Zikmund (1997) construct validity may be present in a study if the majority of the empirical evidence is consistent with the theoretical logic about the concepts.

Measures to increase reliability were also implemented in the study. The Cronbach-Alpha technique was utilised to measure the internal consistency of the scale and is considered a unique estimate of the expected correlation of one test with an alternative form containing the same number of items (Carmine & Zeller, 1979). In addition, the Cronbach-Alpha provides a conservative estimate of a measuring instruments reliability.
Table 4.1 shows the Cronbach Alpha values for the dimensions of the participants' perception items.

Table 4.1 Internal Consistency Data for the Dimensions of Perception Items

<table>
<thead>
<tr>
<th>Factor</th>
<th>Alpha Coefficient</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1- Caring</td>
<td>0.92</td>
<td>9</td>
</tr>
<tr>
<td>Factor 2- Trust</td>
<td>0.80</td>
<td>5</td>
</tr>
<tr>
<td>Factor 3- Comm</td>
<td>0.65</td>
<td>3</td>
</tr>
<tr>
<td>Factor 4- Comfort</td>
<td>0.70</td>
<td>2</td>
</tr>
</tbody>
</table>

As can be seen from Table 4.1 the Alpha Coefficients for the four dimensions of the perception items are 0.92, 0.82, 0.65 and 0.70. The internal reliability co-efficient alpha level is 0.90. This indicates that most of the alpha coefficients exceeded 0.5 resulting in a reliable and acceptable measure of reliability.

4.7 Sampling and Data Collection Procedures

The questionnaire was mailed to external students identified from the external studies database. A mail questionnaire represented an ideal way to collect the necessary data to address the research questions. According to Zikmund (1997), mail questionnaires offer geographic flexibility, are low in cost, are convenient for the respondent and are good for measuring concepts that require detailed understanding.
A convenience sample was used in the study. According to Zikmund (1996, p. 429), "a convenience sample is form of sampling procedure used to obtain those people most conveniently available". The advantage of a convenience sample is in the large number of completed questionnaires (Churchill, 1996).

When the mail questionnaires were mailed to the students, a cover letter was attached explaining the details of the study and how the participants could contact the researcher if there were any problems. The participants then completed the questionnaire, placed it in the self-addressed envelope and sent it back to the external studies department.

There were three major reasons why a questionnaire was used to collect the data in the main study. Firstly, respondent anonymity is definite allowing confidentiality issues to be overcome. Secondly, complicated computer packages allow the data collected in the study to be analysed extensively to determine errors in the data entry process. Finally, questionnaire administration was advantageous in that a large number of students could be sent the questionnaire and the costs were minimal.

Once the process of gathering the data was complete, the data then needed to be converted into a format that allowed the research questions to be answered. This process involved editing and coding. Editing involves checking whether participants had completed all the statements in the questionnaire. Originally, 342 questionnaires were received from participants in the study. However after the editing process, only 300
questionnaires could be used. Following the editing process, the questionnaires were coded.

4.8 Methods and Techniques of Analysis

Following the editing and coding processes, the data from the questionnaires were analysed using the computer program SPSS (Statistical Package for the Social Sciences). Three main analytical techniques were utilised: Factor Analysis, Multiple Regression and T-Tests.

4.8.1 Factor Analysis

Before conducting the other analytical techniques, Factor Analysis is performed on the data. Factor Analysis is an exploratory technique, used to identify the underlying structure of inter relationships among a number of variables (Hair, Anderson, Tatham & Black, 1995). Factor Analysis is used to combine the results of several perception items so that they are represented by a single factor and is commonly used in order to determine groups of variables which are strongly interrelated.

Principal Component Analysis with Varimax rotation was used to analyse the data in the study, as recommended by Stewart (1981). Multiple decisions criterion were employed in deciding the number of factors to be extracted and both the Scree Plots and Eigenvalues were examined. Principal Component Analysis was conducted for one dimension; the perceptions of customer intimacy at the university.
The resulting four factors were interpreted and labelled with regard to the phenomena they identified. Analysis was conducted on the student groups. As the composition of the factors are similar, the results from the Principal Component Analysis conducted on the overall data set was used.

Using the SPSS software, the Alpha Reliability Coefficient was calculated to test the internal consistency of the factors. Reliability is "the degree to which measures are free from error and therefore yield consistent results" (Zikmund, 1997, p. 340). In this context, reliability can be examined in terms of internal consistency of the questionnaire responses. Through the Cronbach's Alpha technique, the test for internal consistency can be made, where the mean reliability coefficient estimates for all possible ways of splitting a set of items in half are computed (Cronbach & Meehl, 1984). Items loading most heavily on each factor were used to assess the reliability of the three factors, thus confirming the stability of the principal components model.

Based on the Factor Analysis, summated scales were then calculated. The variables that loaded highly on each factor were totalled and the average was used as a surrogate variable for further analysis in the Multiple Regression. The summated scale was used instead of factor scores as the relative items loadings for each factor extracted in the principal analysis differed between the student participants. Summated scales were also used to reduce error in the underlying factors, as factor scores are based on correlations with all the variables on the factor and can be error prone indicators. Hair, Anderson,
Tatham & Black (1995) assert that summated scales best represent the basic nature of the factors.

### 4.8.2 Stepwise Regression

Stepwise regression is a multivariate technique that is appropriate when the researcher is only interested in predicting values of the dependent variable rather than trying to understand the relationships between the variables. Stepwise regression enters the predictor which is most strongly correlated with the dependent variable and continues until all predictors have been entered.

### 4.8.3 Multiple Regression

Multiple regression is a multivariate technique that allows a researcher to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable. In this study, the independent variable was the Internet, while the dependent variables were the four components of intimacy: care, communication, comfort, and trust. Multiple regression allows a researcher to build regression equations in order to determine exactly how a predictor variable affects a dependent variable.
4.8.4 T-Test Analysis

A t-test is a univariate hypothesis test using the t-distribution rather than the Z-distribution. It is used when the population standard deviation is unknown (Zikmund, 1997). Independent t-tests were performed on participants' intimacy levels to assess if there were any significant differences between attitudes held by males and females. The 0.05 level of significance was adopted in the t-tests and differences, which were significant at p>.001, were indicated.

4.9 Limitations to the Research

There are certain limitations that are explicit in this study. The first limitation concerns the issue of sample size. The population sample was one university in Western Australia and the sampling frame was the external studies database. Ideally, more universities would have been desirable so that the results were more indicative of external students' perceptions Australia wide.

Secondly, response bias can be a problem and occurs when participants answer questions in a certain way. Two common response errors found in questionnaires are acquiescence bias and social desirability bias (Zikmund 1997). The former applies when a participant agrees with all the questions, while the later occurs to create a favourable impression or appear in a different social role. Although response bias was noted, no such problems appeared to be present in the study.
The third limitation concerns participants' honesty when answering the questions in the questionnaire. Honesty cannot be guaranteed as participants' may have "slanted their views" in order to comply with university policy. In one case, one participant indicated he thought the study was being conducted by the external studies department and believed he could be persecuted for his answers to the questions, even though participant anonymity was guaranteed on the questionnaire cover sheet.

There are also limitations to the measurement instrument used in the study. According to Churchill (1996), problems include the lack of control a researcher has in securing responses, long response times and misinterpretation of questions by participants. Also, because the questionnaire was original, there are resultant problems concerning construct validity.
4.10 Ethical Considerations

Following approval from the Committee for the Conduct of Ethical Research at Edith Cowan University, participants were mailed a questionnaire with a covering letter and a self-addressed return envelope to send the completed questionnaire back to the External Studies department.

The cover page of the questionnaire informed subjects of the importance of the research and assured participants total confidentiality. The questionnaire was voluntary and consent was implied with the completion and return of the questionnaire.

To ensure and maintain confidentiality, the coding system used was only known to the researcher and all data was securely stored. Following the completion of the research, all data sheets and questionnaire forms will be destroyed. Records that are required to be held for a minimum of five years, will be stored on computer disk in the possession of the researcher.
Chapter 5

Findings

5.0 Introduction

This chapter presents the findings of the empirical study. The chapter is divided into five sections. The first section presents the demographic profile of the participants. The second section presents the results of the descriptive statistics for the external students' perceptions regarding customer intimacy at the university. Principal Component Analysis was also performed on the perception items regarding customer intimacy at the university in order to explore the underlying dimensions of customer intimacy. The Component Analyses results are presented in the third section. The fourth section of the chapter contains the Stepwise Regression results. Multiple regression was also used to determine the impact of the Internet on how participants rated their relationship or intimacy level with the university. The final section, section five, reveals the T-Test results, used to determine the effect of gender in regards to how students rate their relationship with the university.

5.1 The Participants' Demographic Profile

This section describes the demographic information of the participants in the study. The demographic information comprises participants' gender, age, school of study, mode of
study, year of study, units taken at Edith Cowan University, contact with the university, state where the participant resides, geographic location, hours spent on the Internet and participants' preference for communication methods with the university.

5.1.1 The Age and Gender of the Participants

The participants' age and gender are summarised in Table 5.1. The largest percentages of participants are in the 36 to 45 year range (38.3%), the 26 to 35 year range (32.7%) and the over 45 range (18%). The 18 to 25 age category (10.7%) and the under 18 age category (0.3%) accounted for only a minimal number of participants. Overall, the median age of the participants was the 36 to 45 year range.

The higher proportion of older students was expected, as external students are typically older than traditional undergraduates and tend to have greater family commitments (Mathews, 1999). According to the external studies department at the university, approximately 80% of students in external study are mature age students (Kirkham, 1999). This is relatively close to the findings of the study, with approximately 90% of participants being classified as mature age.

Table 5.1 The Age and Gender of the Participants

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>f</th>
<th>%</th>
<th>Gender</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18</td>
<td>1</td>
<td>0.3</td>
<td>Male</td>
<td>68</td>
<td>22.7</td>
</tr>
<tr>
<td>18 - 25</td>
<td>32</td>
<td>10.7</td>
<td>Female</td>
<td>232</td>
<td>77.3</td>
</tr>
<tr>
<td>26 - 35</td>
<td>98</td>
<td>32.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 - 45</td>
<td>115</td>
<td>38.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 and over</td>
<td>54</td>
<td>18.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100</td>
<td></td>
<td>300</td>
<td>100</td>
</tr>
</tbody>
</table>
In terms of gender, there were far more female participants (77.3%) than male participants (22.7%). This can be seen in Table 5.1. This result was similar to other findings where it was found that 66% of the adult distance education market is female and 80% of them have children (Bremner, 1998). Macaulay (1999) argues that there is a high proportion of female external students because many females were reluctant to leave home and undertake full-time, campus-based courses. These results were similar to the gender population at the university, as approximately 60% of external students at Edith Cowan University are female (Kirkham, 1999).

5.1.2 The Course and Mode of Study of Participants

The largest number of participants were from the Schools of Communications, Health and Science (41.3%), followed by the Schools of Community Services, Education and Social Science (35.3%) and finally the School of Business and Public Management (23.3%). In terms of the mode of study, the majority of participants were part time (81.7%). This is similar to Mathew's (1999) finding regarding part-time students in distance education and was anticipated, as the majority of the university's external students study part time (Kirkham, 1999). The frequencies and percentages for course and mode of study are provided in Table 5.2.
Table 5.2 The Course and Mode of Study of Participants

<table>
<thead>
<tr>
<th>Course studying</th>
<th>f</th>
<th>%</th>
<th>Mode of study</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus/Public</td>
<td>70</td>
<td>23.3</td>
<td>Full time</td>
<td>55</td>
<td>18.3</td>
</tr>
<tr>
<td>Com Serv/Ed</td>
<td>106</td>
<td>35.3</td>
<td>Part time</td>
<td>245</td>
<td>81.7</td>
</tr>
<tr>
<td>Com, Health</td>
<td>124</td>
<td>41.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.1.3 The Year of Study and Number of Units Taken of Participants

In terms of the year of study, the numbers of participants was spread rather evenly. The largest percentage of participants were from second year (37%), followed by third year (29.3%) and first year (27.3%). The fourth year participants made up only 6.3%, which was expected, as Edith Cowan University offers mainly three-year degree programs.

Similar to the year of study, the number of units taken by participants was spread rather evenly. The number of units with the greatest number of participants was the 9-12 units (25.7%), then the 5 to 8 units (25.3%), followed by the 1 to 4 units (23.7%). The two largest percentages of participants (9 to 12 units and 5 to 8 units) is to be expected as they are second and third year unit numbers, which account for more than 60% of the participants in the year of study. The year of study and number of units taken by participants can be seen in Table 5.3.
Table 5.3 The Year of Study and Number of Units taken by Participants

<table>
<thead>
<tr>
<th>Year of Study</th>
<th>f</th>
<th>%</th>
<th>No units taken</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>82</td>
<td>27.3</td>
<td>1 - 4</td>
<td>71</td>
<td>23.7</td>
</tr>
<tr>
<td>Second Year</td>
<td>111</td>
<td>37.0</td>
<td>5 - 8</td>
<td>76</td>
<td>25.3</td>
</tr>
<tr>
<td>Third Year</td>
<td>88</td>
<td>29.3</td>
<td>9 - 12</td>
<td>77</td>
<td>25.7</td>
</tr>
<tr>
<td>Fourth Year</td>
<td>19</td>
<td>6.3</td>
<td>13 - 16</td>
<td>41</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>More than 16</td>
<td>35</td>
<td>11.7</td>
</tr>
</tbody>
</table>

5.1.4 The State and Geographic Location of the Participants

The majority of the participants were from Western Australia (69.3%). This was expected as Edith Cowan University is a major Western Australian university. The second highest number of participants was Queensland (12%), then New South Wales (7.7%) and finally Victoria (5%). These figures can be seen in Table 5.4.

Table 5.4 The State and Geographic Location of the Participants

<table>
<thead>
<tr>
<th>State</th>
<th>f</th>
<th>%</th>
<th>Geographic location</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA</td>
<td>208</td>
<td>69.3</td>
<td>Metro</td>
<td>166</td>
<td>55.3</td>
</tr>
<tr>
<td>NT</td>
<td>8</td>
<td>2.7</td>
<td>Regional</td>
<td>134</td>
<td>44.7</td>
</tr>
<tr>
<td>SA</td>
<td>6</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAS</td>
<td>4</td>
<td>1.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIC</td>
<td>15</td>
<td>5.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSW</td>
<td>23</td>
<td>7.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QLD</td>
<td>36</td>
<td>12.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In terms of geographic location, the numbers of participants were relatively similar. The majority of participants were from a metro area (55.3%), while regional participants accounted for 44.7%. These figures are quite similar to what was expected as approximately 33% of all external students are from a regional area and 33% are from a metro area. The remaining 33% is made up of interstate and overseas students (Kirkham, 1999). These findings are similar to that of Mathew’s (1999) who argued that distance education has a long history of serving isolated and remote learners.

5.1.5 How Many Hours on the Internet Participants Spent

While the majority of the participants spent up to 5 hours per week on the Internet (51.3%), 30% of participants spent 0 hours on the Internet. This high percentage of participants not using the Internet can be attributed to many factors, including costs involved and access problems from isolated areas (Day & Angus, 1986).

With more than 50% of participants spending more than five hours per week on the Internet, the adoption of Internet technology at the university is encouraging. The university should take advantage of participants' existing Internet behaviour and simultaneously save money, by utilising a medium that participants are already using and are comfortable with (Schmude, 1986). The figures for the number of hours spent on the Internet can be seen in Table 5.5.
Table 5.5 The Number of Hours spent on the Internet

<table>
<thead>
<tr>
<th>Hours Spent on Internet</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Hours</td>
<td>90</td>
<td>30.0</td>
</tr>
<tr>
<td>Up to 5 hours</td>
<td>154</td>
<td>51.3</td>
</tr>
<tr>
<td>6 to 10 Hours</td>
<td>25</td>
<td>8.3</td>
</tr>
<tr>
<td>More than 10 hours</td>
<td>31</td>
<td>10.3</td>
</tr>
</tbody>
</table>

5.1.6 The Participants Preference for Communication Types

The participants' preferences for the different types of communication that can be used by the university can be seen in Table 5.6. Table 5.6 uses a weighted average method to determine the students' preference for communication types. The weighted average method determines the weighted averages by multiplying the percentage of participants with the preference type. For example, the weighted average for Mail, is equal to:

$$Mail = 0.057 + 0.154 + 0.711 + 1.428 + 1.365 = 3.715$$

The most preferable form of communication for participants was ordinary mail (3.71), followed by email (3.70), then by the telephone (3.48) and finally fax (2.43). These findings are significant because the majority of the university's current communication is via ordinary mail, which is relatively expensive. The results indicate that ordinary mail and email are very close in terms of preference by participants. Therefore, the
university could utilise its email database more effectively in order to better its communication and promotion of the university with existing students.

Table 5.6 The Participants Preferences for Communication Types

<table>
<thead>
<tr>
<th>Communication Medium</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Mail</td>
<td>3.71</td>
</tr>
<tr>
<td>Email</td>
<td>3.70</td>
</tr>
<tr>
<td>Telephone</td>
<td>3.48</td>
</tr>
<tr>
<td>Fax</td>
<td>3.43</td>
</tr>
</tbody>
</table>
5.2 Results of the Descriptive Statistics

5.2.1 Participants Perceptions towards the University Regarding Customer Intimacy

Overall, the majority of the participants indicated that they felt distant or very distant from the university (48%). However, the participants' perceived level of intimacy was more promising, with 23% of participants indicating that they would prefer their relationship with the university to be intimate.

Further exploration of the descriptive statistics reveals that individual perception items highlight important perceptions concerning customer intimacy at the university. The method used to measure the perceptions of customer intimacy was a five point Likert Scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Table 5.7 shows the means and standard deviations for each of the statements.
Table 5.7  Participants' Perceptions Towards the University Regarding Customer Intimacy

<table>
<thead>
<tr>
<th>Perceptions/Statement</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would only contact external tutors if I did not understand an assignment</td>
<td>3.86</td>
<td>1.12</td>
</tr>
<tr>
<td>I see my relationship with the university as continuing in the future</td>
<td>3.64</td>
<td>1.07</td>
</tr>
<tr>
<td>If I was unhappy with the university's service, I could easily withdraw</td>
<td>3.64</td>
<td>1.24</td>
</tr>
<tr>
<td>The external tutors are knowledgeable in their chosen field</td>
<td>3.60</td>
<td>0.90</td>
</tr>
<tr>
<td>I feel information given to me is reliable and accurate</td>
<td>3.58</td>
<td>0.94</td>
</tr>
<tr>
<td>I trust the external tutors' abilities when marking assignments and exams</td>
<td>3.45</td>
<td>0.98</td>
</tr>
<tr>
<td>I feel the university shares relevant information and resources with me</td>
<td>3.45</td>
<td>0.94</td>
</tr>
<tr>
<td>The university cooperates with me effectively</td>
<td>3.42</td>
<td>0.90</td>
</tr>
<tr>
<td>I am comfortable talking to external unit coordinators about course requirements</td>
<td>3.30</td>
<td>1.16</td>
</tr>
<tr>
<td>The university listens to me when I have any problems regarding university life</td>
<td>3.30</td>
<td>0.84</td>
</tr>
<tr>
<td>I feel the external tutors are open with me regarding my performance at a tertiary level</td>
<td>3.27</td>
<td>1.08</td>
</tr>
<tr>
<td>The university strives for win/win situations when problems arise in my studies</td>
<td>3.24</td>
<td>0.86</td>
</tr>
<tr>
<td>The university is committed to my success</td>
<td>3.16</td>
<td>0.98</td>
</tr>
<tr>
<td>I feel secure in my relationship with the university</td>
<td>3.10</td>
<td>0.94</td>
</tr>
<tr>
<td>The more experience I have with the university the closer my relationship is</td>
<td>3.09</td>
<td>1.03</td>
</tr>
<tr>
<td>The university is effective at providing complete solutions to any problems that I may experience</td>
<td>2.94</td>
<td>0.98</td>
</tr>
<tr>
<td>I disclose to the university things that are important to me</td>
<td>2.86</td>
<td>1.06</td>
</tr>
<tr>
<td>The length of time enrolled with the university affects level of customer intimacy I receive</td>
<td>2.81</td>
<td>1.00</td>
</tr>
<tr>
<td>The university cares about me</td>
<td>2.77</td>
<td>0.92</td>
</tr>
<tr>
<td>The university takes an active role in protecting my interests</td>
<td>2.77</td>
<td>0.86</td>
</tr>
<tr>
<td>I have a good personal relationship with my external tutors</td>
<td>2.71</td>
<td>1.07</td>
</tr>
<tr>
<td>I exchange views and attitudes with the university</td>
<td>2.58</td>
<td>1.05</td>
</tr>
</tbody>
</table>
Perception 1: University Contact, Continuance and Service Withdrawal

The findings in the study suggest that participants have highly positive perceptions regarding contact with external tutors. This is a similar finding to Day & Angus (1986) who explored distance education at Deakin University. Participants are likely to have these positive perceptions regarding contact due to the nature of external studies in general. That is, contact is a major component of distance education and is crucial in its application (Schmude & Luxton, 1986). Hall (1995) found that a fundamental problem with distance education is maintaining sufficient contact including assistance and performance feedback. However, since the advent of the Internet and its rise in stature, there is no reason why contact between students and external tutors cannot be more frequent.

There were also highly positive perceptions from respondents regarding their relationship with the university continuing in the future. This may be due to participants feeling that they would finish their studies with the university. An interesting finding was that participants also had strong positive perceptions regarding leaving the university if they were not entirely happy with the university's service. This may be due to the ease in which students can swap courses, campuses and even universities. This is an important finding for the university as the retention of students should be a major concern and highlights the importance of quality of service as a major component of student retention.
Perception 2: Reliability, Relevance and Cooperation

The findings in the study suggest that participants have fairly positive perceptions when it comes to the information they receive from the university, due to the university's reliability (3.58), relevance (3.45) and cooperation (3.42). This is somewhat expected as the relay of information is a major component of external education, as students are not on campus (Gorman, 1986). For example, external students are supplied with course outlines, course planners and course notes to help them in their studies (Schmude & Luxton, 1986).

Perception 3: Knowledgeable, Trustworthy and Comfortable

The study also suggests that participants have positive perceptions of external tutors regarding their knowledge, trust and comfort when interacting with them.

Participants had strong positive perceptions regarding external tutors' knowledge of their particular subject (3.60), trust in tutors' abilities when marking (3.45) and felt comfortable when talking to unit coordinators (3.30). This is somewhat expected as the knowledge of tutors is a key element of the core service of the university and trust is considered the binding force in most productive buyer/seller relationships, (Hawes, Mast and Swan, 1989). The knowledge of tutors is important, as this creates expertise, which has been identified as leading to or contributing to trust (Morgan & Hunt, 1994). Trust in business relationships has been identified as crucial, as trust in the exchange partner
leads to repeat business (Hawes et. al, 1987) and facilitates cooperation (Hawes et. al, 1989).

**Perception 4: Personal Relationship, Protection and Care**

The findings in this study also indicate that participants have quite low positive perceptions regarding their personal relationship with external tutors (2.71), the perception that the university takes an active role in protecting students' interests (2.77) and that the university cares about them (2.77). These are all perceptions that develop and build security in a buyer/seller relationship.

Although participants had strong positive perceptions on external tutors' knowledge and trust, participants had weak positive perceptions regarding their personal relationship with their tutors. These results may indicate that the university is effective at providing its core service (education), but is ineffective at making students feel they are more than just another number. The findings in this study relating to frequency of contact may be an indication of why participants have weak perceptions regarding personal relationships. It may be that because contact with tutors is minimal, there is not a chance for personal relationships to form and strive.

Participants also had weak positive perceptions when it came to the university protecting students' interests and caring for students. This may be due to a possible lack of communication in the external mode of study. For example, question 23 is an open-
ended question concerning other variables that affect the relationship with the university. In this question, increased access to and the availability of tutors were the most common variables that participants saw as affecting their relationship with the university.
5.3 Results of the Principal Component Analysis

Through the Principal Component Analysis, the twenty-two perception items measuring customer intimacy at the university were grouped into four factors. The four Principal Component Analysis accompanied by Varimax Rotation resulted in clean factor structures that were interpretable and represented various dimensions of external students' perceptions governing customer intimacy at the university.

5.3.1 The Dimensions of the Participant's Perceptions as to Customer Intimacy at the University

Various tests indicated that Principal Component Analysis of items relating to customer intimacy in a university setting to be appropriate. The Bartlett’s Test of Sphericity is significant, which indicates significant correlations between the variables. The KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) statistic is 0.908, which is more than adequate. The Correlation Matrix table also showed substantial correlations between the variables with many factor loadings being greater than 0.3. All of these measures indicate that the data is suitable for a Factor Analysis.

The Principal Component Analysis produced four factors with an Eigen value greater than 1. The scree plot also supported the extraction of four factors. Overall, the four factors explain 60.51 per cent of the variance. The results of the Principal Component Analysis with Varimax Rotation can be seen in Table 5.8.
### Table 5.8 Results of Principal Component Analysis

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Factor Loadings</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACTOR 1</strong> <em>(eigenvalue: 7.926)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university takes an active role in protecting my interests</td>
<td>0.803</td>
<td>0.700</td>
</tr>
<tr>
<td>The university cares about me</td>
<td>0.788</td>
<td>0.701</td>
</tr>
<tr>
<td>The university is committed to my success</td>
<td>0.756</td>
<td>0.631</td>
</tr>
<tr>
<td>I feel secure in my relationship with the university</td>
<td>0.716</td>
<td>0.564</td>
</tr>
<tr>
<td>The university is effective at providing complete solutions to any that I may experience</td>
<td>0.713</td>
<td>0.567</td>
</tr>
<tr>
<td>The university cooperates with me effectively</td>
<td>0.701</td>
<td>0.661</td>
</tr>
<tr>
<td>The more experience I have with the university the closer my relationship is</td>
<td>0.634</td>
<td>0.564</td>
</tr>
<tr>
<td>The university strives for win/win situations when problems arise in my studies</td>
<td>0.624</td>
<td>0.538</td>
</tr>
<tr>
<td><strong>Alpha Coefficient: 0.90</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FACTOR 2</strong> <em>(eigenvalue: 1.918)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust the external tutors abilities when marking assignments and exams</td>
<td>0.837</td>
<td>0.717</td>
</tr>
<tr>
<td>The external tutors are knowledgeable in their chosen field</td>
<td>0.770</td>
<td>0.620</td>
</tr>
<tr>
<td>I feel tutors are open with me regarding my performance at a tertiary level</td>
<td>0.589</td>
<td>0.661</td>
</tr>
<tr>
<td>I feel information given to me is reliable and accurate</td>
<td>0.574</td>
<td>0.597</td>
</tr>
<tr>
<td>I feel the university shares relevant information and resources with me</td>
<td>0.446</td>
<td>0.510</td>
</tr>
<tr>
<td><strong>Alpha Coefficient: 0.80</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FACTOR 3</strong> <em>(eigenvalue: 1.314)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I exchange views and attitudes with the university</td>
<td>0.825</td>
<td>0.718</td>
</tr>
<tr>
<td>I disclose to the university things that are important to me</td>
<td>0.797</td>
<td>0.702</td>
</tr>
<tr>
<td>The university listens to me when I have any problems regarding university life</td>
<td>0.312</td>
<td>0.482</td>
</tr>
<tr>
<td><strong>Alpha Coefficient: 0.65</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FACTOR 4</strong> <em>(eigenvalue: 1.146)</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a good personal relationship with my external tutor</td>
<td>0.615</td>
<td>0.700</td>
</tr>
<tr>
<td>I am comfortable talking to unit coordinators about course requirements</td>
<td>0.606</td>
<td>0.613</td>
</tr>
<tr>
<td><strong>Alpha Coefficient: 0.69</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The rotated factors can be interpreted as follows:

**Factor 1**
- Caring

**Factor 2**
- Trust

**Factor 3**
- Communication

**Factor 4**
- Comfort

**Factor 1 - Caring**

The items that consist of Factor One include the university taking an *active role, caring, being committed, cooperative, effective and striving for win/win situations*. From a student's point of view, the items in factor one include *feeling secure* in the relationship with the university and the *more experience* students have with the university the closer their relationship is. These items are concerned with the relationship of the student and the university; hence, the factor is termed *Caring*. This factor explains 36.02 per cent of the total variance.

**Factor 2 - Trust**

The items comprised in Factor Two include components of trust in a service provider's relationship with its customers. Factor two includes *trust, knowledge, openness, sharing and reliability and accuracy*. Each item is crucial in the establishment of trust in any relationship. Hence, Factor Two is termed *Trust*. 
Factor 3- Communication

The items that comprise Factor Three include exchanging views and attitudes, disclosure and timeliness. Disclosure is the central defining component of communication and exchanging views and attitudes plays an important part as well. Therefore, Factor Three can be termed Communication.

Factor 4- Comfort (Compatibility)

Factor Four comprises of items that include students feeling comfortable when talking to unit coordinators about course requirements and having a good personal relationship with external tutors. Therefore Factor Four is termed Comfort or Compatibility.
5.3.2 Results of the Reliability Tests

Cronbach's Alpha coefficient was used to test the reliability of the factors derived through the Principal Component Analysis. The Alpha reliability coefficient for Factor 1 and Factor 2 were notable at 0.9018 and 0.7940, indicating a high internal reliability for the scale. Factor 4 had an Alpha coefficient of 0.69, indicating relatively high internal reliability. Factor 3 had the lowest Alpha coefficient (0.65). This may suggest the items contained in Factor 3 did not measure factor adequately, resulting in the presence of construct validity. The Alpha Coefficients for Four Factors is shown in Table 5.8.

Another indication of internal reliability is provided by the Principal Components Analysis on each dimension conducted separately for the participant samples, which resulted in the extraction of similar factors. Thus, the Alpha reliability coefficients were deemed acceptable.
5.4 Results of the Stepwise and Multiple Regression

5.4.1 How Students Rate their Relationship with the University

Table 5.9 presents the stepwise regression results for affect of the four dimensions of customer intimacy and their impact on how students rate their relationship with the university. In order for this relationship to be explored, composite scores were determined for each of the Four Factors, which were then multiplied with the independent variable concerning how students rate their relationship with the university.

The results of the stepwise regression, shown in Table 5.9, reveals Care as the most strongly correlated with predicting how students rate their level of intimacy. The other variables of Trust, Communication and Comfort all had minimal changes to R square, resulting in their exclusion from the model. Overall the model revealed that 57% of the variance could be explained by this equation. Standardised Beta values for Customer Intimacy motives are $\beta = 0.54$ for Care, $\beta = -0.10$ for Trust, $\beta = 0.01$ for Communication and $\beta = 0.02$ for Comfort.
Table 5.9  Stepwise Regression for Predicting How Students Rate their level of Intimacy

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care</td>
<td>0.54</td>
<td>0.00</td>
</tr>
<tr>
<td>Excluded Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.10</td>
<td>0.87</td>
</tr>
<tr>
<td>Communication</td>
<td>0.01</td>
<td>0.56</td>
</tr>
<tr>
<td>Comfort</td>
<td>0.02</td>
<td>0.00</td>
</tr>
<tr>
<td>Adjusted R</td>
<td>0.30</td>
<td></td>
</tr>
</tbody>
</table>

Hence, the regression equation is:

\[
\text{Customer Intimacy} = 0.462 + 0.54(\text{Care}) + 0.10(\text{Trust}) + 0.01(\text{Communication}) + 0.02(\text{Comfort})
\]

The two significant predictors of how students rated their relationship with the university, were Care and Comfort. However, Comfort as a predictor is only weak. These findings were supported by Kunce & Shaver (1994) who found that individuals who were comfortable with intimacy, consistently rated the level of care received much higher than those individuals who were not comfortable with intimacy. If this is the case, is it possible to postulate that participants are comfortable with intimacy, as Care is a relatively strong predictor of how students rated their relationship. The relationship between Care and Comfort is identified by Bowlby (1982) and supported by Stern (1997). Both theorists argue that caring facilitates feelings of comfort, which flow from the consumer's sense of security in a relationship. Therefore, because Care is a relatively
strong predictor of how students rate their relationship, increasing the perceived level of Care in the relationship should result in customer intimacy increasing.

5.4.2 The Impact of the Internet on How Students Rate their Relationship with the University.

Multiple Regression was conducted on questions relating to the Internet. The Internet was explored as to its impact on the level of intimacy, in order to determine whether the Internet affects the intimacy level in the relationship between the students and the University. Current literature suggests that recent technological advancements will help solve many of the problems currently impeding distance education (Day & Angus, 1986).

Table 5.10 presents the multiple regression results for four different equations, with each equation featuring the perceived level of intimacy as the dependent variable and the Internet question as the independent variable. The first equation included "email is the best way for the university to contact me regarding all aspects of university life", the second equation included "the Internet increases the level of intimacy I have with the university", the third equation included "courses should be offered over the Internet" and the fourth equation was "I am experienced at using the Internet".

The results of the multiple regression revealed that none of the four equations are significant predictors in determining how students rate their relationship with the
university (see Table 5.10). These findings are somewhat surprising, considering the expectations that have been voiced in the literature, regarding the use of the Internet in distance education (Schmude, 1986; Mathews, 1999). Within the literature, the Internet has been identified as being able to overcome many of the associated problems that currently impede on distance education (Day & Angus, 1986).

Table 5.10 Multiple Regression Analysis for the Impact of the Internet on How Students Rate their Relationship with the University

<table>
<thead>
<tr>
<th>Predictor</th>
<th>How Do You Rate Your Relationship with the University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email is the best way to contact</td>
<td>-0.01 0.94</td>
</tr>
<tr>
<td>Internet increases level of intimacy</td>
<td>0.10 0.24</td>
</tr>
<tr>
<td>Courses should be offered online</td>
<td>-0.09 0.13</td>
</tr>
<tr>
<td>Experienced at using Internet</td>
<td>-0.06 0.38</td>
</tr>
</tbody>
</table>

5.5 Results of the T Tests

5.5.1 Genders Effect on How Students Rate their Relationship with the University

A T-Test was conducted to determine if there was a significant difference overall in how males and females rated their relationship with the university. The t value was 2.31, indicating equal variance at the 95% confidence level. The results indicated that males significantly rate their relationship with the university higher than females. This finding was somewhat surprising, as the literature suggests that women are more intimate than
males (Morton, 1978; Helgeson, 1987). Reis (1985) found that men and women judged intimacy similarly, however it was harder for males to express intimacy due to cultural prohibitions (Lewis, 1978). Tesch & Whitbourne (1982) also supported this finding.

Overall males rated their relationship with the university higher than females. However, closer exploration of the perception items revealed that at the 95% confidence level, females rated that they would only contact external tutors if they did not understand an assignment (3.93) higher than males. Further analysis of the perception items identified that four of the perception items were significant. The four items were I exchange views and attitudes with the university, the university cares about me, the university takes an active role in protecting my interests and I would only contact an external tutor if I did not understand an assignment. The T-Test results for the perception items can be seen in Table 5.11.
### Table 5.11 T-Test results for Perception Items

<table>
<thead>
<tr>
<th>Perception Item</th>
<th>Males N=68</th>
<th>Females N=232</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do you rate your relationship with the university</td>
<td>2.61</td>
<td>2.34</td>
<td>0.02*</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.38</td>
<td>3.28</td>
<td>0.36</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.51</td>
<td>3.43</td>
<td>0.56</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>2.97</td>
<td>2.83</td>
<td>0.37</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>2.80</td>
<td>2.52</td>
<td>0.07*</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.01</td>
<td>2.91</td>
<td>0.50</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.02</td>
<td>2.70</td>
<td>0.01**</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.01</td>
<td>2.69</td>
<td>0.00***</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.25</td>
<td>3.05</td>
<td>0.10</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.26</td>
<td>3.13</td>
<td>0.35</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.67</td>
<td>3.63</td>
<td>0.82</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.69</td>
<td>3.63</td>
<td>0.70</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.48</td>
<td>3.40</td>
<td>0.51</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.32</td>
<td>3.22</td>
<td>0.46</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.69</td>
<td>3.55</td>
<td>0.28</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.26</td>
<td>3.04</td>
<td>0.11</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.27</td>
<td>3.27</td>
<td>0.98</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.50</td>
<td>3.25</td>
<td>0.14</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>2.72</td>
<td>2.71</td>
<td>0.95</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.63</td>
<td>3.93</td>
<td>0.07*</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.58</td>
<td>3.40</td>
<td>0.18</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>3.69</td>
<td>3.57</td>
<td>0.36</td>
</tr>
<tr>
<td>How do you rate your relationship with the university</td>
<td>2.82</td>
<td>2.81</td>
<td>0.92</td>
</tr>
</tbody>
</table>

1 = very distant, 2 = distant, 3 = neutral, 4 = intimate, 5 = very intimate

2 = strongly disagree, 3 = disagree, 4 = neutral, 5 = agree, 6 = strongly agree

Note: * p<0.10, ** p<0.05, *** p<0.01
5.6 Summary

This chapter has examined the demographic profile of the participants. The results indicate that participants were all fully external, mature age students (median age group was the 36 to 45 year range), in their second year of part-time study and were mainly from the metro area of Western Australia. The results also indicate that participants are highly computer and Internet literate, with 51.3% of participants spending more than five hours a week on the Internet. Participants also indicated a preference for ordinary mail (3.71), as their most preferred type of communication with the university, although email was close behind (3.70).

The chapter also examined the participants' perceptions of customer intimacy at the university. The results indicate that there are significant differences in perceptions held by participants regarding customer intimacy at the university. Participants were found to have highly positive perceptions on University Contact, Continuance, Withdrawal, Knowledge, Trustworthy and felt Comfortable when talking to unit coordinators. Participants also had fairly positive perceptions of the information they receive from the university because of the university's Reliability, Relevance and Cooperation. Participants, however, have weak positive perceptions on the Personal Relationship, Protection and the university cared about them of customer intimacy.

Utilising Factor Analysis, the results revealed that there was four dimensions in the perception of customer intimacy at the university. The four dimensions or factors are Care, Trust, Communication and Comfort. Following the Factor Analysis, the Reliability
was tested using Cronbach Alpha coefficients, resulting in two factors exhibiting high internal reliability.

Stepwise Regression was conducted to explore the effect of each factor's impact upon how participants rated their relationship with the university. The results of the stepwise regression on how participants rate their relationship with the university revealed one significant predictor, with standardised Beta values for Care being $\beta = 0.41$. Multiple regression was conducted to determine the effect if any the Internet had on the way participants rated their relationship with the university. The results of the multiple regression to determine the impact of the Internet on how students rated their relationship with the university revealed no significant predictors.

Finally a T-Test was calculated to determine if gender affected the way participants rated their relationship with the university. The results were significant indicating males rated their relationship with the university higher than females.
Chapter 6

Conclusions, Implications and Future Research

6.0 Introduction

This chapter contains four sections. Following a summary of the study, the findings from the previous chapter are discussed. The research questions are addressed and the managerial implications of these findings on customer intimacy are examined. In the third section, the study's contribution to marketing is discussed and the chapter concludes with a discussion of the limitations in the study and recommendations for future research.

6.1 Summary of the Study

Motivated by a lack of comprehensive conceptual and empirical research into customer intimacy, this study examines student perceptions of customer intimacy at a University. There are three main aims of this study. The first aim is to identify the perceptions of the students regarding customer intimacy at the university. The second aim is to investigate the relationship between the factors or dimensions affecting the level of intimacy of external students. The third aim is to investigate the impact of the use of the Internet on how students rate their relationship with the university.
A self-administered questionnaire was developed to capture the perceptions of 300 external students enrolled at Edith Cowan University. The analysis of the data was conducted using descriptive statistics, as well as multivariate techniques such as Factor Analysis, Stepwise and Multiple Regression. T Tests were also used in the analysis of the data.

Through the descriptive analysis, it was revealed that there were interesting differences in students' perceptions of customer intimacy at the university. The findings suggest that students have highly positive perceptions regarding university contact, continuance, service withdrawal, knowledge, trust and comfort. The study also found that participants have positive perceptions regarding the university's reliability, relevance and cooperation. However, the study revealed that participants have low positive perceptions regarding personal relationship, protection and care at the university.

Using Factor Analysis, the results revealed that there are four dimensions in the perception of customer intimacy at the university. The four dimensions are care, trust, communication and comfort. These four dimensions were used in Stepwise Regression to investigate the relationship between these dimensions and the level of intimacy or the way participant's rated their relationship with the university. Multiple regression was also used to determine the effect of the Internet on the participant's intimacy level. Finally, a T-Test was conducted to examine the impact of gender on the level of the participant's intimacy.
6.2 Discussion

The following discussion seeks to address the ways in which businesses may measure customer intimacy and determine how each dimension of customer intimacy impacts upon their core services. In addition, strategies that marketers may utilise to enhance customer intimacy are examined. Lastly, the implications of the research as well as the limitations and suggestions for further study are considered.

6.2.1 Discussion on the Perceptions of the Participants about Customer Intimacy at the university

The findings in this study indicate that there are interesting differences in student perceptions regarding customer intimacy at the university. Students have highly positive perceptions on university contact, continuance, service withdrawal, reliability, relevance and cooperation at the university. The study also found that participants have fairly positive perceptions regarding the trust and knowledge of tutors and feeling comfortable when talking to unit coordinators. However, the study revealed that participants have low positive perceptions regarding personal relationship, protection and care at the university.

The findings on the perceptions of customer intimacy at Edith Cowan University suggest that in order for the university to compete effectively as a supplier of external education,
the university must focus on the characteristics of contact, relationship continuance, service withdrawal, reliability, relevance, cooperation, knowledge, trust and comfort.

Edith Cowan University provides external education, though the notion of external learning does not justify isolation. Like other studies involving external education (see Day & Angus, 1986) ongoing contact and communication with students was identified as a major component. Many respondents indicated that they felt isolated because they had not contacted their tutors or their tutors had not contacted them. Nearly 80% of respondents only contacted university tutors when they encountered a problem. These results indicate that currently the majority of students have an impersonal relationship with personnel at the university, particularly the external tutors. Possible ways the university could promote contact between external tutors and students, is to utilise the already large number of respondents using the Internet (nearly 70% of respondents use the Internet each week) and conduct tutorials and meetings via email. It is necessary to highlight that there are problems with access for isolated students, when it comes to Internet access. However, the need for contact in the development of a customer relationship is crucial and the Internet is an excellent avenue to communicate with students, using a medium they are comfortable with.

Additionally, the notion of some form of commitment to a student's goals is a good way the university can show its aim of relationship continuance. Relationship continuance involves the student feeling that their relationship with the university will continue in the
Relationship continuance is crucial because it helps the students feel committed to the university and ensures the university retains its customers.

Although participants had strong perceptions regarding relationship continuance, they also had strong perceptions regarding service withdrawal. Service withdrawal measured if students were prepared to withdraw from the university if they were unhappy with the university's service. Approximately 62% of respondents either agreed or strongly agreed with withdrawing if they were unhappy with the university's service. This indicates that students feel they are not locked in to a service or business relationship they cannot escape.

The participants also had positive perceptions regarding the information and resources they receive from the university as being reliable, relevant and cooperative. The majority of the information and resources received by external students comes in the form of readers and study materials. These resources form an integral part of the university's core service, constituting a major selling point for Edith Cowan University. Therefore, if students become unhappy with the service provided by the university, which is essentially the relay of information to students via the readers and study guides, the results already conclude that students are willing to leave the university if they are unhappy with the level of service.

The students' perceptions of the tutors and coordinators are encouraging. The tutors are regarded as knowledgeable and trustworthy and the students feel comfortable when
talking to unit coordinators about course requirements. What is worrying is the students' perceptions on customer intimacy at the university is weak and less positive regarding students' personal relationship with external tutors, the perception that the university takes an active role in protecting students' interests and cares about them.

In order to better relationships between students and tutors, respondents identified meeting days for staff and students and more communication between other external students as possible ways in doing so. The university can also mitigate the problems of students feeling the university is inactive and uncaring, by becoming committed to students and making them feel part of the university. According to the study, possible ways the university can do this are through more career advice and student counseling.

6.2.2 Dimensions Underlying the Perceptions of Customer Intimacy at the University

An important finding in the study was that the Factor Analysis revealed that there were four important dimensions in the perception of customer intimacy at the university. The four dimensions are Care, Trust, Communication and Comfort.

Care- it contains the items an active role, caring, being committed, cooperative, effective and striving for win/win situations. From a students' point of view, the items in Factor One include feeling secure in the relationship with the university and the more experience students have with the university the closer their relationship is.
Trust- it includes the items includes trust, knowledge, openness, sharing and reliability and accuracy.

Communication- it contains the items exchanging views and attitudes, disclosure and timeliness.

Comfort- it contains the items including students feeling comfortable when talking to unit coordinators about course requirements and having a good personal relationship with external tutors.

The findings reveal that customer intimacy consists of four major dimensions. In order to better improve the process of customer intimacy, the university needs to focus and tailor its external education services to improve on four crucial areas, care, trust, communication and comfort. The items that contribute to each of the dimensions are shown above.

6.2.3 The Effect of Customer Intimacy on the How Students Rated their Relationship with the University

Stepwise Regression was used in order to explore the relationship between how students rated their relationship with the university and customer intimacy at the university. The results revealed that two of the four predictors of customer intimacy were significant. The two significant predictors were care (0.54) and comfort (0.02). However, comfort's
effect is minimal. Overall, the total variance explained by how students rated their relationship with the university is 57%, which is quite appropriate for a model.

The implications of these findings are that the university now knows how to improve how students rate their relationship with the university. This will allow the university to develop specific strategies towards the items contained in the dimension of care, in order to increase students' level of intimacy with the university.

6.2.4 The Effect of the Internet on Customer Intimacy

Multiple Regression was used to explore the relationship between the Internet and its effect on participants intimacy levels or the way participants rated their relationship with the university. In total there were four equations tested. The first equation was email is the best way for the university to contact me regarding all aspects of university life, the second equation is the Internet increases the level of intimacy or closeness I have with the university, the third equation is courses should be offered over the Internet and the fourth equation I am experienced at using the Internet. The results indicated that none of the predictors were significant in affecting participants intimacy levels.

6.2.5 Does Gender Affect Customer Intimacy?

A T-Test was utilised in the analysis of the results to explore the role of gender on customer intimacy. The analysis revealed that males significantly rate their relationship
with the university higher than females, with females being higher on only one perception item. One possible explanation that may explain this finding, is that the males may have lower expectations regarding the level of intimacy expected and therefore rate the level they are receiving as being higher than normal. This finding is important because not only can the university increase customer intimacy, but it also can minimise resources by targeting females on certain items, as they rate their relationship with the university lower than males. These results also highlight differences in the way males and females interpret intimacy, even in a business relationship. It seems that females are more tentative in entering a customer intimate strategy and require a more personalised, focused strategy in order to build a long lasting business relationship.

6.3 Implications of the Research

This study has highlighted a number of marketing implications. The study has contributed to marketing literature on Customer Intimacy in several ways.

Firstly, the study addresses the lack of comprehensive research into consumer perceptions of customer intimacy in business relationships. This study has contributed to the understanding of perceptions of students (who are customers of the university) toward customer intimacy at Edith Cowan University. Such an understanding has managerial implications for marketers and university practitioners worldwide, in the measurement and application of customer intimacy in business.
The study is also the first investigation to identify factors of customer intimacy and test a generic questionnaire that measures customer intimacy. This is significant because now business has a scale to measure how its customers perceive customer intimacy in their business. This in turn, will allow businesses to identify problem areas in the application of customer intimacy and develop appropriate strategies to minimise problems.

The findings of this study have important implications regarding business relationships. The findings suggest that the largest predictor of how customers rate their relationship with business is Care. Previous research has emphasised the importance of Trust (Hawes, Mast & Swan, 1989), Communication (Morgan & Hunt, 1994) and Comfort (Bowlby, 1982) on buyer-seller relationships. However, the importance of Care in the development of business relationships is less defined. Therefore, the study contributes to the field of marketing by highlighting a factor that was not previously researched in a business context. This means a business can increase the perceived level of customer intimacy, by focusing on the items contained in the factor Care. For example, a business can increase a person's level of intimacy by increasing the customer's perception of feeling secure in their relationship with the business provider (Item 4 of Care).

In terms of technology, the results indicated that none of the predictors of customer intimacy affected participants intimacy levels. This was an interesting finding, as many theorists continue to highlight the Internet as the saviour of external education, (Day & Angus, 1986; Schmude & Luxton, 1986; Gorman, 1986). It should be noted that although the Internet is considered in such a way, current problems concerning access to
The results did however reveal the students' predilection of the Internet and what it can offer external education. Some of the comments regarding other services the university could offer online include: specific course chatlines, online lectures, specific information for external students, course tutorials, personal web pages for every student and ordering library material.

An interesting finding was revealed by the T-Test on rating the relationship and gender. It was found that males significantly rated their relationship higher than females, this was supported by the exploration of individual perception items, although females were higher on certain items. The implications for business may be in the way males and females are targeted. For example, if males are more likely to rate their relationship higher, does this mean they are more likely to be more intimate than females. If this is the case, it may be more profitable to target males rather than females.

Another contribution this study has made to the existing body of literature is the use of multivariate data analysis techniques such as Factor Analysis, Stepwise and Multiple Regression. This was particularly the case with Stepwise and Multiple Regression, which is not commonly used in marketing studies. Due to the study exploring a new concept, this study clearly shows the usefulness of applying multivariate techniques to
the complex nature of consumer perceptions regarding customer intimacy at the university.

6.4 Limitations of the Study and Suggestions for Further Research

Given this research is exploratory in nature and there is a lack of empirical research in this area, further investigation is required for a better understanding of customer intimacy in business.

In terms of the methodology, there are a number of limitations. Firstly, there is a concern regarding the sampling. The sample chosen in the study was not randomly selected. A convenience sample of external students from the university database was used. Therefore, the survey data is based on external Edith Cowan University students and may not be representative of external students Australia or worldwide. Additionally, the findings cannot be generalized to all consumers in business relationships. This requires precautions to be taken when generalising the findings of this study. Future research is necessary in order that more generalisations that are reliable can be made regarding customer intimacy at a universal level.

Investigation in the future should again address the notion of the Internet and whether when utilised properly, it promotes and enhances customer intimacy. This topic will only increase in importance as universities and business in general continue to utilise technology and the Internet, to better serve and bring customers closer. In addition, the
study highlighted other possible variables that affect the students relationship with the university. These variables included access, distance, availability of staff, time, empathy and openness. Possible research in the future could explore these variables as components of customer intimacy and examine whether any of the new variables are significant predictors.

6.5 Conclusion

Not withstanding the limitations identified, this study has provided an initial starting point for research in the future concerned with intimacy in marketing or customer intimacy. Significantly, the study highlighted some major implications for marketers who wish to utilize customer intimacy as a marketing strategy. Findings from this study suggest that customer intimacy is important and significantly affects how customers rate their relationship with a business provider.
References


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Appendices

The Research Instrument

This appendix contains:

i) A copy of the cover letter

ii) A copy of the questionnaire that was mailed to participants'

iii) A copy of the follow-up letter
Dear Student

I am a Masters student at Edith Cowan University. I am conducting a research project to investigate customer intimacy as a unique marketing concept. This study tries to test and link five different variables that have been identified as affecting customer intimacy.

I would appreciate your response to the attached questionnaire. The questionnaire takes about 10 minutes to complete.

It is expected that this research will benefit the field of marketing by investigating a concept that continues to experience increased interest, as business looks at ways to establish closer relationships with customers. The university will also benefit from the results by giving them some feedback into the relationship they have with their students, who are in many respects customers of the university.

Please don't place your name or any identification on the questionnaire, as your name is not required for the study and the questionnaire is anonymous. The research results will be published without the names of students. Your consent to complete the questionnaire is given on the conditions mentioned above.

You can obtain a copy of the results or ask any questions about the study by contacting Mr. Frank Jasper, jasper@inf.net.au.

Being a student myself, I know your time is limited with upcoming exams and assignments being due. However, please try to return the completed questionnaires by the 15th December 1999, in the envelope provided. When returning the questionnaire, place only the completed questionnaire in the reply paid envelope, as university staff will not open the envelopes to check contents.

Thank you for your cooperation and participation. It is very much appreciated.

Frank Jasper

Masters Student
November 30, 1999
These are statements regarding customer intimacy or closeness with the university. Please rate how you feel about each statement by CIRCLING one answer only for each of the statements.

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The university listens to me when I have any problems regarding university life</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>I feel the university shares relevant information and resources with me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>I disclose to the university things that are important to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>I exchange views and attitudes with the university</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>The university is effective at providing complete solutions to any problems that I may experience</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>The university cares about me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>The university takes an active role in protecting my interests</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>I feel secure in my relationship with the university</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>The university is committed to my success</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>If I was unhappy with the university's service, I could easily withdraw</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>I see my relationship with the university as continuing in the future</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>The university cooperates with me effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>The university strives for win/win situations when problems arise in my studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>I feel information given to me is reliable and accurate</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>The more experience I have with the university the closer my relationship is</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>I feel external tutor's are open with me regarding my performance at a tertiary level</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>I am comfortable talking to external unit coordinators about course requirements</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>I have a good personal relationship with my external tutors</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>I would only contact external tutor's if I did not understand an assignment</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>I trust the external tutor's abilities when marking assignments and exams</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21</td>
<td>The external tutor's are knowledgeable in their chosen field</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22</td>
<td>The length of time enrolled with the university affects the level of customer intimacy I receive</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

23. Apart from communication, caring, commitment, compatibility and trust are there any other variables that affect your relationship with the university? Please specify below:
Section 2: Intimacy level

Please answer the following questions by circling ONE number only for each question, with 1 = Very Distant and 5 = Very Intimate.

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Distant</th>
<th>Very Intimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. The optimal level of intimacy for my relationship with the university</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>25. Overall how do you rate your relationship with the university</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

Section 3: The Internet

Please rate how you feel about the following statements by circling one answer only, with 1 = Strongly Disagree and 5 = Strongly Agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Email is the best way for the university to contact me regarding all aspects of university life (e.g., enrollment, course work, etc)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>27. The Internet increases the level of intimacy or closeness I have with the university</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>28. Courses should be offered over the Internet (online)</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>29. I am experienced at using the Internet</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>30. Are there any other services you would like to see the university offer online? Please specify below.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 4: Areas within the University

Please rate the following areas of the university as an external student. Do so by CIRCLING ONE answer only for each statement, with 1 = Very Bad and 5 = Very Good.

<table>
<thead>
<tr>
<th>Area</th>
<th>Very Bad</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. External studies personnel</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>32. Computer and technology facilities</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>33. Tutors and unit coordinators</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>34. External Bookshop facilities</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>35. Library resources</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>36. Your course in general</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>37. Overall, your level of satisfaction with the university in general</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>38. Are there any improvements you would like to see in the external studies department and/or the university? Please specify below.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 5: Future study

Please answer the following statements by circling one answer statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Only for each</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. When doing further study in the future, I would do all of the units externally</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. When doing further study in the future, I would do some of the units externally</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41. I would recommend studying externally to others</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 6: Psychographics

Please answer the following statements by circling one answer only for each statement. Use the same scale as above, with 1= Strongly Disagree and 5= Strongly Agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Only for each</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>42. I do develop close relationships with some businesses</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. I usually am loyal to products and services</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. When shopping for goods and services, I seek stores that are convenient</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. When purchasing goods and services, I often purchase them on price alone</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. I have a close relationship with the university</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. I would like a close relationship with the university</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. I have to have a close relationship with the university, in order to do well</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 7: Demographics

The following questions can be answered by simply ticking a box.

49. What is your gender?
   [ ] Male   [ ] Female

50. What category best represents your age group?
   [ ] Under 18 years of age   [ ] 18-25 years of age   [ ] 26-35 years of age
   [ ] 36-45 years of age     [ ] over 45 years of age

51. Please tick the classification that best suits the course you are currently studying.
   [ ] Business and Public Management
52. Please indicate which mode of study you are currently enrolled in.

☐ Full Time ☐ Part Time

53. What year of study are you currently enrolled in, based on the external units you have taken this semester?

☐ First year ☐ Second year ☐ Third year ☐ Fourth year

54. How many units have you taken externally at Edith Cowan University?

☐ 1 to 4 units ☐ 5 to 8 units ☐ 9 to 12 units ☐ 13 to 16 units ☐ More than 16 units

55. How many times do you contact someone at university regarding your course work (include phone, email etc)?

☐ Weekly ☐ Monthly ☐ Only when I have a problem ☐ Never

56. Which State do you live in?

☐ WA ☐ NT ☐ SA ☐ TAS ☐ VIC ☐ NSW ☐ ACT ☐ QLD

57. Which category best represents your geographic location?

☐ Metro area ☐ Regional area

58. On average how many hours per week do you spend on the Internet?

☐ 0 hours per week ☐ Up to 5 hours per week

☐ More than 10 hours per week ☐ Between 6 and 10 hours per week

59. Please rate your degree of preference for each communication method as a means to assist in bringing you closer to the external studies. Do so by circling one answer only for each of the methods.

<table>
<thead>
<tr>
<th>Method</th>
<th>Least Preferable</th>
<th>Most Preferable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>Ordinary mail</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

This completes the survey. Thank you for completing the questionnaire, your responses will be used appreciatively.
Dear Student

Late in 1999 you would have received a "Customer Closeness" questionnaire that was sent to external students of Edith Cowan University. If you have returned the questionnaire already I would like to thank you for your help.

If you have not filled it in yet, please do so. The customer closeness survey is part of a master's research project that gives external students the opportunity to express themselves regarding the external study mode. The results of this study will be used to present to the university to help make the external study mode better.

Please help me to obtain a clearer picture of customer closeness at the university by filling in the questionnaire and returning it to the external studies department.

Your response will be treated with complete confidentiality.

If you have any questions or did not receive the questionnaire, please contact Mr Frank Jasper at jasper@inf.net.au.

Please return the completed questionnaire as soon as possible

Thank you for your help. It is much appreciated.

Yours sincerely

Frank Jasper
Master's Student