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**An Examination of the Agent perspective of  
Agent-Principal Relationship Establishment:  
The Case of Real Estate.**

*A thesis submitted for the degree of Doctor of Philosophy*

By

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## **ABSTRACT**

Since agency relationships were defined in Australian law in the 1950's, marketing literature has focussed on the maintenance of these relationships instead of addressing how these relationships come into being. The works of Bergen, Dutta, and Walker (1992); Marsh and Zumpano (1998); Moore, Smolen, and Conway (1992); Singh (2000) and Sitkin and Roth (1993) reflect this in their examinations of agent relationships in product management, supply chains, general sales contexts and real estate. An agency relationship, and establishment of this, defined best in agency theory by Jensen (1998:1994) and Jensen and Meckling (1976) is clearly a marketing issue based on market exchanges between a seller (agent) and buyer (principal) confounded significantly by the tight legal and societal environments within which they operate.

In this dissertation, an overall conceptual model of agent-principal relationship establishment is developed which provides a framework for exploring the internal dynamics of relationship establishment. This research is essential because the focus in existing literature overlooks establishment of the agent-principal relationship that is in fact necessary for the role of agent to exist.

In this research, an attempt to establish the agent-principal relationship is either successful, at which point other competitive attempts are disregarded by the principal, or unsuccessful. This thesis examines both successful and unsuccessful relationship establishment attempts so that it does not fall into the same trap that existing literature does by only examining established relationships.

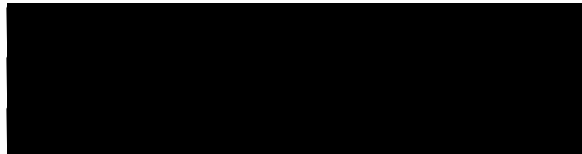
This thesis assembles and tests a model that identifies the antecedents of agent-principal relationship establishment using structural equation modelling, demonstrating clearly that constructs are layered and do not appear as existing literature claims. This thesis therefore fills a gap in existing literature that fails to adequately acknowledge and integrate Festinger's (1957) theory of cognitive dissonance and Morgan and Hunt's (1994) element of trust in relationship establishment.

By understanding how the antecedents of relationship establishment interact and influence the outcome of an attempt to establish an agency relationship, practitioners are shown clearly where current practice is flawed in a way that enables them to improve their business practices.

These findings stretch beyond the context of real estate and are relevant to business generally. Further research is needed to establish the extent to which the relationship establishment process changes with agent and principal experience over time. Such research will provide direct insights into the role of an agent and the dynamics of their operational environment. If this is possible, then further efficiencies and financial results can eventuate for agents, agencies and principals.

## STATEMENT OF ORIGINAL AUTHORSHIP

In compliance with the requirements relating to admission and submission of a thesis for the degree of Doctor of Philosophy of Monash University, the following declarations are made. I hereby certify that, unless otherwise stated, the work that follows is mine and has not been submitted for a higher degree to any other institution or university.



Elizabeth Anne Hemphill

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# CHAPTER 1

## INTRODUCTION TO THIS DISSERTATION

Recent personal experience of a property sale, and then purchase, has left me wondering what the value of the arrangement was for the real estate sales agent involved and whether this is substantially different from the value I experienced from my relationship with the agent. In preparing for a property sale, I engaged in the process of selecting one real estate sales agent from a number of local agents to represent my property in the market and locate a buyer. By establishing an agent-mediated agreement between the selected agency and myself, as a property vendor, I was the agent's principal. This agreement resulted from my evaluation of a number of agent's submissions that clearly documented a recommended course of action for selling my property. All submissions included components of advertising schedules, comparative house sale results and expected time, price and method of sale. Resulting terms of the agreement into which I entered were finally considered to be acceptable to both the agent and myself in order for the agent-principal relationship to be established.

My most recent experience as principal involved accepting a purchaser's early offer one week after the agent-principal relationship commenced, saving me six thousand dollars

in advertising costs as all other scheduled advertising was withdrawn. Accepting this offer of purchase meant I had the opportunity to re-instruct my agents. Despite experiencing the role of property vendor at least three times previously, I did not realise that as a principal, such renegotiation of an agency agreement was an option.

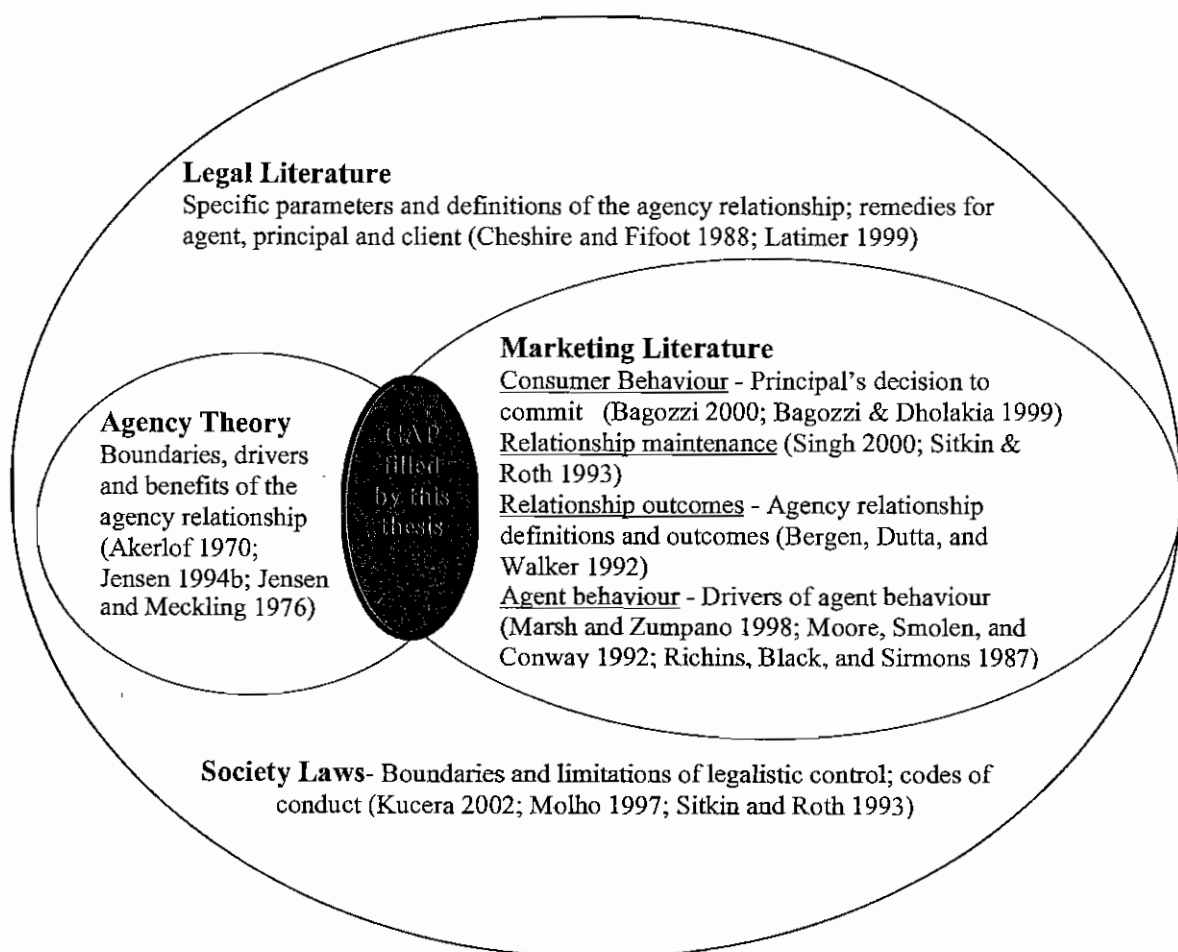
The agents with whom I was dealing would perhaps have obtained some benefit from further market exposure should the originally agreed agent-principal terms have continued, at least in the short term. This brought me to question the relationship with my agent that allowed the original agency agreement to be renegotiated which led to wondering about my understanding of the agent-principal relationship into which I originally entered.

An agent-principal relationship establishment is clearly a marketing issue as there are critical elements of exchange between a customer and a seller. Marketing related examples of agency relationships include:

- A specific product manager engaged by a manager to sell a product to a customer demonstrating issues of agency relationships over time (Bergen *et al.* 1992);
- Automotive repair services in which there are a number of levels of suppliers, customers and service providers demonstrating issues of multi-level agency relationships (Mishra, Heide, and Cort 1990); and
- Specific sales representatives acting as agents of their organizations demonstrating issues of sales force management over time (Kraft 1999).

However, the agent-principal relationship is not a simple marketing issue because society's laws and government have provided a particularly active legal context for real estate agent-principal arrangements, which impacts on all areas of the relationship. For this reason this thesis adopts a holistic approach of examining agency relationships from multiple perspectives. The figure below demonstrates where the gap in existing literature is and the following discussion describes how this thesis will make a contribution by filling this gap.

**Figure 1 Issues and controls of agent-principal relationships**



The authors noted in the figure above have made important contributions to very specific areas and these will be completely explored in the literature review in Chapter Three. At this point though, it is important to recognise the complex environment within which an agent attempts to establish an agency relationship with a principal and that issues of agent-principal relationships fall within the scope of marketing with overlaps into other areas.

Using marketing definitions of the agent-principal relationship as a leverage point, this thesis explores what it takes to establish such a relationship and examines why this is not obvious in existing literature, to make a substantial contribution to knowledge. From the marketing literature, an agent-principal relationship exists when an agent is engaged by a principal to undertake some action on behalf of that principal (Bergen, Dutta, and Walker 1992).

This thesis will focus on real estate agents to examine agent-principal relationship establishment for the following four reasons. Firstly, this is a commonly occurring agency experience because property sales (and purchases) involving real estate agents require establishment of an agent-principal relationship for technical reasons detailed further in Chapter 2 and Chapter 3 of this thesis. Secondly, this is an agent-principal relationship in which people generally have multi-agent experiences as they sell houses and property at different points in their lives. Thirdly, generally people who have engaged in such agent-principal relationships (both as agents and as principals) readily share information about their experience. Finally, this relationship is visible to all those

in a real estate market, whilst the specific process of agent-principal agreement establishment is not.

### **Specific issues of this research**

Some questions that help to identify the key issues for this research are:

- At what point is the agent-principal relationship established?
- What are the determinants of this agent-principal relationship establishment?

And

- Why are these determinants important?

According to Hunt (1991), answering this “why” question will lead to answering a “what will happen if” question that will provide a basis for considering other questions about relationship establishment attempts (Hunt 1991, Page 50). These include what would have been the impact on the relationship establishment attempt outcome if the agent behaved differently; or, if I had not agreed to the agent’s terms and conditions as a vendor in the development of the agent-principal agreement; or, if the process had been steered in a different direction?

This chapter will proceed by identifying the precise point of relationship establishment in an agent-principal relationship; defining the specific market to be studied; and developing an argument that will be tested empirically. Popular contemporary works are used in this thesis to illustrate, explain and support the arguments presented. Key terms, including ‘*agent-principal relationship*’, ‘*agent*’ and ‘*principal*’, are defined in

Chapter 2 to help communicate what is written to the reader. But the roots of the thesis come from fundamental principles that will be explained in depth in the following literature review in Chapter Three. The contribution this thesis makes is based on context specific research because of the method used to drill down through generalised literature and theory to a specific context.

This research will bridge a gap in both marketing and legal literature by showing how agent-principal relationships are established rather than focussing, as existing literature does, on the effects of those relationships.

### **Real estate as an example of agent-principal agreements**

My original interest in the real estate agent-principal agreement came from personal experience as a property vendor, but initial investigations suggest two things that are in fact much more important. Firstly, the need for real estate agent-vendor agreements is likely to continue to exist; and secondly, the agent-principal relationship between real estate agents and vendors is not unique. Perspectives easily found in marketing literature examining agent-principal relationships are described in the table below.

**Table 1 Obvious perspectives of the agent-principal relationship**

<b>Observed real estate perspective</b>	<b>More complex real estate perspective</b>	<b>General marketing perspective</b>	<b>General agency theory</b>
Vendor	Agency	Manager	Principal
Agent	Agent	Salesperson	Agent
Purchaser	Vendor	Customer	Client
Richins, Black, and Simons (1987)	Miceli, Pancak, and Simons (2000)	Bergen et al. (1992)	Jensen and Meckling (1976)

But, so that we do not get confused, we need briefly to remember that an agent can establish a number of relationships in the course of business. The agent-principal relationship in which the principal is a property vendor purchasing the services of an agent is the one we are investigating. It is important to acknowledge that these real estate agents also are involved in an agent-agency relationship as well as the mediation of a relationship between a seller and a buyer. In the case of real estate, an agent functions with the vendor as their principal and also with the agency as their principal as a double agency relationship similar to that described by Mishra, Heide, and Cort (1990) in their examination of complex multi-level agency situations in traditional sales examples.

That real estate agent-principal relationships mirror generalised readily observable agency relationships reflecting the marketing perspective of simple agent-principal relationships reveals the opportunity for this research to make a substantial contribution. To date investigation of the agent-principal relationship establishment process has not yet been done.

In attempting to secure agency relationships, agent are subject to a principal's consideration set that is made up of specific and unique information which determines the principal's evaluation and choice of agent (Roberts and Lattin 1997). In the case of real estate this includes consideration of other agents and personal selection criteria that influences the outcome of a relationship establishment attempt. But this thesis is not about how these consideration sets are built, examining instead establishment of the agent-principal relationship on the premise that each potential principal already has a

specific set of agents in consideration from which any single agent, or agency, may be considered.

This thesis studies Victorian residential property sales because agents benefit significantly from their part in an agent-principal relationship in the Victorian residential property sales market. Reasons for this are as follows.

- At the end of the June Quarter 2002, Victoria contained 24.78% of the Australian population (an increase of 1.3% over the previous year) (Australian Bureau of Statistics 2002). Victoria was one of the only two states in Australia that experienced interstate migration gains in this same period (Queensland =29,000 persons & Victoria=6,200 persons) (Australian Bureau of Statistics 2002). Such internal migration is in fact the main factor changing the distribution of the Australian population (Australian Bureau of Statistics 1998/99). This confirms an increasing demand for the Victorian real estate agent services on the basis that everyone needs somewhere to live.
- The Australian real estate services industry income has increased by 19% since 1995-96, with 7,589 private sector businesses generating \$3,903 million in income in the year ending June 1999 (Australian Bureau of Statistics 1999). Of this, the Victorian real estate industry income accounted for 25.8% of total real estate industry income in this period. With only 21.5% of the total industry employment and 24.8 % of total wages and salaries for the industry for the year ending June 1999 (Australian Bureau of Statistics 1999), the Victorian real estate industry functions with a level of efficiency and productivity greater than other states.

- Property sales accounted for 62.1% of Victorian real estate industry income in the year ending June 1999 (5% more than nationally), with 90% of this income from residential property (Australian Bureau of Statistics 1999). Agent-principal relationships in Victoria are of increasing benefit to local agents because of the income potential from these agency relationships.
  
- A buoyant Victorian property market exists, described by one journalist as *“Booming...[with] auction results reach[ing] better than anticipated prices and vendors generally achieving surprising gains on reserve prices”* (Petty 2001). Median house prices in Victoria increased at a greater rate than other Australian states in the year ending March 2001 ([http://www.reiaustralia.com.au/media/media\\_releases/mf\\_march.htm](http://www.reiaustralia.com.au/media/media_releases/mf_march.htm) 2001).
  
- The Victorian real estate industry is volatile and extremely competitive. There is an absence of any single company dominating market activities but instead, 70 % of Victorian real estate businesses employed less than ten employees in the year ending June 1999 (Australian Bureau of Statistics 1999). The competitive nature of the industry can be seen by five branches of a large Victorian real estate organization being placed into receivership in one of the highest performing regions. The company handled \$650 million sales, had \$2 billion of assets under management but posted a loss of \$653,000 in the year to June 2000 (Wood, McIlwraith, and Leung 2002). More recent financial data are not available.

Whilst internal migration represents one source of demand for real estate agent services as people relocate between states in Australia, additional demand for real estate agent

services comes from people relocating within a state, town or city. Real estate agents benefit from their agent-principal relationships as they seek to derive income from property sales in a competitive industry based on contracted levels of productivity and performance. Agents' income in Victoria therefore increased more than other states because agent commissions depend on these house sale prices. The opportunity for this research is therefore best in Victoria with its efficient operations, competitive industry, increasing sales and increasing revenue.

### **The agent's interest in relationship establishment**

This section confirms briefly, from discussions with agents in the field, that Victorian real estate agents have a continuing interest in establishing agent-principal relationships and how these relationships are established. Although quotations are provided these are not cited specifically because at this point of this research a general demonstration of how these people confirm the agent's interest in agent-principal relationship establishment is that is desired. Chapters 4 and 5 detail further how these data were collected offering a more detailed account of agent interests and opinions.

Residential property sales agents do derive income from their agency agreements as they aim to "*sell houses on time, with minimum hassle, for a profit*". This is not surprising but establishes a case for examining the process of relationship establishment based on the agent's interest in that relationship. They do this by establishing a formal relationship with a principal because agents are unable to sell a property before they have a documented agreement with a vendor that gives them the right to do so.

They get this privilege by successfully submitting to a potential principal a marketing proposal that is designed for the principal's property. These submissions sometimes include even things the agent may personally dislike - *"we have to offer Internet advertising even though we think it is a waste of time because of the time it takes for a screen to download"*.

Performance of the operationalisation of these submissions varies from property to property and is either evaluated by agents *"counting the number of direct enquiries from an advertising source"*, or used without specific evaluation because *"there is no anecdotal evidence available for advertisement measurement"*, *"measures have no direct value"*, and *"too few enquiries for individual properties are sourced from specific advertisements"*.

The implication is that there might be some specific reason for including individual components in an agent's submission to a potential client. These issues are not explained in depth here because they will be pursued further in subsequent sections of this thesis. For now though, a logical link between agent income generating activities and the agent-principal relationship is described.

These agents claim to be concerned about business image, making budgets (sales targets, rent roll budgets, and business goals), sales performance (prices), control of the business (if the agent owns the business), word of mouth referrals (from looking after a vendor), making money (income versus expenditure), and communicating with honesty,

although one agent qualified this by specifying that agents generally were more honest with clients than other agents.

By focussing on the process of establishing these relationships, we can examine the agent-principal agreement and search for all the determinants of this agreement. Agents include things in a submission to a potential client that result in an attempt to establish an agent-principal relationship from which an agency agreement may, or may not, result. Therefore we can investigate which of these are determinants that contribute to the outcome of the process, which things are important and why these function as they seem to. The next section will summarise the scope of this research so that the thesis can seek to find some answers.

### **Scope of this research**

This thesis examines how agents and principals get together using Victorian real estate agents for all the reasons presented in the previous sections. The most important of these are:

- The occurrence of agent-principal relationships with property transactions involving real estate agents;
- The visibility of the agent-principal relationship to all those in a real estate market; and
- The complexity of the legal context within which the real estate agent-principal relationship functions.

This thesis will focus on the success, or failure, of Victorian real estate agents' submissions to potential vendors as they seek to establish agent-principal relationships by examining the agent's input to the process of establishing a relationship with a principal. This research examines whether there is a difference between any single agent's input in a successfully established agency agreement and an attempt by the agent to establish an agent-principal relationship that was unsuccessful, rather than the vendor process of evaluation.

If there is no difference between successful and unsuccessful agent attempts to establish an agent-principal relationship then the outcome may not be something the agent can do anything about. If differences do exist between relationship establishment attempts, then why would an agent make a submission to a potential client that does not maximise the probability of relationship establishment? To consider such a question it is necessary to compare successful submissions with unsuccessful submissions rather than one vendor's decision against another's.

It is the aim of this thesis therefore to explain the generalised procedure of establishment of a real estate agent-principal agreement in which a vendor is the principal, and assemble a model for empirical testing. Hunt (1991) argues that to contribute to the body of marketing theory in existence, a sound explanatory model needs to be expected, pragmatic, intersubjectively certifiable and have empirical content. To do this it is necessary to show that the phenomenon explained was expected, the research is doable but not too restrictive, and explanatory structures are empirically testable (Hunt 1991).

While positive explanations would seek to describe how agents determine their submissions to potential clients, normative explanations would seek to instruct agents how to make these decisions. The following literature review reveals a number of positivist studies of real estate agent practices. However, existing studies seem to inadequately address the process adopted by agents for establishing agent-principal relationships and there are few relevant normative studies in existence. These will be discussed further in the literature review.

Complexities of agent-principal relationship establishment that arise from issues of marketing transactions, legal rules and government interventions mean that this thesis makes an important contribution by filling the existing gap in existing literature by defining the antecedents of agent-principal relationship establishment and why these function as they seem to. This thesis demonstrates for real estate research that an agent-principal relationship develops as a result of a process that involves a number of stages and has a number of determinants.

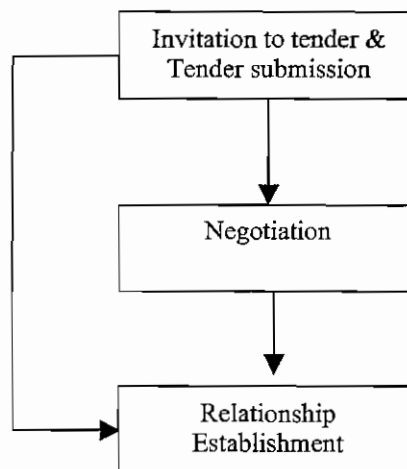
*The first stage is the invitation to tender for the agent-principal agreement in which the agent proposes relationship specifications to a potential principal.*

*The second stage is negotiation with a potential client of submitted terms of the relationship so that an agent-principal relationship can be established by establishing a set of mutually agreeable terms.*

*The third and final stage is the establishment of the agent-principal relationship in which some aspects of the relationship may in fact be renegotiated after commencement of that agreement.*

Graphically this sequence is represented by the figure below.

**Figure 2 Stages of relationship establishment**



Should a set of agreeable terms exist without negotiation then the path between tender submission and relationship establishment is obviously direct. A number of important questions stem from this. These are:

- Who drives agent-principal relationship establishment?
- To what extent does the agent, or the principal, control any discounting or adjustment of the agreement between an agent and client?

- At what point are components of the relationship negotiable, or renegotiable?
- What impact does all this have on whether a specific agent strikes an agreement with a specific principal?

These questions serve to direct the research and offer an opportunity for the research to contribute to both agency theory and practitioners as we examine establishment of agent-principal relationships.

### **Contributions this dissertation makes to theory**

This thesis contributes to theory by examining how the agent-principal relationship comes into existence, and the dynamics of this process that result from competition, in a specific industry that is heavily bound by government and legal controls. By investigating the agency relationship in the real estate industry, the findings may then be generalised to other agency agreements because this is the generalised approach adopted in marketing literature recognised by research theorists such as Hunt (1991).

Existing marketing literature fails to adequately address relationship establishment when the principal in fact is a form of client for which the agent must compete, such as the real estate sales agent and property vendor relationship. Most marketing studies currently use either:

- Examples of agent-principal relationships in which managers (but not necessarily business owners) are the agent's principal (e.g. Kraft 1999); or

- Examples of agent-principal relationships in which clients are principals but with a focus specifically on maintaining relationships rather than establishing those relationships (e.g. Morgan and Hunt 1994; Singh 2000).

Questioning existing theory that claims generalisability, such as Jensen and Meckling (1976) and Morgan and Hunt (1994), this thesis examines fundamental agency theory in a real estate context and expands these findings to more generalised agent-principal relationships by assessing how agent-principal agreements come into being. This offers a new perspective.

### **Contributions this dissertation makes to practitioners**

By identifying the components of the agent-principal relationship establishment that determine whether a relationship is established, agents may be able to more effectively prepare their submissions to potential clients and increase their rate of success. In the real estate example this could mean that agents better design property marketing campaign proposals to increase the likelihood of an agent-principal agreement, or that they even more effectively negotiate the terms of the relationship with the client.

Specific overlay of the findings from research that identifies, and examines antecedents of relationship establishment, offering practical recommendations to provide detailed guidance for both real estate agents and other agents as they seek to refine their operations and increase profitability in a competitive business arena.

### The general research question of this dissertation

Focussing on Victorian Real estate agents, this thesis examines agency principal relationship establishment between a real estate agent and a property vendor. The research therefore asks on a general level, two questions.

- *What are the determinants of relationship establishment in an agent-principal relationship?*

*And*

- *What impact do these have on the establishment of any specific agent-principal relationship?*

## **CHAPTER 2**

### **DEFINITIONS OF TERMS USED IN THIS DISSERTATION**

The purpose of this chapter is to provide the reader with an easily accessible reference guide to key concepts used throughout the thesis and to specify for future reference, exactly what we mean from a marketing perspective, and at a more specific real estate level.

Definitions from marketing literature are used in this chapter. In the next chapter it is shown how, and why, this perspective differs from other perspectives to highlight why there is an opportunity for this thesis to make an important contribution to knowledge. It is important to remember at this point however, that this chapter is not about reviewing all levels of literature but providing an easy reference guide for readers.

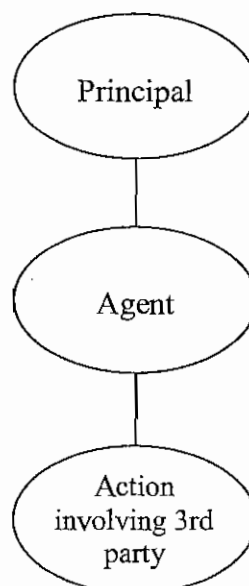
Existing legal requirements for licensing of agents, detailed by authors such as Barron (1999); Cheshire and Fifoot (1988); Laws of Australia 2002a; and Moore, Smolen, and Conway (1992), necessitate minimum levels of agent education (Psi-Delta 1999; Ryder

1998). This training is only available to local agents through government approved training institutions such as Swinburne University of Technology TAFE (Technical and Further Education). It is therefore reasonable to assume that people establishing agent-principal relationships will have the necessary course units as a basis upon which they operate. For this reason the course manuals are a valid initial reference for some important definitions. These are referenced as SUTa (Swinburne University of Technology TAFE 2001a) and SUTb (Swinburne University of Technology TAFE 2001b).

### **Agency relationship**

An agency relationship exists when an agent is engaged by a principal to undertake some action on behalf of that principal (Bergen *et al.* 1992). From this definition the relationship can be shown graphically in the figure below.

**Figure 3 Elements in an agency relationship**



In the real estate context an agent-principal relationship exists between a vendor and sales representative, or a buyer broker and purchaser, or an agency and a sales representative (*Miceli et al. 2000*).

### **Agent-principal agreement**

The agent-principal agreement is:

- Established based on a mutually agreed upon set of rules (Morgan and Hunt 1994);
- Negotiated between principal and agent (Bergen *et al.* 1992);
- Legally binding from the start (Nooteboom 1996);
- Managed over time out of necessity (Bergen *et al.* 1992); and
- Fraught with relationship management issues that are influenced by satisfaction, trust and commitment (Garbarino and Johnson 1999).

In the case of real estate, a property seller normally becomes an agent's principal when the seller engages that agent to locate a buyer (acting as an intermediary in the ensuing transaction). Before selling properties, agents first acquire the owner's written permission to market the property (Ryder 1998). This relationship is enforceable by law because of the nature of the authority invested at the point of relationship establishment.

In the real estate context this agreement is between a real estate agent and a principal. A Real Estate agent most importantly is:

*“someone who engages in the business ...on behalf of another person ... of administering the affairs of a real estate office, own, operate or manage a real estate agency business...licensed to...perform normal agent functions such as acquiring listings, providing market appraisals and estimates, negotiation by phone or personal interview any aspect of a sale or leasing transaction”*  
(SUTa).

**Table 2 Operators in the Residential Property Sales Exchange**

<b>Operator</b>	<b>Definition</b>
Real Estate Agent	A person who is lawfully authorised to act on behalf of a principal to perform certain specific activities which affect the principal's rights and duties in relation to a third party. The estate agent should have written authority from the principal to act on his behalf.
Agent's Representative	Any person who performs for that estate agent any of the functions of an estate agent.
Principal	The person from whom the estate agent receives instructions and on whose behalf the agent acts...usually the vendor...but may be a prospective buyer.
Vendor	The person who wishes to sell [their] property.
Purchaser	The person who acquires title to a property or an interest in a property (property buyer).

Source: Swinburne University of Technology TAFE 2001b.

This table shows that a real estate agent is normally engaged by a seller to locate a buyer for their property and that there are a number of people involved in a real estate sales transaction both pre- and post- agent-principal relationship establishment.

Details of the agency agreement are documented in a listing authority as evidence of an agent-principal relationship in the case of real estate. This agreement documentation is the result of a submission to a potential principal that includes both media and non-media advertising recommendations (SUTa). Media advertising include local newspapers, magazines, classified advertisements, one-page flyers and Internet advertising. Non-media advertising include word-of-mouth referrals, door knocking and cold calling, shopfront displays, open for inspections, and display boards (SUTb). This means that in some way:

- Agent recommendations may influence the establishment of an agreement between the agent and the client; and
- These documented terms and conditions constitute the agency agreement (SUTa).

### **Agent-principal relationship establishment**

Establishing the agent-principal relationship is a process of establishing a legally binding agreement between agent and client/principal. This process is one “*in which agents sell themselves and the firm to convince a potential principal (vendor) of competence and professionalism*” (SUTa, Page 3). This is very important to this thesis because it determines whether the agent-principal relationship is established and we are examining the process of establishing these relationships by looking at differences between successful and unsuccessful attempts.

### **Citation conventions used in this thesis**

Data were collected from many sources and are referenced in the following manner.

**Table 3 Citation conventions for data from discussions held**

<b>Source of data</b>	<b>Referencing</b>
1. Australian Real Estate Industry Association Interview.	[Australian Industry Association]
2. Victorian Real Estate Industry Association Interview.	[Industry Association]
3. Real estate agents were the respondents that provided data for questionnaires.	[Respondent]
4. Agents participated in a focus group to provide qualitative data during a 90-minute group discussion lead by two moderators.	[Agent Focus Group]
5. Commercial market research commissioned by Woodards Pty Ltd provided unpublished data for a focus group of real estate clients.	[Client Focus Group]
6. Other real estate agency industry employees.	[Industry Expert]
7. A number of depth interviews with Real Estate agents and agency owners of 60 – 90 minutes were conducted.	[Agent x]
8. A number of casual interviews with Real Estate clients of 20-40 minutes were conducted.	[Client Interview]

## **Glossary**

<b>Term</b>	<b>Meaning in this thesis</b>
REA	Relationship establishment attempt
SEM	Structural equation modelling
Online advertising	Collaborative advertising other than 3 <sup>rd</sup> party listings and own web sites e.g. <a href="http://www.reiv.org.au">www.reiv.org.au</a>
3 <sup>rd</sup> party listings	Classified property advertisements on a third party website e.g. <a href="http://www.realestate.com.au">www.realestate.com.au</a> , <a href="http://www.propertyview.com.au">www.propertyview.com.au</a> , <a href="http://www.property.com.au">www.property.com.au</a>
Own web site	Real Estate agency specific web site with functionality in addition to property listings such as agent contacts and rental services e.g. <a href="http://www.edwards.com.au">www.edwards.com.au</a> , <a href="http://www.hockingstuart.com.au">www.hockingstuart.com.au</a> , <a href="http://www.ljhooker.com.au">www.ljhooker.com.au</a>
The AGE	State-wide newspaper with Property specific classifieds boasting the largest readership of Saturday classifieds
Leader Newspapers	Municipality specific newspapers with local distribution only, primarily black and white newspaper style publications e.g. Nunawading Gazette, Boroondara Bulletin
Flyers	Single Page brochures handed out at open for inspections or mail drops
Other Weekly publications	Colour regional magazine style publications e.g. Melbourne Weekly, Property Profile, MG
Boards	On site publicity boards divulging key advertising information, sale method and details, agency and agent contact details

## **CHAPTER 3**

### **LITERATURE REVIEW**

The purpose of this chapter is to review existing literature on agency relationships to define the nature of these relationships and identify antecedents of agent-principal relationship establishment. The previous chapter established some definitions for referencing to assist with communicating the findings from the literature.

This chapter of the thesis proceeds in three stages. Firstly, it will be shown that the foundations of agency agreements do not differ between marketing and legal literature and are firmly rooted in agency theory. Secondly, it will be shown that the point of agency relationship establishment is observed to be extremely visible and clearly defined, although not particularly well represented, in this literature. Finally, because the process of agent-principal relationship establishment is relatively untouched across these bodies of literature, different disciplines (with different perspectives) will be used to identify the antecedents of relationship establishment. In this section, texts, seminal papers and other literary perspectives encompassing a wide range of subject areas

contributing to, or just commenting on, determinants of agent-principal relationship establishment are used.

### **The roots of agency agreements**

To demonstrate the divergence in treatment of agency relationship this section will firstly define what this thesis means by agency theory and then identify clearly for the reader any differences between marketing and legal literature that seeks to define the point of agency relationship establishment.

### **Agency theory**

Agency theory reveals that an agency relationship exists with a

*“contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. The principal limits divergence with incentives”* (Jensen and Meckling 1976, Page 6).

To this end, real estate agents are in an agent-principal relationship with authority agreed in the terms of the agreement.

However, agency theory further explains why and how the agent's behaviour is controlled. Summarising Akerlof (1970) and Jensen and Meckling (1976), post-relationship establishment control of the agent includes:

- A principal's control of an agent (with agreed monitoring detailed in terms of the agency agreement);
- An agent's imposed self-control (with any aversion to unnecessary expenditure); and
- Industry imposed controls on the agent (from interests in minimising losses to both the agency and principal).

These controls are all evident post-contract establishment and represent forces to ensure that appropriate levels of care are taken by those in the relationship to avoid a condition known as moral hazard.

The other important condition exerting control in an agency relationship that exists pre-contractually, is known as adverse selection. This is based on the costs and flows of public information as it influences selection of the agent by the principal, or further in the case of encouraging the third party in the agency relationship to commit to a relationship with the principal.

Restricted information flows prior to relationship establishment are dealt with in marketing literature (e.g. Moore et al. 1992) by discussion of adverse selection and in legal literature (e.g. Latimer 1999) by a host of regulations such as obligatory disclosure

of representation and representation of only a single principal. The implication for this thesis is that establishing an agent-principal relationship is a controlled process bounded by legislative and market controls. Thus agents, potential clients, industry and regulators are all drivers of agent-principal relationship establishment. Agency theory however clearly specifies that information and control of information exchange is the key component of agency relationship establishment (Akerlof 1970; Jensen and Meckling 1976).

Unfortunately, the literature does not converge here because reasons that agents enter into negotiation of terms of a relationship in which they do not have control are not clearly defined.

### **The legal perspective**

The roots of agency agreements are well established in both theoretical and legal works by authors such as Cheshire and Fifoot (1988); Jensen and Meckling (1976); Latimer (1999); and McGarvie, Pannam, and Hocker (1966). The legal perspective of an agency agreement does not differ substantially from the marketing perspective discussed in the next section because it includes the following:

- An authority to establish a legal relationship between a principal and agent created by consensual agreement to which they alone are parties (McGarvie et al. 1966, Page 739) that may include a binding agreement between a principal and a third party (Latimer 1999, Page 846). *"Agents are entitled to use the powers given to them by the contract of agency...Exercise of those powers will bind the principal"* (Latimer 1999, Page 846);

- A single point of contract at which services are both specified and committed for agreed remuneration between an agent and a principal (Latimer 1999, Page 837);
- No transfer of ownership between agent and principal (Commonwealth Law Report 1958, Vol. 644); and
- Some form of invitation to tender, some form of price agreement and negotiation, resulting in a principal's promise to pay for services promised by the agent prior to contract establishment (Laws of Australia 2002b; McGarvie *et al.* 1966).

Looking specifically at Victorian real estate agent authority forms we can see how this works in practice, reflecting requirements of the Victorian Real Estate Act (1980, Version No. 077, Amendments dated January 1, 2003). The table below shows how these forms and particular aspects of agency appointments, reflect important legal concepts.

**Table 4 Details of the real estate agent-principal agreement**

<b>Structural point from standard agent authority documentation</b>	<b>The agent-principal agreement...</b>
Point 1 - signed by the vendor & agent	Is agreed prior to commencement of the contract
Point 2 - particulars of appointment, authority	Is subject to some form of invitation to tender
Point 3 - vendor informed of opportunity for negotiation	Involves some form of price agreement and negotiation
Point 4 – vendor to pay specified rate for services detailed in accompanying report (submission document)	Results in a promise to pay for services promised
Point 5 – reserve price to be determined prior to auction (post authority agreement)	Involves a separate price negotiation because of the existing agent-principal relationship that prevents transfer of ownership from the client (Principal) to the agent that would mean the agent could make any such pricing decisions without consultation.

Source: Victorian Real Estate Agent Authority Forms (Appendix 1)

The final point (Point 5) in this table is the strongest argument for using the real estate example to illustrate the agent-principal relationship establishment. This table shows that a real estate agent is engaged in an agent-principal relationship and because clients (as principals) retain control of the agent they are in fact ensuring this relationship continues. To move outside this and allow agents to make their own decisions, ownership has to pass from the client thereby breaching agency definitions so that an agent-principal relationship no longer exists.

The agent and client complete these forms on one side, with the reverse being pre-printed definitions for clarification of the terms of agreement. The reverse side of these forms emphasises terminology definitions, agent authority constraints including the retained decision making power of the vendor, what the agent is expected to do, obligations of the vendor to pay and consequences of not paying, and the opportunity to negotiate price separately after the agreement is confirmed. By legal definitions, real estate agents are agents with their powers stated and established by agreement with a principal.

### **The marketing perspective**

Within this tight legal domain, agent-principal relationships hinge upon a number of critical points in the agency agreement described in marketing literature that includes:

- Mutual agreement between agent and principal (Morgan and Hunt 1994);
- Different tiers (levels) of relationships between agent, agency and client (Garbarino and Johnson 1999) or organization, employee and client (Singh 2000);
- The necessary inclusion of a third party at specific points of these relationships (Mishra *et al.* 1990); and
- An element of time (Kraft 1999; Morgan and Hunt 1994).

But this literature does not adequately describe processes used to formalise agent-principal relationships, or processes used to initially establish these relationships. Establishment of these relationships and the value to both the agent and client of this relationship therefore requires further investigation by new research. For example,

Singh (2000) examined how mechanisms work together over time to build long-lasting customer bonds but failed to acknowledge that if no relationship is established then there is no chance of any long-lasting bond. This author does reveal elements of agent-principal contracts like the employment contract between an organization (as principal) and an employee (as agent). Generally though, existing literature fails to consider the process of initial relationship establishment as a critical component of longer-term marketing issues.

Two more focussed studies, that have implications for agent-principal relationship establishment, include papers by Bhattacharya, Devinney, and Pillutla (1998) and Kahneman, Knetsch, and Thaler (1986). These works also fail to deliver necessary insights about the specific real estate agent-principal relationship because they focus only on the product, or the principal, or the agent, and not the obvious interaction between the three.

Research by Kahneman et al. (1986) calls for outcome-based incentives to manage framing effects perceived by the customer in order to establish and maintain a relationship with that customer. However, this paper does not focus on establishment of the agent-principal relationship because, in their work, the agent is controlled by the organization. A consequence of this is that the agent may not be aware of, or responsible for, the environment within which their organization, product and performance are being viewed (e.g. influences of other agent submissions that contribute to the framing effects within an agent submission competes and is assessed). Real estate agents are different because they do contribute to this, with any competitive submissions a principal might acquire.

Furthermore, research by Bhattacharya et al. (1998) observes the importance of establishing trust as a function of consequences and outcomes of an agency relationship over time. These authors also fail to address the point of relationship establishment that results from selection of an agent before any relationship can exist over time.

To service the general research question of this thesis, and identify how agent-principal relationships are both formalised and established, the next section demonstrates how the legal and marketing perspectives diverge in their treatment of what Morgan and Hunt (1994) describe as a “*mutually agreeable set of relationship terms*”. This thesis fills a gap in marketing literature that currently adopts economic and legal definitions of agent-principal relationship terms to overcome the problematic absence of agent-principal relationship establishment studies.

### **A summary of the two perspectives**

Discussing specifically the similarities and differences between legal and marketing literature this section will clarify that definitions of an agency relationship do not differ fundamentally, but that marketing literature more specifically reveals the process of relationship establishment.

On a general level, similarities between legal and marketing literature include documentation of agency terms, agreement prior to relationship establishment, no specific process of relationship establishment, agent interest in a third party; and remuneration for the agent for their part in the agent-principal relationship. Differences between legal and marketing literature include consequences of relationship

establishment, remedies for relationship breakdown and a discussion of the process of relationship establishment. These differences and similarities have been exposed in previous sections of the literature review and will be brought together now.

Both bodies of literature similarly emphasize the necessity for agreement and documentation in relationship establishment although legal literature more specifically explains the process of formalising this relationship through documentation. For example, federal legislation strongly urges the instigation of adequate documentation of agency agreements (Supreme Court of The Australian Capital Territory 1990) to protect the interests of those in the relationship. Legal literature indicates that oral agreements have little value as alterations to written agreements (Cheshire and Fifoot 1988, Page 198, Section 546).

Marketing literature does not contradict legal definitions of the revenue driven agency agreement (Latimer 1999). When authors such as Marsh and Zumpano (1998), Richins et al. (1987) and Yavas, Miceli, and Sirmans (2001) observe that real estate agents were driven by pursuit of financial restitution through commission payments for agency revenue, they were really talking about the fundamental business of the agent-principal relationship. The purpose of an agent is to earn an income out of a commitment to a specific principal.

However, there is a problem in the marketing literature that discusses agency relationships because of the interpretation of the interests served by the agent. When Barron (1999) claims real estate agents receive commission for connecting buyers with

sellers he implicitly questions the agent's ability to act on behalf of a party other than themselves. In this instance the author is suggesting that the agent serves himself rather than the principal.

This pursuit of agent self-interest is the concept examined by Jensen (1994) and Jensen and Meckling (1976) with moral hazard and adverse selection in which various parties in the agency relationship pursue self-interest. The gap between Barron (1999) and Jensen and Meckling's (1976) views rests on definition of terms of a specific agency agreement rather than definitions of agency-relationship establishment processes. Singh (2000) resolves this through his treatment of key elements of relationship maintenance. If '*agents*' are not perceived to be acting '*appropriately*' by the principal then relationships will not be maintained (Sitkin and Roth 1993). Furthermore, legal redress is available to the principal (and agent) because of the requisite documentation in the agent-principal agreement Kucera (2002).

If a principal (vendor) wants the agent to function solely on their behalf, then this is just a matter of specifying this in the contract with adequate monitoring imposed. Marsh and Zumpano (1998) argued that real estate agents are not agents by fiduciary definitions because they really have interests in more than one party. But these authors lose sight of the legal definition of an agent in which an agent necessarily operates at least in the interests of themselves, their principal and some third party.

Whether vendors enter into a relationship with a specific agent only once, using perhaps another agent or agency at another time, is not as important at this point as the effects of

the vendor's previous agency relationship experiences. While relationship maintenance may not be the fundamental issue in the real estate context, accumulation of opinions from each real estate agency experience serves to influence perceptions and pursuit of self-interest and therefore the agency relationship attempt outcome.

A fundamental element of the definition of an agent is the absence of any transfer of ownership from the principal to an agent (Jensen 1998). In the case of real estate, a vendor retains the right to final refusal of buyer offers (SUTa). Marsh and Zumpano's (1998) argument that real estate agents are not agents is further flawed because real estate agents do not have decision making powers other than those documented in the agency agreement, do not acquire ownership of a property and do something on behalf of a the principal. Their point that the agent acts out of self-interest may be correct but this does not mean they are not '*agents*'.

This section has demonstrated that despite an element of self-interest, marketing and legal literature both acknowledge and offer solutions to temper the effects of pursuit of self interest. However, what can be observed from this literature that seeks to argue that real estate agents are not really agents, is that real estate agency agreements are fraught with contract specification issues. This does not change the definition of an agent. Nor does it mean that real estate agents are not really agents. These points mean that both the real estate agent and the vendor (as the principal) depend upon the establishment of the agent-principal relationship in order to make a property available for sale. These authors all fail to examine the process of relationship establishment so there is an opportunity here for this thesis to fill a gap in existing literature.

Although marketing literature seeks to explain agency relationships as an issue of trust, it fails to adequately address how to deal with the breakdown of a relationship, referencing only that lasting consequences are likely if agreed terms are breached (Sitkin and Roth 1993). The legal perspective is considerably clearer with remedies and opportunities for restitution firmly rooted in legal principles.

Perspectives from which this thesis examines agency relationship establishment are illustrated in on Page 1-3. This diagram also shows cognitive issues within each perspective that are considered most significant. From this emerges the observation in this thesis that all areas of existing literature similarly lack definition of the antecedents of agent principal relationship establishment. The next section examines further why this situation exists. What it takes to establish an agent-principal relationship is relatively unexplored but specification of what the relationship is so well accounted for.

The opportunity exists therefore for this research to examine the antecedents of agent-principal relationship establishment to correct the obvious weakness in both bodies of literature, whilst noting the strengths of each.

### **Specifying the agency relationship**

By examining the terms of a real estate agent-principal agreement this section will demonstrate that a real estate agent exists in a relationship with a client that is sufficiently specific for there to be little doubt that they serve a principal. These include

details like the level of authority invested in the agent by the principal and the opportunity to renegotiate agency terms. As a result, an agent-principal relationship has been established between an agent and a principal. The point of relationship specification is critical to the agency relationship and the table below shows why this point is so important.

**Table 5 Who, or what, limits what an agent can do**

<b>What an agent can do</b>	<b>What an agent cannot do</b>	<b>Decision maker (control)</b>
Advertise the property	Falsely advertise the property	Statutory Control Trade Practices Act
	Spend unlimited advertising dollars	Vendor Agreed budget in the Agent Authority
Introduce a purchaser to the property	Call in anytime unannounced, give out personal details of vendor	Agent Authority
Solicit an offer from a purchaser	Accept an offer on behalf of a buyer	Agent Authority
Release deposit moneys to vendor	With-hold funds from a vendor	Statutory controls & Agent Authority
Present an offer to a vendor	Change, or set, the terms of the sale	Agent Authority
Recommend a commission rate & selling expenses	Set the commission rate & selling expenses	Agent Authority
Recommend a sale method, time & date	Set the sale method, time & date	Agent Authority

Source: Exclusive Auction Authority 003, REIV 2000 and Exclusive Sale Authority 002, REIV 2000 (Appendix 1)

From this table we can see the importance of the agent authority documentation in controlling agent behaviour throughout the relationship. Important limitations of this fixed form documentation include:

- No option for post-relationship establishment alterations;
- No allowance for changes in the interpersonal aspects of the relationship;
- No allowance for the opportunity to renegotiate terms of the agreement; and
- No allowance for implementation of any subtle changes in the agent and client needs.

But as a point of contractual commitment (the agent authority) between the agent and the client this documentation establishes boundaries of the agent-principal relationship that will be more fully examined through the literature.

### **The structure of agent-principal relationships**

Terms of the agent-principal relationship are submitted to a potential client for agreement prior to relationship establishment (Benjamin and Chinlo 2000).

Consequently, the act of establishing an agent-principal relationship between a real estate agent and a vendor is a competitive process (Benjamin and Chinlo 2000; Ryder 1998; Yavas and Colwell 1995).

In the case of real estate, this submission includes advertising campaign recommendations as part of an agent's total submission to a potential client (SUTb).

Real estate agents in pursuit of an agent-principal agreement try to convince potential clients to sell their property, decide between competitive agent submissions and commit to an agent-principal relationship (SUTa). Kahneman et al. (1986) explain that this decision results from perceptions of fairness and that these perceptions differ between levels of the organisation, employee and customer. In the case of real estate, this means the agent-principal relationship establishment requires a specific perspective for a complete examination.

Looking now at real estate agent operations literature, three clear perspectives are evident. A description of each follows so that the perspective adopted in this thesis can be clarified. Existing perspectives in the literature include the buyer perspective, seller perspective and agent perspective.

### **The Buyer Perspective**

Empirical studies examining real estate transactions distinctly from the perspective of a property buyer include examinations of buyer service experiences (Nelson and Nelson 1995), buyer choice of dwellings (Earnhart 2001), unfavorability of buyer choices (Luce, Payne, and Bettman 2000), and how the buyer's agent tries to follow the values of the principal (Huber and Ariely 2001). Such a perspective exists because buyers *"deal with agents on a more personal level [than sellers]...seeking guidance...and counsel on the desirability...and quality of a locale and alternative homes"* (Marsh and Zumpano 1998).

This thesis has good reasons for adopting an alternative approach to relationship establishment because in an agent-principal relationship a buyer is not strictly the agent's principal for a residential property sale. Although the buyer is important to the exchange mediated by an agent on behalf of a principal, no ownership passes between a vendor and a buyer through an agent unless the agent and principal get to the point of relationship establishment. Focussing on the buyer would inhibit the capacity of the research to explore agent-principal relationship establishment.

### **The Seller Perspective**

The seller perspective is also well represented in the literature that serves as a reference source for the investigation of agency theory, buyer behaviour and information flows. Benjamin and Chinlo (2000) and Yavas et al. (2001) describe the true value of agents to vendors to be the agent's capacity to draw a pool of buyers to a contracted property for sale and achieve a binding commitment between buyer and seller.

In the case of real estate, this client is in fact the purchaser of the agent's services. Works by Bagozzi (1982; 2000), Bagozzi and Dholakia (1999), and Bagozzi, Gopinath, and Nyer (1999) clearly detail how a client will come to such a purchase decision. Within this solid body of theory, on the face of it the seller perspective suggests a client side study. But this would actually inhibit the ability of this thesis to explore the agent's part in the establishment of a relationship with a principal for reasons best explained by Mishra et al. (1990) who found that the client does not have access to organization procedures and process knowledge that are brought to the relationship by the agent and the agency. Most real estate research adopts either a buyer or seller perspective so this

research makes an important contribution by adopting a new but much needed perspective – that of the agent.

### **The Agent Perspective**

Extending this logic, an agent can only attempt to advertise, and sell, a property after the seller has committed to an agent-principal relationship. This is supported in the literature (Benjamin and Chinlo 2000). However, not much literature exists that examines the establishment of agent-principal relationships, let alone between a real estate agent and a vendor.

Only three useful studies were found to specifically deal with this process. Firstly, Moore et al. (1992) examine how a real estate agent acquires the right to represent sellers. That study retains a focus on buyer brokers rather than selling agents and is not generalisable because it does not reflect the distinct nature of the agent-principal relationship observed by Marsh and Zumpano (1998). Both Marsh and Zumpano (1998) and Moore et al. (1992) fail to thoroughly address relationship establishment. This thesis can therefore make a contribution by adopting an original perspective on a relationship that is established in the literature to be important but is inadequately explored.

Secondly, while measuring agency orientation, Richins et al. (1987) address benefits to an agency strategy from advertising components in a marketing campaign. These authors also maintain a focus on post relationship establishment activities. The phenomenon we are examining results in an agent-principal relationship rather than

follows the commencement of this relationship. Richins et al.'s (1987) study does not consider what it takes to establish this relationship in the first place.

Finally, while examining real estate agent strategies, Benjamin and Chinlo (2000) offer a succinct description of two alternative pricing strategies negotiated between a seller and agent. These authors overlook the contribution of these strategies to establishment of the agent-principal relationship by focussing on selling activities that cannot commence until a relationship has been established. By focussing their measurement on the probability of sale they overlook any specific importance of the probability of agency relationship establishment. The tendency of empirical studies to gloss over relationship establishment in an agent-principal relationship is possibly a result of the complexity of the process.

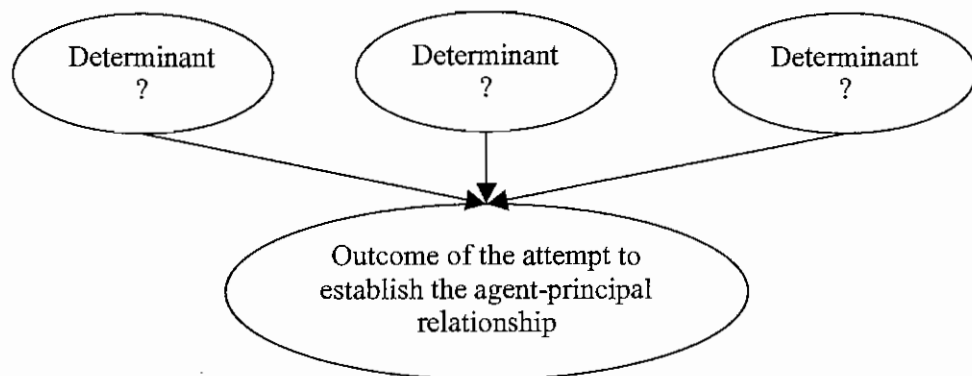
This research focuses on the point of establishing an agent-principal relationship as a necessary pre-condition to property sales because of previously noted gaps in existing literature. Understanding the process of how agent-principal relationships are established is important because without relationship establishment the role of a real estate sales agent ceases to exist in its current form.

Relationship establishment depends not only on actions but outcomes and consequences (Bhattacharya et al. 1998, Page 468), and is a process based on establishing trust between an agent and principal (Morgan and Hunt 1994). In the case of real estate, any single relationship establishment attempt can result in either a successful engagement of an agent (an established relationship between agent and client) or an unsuccessful agent

submission with no relationship established between the agent and client (whereby the potential client engages another agency, or does not engage any agency choosing to continue without an agent or do nothing further at this point in time). Kraft (1999) shows that the outcome from such a process acts as an incentive for performance in the process.

This research will therefore develop and complete the model below to reveal the antecedents of agent-principal relationship establishment as the literature is pursued further.

**Figure 4 The agent-principal relationship**



The construct labelled in the above figure as the outcome of the attempt to establish the agent-principal relationship represents the process of an agent submitting to a potential client their tailored agency agreement proposal. By defining and assembling all the constructs in the process of attempting to establish an agent-principal relationship, it should be possible to determine the influence of these constructs, and the likelihood of alternative outcomes, should construct values change. The contribution this study

makes to marketing literature is, therefore a theoretical account of relationship establishment in an agent-principal relationship. Examining the variables in both successful and unsuccessful submissions will define the role that the determinants play in the outcome of this process.

Details of other agent submissions are not necessary at this point, although these form part of Kahneman et al.'s (1986) framing effects that consequently play a part in these outcomes, because establishment of an agent-principal relationship implies superiority of the successful agent submission. This thesis adopts the perspective of the real estate agent to discover the determinants of relationship establishment by considering multiple agents' multiple relationship establishment attempts to examine agency relationships in a way not done before.

### **Determinants of agent-principal relationship establishment**

This section identifies the determinants of relationship establishment in an agent-principal relationship found in the literature. By looking specifically at what is involved in relationship establishment, Lewicki, McAllister, and Bies (1998) observe a process of building upon the principal's confident positive expectations of the agent and that these must be acceptable also to the agent. But the literature does not detail how or what these might be, particularly in a way that can be generalised at least to the context of real estate.

## **Agent-principal relationship establishment**

This section will explain the process of establishing an agent-principal relationship by looking at three things. Firstly, how an agent contributes to establishment of the agent-principal agreement will be investigated. Secondly, the components that make up an agent-principal agreement will be identified. Finally, necessary agent skills for securing this agreement will be examined. This section of the thesis moves through a number of areas of literature that contribute to establishing the right context for research questions.

### Pursuit of self-interest

This section will show how the literature reveals real estate agents to be no different from any other person as they pursue their own goals. This pursuit of self-interest emerges as fundamental to negotiations prior to establishing an agent-principal agreement.

In agency theory literature, Jensen (1998) finds that

*“no-one can so embody the preferences of another enabling them to be that person’s perfect agent [because] people always choose the option that makes them better off” (Jensen 1998, Page 40).*

Contradictory findings by Sigmund, Fehr, and Nowak (2002) argue that people do not always pursue self-interest. For example, pursuit of social benefits may over-ride self-interest in the short term but once these are achieved then self-interest returns to the fore. It is noted here that despite this contradiction, which only happens in specific

situations, self-interest inevitably re-emerges regardless of whether people are driven by a perception of total gain or perception of minimisation of total loss,

Standardised practices exist in the Victorian real estate industry for property listings, market appraisals, property inspections, open for inspections, negotiations and preparing legal documents (SUTb). These practices are observed to be an attempt to control and protect all members of the real estate market from conflicting interests, and preserve the real estate market exchange. But if standardised forms and processes actually mask the opportunity for negotiation in the development of a sufficiently specific agent-principal agreement then this may be a symptom of some other problem in the process of establishing an agent-principal relationship and will be considered in more depth later in this literature review. The task for the agent is to establish an agent-principal relationship while grappling with normal, but conflicting, self-interests.

### Influencing the potential client

This section shows that agents seek to influence a potential client in the process of establishing an agent-principal relationship. Park and Lessig (1981) observe that increasing product familiarity will increase confidence in, and the likelihood of a purchase decision.

In the case of real estate agent-principal relationship establishment, Benjamin and Chinlo (2000) note the product to be an agent's proposed marketing package that is supposed to entice a commitment from a potential client. These authors claim that only

two pricing strategies exist in the case of real estate. One has a focus on selling the principal's property. The other maximises exposure of the property and the agency. Agents gain from either strategy if an agent-principal relationship has been established because they can pursue income from the relationship in the future but at this point there is no particular gain to the client.

Benjamin and Chinlo (2000) specifically address the real estate agent-principal relationship and are therefore important to this thesis. But because these strategies maintain a focus that is post-relationship establishment, their contribution to this thesis is their suggestion that agents operate for a reason other than optimising rewards for the client. These authors raise another important point by suggesting that price can be used to pursue clients or some other corporate agenda. If price is used in this manner then implicitly the market value of the vendor's property may be obscured by agent agendas. Consequently potential clients may not be in a position to differentiate between agent submissions without a range of information resources. Even in an unsuccessful submission, the agent adds some value to another agents' success through the provision of a valuation considered by the client (Kennan 2001, Page 17).

This research observes therefore that while trying to influence a decision making process, agents may in fact be complicating this process. Consequently, an agent can influence a potential client (as vendors) because these potential clients in fact make a choice (or decision to purchase agent services) based on a cumulative process of information gathering (Braun 1999); that includes the collection of information such as property valuations from other agents (Yavas and Colwell 1995).

In the process of coming to a point of establishing an agent-principal relationship, potential clients in fact distance themselves from one agent's efforts of persuasion by considering other influential factors. Jacoby, Chestnut, and Fisher (1978) suggest this process to be a function of buyer-search experience and information acquisition. In the case of real estate, a principal's previous real estate sales and purchase experience and their individual propensity to acquire information from other sources.

Authors discussed in this section (e.g. Jacoby et al. 1978; Kennan 2001; Yavas et al. 2001) adopt a seller perspective are most important to this thesis for two reasons. Firstly, that the client exerts a great deal of control in agent-principal relationship establishment because of what Kahneman et al. (1986) describe as framing effects beyond the agent's control; and secondly, the limitation of the client perspective as it fails to address agent processes. In light of these findings, agents make a contribution to agent-principal agreements other than their own when they make submissions to potential clients through the provision of property valuations, thus contributing to the information acquisition in unsuccessful relationship establishment attempts in addition to successful relationship establishment attempts.

#### Agent and client goals

This section shows how an agent can identify, and possibly accommodate, a client's goals. What we will not do is to try to identify all the goals of those involved. Firstly we will consider whether agent and client goals actually differ. Of paramount concern

in relationship establishment is the appearance of 'reasonableness' despite these goals according to authors such as Kahneman et al. (1986) and Morgan and Hunt (1994).

In an empirical study examining agency theory and the role of the real estate broker, Marsh and Zumpano (1998) show that real estate agents and their principals have not just different but conflicting goals. For example, sellers strive to expedite the sale of their property at the highest possible price with the most favourable terms and agents strive to facilitate closure of the sale. Likewise, conflicting demands from buyers and sellers exist.

Taking this further, agencies have another set of conflicting demands because they have multiple vendors for whom they operate and would not exist in the long run if this were not the case (SUTa). Because relationship establishment attempts do not necessarily result in relationship establishment, agents contribute to the framing effects of potential clients against which a decision to commit to an agent-principal relationship is made (Kahneman *et al.* 1986). When Benjamin and Chinlo (2000) found that an agent participates in more than one value-creating system, they are actually referring to pursuit of agent-agency and agent-principal goals as a result of this decision.

As agents just take advantage of their distinctive competencies (Cinzia 1999), they operate in an environment of conflicting goals according to (Marsh and Zumpano 1998). Therefore, this research observes this not to be at all unusual and is a matter of acting out their *raison d'être* because an agent's goal might be to make a sale, while sellers might strive to expedite their sale at the highest possible price with favourable terms, and buyers might strive to purchase a property at the lowest possible price with

favourable terms then conflicting goals exist. But, whether it is possible to simultaneously optimise all of these with one outcome is not so obvious.

Adding to the already complex situation in which an agent functions, multiple goals exist within an organization. One real estate industry study notes that Real Estate agency owners themselves have their own goals driving the operations of an agency and that these may not obviously be profit based (Psi-Delta 1999). What this means is that within an agency, agents need to operate to further the pursuit of the agency owner's goals. For example, an agency owner may want a market presence in a particular market segment for a specific reason restricting agents to making submissions in that market segment only. Anecdotal evidence is discussed in Chapter 5 showing how real estate agents in the course of this research support this literature.

In addition to the pursuit of agency goals, discussions with potential clients that may lead to the establishment of an agent-principal relationship are noted to be a matter for determination by the agency (Massengale 1991, Page 83). Therefore, how an agent is controlled, in order for the agency to pursue its goals, is noted to be important.

When multiple goals exist, these goals can be evaluated for goal dominance with Kaplan and Norton's (1992) balanced scorecard measurement tool. These authors further developed their work because of the conflict between short-term and long-term goals because evaluation has traditionally led to measuring short-term strategy implementation (Kaplan and Norton 1996).

Kaplan and Norton's (1996) balanced scorecard operates on the differences between customer and seller definitions. For example, time for an agent may not be defined the same as a principal's definition, likewise price for an agent may not be defined the same as a principal's definition of price, reflecting the differences between principal and agent expectations. Consequently, framing a principal's objectives in terms of an agent's experience provides an opportunity to evaluate agent's activities (Kaplan and Norton 1992).

This is of little relevance to the real estate context in part because there are multiple buyers of real estate agent services. As already noted, the real estate exchange is further complicated by the additional goals of a third party – the buyer (purchaser).

Considering that vendors, agents, agency owners and purchasers would each contribute a set of definitions, Kaplan and Norton's (1992) approach appears to be unmanageable. This situation would also exist in other agency situations with sellers, agents, agency owners and buyers each contributing a set of definitions.

While examining the real estate agents' goals as they translate into customer experiences would be interesting, three things are important. Firstly, such a study would be focussed on levels of sellers' satisfaction and not how agent-principal agreement proposals contribute to this satisfaction. Secondly, organization specific goals may be transparent to sellers (such as sales quotas, profitability, long range business plans, expansion and market share). And thirdly, establishment of an agent-principal relationship has been suggested to be a suitable measure of an effective

marketing campaign submission. This tool is therefore an unnecessary instrument in the examination of agent efforts in establishing agent-principal relationships.

This does mean, however, that agents really are in a difficult position. If goal dominance cannot be measured then, to reach a consensual agreement some trade-off, or bargaining, must occur. If we accept this then through some negotiation of agent-principal terms the first two constructs for the structural model of the agent-principal agreement emerge with the following research question:

### **Research Question 1**

*Is negotiation of an agency agreement a determinant of relationship establishment in an agent-principal relationship?*

This negotiation is a process of establishing a set of agreeable terms that the agent, agency and principal must all accept. Sitkin and Roth (1993) argued that control in such a situation is based on trust, resting on expectations about the agent's (or employee's) ability to complete tasks reliably. The task here is to establish the relationship with the principal by negotiation of a set of agreeable terms. Therefore, in the case of real estate, management controls for negotiation are task driven, based on the expectation that the agent will perform reliably. Kahneman et al. (1986) also emphasize an issue of management control applicable to relationship establishment.

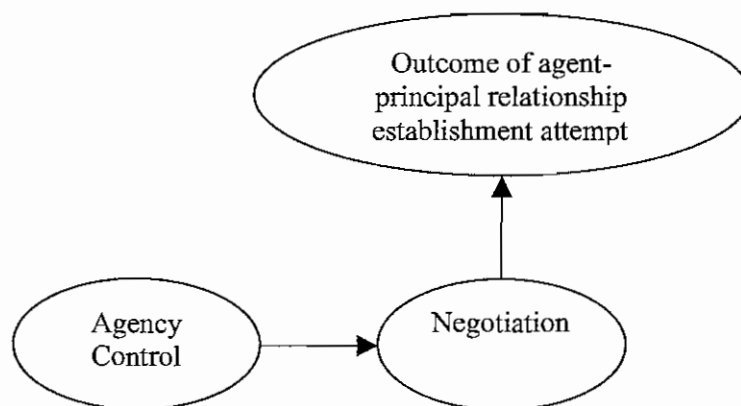
The following research question emerges from this:

**Research Question 2**

*Is agency control a determinant of negotiation in establishment of an agent-principal relationship?*

The figure below shows how agency control and negotiation determine establishment of an agent-principal relationship.

**Figure 5 Negotiation and agency control**



The position from which agents pursue an agent-principal agreement, while constrained in some way by agency agendas, results from conflicting goals of vendors, the agent and the agency. These goals will now be more closely examined to determine how these are identified, from the perspective of the agent in pursuit of an agent-principal agreement.

### Identifying the client's goals

This section shows that client supplied information is an important part of acquiring an agency agreement and that, by acquiring information from a client, agents seek to identify the client's goals, decision criteria and the nature of competitive agent offerings being considered.

Jacoby et al. (1978) and Park and Lessig (1981) observe information to be important in relationships such as the agent-principal relationship. But when Jacoby et al. (1978) found that information asymmetry in which the agent (employee) holds the balance of control they failed to address relationship establishment in which both the agent and principal control important 'purchase' (or relationship commitment) related information. Additionally, when Park and Lessig (1981) observed the importance of a customer's subjective assessment of their purchase decision to be based on familiarity they failed to allow for the tailoring of product offerings that some agents offer a potential principal such as in the case of real estate agent-principal relationship establishment.

While Marsh and Zumpano (1998, Page 162) found that agents seek to acquire knowledge of a seller's goals, they did not restrict their observations to any specific part of formulating the agency agreement. In fact, they suggest that an agent acquires similar information from a potential buyer. But we are specifically examining relationship establishment in an agent-principal relationship so will put property buyer

information acquisition aside. The focus on establishing an agent-principal relationship comes well before any pursuit of buyers.

Other information acquired by an agent is also obviously important in the literature that seeks to describe the design of an agent's submission. For example, in the case of real estate, an agent's prior knowledge of general buyer availability (Benjamin and Chinlo 2000; Richins *et al.* 1987) and buyer searches (Baryla and Zumpano 1995), are important aspects of information.

The importance of information is further noted in other areas of literature that have relevance to agent-principal relationship establishment including: the control of flows of information through a duty to inform (Marsh and Zumpano 1998); and an obligation of disclosure (Moore *et al.* 1992). These controls are necessary because not all market information is freely available to all market elements. Three reasons for this are observed to exist in the literature including: significant costs incurred by information searches (Baryla 1995); information communicated between buyers and sellers through agents is part of the agent's service provided to the principal (seller) (Jensen 1994b; Jensen and Meckling 1976); and availability and observability of factual information provides an opportunity for parties to conceal information (Molho 1997).

Information is also observed to be important in a broader marketing sense. Examples of this are: Yudelson's (1999) acknowledgement of issues of information communication accuracy and completeness; and Jacoby *et al.*'s (1978) acknowledgement of the impact of information on buyer searches.

Pausing for a moment to consider the real estate agent-principal agreement, the flow of information starts with an agent acquiring information to prepare a proposal for agreement. The vendor serves as one source of information for this, others include previous sales experiences, other current market offerings, and property characteristics that are freely observable. For this reason, information flow, and the acquisition of information from a vendor, is important to this thesis if we are to examine how agent-principal relationships are established and their value to the client and the agent. Extending this, information appropriation from a vendor is a necessary pre-condition to information dissemination. If this information is used in the design of the property marketing campaign then it forms part of the acquisition of an agent-principal agreement, as a pre-listing listing function. Dissemination of information to buyers operates only after an agent-principal relationship has been established. An explanation for these flows of information is found in agency theory (Akerlof 1970; Molho 1997).

As discussed previously in this literature review, these authors define two conditions that arise from flows of information, or more specifically imperfect flows of information, as adverse selection and moral hazard (Akerlof 1970). A gap between marketing and legal literature emerges here because legal avenues are seen to be ineffective in rectifying and preventing these conditions. For example, Holmstrom (1980) argues that legislative redress does not overcome the absence of observability that causes the condition of moral hazard in the first place.

More specifically, Molho (1997) finds both these conditions exist in the real estate context. In a real estate exchange, adverse selection emerges as buyer blindness before a contract is established, both when sellers select agents and when purchasers consider properties. In this same context, an opportunity for moral hazard emerges three times in a real estate transaction. Firstly, after agents have a contract with a seller, agents may spread their efforts among their other business duties. Secondly, after sellers have a contract with a buyer, owners may relax their duty of care to the property for sale. Finally, after establishing a relationship with a client the agent may neglect their duty of care to the seller as they pursue buyers.

These conditions occur because agents pursue financial rewards from their control of information (Barron 1999) and the inhibition of information flows (Miceli *et al.* 2000). Marsh and Zumpano (1998) support these findings in the claim that

*“Real estate markets are generally considered to be inefficient...since all the information necessary ...is often not available to market participants ...information is incomplete ...and costly to obtain...”* (Marsh and Zumpano 1998, Page 151).

But the debate whether market-correcting mechanisms are necessary or not appears to remain unresolved despite some mechanisms identified by Molho (1997) existing in the Victorian real estate context. For example: incentive contracts (where agents are offered a larger commission once an agreed minimum price is reached); constraints on contracts (where sellers are not permitted to re-list with other agents within 55 days of contract termination but are allowed to terminate a contract at any time); and motivation of

multiple agents (where one seller can employ more than one agency to locate a buyer) all operate in the Victorian real estate industry currently (SUTb).

The evidence suggesting information flow correction mechanisms are important for relationship establishment is highlighted here because of the impact on the terms of an agreement from adverse selection. For example, if a principal has insufficient information or experience, it might be possible that the terms of the agency agreement in some way are more favourable to the agent than the principal. Jacoby et al. (1978) refer to past-experience influencing information acquisition in consumer searches. This thesis observes these findings to be applicable to aspects of product supply by an agent because of the contribution of information appropriation to avoidance of adverse selection.

Molho (1997) claims that there are further actions the industry could take to improve the real estate market operations. Benjamin and Chinlo (2000) find existing linear commission payment systems offer adequate incentives for markets to function. This contradiction evident in the literature remains unresolved, highlighting some important issues for the preservation of the real estate market over time. Establishment of the agent-principal relationship is fundamentally more important to this thesis than relationship maintenance over time unless established and continuing relationships are used to persuade new principals to commit to agency agreements.

What also emerges is the observation that agents have an interest in information acquisition, control and dissemination. But because agents do not benefit economically

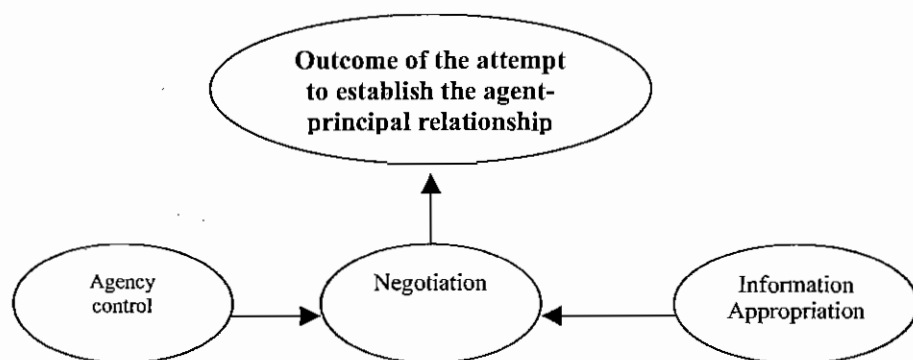
unless they have established agent-principal relationships, then this information accumulation necessarily influences the process of securing these relationships from two perspectives. Firstly, as agents identify the nature of client's goals they increase their awareness of agent-principal relationship parameters influencing in fact the level and direction of information asymmetry. Secondly, agent knowledge of agency goals and constraints also influences the agent-principal agreement negotiation.

The following research question, described in the figure below, emerges:

### **Research Question 3**

*Is the information appropriated from a vendor a determinant of negotiation in relationship establishment in an agent-principal relationship?*

**Figure 6 Information appropriation in agent-principal relationship establishment**



The previous discussion revealed that negotiation of the agent-principal agreement is determined in some way by the information an agent gets from the vendor. Accepting this we now need to look at what might influence this appropriation of information.

### Drivers of Information Appropriation

This section will examine drivers of information appropriation to show how a varying degree of morality among agents is observed to exist and suggests that this may actually have something to do with how agents negotiate an agent-principal agreement.

Both positive and negative evaluations of agent morality (and honesty) exist. Local real estate agent licensing requirements include disclosure, honesty and minimum levels of education. This directly contrasts with one American situation where a felon was able to renew his licence to practice while in detention (Babson 1999). Locally though, agents must be “*greater than 18 years of age, pass prescribed courses, have a registered address in Victoria, and not ineligible*” (SUTa). Establishing ineligibility includes personal convictions of fraud, insolvency, claims against candidates, and not with legal guardianship (SUTa). Moore et al. (1992) suggest that controls like these are however unlikely to positively influence practice or perceptions of practices.

Confirming this issue of perceptions of agent practices, one real estate industry study finds that agents and their employers may pursue objectives of prestige, power and control (Psi-Delta 1999). The study further finds that an agent’s reputation for moral standing may be linked to their agency size.

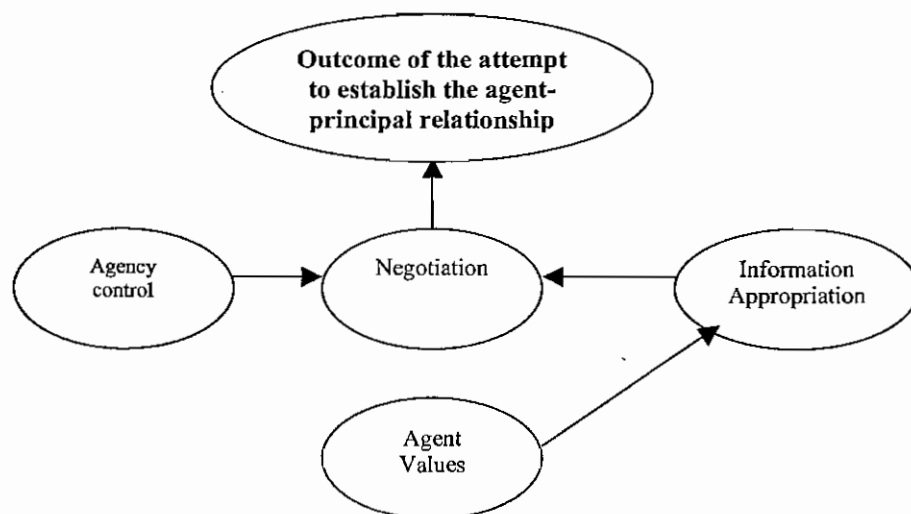
Drawing these points together, an agent's values, such as honesty, ambition and drive for prestige, are behind their pursuit of business objectives. The real estate industry acknowledges a range of values to exist among agents and appears to try to manage agents' pursuit of self-interests. By Sitkin and Roth's (1993) definition values are individual attributes that influence behaviour.

It has already been established that information appropriation is an integral part of agent-principal relationship establishment. The implication for this research is therefore that, in some way, an agent's values influence the process of information appropriation as one component of establishing the agent-principal agreement. The following research question, described in the figure below, emerges.

#### **Research Question 4**

*Are an agent's values a determinant of the information appropriated for negotiation in the establishment of an agent-principal relationship?*

**Figure 7 Agent values in agent-principal relationship establishment**



Personal values of morality, honesty, pursuit of power and prestige are all observed to be drivers of agent behaviour. These appear to be important in the consideration of what and how client information is sought as agents seek to tilt the information asymmetry in their own direction so they can pursue their own objectives.

In an empirical study Moore et al. (1992) imply that these agent values also influence whom an agent will truly represent. They find real estate agents make a cognitive decision of whom to represent as a matter of goal prioritisation. Agents are found to choose between:

- Seller agent (using every effort to persuade buyers to make as many concessions as possible);
- Buyer representative (helping buyers to get good terms);
- Middleman (avoiding advertising on price with a passive role in negotiations as the objective is to introduce buyer to seller);
- Mediator (working on seller to reduce price and buyer to increase offer); and/or
- Dual agent (promote a fair deal).

The study focuses on whom an agent will admit to representing. This means that in the agent-principal agreement negotiation, an agent may indicate that he will be bound to the principal. The study offers a useful means of categorising the representation of an agent that is observed to reflect the way an agent chooses to work on behalf of an entity

(the client, agent or buyer). This thesis investigates the process of establishing the agent-principal agreement so we need to consider an influence of agent representation on negotiation as terms of the agreement are modified. The following research question emerges:

#### **Research Question 5**

***Is agent representation a determinant of the negotiation in establishment of an agent-principal relationship?***

Moore et al.'s (1992) study further legitimises the existence of the construct agent values because of an important question that emerges from the study. Of what benefit would it be to an agent to admit to a seemingly inappropriate representation? From this perspective the study is inadequate at diagnosing the true representation of agents although it does offer concepts that can be used in this thesis as it proposes the selectivity of agent representation.

Definitions used in the study imply that agent representation is influenced by agent values. Thinking about this, an agent's values are evident by their concern for fairness, or getting their own terms accepted by convincing the client to commit to a decision rather than altering terms in the client's favour, or actually wanting to help a client. These might in some way influence whom the agent chooses to represent.

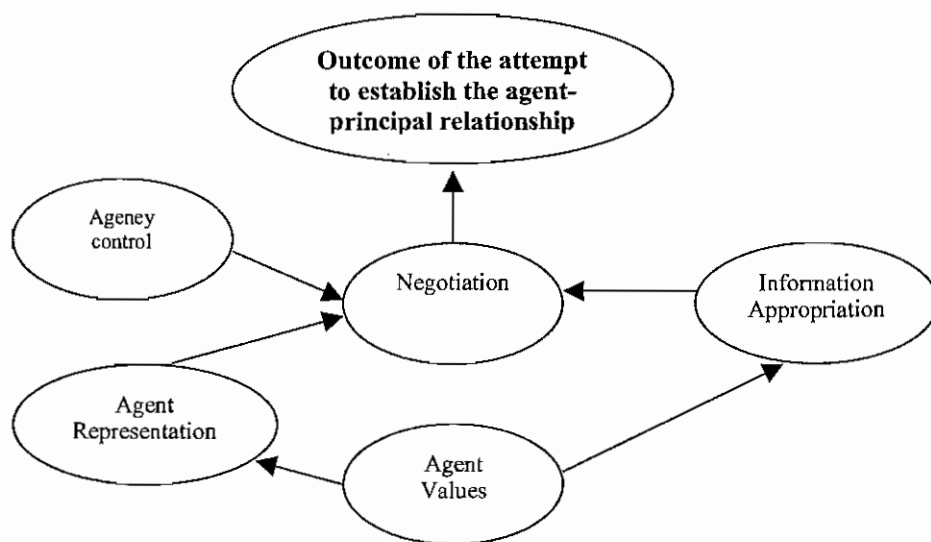
Consequently the following research question emerges:

### **Research Question 6**

*Is agent representation determined by agent values?*

The figure below shows how these questions are embedded in the theoretical model.

**Figure 8 Agent representation in agent-principal relationship establishment**



Considering the model assembled thus far, we can see that we do not necessarily need to measure self-interest directly but can examine outcomes through the negotiation that leads to the establishment of an agent-principal relationship. Constructs presented thus far seem to address how a negotiation is performed but not necessarily what is negotiated.

It is therefore demonstrated that only limited work exists in the literature that examines the agent-principal relationship that does not necessarily apply to real estate agent-

principal relationships, and that even less examining agent-principal relationship establishment. This offers the opportunity for this research to contribute an understanding of agent-principal relationships through examination of relationship establishment in the context of real estate. By expanding the literature that represents agency theory, this issue of relationship establishment should apply to all agent-principal situations thereby making a broad contribution.

### **Designing the agent-principal relationship submission**

This section of the thesis investigates what is included in an agent's submission to a client in the case of real estate to expose components of an agent-principal agreement that appear to be determinants of agent-principal relationship establishment. The literature shows that the purpose of recommending a strategy to a potential principal (client) is to ensure a supply of stock for the agent (through the agent-principal submission) and a supply of buyers (through the operationalisation of the agent-principal agreement) from an agent's perspective (SUTb). This also applies to all agency situations and is distinct from the agent-purchaser relationship.

Previous agent-principal agreements serve as a source of information for relationship-establishment (SUTb). A client (principal) is not privy to these details until an agent's tender submission. This further legitimises the approach adopted in this thesis of examining the agent's perspective. In order to understand how real estate agents seek to achieve all the objectives of those involved in the real estate exchange, it is important now to more closely examine what the elements of an agent's submission to a potential client are, and their relative importance.

In the case of real estate, elements of a property marketing campaign proposed to a potential client include time on market, seller marketing costs and selling price (Yavas and Colwell 1995). Richins et al. (1987) contribute to the definition of seller marketing costs by including agent commission and advertising costs. Although price is observed to be important to sellers, buyers and agents, the relative importance of price varies in the literature.

For example: Price reflects the probability of sale (Benjamin and Chinlo 2000); represents an agent's strategy (Richins *et al.* 1987); and significantly impacts on marketing strategy selection while reflecting both buyer and seller expectations (Yavas 1995). Yavas (1995) warns of the already discussed economic effect of price as it either increases or decreases the probability of sale.

These studies do not converge at a single point to define the effect of a proposed property price on the outcome of an agent's submission to a client. Benjamin and Chinlo (2000) contradict Yavas (1995) by inferring the effect to be important only as a reflection of the vendor's belief of the probability of sale. Therefore, the property price emerges as an important component of the proposed property marketing campaign. However, the agent authority forms (Appendix 1) suggest this may not be critical to establishment of the agent-principal relationship because property price is a variable over which vendors have final authority and that can be negotiated after the agent-principal agreement is established, pre-auction with reserve prices or pre-authority by specification.

Another variable in the property marketing campaign proposal is time. Miller and Sklarz (1987) find time for an effective marketing campaign to depend on property value estimates. This suggests a relationship between time and price. Other studies such as Baryla and Zumpano (1995) similarly examine time on the market from a seller's perspective. In addition, Jobson (1991a) measures time as days between establishment of an agent-principal relationship and relationship establishment between a client and property purchaser. Despite the questionable dominance of either time or price in the literature, both are recognised as basic considerations in the process of establishing the agent-principal relationship (Benjamin and Chinlo 2000, Page 62).

One further empirical study by Yavas et al. (2001) models the property marketing campaign selection of a seller, finding that such a decision has implications for time on the market, seller marketing costs, buyers' characteristics, buyer search efforts and selling price. Thus the likelihood of sale emerges as important to sellers (as they contemplate a commitment to an agent agreement) and important to agents (as sellers contemplate this commitment) (Richins *et al.* 1987; Yavas and Colwell 1995).

Perhaps, this is why agents include retrospective examples of previous successes in a submission to a potential client.

The literature strongly suggests that some trade-off between marketing campaign components appears likely, if not necessary, to achieve a commitment to sell (Baryla and Zumpano 1995; Benjamin and Chinlo 2000; Marsh and Zumpano 1998; Richins *et al.* 1987; Yavas and Colwell 1995). This shows that while investigating how an agent-

principal agreement comes into existence, we need to consider that the property marketing campaign is made up of a number of things. Seller marketing costs (agent commission and advertising costs), property price, time on market and sale type are all part of the agent-vendor agreement. Agreement to the terms contained in an agent authority is a necessary condition for signing of the agreement by the agent and the client. If we accept this then the specific terms of the authority that might be negotiated can be absorbed into the existing model construct negotiation.

However, media and non-media advertising also form part of the agent's submission to a vendor (SUTa) and these details do not form part of the agent authority (Appendix 1). So then what impact does agent proposed advertising have on establishment of an agent-principal relationship?

The Table 6 shows more extensively the components of the agent submission to a client and these are discussed in the sections following.

**Table 6 Components of a real estate agent submission to a potential client**

<b>Process</b>	<b>Literature</b>
Proposing an advertising campaign	Baryla 1995; Benjamin and Chinlo 2000; Marsh 1998; Richins et al. 1987; Yavas and Colwell 1995
Proposing advertisements	Richins et al. 1987
Proposing advertising media	Richins et al. (1987); Siebert 1999; SUTa 2001; Devine 1999
Negotiation of the agent-principal agreement Proposed Sale Type Proposed Marketing Costs Agent Commission Advertising costs	Victorian Real Estate Agent Authority Forms (Appendix 1)
Proposed Time on Market	Jobson, 1991; Benjamin and Chinlo 2000; Baryla, 1995
Proposed Property Price	Benjamin and Chinlo 2000; Richins et al. 1987; Yavas and Colwell 1995

Agent proposed advertising

This section will examine what existing research contains regarding a proposed advertising campaign to identify if this is important in relationship establishment of agent-principal relationships.

Real estate agent submissions to potential clients include both media and non-media advertising recommendations. Media advertising includes flyers, letter drops, third party classified advertisements (magazines, newspapers, and Internet), real estate agency websites (third party classified advertisements, corporate web sites and other links) and paid or unpaid editorials. Non-media advertising include leased outdoor advertising boards, word-of-mouth, cold calling, door knocking and open for inspections (Devine

1999; Siebert 1999; SUTb). Lasher (1999) finds that word-of-mouth communication is also very important when compared with media advertising.

So then what advertising does an agent propose? Design of advertising campaigns is observed to be important because these are meant to persuade clients to take action (Devine 1999; Lasher 1999). As agents pursue an agent-principal relationship the action they seek is for the client to commit to an agency agreement. In this case, proposed advertisements are important to the process of establishing an agent-principal agreement.

In marketing literature (e.g. Roberts and Lattin 1997; Shapiro, Macinnis, and Heckler 1997), advertising is noted to have important implications for consideration sets from which any specific agent might be selected, and hence an agent-principal relationship may be established. Applying Roberts and Lattin (1997) to the real estate context, being in the set of agents considered by a potential principal logically is a necessary but not sufficient condition for relationship establishment.

Advertising, described by Shapiro et al. (1997) to have an effect on establishment of a consideration set occurs, only once an agent-principal relationship has been established with another principal. Therefore, previous advertising efforts may influence a principal's decision to commit to a relationship, but the principal considering a commitment to a specific agent does not benefit from their own advertising until after an agency relationship has been established. The following research question emerges because how agent-principal relationship establishment is affected by specific

advertising is left somewhat unresolved leaving an opening for this research to resolve a problematic gap in existing literature.

#### **Research Question 7**

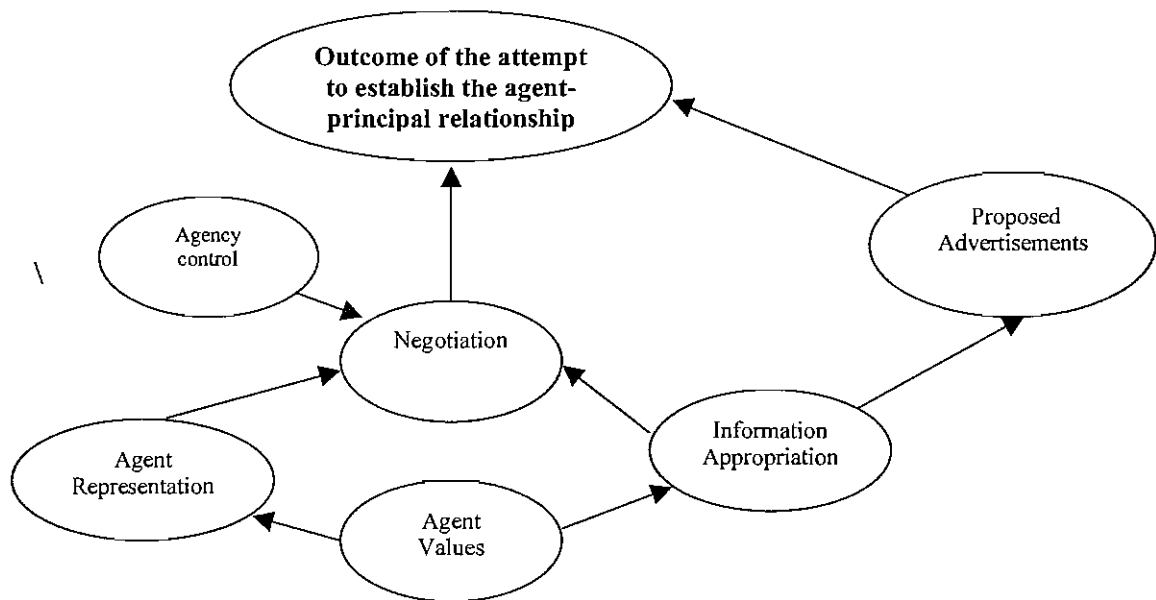
*Are proposed advertisements a determinant of establishment of an agent-principal relationship?*

Further to this, proposed advertisements are observed to include factual or fictional information with the objective of either persuading or informing those exposed to the advertisements (Devine 1999; Lasher 1999). This information could not be included in an advertisement if the agent had not acquired this information. Therefore information appropriation is observed to be linked to proposed advertising. A further research question emerges.

#### **Research Question 8**

*Is information appropriation a determinant of proposed advertisements in relationship establishment in an agent-principal relationship?*

**Figure 9 Information appropriation and agent proposed advertisement content**



To understand what this means to this thesis it helps to question whether persuading a potential client to come to an agent-principal agreement is the same as persuading a potential buyer to commit to a purchase. Papers such as Richins et al. (1987) contribute significantly to understanding this issue through an empirical study that implicates advertising commitment to be important in the real estate agent-principal agreement by looking at persuading a buyer. However, advertising commitment only results from an established relationship between agent and client.

While Richins et al.'s (1987) study focuses on activities after an agent-principal agreement is established there is an implication that the property advertising campaign can influence the vendor in establishing this agreement because of a perceived future

contribution of that advertising to the client's goals. Yavas and Colwell (1995) similarly observe this to be important. But the contribution of advertising in this expected return is not obvious in the literature.

It might be argued that advertising design is important in establishment of an agent-principal relationship, but what is not clear from existing literature is precisely how advertising influences establishment of this agent-principal relationship. By assembling and empirically testing a model of agent-principal relationship that includes the element of advertising, this thesis fills a gap in existing literature.

#### Advertising options available to real estate agents

The previous section revealed the range of advertising alternatives available to real estate agents. This section will examine specific media tools. The noted gap in the literature continues at this level. Empirical real estate industry specific studies do not typically adopt an advertising perspective, let alone a media specific perspective. Other agency relationship literature similarly omits an advertising perspective so marketing communication literature will therefore be used later. But first the real estate perspective is examined.

One example of this is a study by Jobson (1991b) that links components of real estate exchanges, while holding a number of values constant, such as property geographic region and point in time. The study determines important influences in the relationship between house price, sale price and number of days for listed properties that were actually sold. While producing a tool that could be used by agents in a submission to

potential clients, the study does not go far enough because it excludes advertising and the process of establishing the agent-principal relationship. This thesis fills this gap in the literature by including both media and property advertising in specification of the agent-principal relationship establishment process and verifying their importance empirically.

An example of a study that at least implies an advertising perspective, is the industry commissioned commercial research that finds real estate agency success to depend on a number of agency operational variables (Psi-Delta 1999). Profitability, as an indicator of agency success, emerges from the study as a function of organization objectives, decision-making processes, location, revenue, operating expenses, staffing and marketing efforts. This observed link between business performance and marketing efforts means establishment of agent-principal relationships (as a means of generating future revenue to produce profit) is linked to advertising design through the agent submission to a potential client. We can therefore legitimately consider this in more detail.

Richins et al. (1987) investigated the marketing strategies of real estate agents to find that firms with different strategies place different emphasis on advertising.

**Table 7 How agency strategies respond to advertising**

<b>Agency Strategy</b>	<b>Response to Advertising</b>
Selling properties listed by the principal agency AND Selling properties listed by other agencies	Benefit from displays and classified advertisements
Selling only properties listed by other agencies	Minimally influenced by advertisement type
Selling only those properties listed by the principal agency	Benefit most from classified advertisements rather than displays

Source: Richins et al. (1987)

The table above reveals a close link between agency strategy and response to property advertisements. Real estate agents are found to benefit from classified advertisements if they sell properties listed by their own agency (the principal agency).

#### Media Selection

Applying the concepts in the table above, Victorian agents should benefit from classified advertisements because they sell properties listed by their own agency (the principal agency) (Richins *et al.* 1987). Classified advertisements are part of an agent's submission to a potential client, so it may then be that this influences relationship establishment in an agent-principal relationship. This section will investigate how an agency narrows down the advertising options for the purpose of establishing an agent-principal relationship because previous studies do not do this.

An existing body of literature advocates the integration of advertising vehicles and marketing efforts to increase advertising reach (Bishop 1998; Zeff and Aronson 1997), augment offerings (Bishop 1998; Hutt and Speh 1998) and improve the likelihood of

advertising reaching and influencing a target audience (Linton and Morley 1995), depending on advertisers' perceptions of tools (Bush and Bush 1998). This results in Integrated Marketing Communications according to authors such as Belch and Belch (1999), Linton and Morley (1995) and Schultz and Kitchen (1997).

If an organization chooses to invest specifically in any single tool such as Internet advertising, then logically some benefit would be expected. The literature assembles the possible benefits from Internet advertising gradually. Internet advertising offers an alternative way of reaching customers (Dreze and Zufryden 1999; Hoffman 2000; Norton 2001; Poon 1998), a tool for competitive leveraging (Poon 1998) increased distribution and exposure through consumer reach and links with other advertisers (Norton 2001) increased advertisement frequency (Kover 1999), and innovation of advertisement content (Hoffman and Novak 1996).

Empirical studies of Internet advertising at the real estate agent level are relatively scarce. One such study shows agent online offerings to be third party property listings, corporate web pages, or links with portals (Muhanna 2000). A third party listing site is an online classified advertisement site such as [www.realestate.com.au](http://www.realestate.com.au) or [www.realestateview.com.au](http://www.realestateview.com.au), while a corporate web site is an organization's online presence such as [www.hockingstuart.com.au](http://www.hockingstuart.com.au) or [www.woodards.com.au](http://www.woodards.com.au).

Real estate agencies establish a web presence to stay current, use a cost effective advertising medium, increase their profit, and as protection from losing customers (Muhanna 2000). Retaining a focus on the contribution of the Internet to property sales,

the author claims that 21% of real estate sales were generated through the Internet. The Internet apparently makes a yet to be substantiated, but positive, contribution to sales. Benefits to the real estate exchange process rest in both buyers' search and securing agent-principal agreements (Muhanna 2000).

The post-relationship establishment focus found in much of the literature under-values the contribution to the establishment of that relationship of specific media such as the Internet. Advertising effectiveness is not really an issue at the point of relationship establishment because advertising cannot be operationalised until the agency relationship has been established with a specific client. Therefore, this study does not need to focus on whether specific media property advertisements are effective, but rather the extent to which an agency offers these as an advertising option. The following research question suggests a means of incorporating this aspect of media into the model being assembled:

#### **Research Question 9**

***Is agent media selection a determinant of relationship establishment in an agent-principal relationship?***

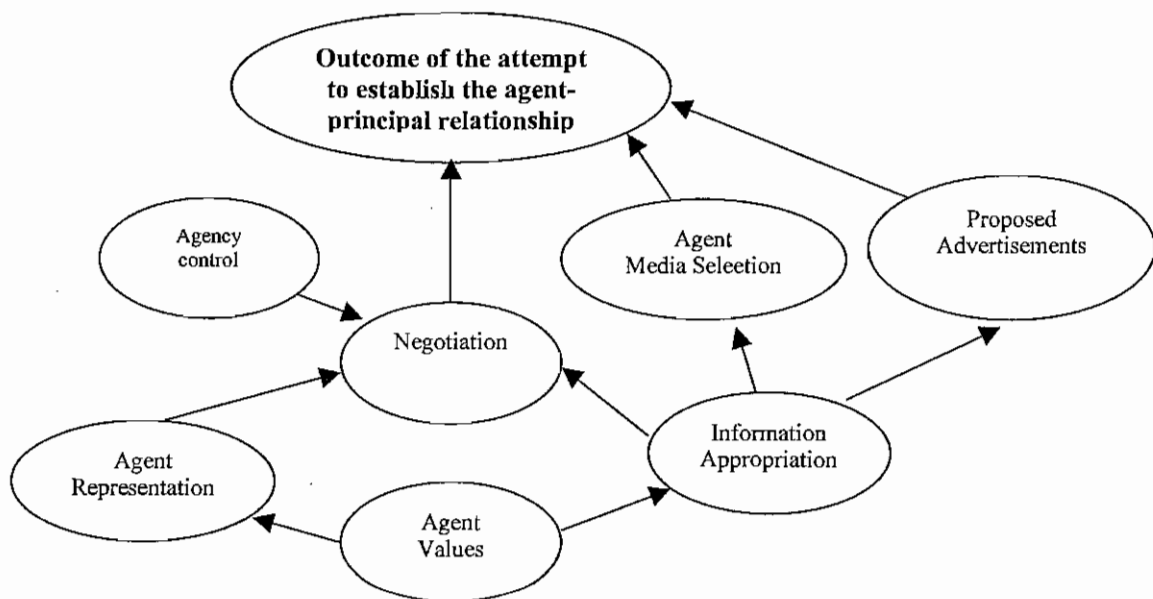
But first we need to consider one more aspect of media selection. As discussed in previous sections, the agent's task is to entice, or persuade, a client to commit to an agent-principal relationship by presenting a package to the client (Benjamin and Chinlo 2000). So then, if a potential principal expressly wishes to include a specific advertising activity, this might then become part of establishing the agent-principal relationship.

Acquiring such information from a vendor has already been shown to be important to advertisement content in the previous section but this appears also to be important to media selection. Because establishment of the agent-principal relationship is a process of matching a client and agent's goals the following research question is proposed:

**Research Question 10**

*Is information appropriation a determinant of agent media selection?*

**Figure 10 Proposed advertising in agent-principal relationship establishment**



The figure above demonstrates that advertising content and media are observed to be important to the agent-principal agreement, as constructs of agent-principal agreement establishment influenced by information appropriated by the agent from the vendor.

## Sales presentation

This section investigates other ways in which an agent can influence establishment of an agent-principal agreement. A vendor commitment to the role of principal represents a purchase of a real estate agent's services. Authors such as Borden and Marshall (1959), Braun (1999) and Ryder (1998) show that it takes more than advertising to persuade a purchaser, and that a seller should not just rely on advertising.

*"Assigning varying burdens to advertising, some [managers...rely] upon advertising to sell their products to consumers ...[or] upon ...personal selling... put[ting] relatively little burden on advertising...Generally...a combination"* is used (Borden and Marshall 1959, Page 24).

Similarly Braun (1999) more recently finds that it takes more than just advertising to influence a buyer to make a purchase. In the case of real estate vendors this equates to a principal engaging an agent.

Personal sales literature shows that at the point of purchase, purchasers believe the time is right, see the need, satisfy the need, are satisfied with brand, price and organization, recognise affordability and like, believe and trust the salesperson (Quigg and Wisner 1998). But this literature does not adequately describe how an agent can increase the likelihood of a vendor commitment to an agent-principal relationship, or the point at which the vendor decides to purchase the services of the agent.

Although a contradiction emerges between agency theory and communication literature because of what Levitt (1986) describes as "*stages of the sale*", it is up to the agent as a

seller to penetrate *“the buyer’s domain to learn about his needs, desires, fears, and the like, and then design and supply the product in all forms”* (Levitt 1986, Page 114).

This thesis argues that the problem for agent-principal relationship establishment is the agent’s presentation, or sale, of their submission to a prospective vendor so that the offering is perceived to be in the right form. Personal selling literature can help us understand aspects of the agent’s presentation that can be influential (Quigg and Wisner 1998).

Fundamental selling skills for successfully influencing a purchaser include people skills, communication skills, image and ability to overcome objections (Quigg and Wisner 1998). Common sayings such as *“it’s not what you say but the way that you say it”* or *“your words are not the message, you are”* reflect this marketing theory. Quigg and Wisner (1998) suggest that a sales presentation is made of a number of aspects including:

- Communication skills such as persuasion, listening, feedback and getting to know the vendor influence a vendor;
- Basic ‘people’ skills like hearing, helping, and getting along with a vendor; and
- Personal grooming, dress, speech and etiquette.

These three categories (agent communication skill, agent people skills and agent image) represent the domains of the construct agent presentation described in this literature but are not only observed to be persuasive in this body of literature. For example, Morgan

and Hunt (1994) suggest that presentation contributes to establishing trust that leads to a relationship, and continuity of established relationships.

If levels of agent skills are different for different relationship establishment attempts then by examining multiple agent submissions we will be able to determine the nature of the influence of this skill development.

A further research question for this thesis therefore emerges:

### **Research Question 11**

***Are agent sales presentation skills determinants of relationship establishment in an agent-principal relationship?***

Aspects of skills developed by the agent that emerge from psychology literature (e.g. Festinger 1957), include the agent's capacity to engage a client in dialogue, listen and appear to be personally attractive, contribute also to negotiation of the terms of the agency agreement because of what Levitt (1986) describes as a "*cumulative flow from before a product is delivered to after a product is delivered*" (Levitt 1986, Page 122). Delivery of the agent submissions is when any negotiation takes place.

Further literature supporting the ongoing persuasiveness of the agent from pre-delivery to post-product delivery, includes two important observations made by Kucera (2002). These are firstly, that documentation is not the only source of information used in negotiations; and secondly, that informative signals contribute to parties establishing

contracts if they help define critical variables. The implication is that agents' skills, particularly communication and negotiation, are important in coming to an agent-principal agreement as acceptable terms of the agreement are formulated.

Modern marketing literature builds on Festinger's (1957) cognitive dissonance theory in the context of agent-principal relationship establishment to show that a client will enter a relationship if they perceive the agent to be reasonable and acceptable. Festinger (1957) argued that this perception results from evaluating their experience with the agent, against a set of individual and private attributes formed independently, adopted directly from those of influential others or formed based on those of influential others.

On the basis of this cognitive dissonance theory, dialogue and perceptions of attractiveness determine whether there is value in pursuing a relationship (Egan 1982). In the case of relationship establishment these are transferred to the agent-principal agreement as a process of the agent selling himself or herself to the vendor.

A large body of literature emerging since the 1990's discusses aspects of trust from marketing and relationship perspectives to examine things like purchasers' decisions (e.g. Garbarino and Johnson 1999; Hunt 1991; Hutt and Speh 1998; Jevons and Gabbott 2000; Lewicki et al. 1998; Morgan and Hunt 1994; Singh 2000). Morgan and Hunt's (1994) theory is that as long as the client does not experience cognitive dissonance and there is a level of acceptability, and reasonableness, perceived by the client, the relationship is likely be formed. But there are two problems with marketing and legal literature that examines relationship establishment. Firstly, the literature generally does

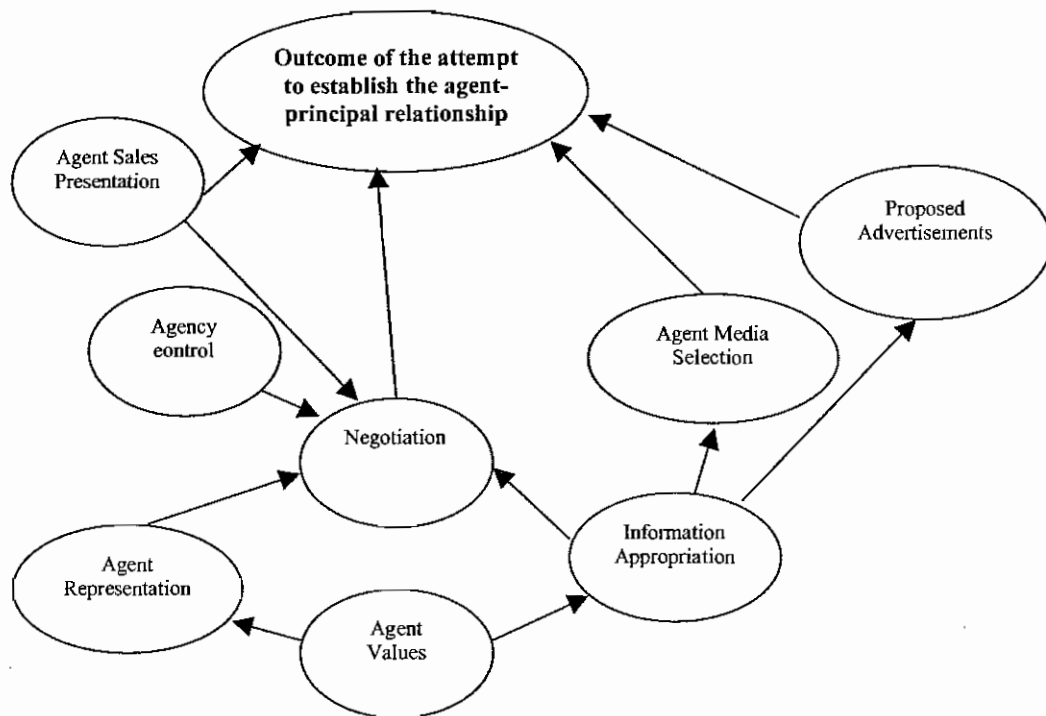
not deal with recruiting principals but instead examines the recruitment of purchasers (e.g. Morgan and Hunt 1994). Secondly, it does not deal with the true definition of a principal that is necessary for an agency relationship to exist but instead deals with recruitment of employees by managers that are only agents themselves (e.g. Bergen et al. 1992). This thesis examines the establishment of a true agency relationship between an agent and a principal and therefore makes a substantial contribution. A further research question is therefore proposed to capture the extent of the influence of agent's skill development in negotiations:

#### **Research Question 12**

*Are agent sales presentation skills a determinant of negotiation in establishment of an agent-principal relationship?*

The figure below shows this construct to be embedded in the proposed model of establishment of an agent-principal relationship.

**Figure 11 Sales presentation in agent-principal relationship establishment**



### **Conclusion**

It has been demonstrated that the literature reveals real estate agents to exist in a normal agent-principal relationship. They generally have no authority to make decisions on behalf of a principal, and are unable to protect the interests of that principal because of conflicting demands of all parties in the exchange process. But they definitely control information flows as they hold and appropriate information. This is, therefore, a normal agent-principal relationship with the vendor being the agent's principal.

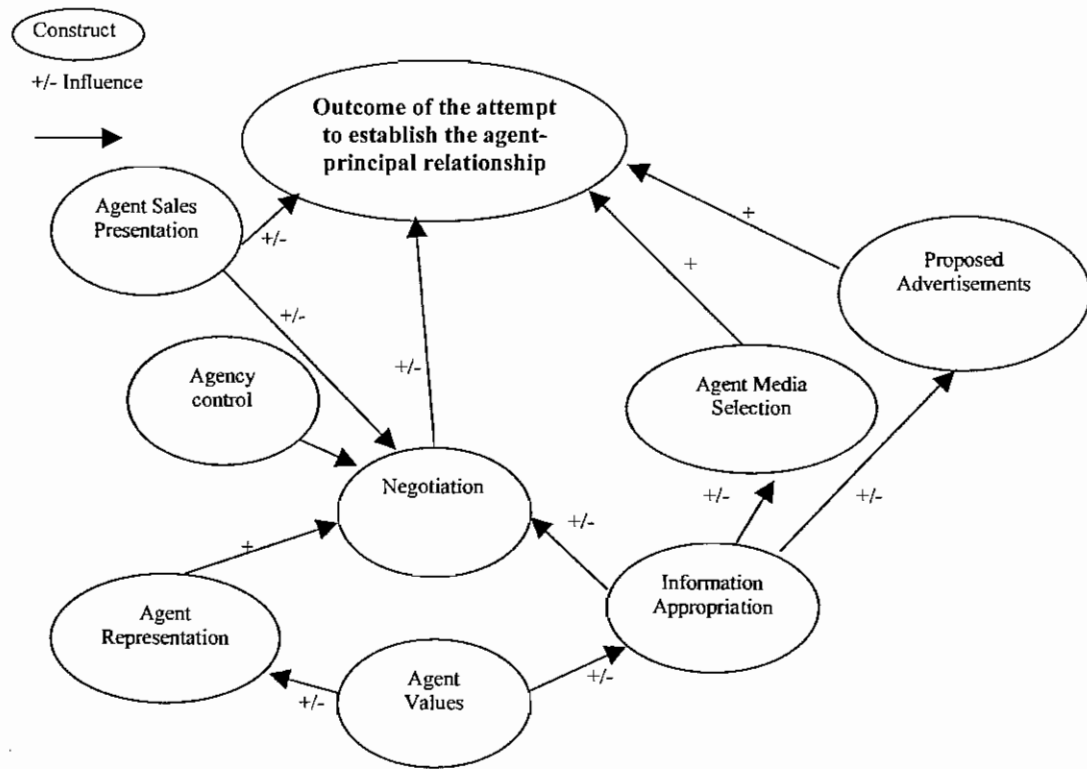
It has been shown that the agent-principal agreement greatly depends on specification of details in that agreement. What is most important in this argument is that the agent-principal agreement is negotiated, clearly documented and agreed to by both the agent and the principal.

By assuming that acquiring the right to market a property is a necessary but not sufficient condition to selling that property, the establishment of an agent-principal relationship becomes the point at which an agent-principal agreement exists. This therefore represents an appropriate unit of measure for examining the agent-principal agreement.

This thesis proposes that the determinants of relationship establishment in an agent-principal relationship include: information appropriated by agents from vendors driven by an agent's personal values; an agent's presentation skill development by way of communication skills, personal grooming and people skills; whom an agent will actually represent as a reflection of the degree to which self-interests are pursued; and an agent's proposed advertising for the principal's property as a reflection of that agency's capacity to offer the media type and plan advertising campaigns.

Figure 12 below depicts the conceptual model assembled with the assistance of the literature.

**Figure 12 Proposed conceptual model**



Adopting a unique approach of examining the agent process of establishing an agent-principal relationship, this thesis has uncovered a number of critical constructs. The constructs identified in the above figure have all been developed and explained in depth in the preceding literature review. The table following shows how this has been done.

**Table 8 Cognitive issues, constructs and literature**

Research Objective	Cognitive Issues	Constructs	Literature
To define the determinants of relationship establishment in an agent-principal relationship	What is an agent-principal relationship?	Agent-principal agreement	Legal literature (Cheshire and Fifoot 1988; Latimer 1999; McGarvie <i>et al.</i> 1966) Marketing literature (Bergen <i>et al.</i> 1992; Kraft 1999; Singh 2000)
	Who does the agent represent? What drives them?	Agent values	Agency theory – self interest, motivation, values (Babson 1999; Jensen 1998; Moore <i>et al.</i> 1992)
		Agent representation	(Moore <i>et al.</i> 1992)
	What information do agents acquire from sellers and what do they do with this?	Information Appropriation	Agency theory (Akerlof, 1970; Molho, 1997; Marsh, 1998; Moore, 1992)
	How is the agent-principal relationship established?	Agent presentation skill	Marketing Communication – Personal Sales (Kucera 2002; Quigg and Wisner 1998) (Bagozzi 1982; Bagozzi 2000; Bagozzi and Dholakia 1999; Bagozzi <i>et al.</i> 1999) (Morgan and Hunt 1994)
			Buyer behaviour (Benjamin and Chinlo 2000; Braun 1999; Hovland, Janis, and Kelley 1966; Levitt 1986; Marsh and Zumpano 1998; Richins <i>et al.</i> 1987; Yavas and Colwell 1995; Yavas <i>et al.</i> 2001)
			Theory of Cognitive dissonance (Egan 1982; Festinger 1957)
		Negotiation & Agency Control	Marketing literature - (Baker and Lutz 2000; Baryl and Zumpano 1995; Benjamin and Chinlo 2000; Marsh and Zumpano 1998; Richins <i>et al.</i> 1987; Yavas <i>et al.</i> 2001)
	What is in an agent submission to a potential client? How is this designed? What does the agency have to do with this?	Proposed Advertisements & Agent media selection	Marketing communication – (Dreze and Zufryden 1999; Hoffman 2000; Norton 2001; Poon 1998)

Relationship establishment in an agent-principal relationship is the dependent variable in this research, influenced by a proposed and presented agent-principal agreement.

At the point of the establishment of an agent-principal relationship the following conditions exist:

- Other agent submissions are considered inferior;
- Implicit acceptance by both seller and agent of the terms of the agreement; and
- Effective agent submissions to clients result in relationship establishment between the agent and the client while ineffective agent submissions result in either potential clients engaging another agent or no engagement of any agent at that time.

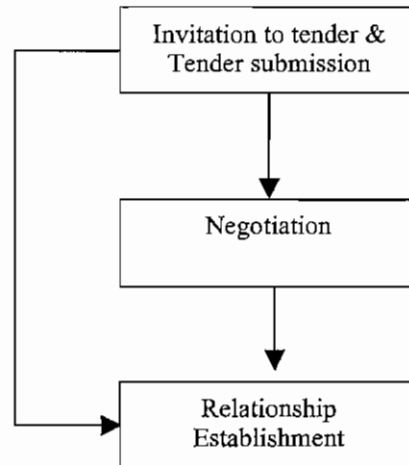
The table below shows research questions related to the previously identified constructs that have been developed throughout the literature study.

**Table 9 Research Questions and their constructs**

<b>Research question</b>	<b>Constructs</b>
Research Question 1 Is negotiation of an agency agreement a determinant of agent-principal relationship establishment?	Negotiation
Research Question 2 Is agency control a determinant of negotiation in agent-principal relationship establishment?	Agency Control
Research Question 3 Is information appropriation a determinant of negotiation in agent-principal relationship establishment?	Information Appropriation
Research Question 4 Are an agent's values a determinant of information appropriation in negotiation in agent-principal relationship establishment?	Agent values
Research Question 5 Is agent representation a determinant of negotiation in agent-principal relationship establishment?	Agent Representation
Research Question 6 Is agent representation determined by agent values?	Agent Values
Research Question 7 Are proposed advertisements a determinant of agent-principal relationship establishment?	Proposed Advertisements
Research Question 8 Is information appropriation a determinant of proposed advertisements in agent-principal relationship establishment?	Information Appropriation
Research Question 9 Is agent media selection a determinant of agent-principal relationship establishment?	Media Selection
Research Question 10 Is information appropriation a determinant of agent media selection?	Information Appropriation
Research Question 11 Are agent sales presentation skills a determinant of agent-principal relationship establishment?	Sales presentation
Research Question 12 Are agent sales presentation skills a determinant of negotiation in agent-principal relationship establishment?	

Simplifying the conceptual model proposed in the figure above, the figure below shows the fundamental processes that lead to relationship establishment.

**Figure 13 Fundamental processes for relationship establishment**



Legal and marketing literature and agency theory all suggest the agent-principal relationship is established through moderation (or negotiation) of relationship terms in order for relationships to begin. This thesis has covered literature that converges at the point of an agent establishing a relationship with a client (vendor), entering into an agent-principal agreement with that client (vendor) as a principal. Once identification of the goals of the agent, and the perspectives from which these can be viewed, is achieved through examination of theory, research questions and constructs for assembling the above conceptual model are then legitimised. Compartmentalising models and assembling constructs in this manner is a recognised technique for establishing a conceptual model (Hayduk 1996; Hayduk 1987).

This thesis can now develop a method to test this model.

*If there is no change in the dependent variable (relationship establishment in an agent-principal relationship) from changes in the independent variables in the relationship establishment in agent-principal relationships then either the model is flawed, or the agent does not influence establishment of an agency agreement.*

This literature review presents a case for arguing that the conceptual model is not flawed with constructs carefully embedded in theory. In this case, the degree to which the agent contributes to agent-principal relationship establishment, can be tested by examining real estate agents in Victoria, as they seek to establish these relationships.

This is generalisable for three reasons. These are:

1. An agent-principal relationship exists between an agent and the agent's principal (the vendor);
2. Negotiation of the agent-principal relationship precedes any commitment to that agreement; and
3. The real estate agent submits terms of the relationship to the client prior to establishment of that relationship.

This means we can describe the agent-principal agreement establishment by focussing on Victorian Real Estate agents. We expect to find that agent-principal relationships are a function of some combination of all the constructs developed in the previously described conceptual model; and that some aspects will be more important than others in the agency relationship establishment. How to organise and collect data to test the conceptual model is discussed in following sections of the thesis.

# CHAPTER 4

## METHODOLOGY

This research asks two questions on a general level:

- What are the determinants of relationship establishment in an agent-principal relationship? And
- What impact do these have on the establishment of any specific agent-principal relationship?

The purpose of this chapter is to determine how to address the twelve more specific research questions developed in the preceding literature review. This chapter is about discussion of further issues so a research model and methodology can be identified for testing in subsequent chapters. The table below shows specific research questions from the literature that relate to the conceptually modelled constructs.

**Table 10 Conceptual model constructs and research questions**

<b>Conceptual Model Construct</b>	<b>Research Question</b>
Negotiation	1
Agency Control	2
Information Appropriation	3, 8, 10
Agent Values	4, 6
Agent Representation	5
Proposed Advertisements	7
Agent Media Selection	9
Sales Presentation skills	11,12

In order to answer the research questions in this table the next sections of this chapter will examine what needs further definition, and how data can be collected, so that there is scope for identifying a well-founded path along which this research can proceed.

### **General research issues**

Research method literature (e.g. Hunt 1991; Neuman 2000; Salkind 1997) shows that classification of research is important because how to proceed comes from this. Hunt (1991) advises that this requires identification of the subject of the research. Two dichotomies emerge at this point. Firstly, a distinction between discovery and justification is important to separate the purpose of steps in the research, so that these can be mutually exclusive and exhaustive. Steps in the research must be mutually exclusive to ensure completeness of the steps. For example, collecting data before data collection instruments are properly tested is likely to adversely effect quality of the data, or creating a data collection instrument that is not strongly linked to the underlying theoretical model is likely to produce data that fail to contribute to proving a specific theory.

Secondly, a distinction between context (issues and questions) and logic (systematic rules and procedures such as laws, hypotheses and theories) is important to separate what to do from how to do it. The research is considered with these dichotomous conditions in mind so that logical processes can position the research in its appropriate context.

In classifying this research, the subject of the research is based on social interaction between an agent and a client seeking to establish an agent-principal relationship. Consequently, pure positivist theory is not appropriate for two reasons. Firstly, for establishing context pure positivist theory is singularly inadequate (Hunt 1991); and secondly, studies of social behaviour involving many variables working together experience inherent complexities (Neuman 2000). The subject of this thesis fits more with interpretivist theory because it is based on the study of social interaction that is not just observable but meaningful.

Two questions emerge from examining the literature.

*What do real estate agents do in pursuit of agent-principal agreements? And, what do these same real estate agents consider determinants of agent-principal agreements?*

A process of investigation (the logic of discovery) is required (Hunt 1991) for these questions. However, although Hunt (1991, Page 26) finds no single set of procedures that guarantee answers, application of an accepted research method serves to verify our logic, allowing a more rational examination according to Salkind (1997).

A method prescribed by services marketing research specialists Johns and Lee-Ross (1998) will be used in this research, utilising ongoing interplay of qualitative and quantitative data collection methods. This facilitates examination of the social interaction of agent-principal relationship establishment to enrich the contribution this thesis makes through discovery (and justification) of the context of this phenomenon, with a depth and breadth not done before.

Hunt (1991) argues that establishing context can be an inductive process (commonly a process of observations, data recording, classification and induced generalisations) or deductive process (commonly a process of speculations, assumptions, hypothetical model specification and deduced generalisations). The two approaches are typically seen in marketing and economics research respectively. However, this does not mean we should be using either route exclusively.

The context of discovery for this thesis is established from multiple perspectives. Marketing, legal and theoretical perspectives of agent-principal relationships have been examined so that preliminary research questions can be positioned in their rightful context, based on existing literature. But interpersonal perspectives of marketing are not obviously revealed in a real estate agent context in this literature.

Social research, such as this thesis, is increasingly becoming influenced by current research trends of combining qualitative and quantitative research methods (Denzin and Lincoln 1994, Page 277). Hunt (1991) and Johns and Lee-Ross (1998) similarly recommend interplay between qualitative and quantitative research data. Based on this

literature, a valid course of action for this thesis is to implement qualitative research and quantitative research, so that precise answers to the research questions at hand can be found.

### **Qualitative research issues**

Qualitative research is

*“multimethod in focus, involving an interpretive, naturalistic approach to its subject matters...attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them”* (Denzin and Lincoln 1994, Page 2).

Detailing agent-principal relationship establishment therefore requires collection of qualitative data in the specific context being studied to explore more personal aspects that may be experienced. The table below shows the nature of discussions prescribed by Churchill (1979) that were held in the course of collecting qualitative data for this thesis. Although this author recommends these discussions to frame a research instrument, they cover an extensive range of data sources that are used throughout the thesis to maximise the benefits from qualitative and quantitative research methods.

**Table 11 Discussions to frame wording of questions**

<b>Discussions were held with...</b>	<b>Description of those involved in discussions</b>	<b>Description of discussion</b>
People with responsibility for the product	Sales Representatives	Individual agent depth interviews & informal discussions
Dealers	Agency Owners	Individual depth interviews & focus group
Consumers	Property Sellers	Individual depth interviews and informal discussion
Consumers	Property Buyers	Individual depth interviews and informal discussion
Marketing Researchers	Industry members that had commissioned marketing research reports (Real Estate Industry Institute and Agency Franchise owners)	Report on quantitative industry study (Psi-Delta 1999) Commercial buyer focus groups
Outside Experts	Real Estate Property Manager	Informal discussion
	Experienced Research Academics	Review of proposed questions, test run of questionnaire, analysis requirements
	Family	Informal discussion
	Partner	Informal discussion

Source: Churchill (1979)

### **Quantitative research issues**

In addition to the exploratory nature of qualitative research, the research questions from the literature review need to be specifically addressed, and the conceptual model tested. Some fundamental driving questions to do this are proposed in the table below.

**Table 12 Questions directing development of a method for testing the model**

<b>Question</b>	<b>Resource/Purpose</b>
What are we measuring?	Finn and Kayande 1997
What are we testing?	Campbell and Fiske 1959
What controls can we put in place?	Finn and Kayande 1997
How can we test our model?	Bagozzi, Gopinath, and Nyer 1999
How can we measure our constructs?	Various Marketing Research Scales

Answering these questions define for this thesis the method with which to collect data that will allow a final research model to be tested.

What are we measuring?

In the literature review it was proposed that, for this research, an agent-principal relationship is established from the agent's attempt to establish this relationship. Finn and Kayande (1997) note a need to identify the facet over which findings can be generalised and levels of an object of measurement (Finn and Kayande 1997, Page 137).

For this research therefore:

- The facet of generalisation is the agent-principal relationship;
- The levels of the object of measurement are agent-principal relationship establishment attempts;
- The unit of measure is the outcome of the real estate agent-principal relationship establishment attempt; and
- The informant is the real estate agent.

Applying Finn and Kayande's (1997) method to this research, the real estate agent supplies information on real estate agent-principal relationship establishment attempts (both successful and unsuccessful), so findings can be generalised over all real estate agents to test a theory. The agent's submission to a client in pursuit of an agent-principal relationship can have any one of a number of outcomes. A listing proposal logically results in one of:

- A successfully established agent-principal relationship; or
- An agent-principal relationship established with another agency; or
- No agent-principal relationship established at all as the potential client chooses not to sell at that time; or
- No agent-principal relationship established at all as the vendor chooses to sell without the assistance of an agent.

These are mutually exclusive outcomes.

Analytical data "*reflect an internal structure that combines separate events around a common object*" (Hair, Anderson, Tatham, and Black 1998, Page 676). The immediate task then is to decide how to collect the analytical data required to test the model be collected and who to get this information from. As shown in the first three chapters of this thesis, a real estate agent and agency do a number of things. Therefore the person most able to provide information on relationship establishment in an agent-principal relationship is the agent engaged in the process of relationship establishment with a potential client.

The informant is not a property buyer because they do not see the total vendor package development and negotiation. Likewise the informant is not the seller because they do not see how all the underlying constructs of the model are managed. We are testing differences in relationship establishment attempts that determine the relationship establishment attempt outcome.

In their paper titled “*The Role of Emotions in Marketing*” Bagozzi et al. (1999) consider a Structural Equation Modelling (SEM) approach to test the influence of emotions on a marketing transaction process. This thesis is similar in that it proposes that agents’ personal values, among other constructs identified, influence establishment of the agent-principal relationship. What this means for this research is that an instrument needs to be designed that can capture sufficient quantitative data so that SEM can be used. The precise nature of data analysis will be considered in more detail later.

#### Scale development on a theoretical level

This research seeks to test the conceptual model as a “*structure of symbols and operating rules*” (Perry 1996, Page 38). The model proposes a set of determinants of relationship establishment efforts. To verify the accuracy of the model, the research needs to develop a measure that is valid (measures what we say it measures) and reliable (independent but comparable measures of the same constructs that agree) (Churchill 1979, Page 2).

Important components of scale validation include convergent validation (similarity of measures within a construct) and discriminant validation (intention of difference between constructs) (Campbell and Fiske 1959). Using multi item measures, and measuring the same trait with different methods, allows for a process of instrument validation.

Using the process outlined by Churchill (1979), measurement scale development includes multiple items to capture only one trait, in preference to single item measures (Churchill 1979, Page 197). For example, if we want to know how important prestige is to an agent then we need to ask more than one question about this (preferably 3 or 4 questions) to overcome method variance. Anderson and Gerbing (1988) recognise this fact, but add that, in practice, single indicators may be preferable to ensure unidimensionality. Churchill (1979) early establishes the need for unidimensionality as a necessary but not sufficient cause of validity.

A number of methods to derive single indicators exist in the literature at both the textual level (Hair *et al.* 1998), and seminal level (Bhargava, Dubelaar, and Ramaswami 1994; Little, Cunningham, Shahar, and Widaman 2002). Authors such as Bagozzi (1982) recommend using observed single items to preserve a direct connection with the original data for model development. Furthermore, authors such as Little *et al.* (2002) recommend 'parcelling' of observed items into a manufactured single item (based on averaging a number of observed items) to best represent item-to-construct balance.

Working within these recommendations observed in the literature as discussed here, this thesis will firstly develop multi-item scales and validate them for assembling a legitimate model. Where it is necessary to implement single item indicator analysis to assemble a legitimate model, this approach is justified by the literature just described, on condition that validity is verified and appropriate constraints are implemented, such as constraint of error variance for valid model verification (Hayduk 1996; Joreskog and Sorbom 1989).

According to Finn and Kayande (1997), variance is most important because reliability of a measure is dependent on:

Variation among mean scores of measures (true scores) divided by

Variation among observed scores (True score variance + error variance)

A variance decomposition analysis will be performed in the next section so that reliability of measures can be established in Chapter 6.

The process used to develop the research instrument for this thesis is detailed now:

### **1. Construct identification**

This has been done in the literature review with respect to Borque and Fielder's (1995) acknowledgement of a distinction between a construct's systemic meaning and observational meaning. This distinction refers to the fact that the interpretation of what a construct stands for depends on the theory in which the theory is embedded (systemic meaning) and that a construct must be capable of being operationalized if it is to have explanatory power (observational meaning);

## **2. Measure Purification strategy design**

The approach to reliability, validity and generalisability for purification of measures used in this thesis is that described in detail by Churchill (1979) and implemented in chapter six;

## **3. Variance Decomposition analysis**

Recommended by Finn and Kayande (1997), this appears in the next section to:

- a) Identify any sources of noise in the system that we are investigating;
- b) Ensure that there are no systematic problems caused by this noise; and
- c) Narrow the task to one of evaluating just the changes in the relationship establishment attempt outcome as a result of changes in the constructs;

## **4. Attribute identification and purification**

Research literature is examined to identify existing relevant robust scales that apply to the constructs we are seeking to measure. Adaptation of existing instruments is acceptable on the basis of instrument size, population characteristics or language (Borke and Fielder 1995, Page 37). Adaptations or direct adoptions are best (Peter 1981). Any constructs without appropriate measures require measure development and verification before inclusion in an instrument. This is done with concern for theoretical recommendations in close liaison with practitioners, to capture characteristics of the population concerned and language appropriate to respondents, detailed in the next chapter and documented in chapter six; and

## 5. Research method design

As well as being theoretically sound, measures need to be 'doable' if we actually expect to collect data. Based firmly on the recommendations of Dillman (1978), the research method is designed to minimise respondent fatigue so that response rates and quality are maximised. This author indicates that these are somewhat dependent on consistency of scales. This is further considered in question design in chapter six.

### Controls (Variance decomposition analysis)

The value of a research project increases when the research design controls potential sources of error (Malhotra 1999), and hence sources of variance. Sources of variance identified in the literature are the unit of measure, constructs being measured, the questionnaire, the environment and [I(interaction),  $\delta^2$ (random error)] (Campbell and Fiske 1959; Churchill 1979; Finn and Kayande 1997).

One reputable method of identifying the extent of variance in a system is variance decomposition analysis (Finn and Kayande 1997). The table below describes sources of variance in this research.

**Table 13 Variance decomposition analysis**

Dependent variable	Independent influencers	Decomposition formulae
$\delta^2(\text{observed score})$	$\delta^2(\text{agent-principal relationship establishment})$	$\delta^2(\text{agent-principal relationship establishment}) = \delta^2(\text{industry}) + \delta^2(\text{constructs}) + [I(\text{interaction}), \delta^2(\text{random error})]$ <i>WHERE</i> $\delta^2(\text{constructs}) = \delta^2(\text{agent presentation}) + \delta^2(\text{negotiation}) + \delta^2(\text{agent representation}) + \delta^2(\text{agent values}) + \delta^2(\text{information appropriation}) + \delta^2(\text{agency control}) + \delta^2(\text{agent selected media}) + \delta^2(\text{proposed advertisements}) + [I(\text{interaction}), \delta^2(\text{random error})]$
	$\delta^2(\text{respondent})$	$\delta^2(\text{respondent}) = \delta^2(\text{skill}) + \delta^2(\text{health}) + \delta^2(\text{motivation}) + \delta^2(\text{emotional strain}) + \delta^2(\text{fatigue}) + \delta^2(\text{understanding of instructions}) + [I(\text{interaction}), \delta^2(\text{random error})]$
	$\delta^2(\text{questionnaire})$	$\delta^2(\text{questionnaire}) = \delta^2(\text{wording}) + \delta^2(\text{question order}) + \delta^2(\text{scaling}) + [I(\text{interaction}), \delta^2(\text{random error})]$
	$\delta^2(\text{environment})$	$\delta^2(\text{environment}) = \delta^2(\text{work load}) + \delta^2(\text{distractions}) + [I(\text{interaction}), \delta^2(\text{random error})]$
	$[I(\text{interaction}), \delta^2(\text{random error})]$	All interaction among above factors: two way, three way etc. Note that random error is confounded with the four-way interaction effect (Finn and Kayande 1997).

The decomposition formulae in the table above will now be explained in detail under the following headings:

- True characteristics of agent-principal relationship establishment  
*( $\delta_{\text{agent-principal relationship establishment}}$ );*
- Subjects who rated their agent-principal relationship establishment  
 *$\delta_{\text{respondents}}$ ;*
- Measurement scales for rating agent-principal relationship establishment  
 *$\delta_{\text{questionnaires}}$ ; and*
- Setting where subjects rated agent-principal relationship establishment  
 *$\delta_{\text{environment}}$ .*

Note that the main purpose of this process is to establish on a theoretical level the absence of systematic bias in any part of the decomposition formula. For this section, interaction effects will be discussed logically to establish they do not exist, or noted for further empirical examination in later sections of the thesis. Random error is a “measurement error, which represents transient factors that affect the observed score in different ways each time the measurement is made, such as transient personal or situational factors,” (Malhotra, Hall, Shaw, and Oppenheim 2002, Page 309).

True Characteristics of agent-principal relationship establishment.

$$\delta^2(\text{agent-principal relationship establishment}) = \delta^2(\text{industry}) + \delta^2(\text{constructs}) + \\ [I(\text{interaction}), \delta^2(\text{random error})]$$

- (a)  $\delta^2(\text{agent-principal relationship establishment})$  - Sources of variance in agent-principal relationship establishment stem from how an agent is selected by a client. Because we are empirically measuring the agent's part in this we need to consider the sellers part from another perspective. Just because we are not talking to sellers does not mean there is no noise from their role in relationship establishment. Logically, no systematic noise should arise from the sellers (as potential clients), because we are randomly selecting agents from across the whole of Victoria, not just a single location that might be inhabited by people with similar characteristics, attitudes and life experiences. The locations used in the thesis cover a broad range of ethnic, demographic and psychographic centres that precludes the likelihood of a systematic error from clients.
- (b)  $\delta^2(\text{industry})$  - Noise might arise here from including various types of agents (e.g. residential, commercial, rental). Therefore the study is confined to residential property sales agents to eliminate this unwanted noise. A restriction of this nature is not uncommon in real estate research, due to specific characteristics of residential and commercial, sales and rental property transactions (Benjamin and Chinlo 2000; Miceli *et al* 2000; Muhanna 2000; Richins *et al* 1987).

(c)  $\delta^2(\text{constructs})$  – Noise might arise here from construct definition or operationalisation. Thinking about the constructs identified we need to measure the things that we see as interesting and control the rest. The table below shows decomposition of construct variance.

**Table 14 Decomposition of construct variance**

<b>Construct</b>	<b>Variance</b>
$\delta^2(\text{agent presentation})$	Noise might stem from timing and location of the presentation. We will assume that a mutually agreeable time and place is arranged in order for the presentation to take place. The timing and location of the presentation may vary for each presentation to a principal because this is usually done in the vendor's home. It is likely therefore that there is an absence of systematic, or constant, variance or noise. Other aspects of the sales presentation defined in theoretical terms of modelled constructs will be measured.
$\delta^2(\text{negotiation})$	This will be measured.
$\delta^2(\text{agent representation})$	This will be measured.
$\delta^2(\text{agent values})$	This will be measured.
$\delta^2(\text{information appropriation})$	This will be measured.
$\delta^2(\text{agency control})$	Noise might stem from the difference between levels of independence of an organization. To control this we are examining just the agent and so it does not matter whether the agency constraints are imposed by the agency director or higher up. The effect is the same – a constraint is placed upon the operating agent. No systematic variance between respondents should occur because of the sampling method used.
$\delta^2(\text{proposed advertisements})$	Noise might stem from all advertisement options open to the agent. We clearly define the terminology and measure this.
$\delta^2(\text{agent selected media})$	Noise might stem from all media open to the agent. We clearly define the terminology and measure this
[I(interaction), $\delta^2(\text{random error})]$	Interaction between the constructs will be measured to verify no systematic bias from this

Variance within and between individual constructs will be measured.

Interaction between and within constructs can be tested (Campbell and Fiske 1959). Noise from construct definition is not important here because these are soundly embedded in theory.

- (d) [I(interaction),  $\delta^2$ (random error)] – This thesis has not yet proven categorically that there is no interaction at this point. So it will be assumed that no systematic interaction exists between the constructs and industry as was argued in the case for establishing generalisability discussed in the previous chapters. However, this assumption will be re-examined further in chapter 6 so that random errors arising from this are negligible.

#### The respondent

$$\delta^2(\text{respondent}) = \delta^2(\text{skill}) + \delta^2(\text{health}) + \delta^2(\text{motivation}) + \delta^2(\text{emotional strain}) + \delta^2(\text{fatigue}) \\ + \delta^2(\text{understanding of instructions}) + [I(\text{interaction}), \delta^2(\text{random error})]$$

- (a)  $\delta^2$ (skill) – Noise might arise here from agents not being able to complete the research instrument. Despite mandatory agent representative education, that might imply minimum literacy skills among respondents (SUTa; SUTb), this has been implemented in the industry after many agents commenced operations. But because agents have a number of forms to fill in during the course of selling a house it is reasonable to assume that the minimum skill level of agents that enables them to perform their work duties will be adequate, for at least completion of a survey form, if it is couched in appropriate terminology and has a simple, logical flow. Pre-testing and a consultative approach to research

instrument development will eliminate any systematic agent skill sourced error.

Agents can also contact the researcher for clarification if desired.

(b)  $\delta^2(\text{health})$  – Noise might arise here from individual agent's personal health. So

we assume that because agents are free to choose not to participate, they must

have enjoyed a minimum level of health that did not prevent them from

participating. Furthermore, even minor personal health issues such as colds,

sore throats, headaches etc are not likely to have caused any systematic noise.

(c)  $\delta^2(\text{motivation})$  – Noise might arise here if agents have some agenda for

participating in the research. Agents are encouraged but not forced to participate

in the research. Because motivation can be a function of loyalty to the group

being studied, and interest in finding out results of the research (Borque and

Fielder 1995), participants were encouraged, but not forced, to participate by the

industry association. Their motivation most probably came from:

- The opportunity to contribute to industry knowledge;
- The opportunity to contribute to knowledge;
- A feeling empathy with (or sympathy for) the researcher; or
- The opportunity to access results.

All participants were sampled from the industry association membership. Steps

available to control for variations of agent motivation include equal access to

results and anonymity in result publication. Although the use of incentives may

motivate respondents to participate (Chebat and Picard 1991), these are not

included in an effort to eliminate spurious influences on motivation. For all

these reasons, variance in agent motivation cannot be ignored and will be

examined for any systematic differences.

- (d)  $\delta^2(\text{emotional strain})$  – Noise might arise here if the study were investigating a more subjective issue. The participant is in no way threatened, either personally or vocationally by the research. No systematic noise is expected to arise from this construct because of a fully tested and proper instrument development process. Emotional strain should not vary systematically between, or within, respondents during the study.
- (e)  $\delta^2(\text{fatigue})$  – Noise from fatigue might arise if the research process caused participants to become fatigued, or was operationalised at a point in time that they were fatigued. Control for respondent fatigue is a matter of instrument preparation. The length of questionnaire, clear notification of requirements prior to commencement of survey and operationalisation at a time when agents are not fatigued, controls for possible variance resulting from fatigue. Knowing the industry cycles allows research to take place at a time when agents are unlikely to be over taxed. For these reasons, fatigue is not expected to be a source of systematic variance.
- (f)  $\delta^2(\text{understanding of instructions})$  – Noise from this might stem from an absence of instruction clarity, specific wording and complexity of instructions. All instructions are pre-tested, developed in consultation with agents and standardised throughout the research so they are simple, clear and actionable.
- (g)  $[I(\text{interaction}), \delta^2(\text{random error})]$  – If fatigue, emotional strain, understanding of instructions, motivation and health interact, the likely impact is on quality of response, response rates and characteristics that might emerge from the analysis of the data. Responses will be explored to ensure there are no obvious clusters

that result from any interaction between these aspects. Any interaction from these things is unlikely to be systematic because of the range of respondents used in the research. There is unlikely to be any undue influence of interaction between these things so the error arising from this interaction is likely to be negligible.

### The Questionnaire

$$\delta^2(\text{questionnaire}) = \delta^2(\text{wording}) + \delta^2(\text{question order}) + \delta^2(\text{scaling}) + [\delta^2(\text{interaction}), \delta^2(\text{random error})]$$

- (a)  $\delta^2(\text{wording})$  – Noise from this might stem from agents not understanding the wording used. Questionnaire wording, as a matter of literacy (Borke and Fielder 1995), is controlled by formalisation and standardisation of questions in a structured questionnaire. Test and pre-test cycles eliminate variance of wording between and within questions. Question wording developed in consultation with real estate agents, means that relevant wording could be designed using common industry appropriate terminology. This reduces the likelihood of error from misinterpretation. If this research were to be done in another industry then wording would be an issue for redesign but need not be a source of error in future studies.
- (b)  $\delta^2(\text{question order})$  - Noise from this might arise if agents cannot follow the sequencing of questions, or do not like the ordering of questions. For this reason questions are ordered. The instrument commences with general (easy) questions; then addresses successful experiences (positive reinforcement of skill to build trust leaving more contentious topics until later once relationship established). The instrument then addresses unsuccessful experiences (presented

identically to successful experiences to minimise surprise non-completion). The instrument concludes with personal questions and demographic questions (taking advantage of cognitive ties to respondent, and their interest in not wasting their investment to this stage) (Kline 1998; Malhotra 1999).

The absence of complex skip patterns reduces errors that might result from question order. Further noise might arise from what is described by Kahneman et al. (1986) as framing effects. These are the holistic context within which specific stimuli (a survey instrument question, series of questions, etc) are experienced. Within a questionnaire these will be constant for each respondent, but between respondents it is unlikely that these will be in any way systematic because of the range of respondents targeted by the research.

- (c)  $\delta^2$ (scaling) – Noise from this might stem from agents not being able to use the scales, or from the scales not suiting the questions asked. The literature tells us that multi-item scales allow for internal reliability (Churchill 1979; Finn and Kayande 1997) and internal consistency (Churchill 1979), and that scaling consistency across the trait is also important (Menezes and Elbert 1979). While it is not possible to prove a trait is different from all other traits, it remains possible to show that little overlap exists between measures (Campbell and Fiske 1959). Scales will be tested, standardised and proven prior to data capture, to eliminate this as a source of systematic variance. Previously used robust scales will be used wherever possible. Any error emanating from scale design will be known.

(d) [I(interaction),  $\delta^2$ (random error)] – Evidence of any interaction between scaling, question order and question wording will be collected after the fact anecdotally by confirming with respondents their impression of the survey instrument. Furthermore, the range of respondents participating in the research ensures a range of literacy and experience that would make it unlikely that any systematic interaction between experience of scaling, ordering and wording would bias the sample. Pre-testing the instrument ensures that the best instrument is operationalised so that random errors can be minimised.

#### The environment

$$\delta^2(\text{environment}) = \delta^2(\text{work load}) + \delta^2(\text{distractions}) + [\text{I}(\text{interaction}), \delta^2(\text{random error})]$$

(a)  $\delta^2$ (work load) - Noise from this might stem from choosing a very busy time to collect data, or even a known period of vacation. For this reason a quiet time for residential listings (November, February) is selected for data capture. All respondents are residential property sales agents. It is likely that there is a systematic bias towards agents that are not too busy to participate in the research. For this reason, the sample is tested in Chapter 6 to ensure that participating agents are representative of agents in the broader real estate property sales industry.

(b)  $\delta^2$ (distractions) - Noise from this may stem from other distractions such as work, or personal, events. Scheduling of the research considers distractions from significant economic events (such as the state of the property market) and social events (such as Christmas parties). Again, respondents are invited and

encouraged, but not coerced or forced, to participate. Response rates are explored by collecting anecdotal evidence from agents to verify that this is not a source of systematic variance. Respondents are free to participate when convenient, thereby avoiding distractions from home lives. Other distractions that cannot be predicted will be dealt with as needed to ensure no systematic influence on results.

- (c)  $[I(\text{interaction}), \delta^2(\text{random error})]$  – Interaction between distractions and workload are likely but will be investigated after data collection commences and considered as a component of analysis to ensure no systematic bias results from these.

#### Interaction, random error

Interactions among agent-principal relationship establishment, respondents, questionnaires and the environment are not systematic because of the methodological approach to research design that governs the nature of the survey instrument, definition of respondents and broad sampling frame, carefully modelled relationship establishment process and cross-sectional research design. For random error to exist these things would necessarily be transient and they are not. So random error from any interaction terms are assumed to have a mean of zero with an unknown variance, if they exist at all.

#### **Testing the conceptual model**

The literature shows that categorising the nature of the model is a precursor to selecting a test procedure. Following the method prescribed by Anderson and Gerbing (1988), model verification will be performed by comparing proposed models with a measurement model to assess the degree of fit of proposed models.

The conceptual model developed in this thesis shows a number of interrelated constructs. Categorised as latent variables, constructs in such a model are not directly measurable but can be observed by measuring specific features of the behaviour of a set of subjects in a particular environment (Raykov and Marcoulides 2000). This thesis has developed a model of constructs that represent the behaviour of real estate agents in the process establishing an agent-principal relationship.

Once the constructs have been examined, a proper analysis method to test the plausibility of proposed interrelationships among constructs is structural equation modelling (SEM). Characteristics of structural equation models are listed as:

- Models are conceived in terms not directly measurable;
- Models take into account potential errors of measurement in all variables with variance in error terms estimated for all variables; and
- Models fit to matrices of interrelated indices between all pairs of observed variables (Raykov and Marcoulides 2000).

SEM assumes:

- Linearity between dependent and independent variables; and
- Residuals have a mean of zero and are independent, normally distributed and have variances that are uniform across the levels of an independent variable (Kline 1998).

SEM is better in this instance than more classical approaches, such as analysis of variance and regression, which use models that fit raw data with no error of measurement and assume independence of variables. These classical approaches, at best, allow relationships between independent variables and dependent variables to be established, but they do not allow testing of model validity. Both classical approaches and SEM share an assumption that the relationship between observed variables is linear and that model comparison is statistically possible to examine the plausibility of factor loadings of error variances and co-variances (Raykov and Marcoulides 2000).

Two types of SEM exist. Path analysis models focus on observed variables while confirmatory factor analysis is for examining patterns of interrelationships between constructs. SEM is the best analysis method for confirmatory model verification. SEM enables assembling of sub-models. Errors are related to the reliabilities of the constructs and hypotheses can be tested. However, SEM is not perfect.

Software available for SEM includes packages like LISREL and AMOS. This thesis will use AMOS. The software does not function if there is not a good fit between the data and the model, with missing cases being an ongoing issue with the software. For this reason, data need to be scrutinised before model testing to verify that they conform to SEM rules and AMOS restrictions.

The theoretical model developed appears to be suited to confirmatory factor analysis with structural equation modelling. As done by Aquino, Lewis, and Bradie (1999), this thesis will follow the format recommended by Bagozzi (1982) and Bagozzi et al. (1999) for verification of such a model. Chin (1998) specifies a four step process based on

these works that models relationships among multiple predictor variables; constructs unobservable latent variables; models error measurements for observed variables; and statistically test assumptions made about the data. Chin (1998) carefully warns against *“slipping into an exploratory mode where the final results may be unduly influenced by the vagaries of the data at hand”* (Chin 1998, Page 5). For this reason, theoretical implications will be considered, instead of statistical analysis alone, so that there are no serious omissions.

## **Limitations**

There are four types of limitations to a study such as this, including limitations of:

- The literature - these in fact reveal the opportunity for this research to make a contribution to areas that are observed to be lacking;
- Research design – these are not problematic because of the interplay of methods to ensure that there are no serious omissions; furthermore research design is firmly based in research method literature;
- Data collection – these are discussed in the section below and further detailed in the following sections and chapters of this thesis; and
- Data analysis – these are discussed now.

## Data Analysis

Kline (1998, Page 25) suggests that covariance is the "basic datum" of SEM and that correlation is part of this, given that:

*"Variance is the weighted average of the squared differences (or distances) between the values of the variable and the mean of that variable, co-variance is then the expected variance between two variables"* (Judge, Hill, Griffiths, Lutkepohl, and Lee 1982, Pages 27-29).

As with all analysis techniques, some basic assumptions or 'rules' exist and there are consequences to violations of these. Assumptions upon which SEM operates are those of linearity, variability, relative shapes of distributions, reliability and validity. Many of these conditions are necessary for use of other analysis tools such as regression. Data will be screened for these conditions in Chapter 6, violations noted and inferences adapted accordingly.

## Impact of assumption violations

The work of Judge et al. (1982) is used to examine consequences of violation of assumptions necessary for data analysis in this thesis. This cannot be discussed fully until then because it would be pre-emptive to do so before development of the data collection tool has been discussed.

Nevertheless the following is a list of things that happen if assumptions are violated according to Judge et al. (1982). Data are examined for these conditions so that the analysis method is fundamentally flawless. Things that might happen include wrong regressors – omission of relevant and inclusion of irrelevant variables; nonlinearity; changing parameters during collection period; biased intercept; heteroskedasticity;

autocorrelated errors; errors in measures & variables; autoregression (lagged dependent variable as independent variable); simultaneous equation estimation (simultaneous interactions causing changes in dependent variable); and multicollinearity.

#### Indicator specification

The required number of indicators for specifying a model is given great attention in the literature but treated in this thesis by adopting Anderson and Gerbing's (1988) staged analysis method. The resulting model is specified using Hayduk's (1996) recommended single item indicators because this is best for complex models such as the one developed from the literature review and exploratory research in this thesis.

#### Other limitations

Other limitations pertaining to the research instrument, response and non-response, and the data analysis method are discussed in Chapter 6. These limitations do not relate to conceptual limitations because limitations on this level arise from examination of results and lead to further research opportunities. These will be discussed in the last chapter of this thesis.

## **CHAPTER 5**

### **QUALITATIVE RESEARCH**

This chapter describes the qualitative research conducted in the course of this research. These data are used at this point to clarify further practical aspects of agent-principal relationship establishment by defining the research problem, method and findings. Further use of these data throughout the thesis confirms and expands points of interest from quantitative investigations.

The conceptual model proposed in Chapter 3 is developed from a theoretical perspective, largely without context specific definitions. The research problem at this point raises three questions:

- Firstly, do the theoretical constructs truly exist in the real estate context? This question is necessary because of the lack of existing context specific research that would be useful as a comparison and to provide a base for generalisability;
- Secondly, can the nature of these constructs be confirmed from the agent's perspective? This question is necessary so that terms can be defined

appropriately and couched in appropriate language for later sections of this thesis; and

- Lastly, are there any additional aspects that need to be included? This question ensures the conceptual model forming the base for answering the research questions of this thesis is sufficiently specified and that all of the aspects described in the conceptual model have been included.

### **Research method**

Discussions were conducted to gather qualitative data throughout the research process in both preliminary exploratory and confirmatory stages later in the research process. The method and nature of these discussions are detailed in the previous chapter but described here.

Depth Interviews were conducted with the following for reasons specified below:

- 5 real estate agents (who wish to remain anonymous) – 4 agency owners and 5 real estate sales representatives. Real estate agents interviewed were chosen from a small agency (only two sales representatives), medium agency (5 sales representatives) and large agency (as part of a national agency chain). All agents had experience in property sales and listing, some with over 20 years in the real estate industry. All participants were interested in helping me to accurately describe how the property listing process worked to establish agent-principal relationships and to get some benefit from this research;

- 2 Marketing Managers of Real Estate Industry Internet classified advertisement suppliers ([www.property.com.au](http://www.property.com.au) and [www.realestate.com.au](http://www.realestate.com.au)). These suppliers were chosen because they knew all the options open to real estate agents instead of more conventional media suppliers that may not have understood the newer technology options;
- 3 vendors that had recently engaged in the process of entering into an agency agreement. Vendors were selected because their experiences were recent and came from different locales, demographic sectors, property prices and sales methods;
- The Chief Executive Officers of the Real Estate Institutes of Victoria, Canberra and Australia, and the Director of a large real estate franchise chain that commissioned focus groups to study buyer attitudes to real estate agents and real estate transactions. These people were interviewed to give a broad perspective on how agents in general think within the real estate industry and how the communities in which they operate perceive agents; and
- Outside experts that had experienced relationship establishment between an agent and client (Real Estate Property Manager, Experienced Research Academics, Family members and Partner). These people were included to add further dimensions to the emerging conceptual model from both a real estate, academic and more general perspective.

Discussions with real estate professionals in the industry were held at the interviewee's work place and lasted approximately one hour. Other conversations were held at locations that suited the interviewees.

The real estate agent focus group was attended by a small number of real estate agents and the researchers (one research supervisor and myself). This was held in the boardroom at Monash University during business hours. Lunch was served and a small gift was given to attendees. These were not used as an incentive for attendance. The focus group ran for approximately one hour and a half and was dual moderated by both my supervisor and myself. Proceedings were audio taped and subsequently transcribed by the researcher.

Discussions with vendors were less formal and not audio taped. It seemed that everyone who had been a vendor was happy to talk about the experience. Data were collected both before and during the process of reviewing the literature.

### **Research findings**

This section will proceed by analysing the transcripts of interviews and notes taken in discussions described in the previous section. Most of the findings from the literature review are reflected in this discussion material. The referencing style used here is:

- [Agent Focus Group] for focus group sourced quotations;
- [Agent X] for participating real estate agents and agency owners to protect anonymity;
- [Industry Association Interview] for industry association executives; and
- [Industry Expert] for other agency personnel, also to protect anonymity.

### Determinants of agent-principal agreements

The listing process is the most critical decision point for agents because they need properties to sell [Agent Focus Group]. Agents are “*privileged*” if they “*get the listing*” [Industry Association Interview], and “*The agent’s goal is to get listings and then get buyers*” [Agent X].

A number of determinants exist in the process of acquiring a property listing. Some important components of the listing acquisition include media costs, the media mix and information acquisition [Agent Focus Group]. The importance of advertising is well understood by agents. This is reflected in comments like “*Advertising gives you the right to a sale*” [Industry Expert].

These findings suggest that the perspective modelled in Chapter 3 has a strong basis by revealing a fundamental consistency between practitioners and the literature and that there are a number of determinants of relationship establishment. .

### Negotiation and agency management control

In the process of acquiring an agent client relationship, negotiation of terms of the agency agreement “*depends on public and consumer pressure*” [Agent Focus Group]. This means that the agreement between the agent and the vendor is subject to ‘pressure’ from the principal.

Control imposed by a principal, by way of removing the freedom of the agent to act solely on their own terms, earns them the title of “*vendor from hell*” in one case [Agent Focus Group]. This ‘pressure’ establishes the criteria for the marketing campaign prior

to commencement of the agency agreement and can be monitored by the vendor whilst in operation [Agent Focus Group]. This shows that somewhat reluctantly, agents are subject to discussions and arrangements of terms of an agreement and means that some aspects of the agent-principal agreement are not left solely to the agent. For example, *"It is the vendor's decision to use Internet advertising"* [Agent X].

Some agents consider agency control to be excessive. This was given as a reason for one agent establishing an independent agency business [Agent X].

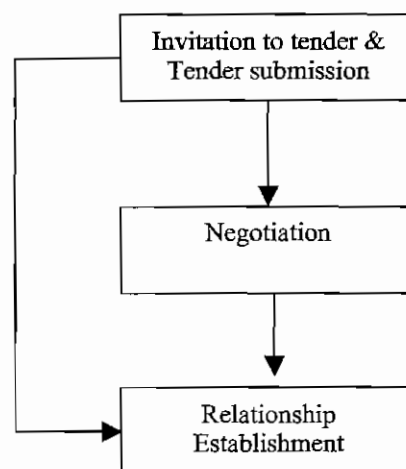
Agency control of the listing process at its extreme is seen to exist. One agency holds at least weekly rehearsals of scripted listing submissions [Agent X].

Agency level procedures exist for significant components of the listing acquisition. For example, *"Under-quoting [will] ...get the deal through better than over-quoting"* [Agent X]. To under-quote, or over-quote, is to suggest to a prospective principal of a price for their property that is either below what may be achieved with sufficient effort (in under-quoting) or above what can be achieved despite all efforts (over-quoting). Agent X indicates that at an agency level, their policy is to price low rather than high with respect to a potential listing. One cited reason such control is important is to overcome the *"agents day-to-day focus [of] a sales orientation based on listings"* [Agent X].

These findings suggest that the modelled link between agency control and negotiation has a strong basis, whilst expanding this link to indicate that from the agent's perspective negotiation is not essential despite the likelihood that potential principals

might consider negotiation to be important. The implication here is that should the principal not require this negotiation an agent is likely to go with this because this is what management would want, moving directly to relationship establishment. Depicted graphically, the conceptual model from the literature review is therefore confirmed with exploratory research, restated below for the reader's convenience.

**Figure 14 The path from tender submission to relationship establishment**



Discussions revealed that the path between tender submission and relationship establishment depends on the consumer's desire to negotiate.

#### Information appropriation

Information appropriation is important in establishment of the agent-principal agreement. Information dissemination by agents is more important in the sale process.

*"If a house has white ants we need to know it is fixed...and if buyers ask we tell them to get an inspection done...we tread carefully" [Agent X].*

The value of an agent to a vendor depends on their knowledge [Agent X]. For this reason some agents let the principal lead agency agreement negotiations by continually asking questions like “*What commission were you thinking of? Is that all right with you? Do you agree with that?*” [Agent X].

These findings suggest that the modelled link between information appropriation and negotiation has a strong basis.

#### Agent values

Agents were reluctant to discuss elements of the construct identified as Agent Values in a group situation. The reason cited is that

“*Communication is not honest between agents*” [Agent X].

However this was achieved through individual discussions.

The goal of real estate agents is very obviously focussed on financial return. This is seen by comments like:

- Profit is “*a necessity [but so too is] making money for the effort you put in....[but] if agents only focus on money then they won't stay in business long*” [Agent X];
- Because “*agents can mislead ...price ranges [are] an [important] issue*” [Agent X]; and
- “*The only goal of agents is to make money*” [Agent X].

The literature has suggested agents will pursue their goals and that how they do this is some function of their values. Agents indicated that:

- *“We do the right thing”* [Agent X];
- *“Unethical behaviour [exists...including] agents dealing direct in conjunctional sales [and] taking each others buyers when working on the same property...[agent x is a] ...snake in the grass”* [Agent X];
- *“There will always be marginal operators”* [Industry Association]; and
- *“ We encourage vendors to avoid the shonky operators...Honesty is important but not attributed to agents generally”* [Agent X].

Other values held important to some agents include *“Goodwill...treating people nicely...self-fulfilment ...image amongst peers...[and] public service”* [Agent X].

These findings suggest that the modelled role of agent values has a strong basis.

#### Agent representation

In order to obtain an agency agreement, agents need to be focussed on their relationship with the vendor first [Agent X].

*“There should be a perception that [we’re working for] the vendor “* [Agent X]

*“[We] need to be seen to benefit the vendor, wanting to get the most from advertising”* [Agent X].

Appearances of representation are important, but agents admit to a conflict between interests in a seller and buyer. They acknowledge the demarcation of what allows you to develop a buyer base and what you need to guarantee your continued existence. To do this, *“contractual control [exists] at each level [of the exchange]”* [Agent X] but agents do *“[have] an obligation to get [a] contract with buyer”* [Agent X].

By law agents are not allowed to admit to representing more than one party.

These findings suggest that the modelled role of agent representation has a strong basis.

### Marketing communication

Agents compete for listing “*on the basis of marketing strategy*” because of expectations of the buyer search process [Agent X]. Agent X believes that a buyer that has already examined Internet classified advertisements is more active in their search process and more likely to commit to a purchase. But this search process also includes consideration of each release of other important classifieds such as The Age, and local print media.

As a summary of the literature in chapter three, there are many components of a marketing campaign. Agent X indicated that the agent determines some of these but others are determined by negotiation. This has been illustrated already from two perspectives. Firstly, when agents ask vendors what is important to them, and secondly, when agents are subject to pressure from vendors. It is important to note that the proposed ‘marketing campaign’ includes a proposed advertising campaign for a specific principal’s property.

“*Fundamentally though marketing is advertising*” [Industry Association Interview].

Advertising campaigns are designed for each property and form part of the agency agreement.

*“Advertising is considered an integrated strategy for each product” [Agent X].*

This implies some tailoring for individual vendors.

As a summary of agents participating in this phase of the data collection, advertising options include boards, brochures, The Age (has the greatest range), Melbourne Weekly, Property guides, Melbourne Property guides, Local papers (considered good for bargains) and the Internet.

Even though Agents do not consider themselves to be at the forefront of marketing, advertising is considered an important component of their business [Agent Focus Group]. But agents are unable to predict where a purchase enquiry will come from. They have many stories that show the variability of sources of enquiry. These include “walking the dog”, “viewing Internet only advertisements” and “the property was not advertised”.

Agents do not try to predict an outcome from either their listing, marketing or advertising efforts. This is because they cannot do so. For example,

*“You can’t tell who you’re reaching...[or] what it is that made the extra dollar benefit” [Agent X].*

But to maximise the benefit to the agent,

*“Agents want a presence on the Internet that will showcase properties they have to sell to a wider audience than they would otherwise be able to reach with print media...want their image presented in a professional manner” [Agent X].*

But *“still the AGE is the most important advertisement tool” [Agent Focus Group].*

Agents make recommendations about the inclusion, or exclusion, of media. This depends on property price, competitive pressure, trends in their market segment, similar geographically located operators, what agents can sell potential listers as they have expectations, selective release of information, and their own knowledge base. A location specific mix of print media includes the Internet if possible (as it is perceived to be cost effective) subject to public and consumer pressure to include or exclude this tool. Agents want to advertise as a means of selling properties thus attaining and retaining credibility.

Agents attending the focus group offered a broad range of reasons for liking Internet advertising that include *“speed, location specific success depending on demographic characteristics, no discrimination on the basis of age, being perceived to be a useful form of communication, not just an advertising media, different value to different agents, occasional direct links to some sales leads” [Agent Focus Group].*

This same group disliked Internet Advertising for the following reasons.

- *It is no substitute for the Age or other print advertising tools;*
- *It has too many constraints currently on formats of information presentation;*  
*and*
- *It does nothing that other advertisements can't do.*

Conventional classified publications such as The Age classifieds are considered very expensive and inflexible with rigid schedules and controls of content to the extent that an agent cannot include domain names of other Internet search engines and Internet references for non-Age owned media. Information transferral from print classifieds to the Internet is not automated in real estate despite all Internet classifieds being jointly owned by a print classified publication.

Advertisement design is considered a media specific function.

*“You don't put open times or addresses on the Internet”* [Agent Focus Group].

These findings suggest that the modelled roles of advertising and media have a strong basis.

#### Sales presentation skills

When it comes to getting a listing an agent has to do it cheaper than their competitors.

They do this by

*“turning [any perceived] negatives into positives”* [Agent X].

The best chance an agency has of doing this is by educating their agents. With adequate education an agent's performance can be more effective [Industry Association Interview].

Agents consider the listing proposal submission to

*"Come down to what you can sell to the vendor...we consider the house their product from the moment [vendors] decide to sell" [Agent X].*

This submission is done is by

*"Creating an image through a presentation" [Agent X], and*

*"Leaving nothing to chance" [Agent X]*

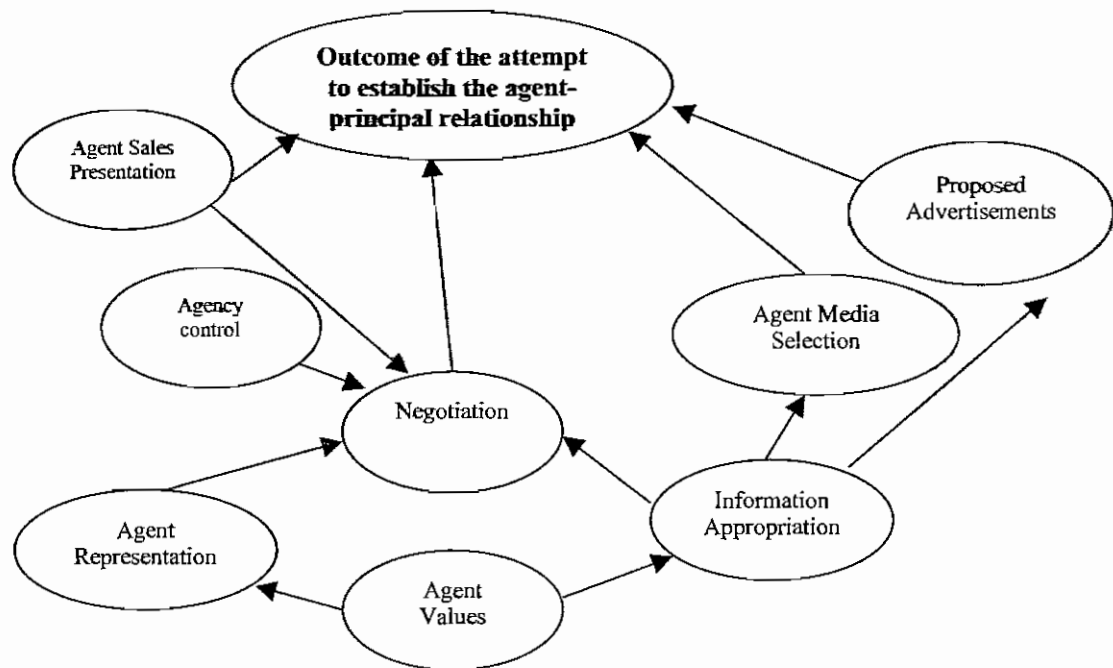
Because *"agents think they sell the houses/generate interest etc but this is just a matter of education...training and professional development are all that an agent has to pursue the listing"* [Industry Association Interview].

These findings suggest that the modelled role of sales presentation skills has a strong basis.

## **Conclusion**

Through these discussions, agents provide practical insights supporting the conceptual model in the figure below. This model and further qualitative insights will be used in the next chapter and throughout the thesis.

**Figure 15 Confirmed conceptual model**



Most importantly, the qualitative data for the purpose of qualitative analysis suggests that the modelled sequences developed from the literature have a strong basis. This industry specific qualitative research fills an existing gap in the literature by contributing context specific concepts to an area that is not particularly well represented. Furthermore, because general literature developed the model appropriate for the real estate context, a case for generalisability from the research to other contexts is established once proposed links are examined.

## **CHAPTER 6**

### **HYPOTHESES, RESEARCH INSTRUMENT AND THEORETICAL MODEL DEVELOPMENT**

The purpose of this chapter is to create a research instrument so that the conceptual model developed from the literature review, with confirmation by practitioners in the field, can be tested. This is done by firstly developing testable hypotheses for each link proposed in the model, then developing a research instrument for collection of data. Finally, the development process used in this research to create a valid and robust structural model, with which to collect data to test these hypotheses, is described so that research findings can be revealed in later chapters.

#### **Method for developing hypotheses**

Hypotheses are developed in this thesis by, firstly, examining important literature on marketing research methods and, secondly, implementing the course of action recommended in this literature. For this, the work of Hunt (1991) is used almost exclusively. This approach is justifiable because his contribution to marketing research

theory is most significant as he adopts the unusual approach of scrutinising existing research methods from the perspective of their usefulness in establishing and proving theory within the context of marketing.

Hunt (1991) suggests that the role of a theory is to increase scientific understanding but prior to acceptance of any theory this needs to be proven.

*“A theory is a systemised structure capable of exploring and predicting phenomena systematically through related sets of statements, including law-like generalisations that are empirically testable”* (Hunt 1991, Page 172),

Whilst previous sections of this thesis have proposed a conceptual model of agent-principal relationship establishment, the theory this research proposes is that an agent-principal relationship develops as a result of a process that involves a number of stages and has a number of determinants:

- The first stage is the invitation to tender for the agent-principal agreement in which the agent proposes relationship specifications to a potential principal;
- The second stage is the negotiation with the potential principal of submitted terms of the relationship so that an agent-principal relationship can be established; and
- The third and final stage is the establishment of the agent-principal relationship in which some aspects of the relationship may in fact be renegotiated after commencement of that agreement.

Theories such as this are:

*“Empirically testable when ... capable of generating predictive-type statements (hypotheses) whose descriptive terms have empirical referents, thus ensuring that the statements are amenable to a direct confrontation with real-world data”* (Hunt 1991, Page 170).

The confirmed conceptual model (Figure 15) is the systemised structure that seeks to explain relationship establishment in an agent-principal relationship and how determinants are interrelated in this structure.

The two general research questions from Chapter One, restated here, are:

- What are the determinants of relationship establishment in an agent-principal relationship? And
- What impact do these have on the establishment of any specific agent-principal relationship?

In order to generate statements that facilitate theory proving and creation Hunt (1991) recommends a two-step process of *“speculation and creation of a priori hypotheses. These are absolutely essential parts of any systematic procedure of theory discovery and creation”* (Hunt 1991, Page 25).

While Hunt (1991) advocates assembling bridging laws and then corresponding research hypotheses, other theorists refer to alternate and null hypotheses. These are different labels attached to an important process of arriving at something testable. What is obvious though, is that from a research question, and an investigation of the literature

that securely establishes the context of the research, we need to do two things. This research requires firstly, indirectly testable statements that are linked to the theory (alternate hypotheses) and secondly, directly testable statements that are linked to the indirectly testable statements (null hypotheses). Hypotheses need to be sufficiently specified so that all descriptive terms have rules of interpretation (definitions of terms, scope and dimension), contain empirical referents (are testable) and are amenable to data (can be measured) (Hunt 1991).

This means that moving from research questions (developed in the literature review) to something testable is a process of defining hypotheses that are carefully specified. In doing so, this research will be closer to making a contribution to theory because, by Hunt's (1991) definition, a proposed theory allows hypotheses deduction, the testing of which allows for induced confirmation of that theory.

### **Hypotheses Development**

This section examines the research questions that have been developed in previous chapters to develop alternate and null hypotheses so that this thesis has something to test. Research questions will be converted to testable null hypotheses with the assistance of the knowledge gained in the discovery process by specifying terminology definitions, scope, dimension, and an appropriate measurement method. The discovery process includes examination of relevant literature and qualitative research detailed in previous chapters of this thesis. To assist the reader, research questions are shown in the following table.

**Table 15 Research questions that need hypotheses**

<b>Research Question</b>	
Research Question 1	Is negotiation of an agency agreement a determinant of agent-principal relationship establishment?
Research Question 2	Is agency control a determinant of negotiation in agent-principal relationship establishment?
Research Question 3	Is information appropriation a determinant of negotiation in agent-principal relationship establishment?
Research Question 4	Are an agent's values a determinant of information appropriation in negotiation in agent-principal relationship establishment?
Research Question 5	Is agent representation a determinant of negotiation in agent-principal relationship establishment?
Research Question 6	Is agent representation determined by agent values?
Research Question 7	Are proposed advertisements a determinant of agent-principal relationship establishment?
Research Question 8	Is information appropriation a determinant of proposed advertisements in agent-principal relationship establishment?
Research Question 9	Is agent media selection a determinant of agent-principal relationship establishment?
Research Question 10	Is information appropriation a determinant of agent media selection?
Research Question 11	Are agent sales presentation skills a determinant of agent-principal relationship establishment?
Research Question 12	Are agent sales presentation skills a determinant of negotiation in agent-principal relationship establishment?

As recommended by Hunt (1991), the structure used for deducing hypotheses in this section involves the specification of:

- Definition of terms, scope and dimension;
- Measurability (based on these definitions); and
- Testability (based on measurement).

Once terminology has been defined, definitions will not be repeated for readability purposes. Note here that scale development methodology and instrument development are detailed later in this chapter, and referencing conventions were detailed previously in Chapter 2. The following sections will develop each research question from the literature individually in accordance with the structure observed in Hunt's work.

**Research Question 1 – Is negotiation of an agency agreement a determinant of agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

- **Negotiation** – Real estate agents say there are "*some important components*" [Agent Focus Group] in agent-principal relationship negotiations. This process follows the submission by an agent to a client of a proposed package to entice a client commitment to that package (Benjamin and Chinlo 2000). Consensual agreement involves some degree of bargaining, or trading-off, between agent and client (Marsh and Zumpano 1998). Parties negotiate with each other according to Latz (2001) to overcome conflicting goals. In the case of real estate, "*Real estate agents in pursuit of an agent-principal agreement try to convince potential clients to sell their property, decide between competitive agent submissions and commit to an agent-principal relationship*" (SUTa).

One first time vendor interviewed was involved in very little negotiation in the process of establishing an agent-principal relationship. But another, more experienced, vendor was involved in more substantial negotiations of the terms of the agreement, with many changes made to the agent proposed agreement

before establishing their agent-principal agreement. This process of discussing components of the proposal with the agent, with the view to changing some of these, was in fact a process of bargaining, or trade-off, to reach an agreement. The degree of discussion, and changes, of agreement terms is what this thesis means by the term negotiation. This process occurs to different degrees for different agent-principal agreements.

- **Agency** - Entity for which the agent is working to establish a relationship with a client; the business of which is to earn commission (Psi-Delta 1999).
- **Agency Agreement** – In the case of real estate, this is a written authority empowering the agent to have a specific relationship with a vendor in order to locate a buyer for the property (Laws of Australia 2002a, Section 29; Cheshire and Fifoot 1988). Signed by the agent (on behalf of the real estate agency) and the vendor, the agency agreement binds the agent and principal. Agreement to the terms and conditions is reached prior to commencement of the contract. This agreement typically includes details like the level of authority invested in the agent by the principal and the opportunity to renegotiate agency terms (Appendix 1). In more general terms an agency agreement is a “*contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf*” (Jensen and Meckling 1976, Page 6).
- **Determinant** – Because “*Real estate agents are privileged if they get the listing*” [Industry Association Interview], something must earn them the privilege of acquiring a vendor’s authority. The model proposed in this thesis

suggests that a number of things (events, processes, determinants) influence the acquisition of this privilege. To understand this we need to understand that a determinant exists in a statement of a relationship of dependency. For example, if  $x$  is a determinant of  $y$  then  $y$  is dependent on  $x$  (that is if an agent's commission rate is a determinant of whether the vendor will sign the agency agreement, then whether or not the vendor will sign the agent agreement is dependent on the agent's commission rate).

- **Relationship establishment** –Agency agreements, or agent-principal relationships, are legal relationships examined in real estate research, agency theory, legal literature and marketing literature, by authors such as Moore et al. (1992), Latimer (1999) and Singh (2000) respectively. We have already identified that this relationship is represented by a contract entered into between the agent and client. The point of relationship establishment is the result of a process (and determinants) designed to result in consensual commitment to terms of the agent-principal agreement. If a relationship is established then the process was successful. Alternatively the relationship may not be established, indicating an unsuccessful process.
- **Principal** – The person (or entity) engaging the agent in the agency arrangement. In the case of real estate, a vendor must be legally entitled to sell the property, engages an agent and acts as their principal.

- **Agent** - The agency agreement is between two entities (agent and principal). In the case of real estate, the property sales representative in fact 'serves' a number of masters – the property vendor, agency and himself. But this thesis is most concerned with the real estate sales agent and the potential vendor.

In the case of real estate, the agent, as the representative of the agency, is generally an employee working on a retainer and commission incentive package. On establishment of the agency relationship, the agent presents a proposed agency agreement to a potential client. The agent is one party in the negotiation of terms of this agreement that has an interest in establishing an agent-principal relationship.

- **Agent-principal relationship** – the relationship established by an agency agreement between agent and principal.

The following table highlights the scope of this research questions and dimensions within this.

**Table 16 Scope and dimensions of Research Question 1**

<b>The scope of this research question</b>	
Includes	Negotiating (bargaining, trading-off, 'haggling', discussing) with the view to <u>changing</u> terms of the agent-principal agreement.
Excludes	The design, plan and assembling of the agent proposal. Anything prior to the completion of initial client evaluation of the agent proposal Anything prior to both parties establishing their goals. Measurement of the client's previous experiences. Anything to do directly with potential buyers
<b>The dimensions are</b>	
Dependent variable	Establishment of an agent-principal relationship
Independent variable	Negotiation

### ***Measurement***

This construct can be measured by the outcome of the negotiation. The scope of this research question clearly implies that any negotiation can either lead to development of acceptable terms of an agency agreement or lead to cessation of the relationship establishment process. Within this negotiation process, the amount of change to a proposed agency agreement is what is being examined because:

- It is the agent's job to secure an agent-principal relationship;
- As part of this a proposed marketing campaign is submitted to a vendor;
- Some of the terms of this can be changed; and
- These alterations may influence whether a relationship is established.

Negotiation will be measured from the perspective of its contribution to successful relationship establishment. Full details of development of measures are contained the next section of this chapter.

### ***Hypothesis and Its Alternative***

The degree of change to the terms of an agent-principal agreement submission will have an effect on the chance of establishing an agent-principal agreement.

The corresponding null hypothesis is

*The degree of change to the terms of an agent-principal agreement submission will have no effect on the chance of establishing an agent-principal relationship.*

This negotiation is a process of establishing a set of agreeable terms that the agent, agency and principal must accept. Sitkin and Roth (1993) argued that control in such a situation is based on trust that rests on expectations about an employee's ability to complete tasks reliably. The task in the agent-principal relationship establishment attempt is to establish an agency relationship between the agent and principal by negotiating a set of agreeable terms. Therefore, in the case of real estate, management controls for negotiation are task driven, based on the expectation that the agent will perform reliably. Kahneman et al. (1986) also emphasize the importance of management control in relationship establishment. The following research question emerges.

## **Research Question 2 - Is agency control a determinant of negotiation in agent-principal relationship establishment?**

This research question comes from the literature review.

### ***Definition of Terms***

- **Management Control** – At the agency level, organization goals govern the operations of that agency (Psi-Delta 1999). At a lower level, these goals impose constraints on the employees within that agency (Massengale 1991). Anecdotal evidence provided by agents show one agency's rule of "*under-quoting rather than over-quoting – as it gives us a means of managing expectations*" [Agent Interview]. The agency goal associated with this operating rule is positive referrals by word of mouth achieved by meeting client's expectations. Another agent indicated "*we rehearse weekly the presentations for vendors to standardise the quality across the organisation*" [Agent Interview]. The goal associated with this rule is a standard agency market image that demands a specific quality of presentation skill across the organization. These are two examples of agency control of agent operations to demonstrate what we mean by the term agency control in this thesis.
  
- All other terms have previously been defined.

The following table highlights the scope of this research questions and dimensions within this.

**Table 17 Scope and dimensions of Research Question 2**

<b>The scope of this research question</b>	
Includes	Agency constraint of the negotiation.
Excludes	How agency controls are imposed What controls are imposed All components that an agent is at liberty to negotiate Note: Specific components that are not changed are not necessarily controlled by the agency. This may result from some other issue such as acceptability of conditions to both parties, or not known to be negotiable.
<b>The dimensions are</b>	
Dependent variable	Negotiation
Independent variable	Agency control

### ***Measurement***

Measurement of agency control is based on the degree to which this influences the outcome of negotiations (the degree of change to a proposed agency agreement). If negotiation occurs then agency control must have allowed this to happen, unless exceptional circumstances exist so that an agent can work outside the boundaries set by their agency. Thus agency control is a necessary but not sufficient condition to account for changes to the agency agreement terms.

But if no negotiation occurs then we do not really need to know whether this is because of agency control or some other cause. A lack of management permission is not the only reason that the proposed agreement terms may not be changed. This could also happen because the vendor is not aware that the terms could be changed; or because the terms are acceptable without changes to both parties.

The table below visually demonstrates these scenarios.

**Table 18 Negotiation and agency control**

		Negotiation	
		Yes	No
Agency Control	Yes	Essential	It is not really possible to tell these apart
	No	Exceptional	

This thesis measures only the degree of change to the terms of the agency agreement so that the extent of control in alterations of proposed agreements can be investigated.

### ***Hypothesis and Its Alternative***

Agency imposed controls have an effect on negotiation of terms of an agent-principal relationship.

The corresponding null hypothesis is:

*Agency imposed controls have no effect on negotiation of terms of an agent-principal relationship.*

### **Research Question 3 - Is information appropriation a determinant of negotiation in agent-principal relationship establishment?**

This research question comes from the literature review.

### ***Definition of Terms***

- **Information** – “In any negotiation, information is power. The more you get, the better you’ll do” (Latz 2001). Is this why agents acquire information? Maybe – but what sort of information is important? Anecdotal evidence shows that two distinct types of information are important in the establishment of an agent-principal relationship. These are:

**Information about the client.** For example, one agent claims they “*Try to find out who else is being considered...the bedside table, or kitchen bench, [usually has] business cards of agents being considered*” [Agent Focus Group]. They also acquire information directly by asking questions like “*Where are you moving to? They usually tell us why too*” [Agent Focus Group]; and

**Information about the property.** For example, as mentioned previously, one agent claims they prefer good information about a property. “*We want to know that the white ants have been fixed, if they tell us the property had white ants...[because] ...we try to find solutions rather than problems*” [Agent Interview]. Another vendor’s agent asked if there was something special about the house like a famous person having lived there, or some other historical detail. The implication is that an agent can be selective about appropriation of information.

- **Appropriated** – Authors such as Akerlof (1970), Marsh and Zumpano (1998), and Moore et al. (1992) are concerned with information and in so doing acknowledge the importance, cost and scarcity of this information in an exchange. Appropriation of information is the acquisition and accumulation of information that contributes to a knowledge base, not readily available.
- **Property** – In the case of the real estate agent, the sale of the property is what the principal engages the agent to arrange. In general terms, an agent is employed to do something on behalf of the principal (e.g. facilitate a specific

transaction such as arranging the sale of a vendor's property to a purchaser).

What the agent is meant to do is clearly documented in an agent-principal agreement (for example the listing agreement between a real estate agent and the property vendor).

- **Vendor** – Property vendors are legally allowed to establish an agent-principal relationship taking on the role of principal in this relationship. These potential clients are engaged in a process of agent selection (Braun 1999), have their own selection criteria (Marsh and Zumpano 1998) and objectives as sellers (Kaplan and Norton 1992; Kaplan and Norton 1996). Property vendors participating in a commercial focus group expressed the view that “*They are very competitive in [the process of] agent selection*” [Client Focus Group]. The implication is that to establish an agent-principal relationship, an agent must offer some real competitive advantage, or benefit, to the vendor.
- All other terms have previously been defined.

The table below highlights the scope of this research questions and dimensions within this.

**Table 19 Scope and dimensions of Research Question 3**

<b>The scope of this research question</b>	
Includes	Acquisition of vendor sourced property and vendor information
Excludes	How the agent uses the information How the agent acquires the information Whether the information was requested, offered directly, observed indirectly, or acquired by other means Quantity of information about the vendor
<b>The dimensions are</b>	
Dependent Variable	Negotiation
Independent Variable	Information appropriation

### ***Measurement***

Measurement of information appropriation is by vendor sourced property and vendor information in successful, or unsuccessful, negotiations.

### ***Hypothesis and Its Alternatives***

Agent selectivity of information appropriation from a vendor has an effect on negotiation in agent-principal relationship establishment.

Two types of information appropriation have emerged from the preceding definitions, so two null hypotheses are required.

The corresponding null hypotheses are:

*a) Vendor information appropriation has no effect on negotiation in agent-principal relationship establishment; and*

*b) Property information appropriation has no effect on negotiation in agent-principal relationship establishment.*

**Research Question 4 - Are an agent's values a determinant of information appropriation in negotiation in agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

- **Values** – A focus group of real estate vendors found that “*People want to feel that agents are honest*” [Client Focus Group]. Expanding this, consider that if an agent is honest then honesty is one of his personal values. The client focus group quote above adds to this that the agent must also project this honesty so that he is perceived to be honest. Anecdotal evidence shows that agents are aware that they are sometimes perceived to be “*shonky operators*” [Agent Interview], “*marginal operators*” [Industry Association Interview], and “*a real snake in the grass*” [Agent Interview]. To overcome this image, agents “*clearly state that they work hard to do the right thing*” [Agent Interview].

Perceptions of an agent's values are important to this thesis because values (such as power, prestige, honesty and morality) are linked to the way an agent works towards their goals (Babson 1999; Moore *et al.* 1992; Psi-Delta 1999). The literature review revealed a case for considering that the issue of morality, and even honesty, is covered by legislation and licensing requirements.

Other values linked to work performance by Pryor (1997) include altruism, money and prestige. These are important to this thesis as drivers of agent behaviour. For example, if an agent values prestige then it would be reasonable

to expect that the agent's work practices reflect this, perhaps in their appearance, the car they drive and the house in which they live.

- All other terms have previously been defined.

The table below highlights the scope of this research questions and dimensions within this.

**Table 20 Scope and dimensions of Research Question 4**

<b>The scope of this research question</b>	
Includes	Personal values that influence the work practice of acquiring information
Excludes	Personal likes/dislikes Degree (and history) of law abidance How an agent negotiates, or acquires information Honesty (although important is excluded because it is implicitly controlled with regulation, a minimum level of honesty must exist for the agent to be licensed)
<b>The dimensions are</b>	
Dependent Variable	Information appropriation
Independent Variable	Agent values

### ***Measurement***

Measurement of agent values is by agent admission of specific personal values.

Measurement of information appropriation is focussed on the opportunity for selective acquisition of property and vendor specific information. Previous definitions in this chapter have demonstrated that agents' selectively appropriate good information that will improve their chances of relationship establishment and subsequent sale of the property. For this reason, measurement of information is focussed on the information nature (selectivity of good or bad information) and information type (vendor or property information).

### ***Hypothesis and Its Alternatives***

An agent's personal values will have an effect on selectivity of information appropriated by the agent.

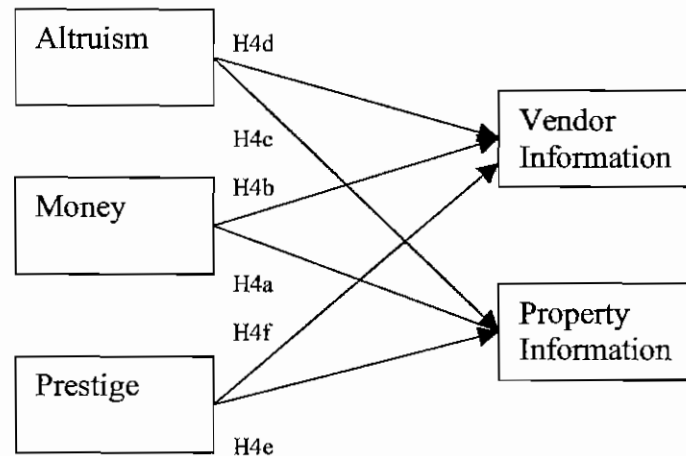
To examine this hypothesis six null hypotheses actually need to be examined because of the three dimensions of values (altruism, money and prestige) and two dimensions of information (vendor and property).

The corresponding null hypotheses are:

- a) *An agent's personal value of money will have no effect on selectivity of property information appropriated by the agent (H4a);*
- b) *An agent's personal value of money will have no effect on selectivity of vendor information appropriated by the agent (H4b);*
- c) *An agent's personal value of altruism will have no effect on selectivity of property information appropriated by the agent (H4c);*
- d) *An agent's personal value of altruism will have no effect on selectivity of vendor information appropriated by the agent (H4d);*
- e) *An agent's personal value of prestige will have no effect on selectivity of property information appropriated by the agent (H4e); and*
- f) *An agent's personal value of prestige will have no effect on selectivity of vendor information appropriated by the agent (H4f).*

These links are illustrated in Figure 16.

**Figure 16 Links between agent values and information appropriation**



**Research Question 5 - Is agent representation a determinant of negotiation in agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

- **Representation** – Agents are legally obliged to ‘represent’ the vendor (Cheshire and Fifoot 1988; Latimer 1999; Laws of Australia 2002b). The agent makes a choice of whom they are most interested in and this is considered to be whom they actually represent (Moore *et al.* 1992). Anecdotal evidence shows two things. Firstly, that “People [vendors] ...want to feel ...[the agents] are working for them” [Client Focus Group], that the agent is representing the vendor (client). Alternatively agents can elect to represent their own interests by “trying to promote themselves... that’s their main focus” [Agent Interview].

Legally, agents must represent the principal. Regardless, agents choose whom they really are working for.

All other terms have previously been defined. The table below highlights the scope of this research questions and dimensions within this.

**Table 21 Scope and dimensions of Research Question 5**

<b>The scope of this research question</b>	
Includes	The party an agent elects to position as most important
Excludes	Benefits to the agent, or other parties Obligation to any party Payment from any party Dealings with buyers
<b>The dimensions are</b>	
Dependent Variable	Negotiation
Independent Variable	Agent representation

### ***Measurement***

Measurement of agent representation is by the agent's admission of which party the agent is really working for and whose interests the agent actually will put first whilst in the agency agreement.

### ***Hypothesis and Its Alternative***

Who an agent represents has an effect on negotiation in agent-principal relationship establishment.

The corresponding null hypothesis is:

*Who an agent represents has no effect on negotiation in agent-principal relationship establishment.*

### **Research Question 6 - Is agent representation determined by agent values?**

This research question comes from the literature review.

All terms have been defined previously. The table below highlights the scope of this research questions and dimensions within this.

**Table 22 Scope and dimensions of Research Question 6**

<b>The scope of this research question</b>	
Includes	Agent values of stated agent selectivity of the party most important in a negotiation
Excludes	Buyers Values other than those defined Perceptions of agent representation
<b>The dimensions are</b>	
Dependent Variable	Agent representation
Independent Variable	Agent values

### ***Measurement***

Measurement of both these variables has been detailed earlier in this section of hypotheses development. We are testing here the relationship between two previously defined constructs.

### ***Hypothesis and Its Alternatives***

An agent's values have an effect on their choice of whom they represent. Agent values include value of money, value of altruism and value of prestige.

The corresponding null hypotheses are:

- a) An agent's value of altruism has no effect on their choice of whom they represent;*
- b) An agent's value of money has no effect on their choice of whom they represent; and*
- c) An agent's value of prestige has no effect on their choice of whom they represent.*

**Research Question 7 - Are proposed advertisements a determinant of agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

- **Proposed** – Recommended property advertising strategy and plan. In general terms this equates to the agents proposed course of action on behalf of the principal.
- **Advertisements** – Advertising options generally used by real estate agents with specific benefits (Richins *et al.* 1987) are combined for specific reasons to cater for advertisement content, nature of information and presentation methods available. (Belch and Belch 1999; Linton and Morley 1995; Schultz and Kitchen 1997)

All other terms have previously been defined. The following table highlights the scope of this research questions and dimensions within this.

**Table 23 Scope and dimensions of Research Question 7**

<b>The scope of this research question</b>	
Include	Recommended advertisements in a proposed agency agreement
Exclude	Other terms and conditions of agreement Moderation of terms and conditions that influence negotiation
<b>The dimensions are</b>	
Dependent Variable	Relationship establishment
Independent Variable	Agent proposed advertising

### ***Measurement***

We can measure proposed advertisements by the inclusion, or exclusion, of characteristics of advertisement content.

### ***Hypothesis and Its Alternative***

Proposed advertisements have an effect on the chance of establishing an agent-principal agreement

The corresponding null hypothesis:

*Proposed advertisements have no effect on the chance of establishing an agent-principal agreement.*

### **Research Question 8 - Is information appropriation a determinant of proposed advertisements in agent-principal relationship establishment?**

This research question comes from the literature review.

### ***Definition of Terms***

All terms have previously been defined.

The table below highlights the scope of this research questions and dimensions within this.

**Table 24 Scope and dimensions of Research Question 8**

<b>The scope of this research question</b>	
Includes	Agent appropriated information that is included in the recommended advertisements
Excludes	Other terms and conditions of agreement Moderation of terms and conditions that influence negotiation Information appropriated from other sources
<b>The dimensions are</b>	
Dependent Variable	Proposed advertisements
Independent Variable	Information Appropriation

### ***Measurement***

We can measure the proposed advertisements by the inclusion, or exclusion, of specific information. This measurement is the same as the previous alternate hypothesis but here we are testing the influence on information appropriation rather than relationship establishment.

### ***Hypothesis and Its Alternatives***

Agent selectivity of information appropriated has an effect on proposed advertisements. Information appropriation includes vendor information and property information.

The corresponding null hypotheses are:

- a) *Vendor information appropriated has no effect on proposed advertisements;*
- and*
- b) *Property information appropriated has no effect on proposed advertisements.*

**Research Question 9 - Is agent media selection a determinant of agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

- **Media Selection** - Media advertising includes flyers, letter drops, third party classified advertisements (magazines, newspapers, and Internet), real estate agency websites (third party classified advertisements, corporate web sites and other links) and paid or unpaid editorials (Devine 1999; Siebert 1999; SUTb). The Internet, in particular, is a business tool suitable for use as an advertising tool (Dreze and Zufryden 1999; Hoffman 2000; Norton 2001; Poon 1998), with particular benefits of distribution and exposure (Norton 2001), increased advertisement frequency (Kover 1999), and innovation of advertisement content (Hoffman and Novak 1996). This is specifically appropriate as an advertising tool available in real estate (Muhanna 2000). Anecdotal evidence shows that real estate agents think the Internet *"Has speed; is a useful form of communication, not just an advertising media; gives different value to different agents; and has direct links to some sales leads"* [Focus Group]

- All other terms have been defined.

The table below highlights the scope of this research questions and dimensions within this.

**Table 25 Scope and dimensions of Research Question 9**

<b>The scope of this research question</b>	
Includes	Media selection for a proposed agency agreement
Excludes	Other terms and conditions of agreement Moderation of terms and conditions that influence negotiation Non-media advertising
<b>The dimensions are</b>	
Dependent Variable	Relationship establishment
Independent Variable	Agent media selection

### ***Measurement***

We can measure agent-selected media by the inclusion, or exclusion, of specific media in a proposed agreement.

### ***Hypothesis and Its Alternative***

Agent media selection has an effect on the chance of establishing an agent-principal agreement.

The corresponding null hypothesis:

*Agent media selection has no effect on the chance of establishing an agent-principal agreement.*

**Research Question 10 - Is information appropriation a determinant of agent media selection?**

This research question comes from the literature review.

***Definition of Terms***

All terms have been defined. The table below highlights the scope of this research questions and dimensions within this.

**Table 26 Scope and dimensions of Research Question 10**

<b>The scope of this research question</b>	
Includes	Media included in a proposed agency agreement
Excludes	Advertisement content Other terms and conditions of agreement Moderation of terms and conditions that influence negotiation
<b>The dimensions are</b>	
Dependent Variable	Relationship establishment
Independent Variable	Information appropriation

***Measurement***

We can measure the agent proposed media by the inclusion, or exclusion, of specific media in an agent proposal.

***Hypothesis and Its Alternatives***

Agent selectivity of information appropriation has an effect on agent media selection.

Two types of information have been defined.

The corresponding null hypotheses are:

- a) *Vendor information appropriation has no effect on agent media selection;*
- and*
- b) *Property information appropriation has no effect on agent media selection.*

**Research Question 11 - Are agent sales presentation skills a determinant of agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

- **Sales Presentation** – The term sales presentation refers to the agent’s skill of presenting (Quigg and Wisner 1998) to entice commitment (Benjamin and Chinlo 2000). Anecdotal evidence suggests that by “*Creating an image through a presentation*” [Agent Focus Group], agents have the opportunity to “*leave nothing to chance*” [Agent Focus Group]. Listening skills are evident because agents practice active listening by “*constantly asking what do you think...and is that right?*” [Agent X].
- **Skills development.** “*Training and professional development...is all that an agent has to pursue the listing*” [Industry Association Interview].
- All other terms have previously been defined.

The following table highlights the scope of this research questions and dimensions within this.

**Table 27 Scope and dimensions of Research Question 11**

<b>Scope of this research question</b>	
Includes	Agent development of presentation skills to establish an agent-principal agreement
Excludes	What they do Where or how they present
<b>The dimensions are</b>	
Dependent Variable	Outcome of agent relationship establishment attempt
Independent Variable	Agent sales presentation skills

### ***Measurement***

Measurement of this construct is by levels of specific presentation skills developed by the agent in attempts to establish relationships.

### ***Hypothesis and Its Alternatives***

The level of development of agent sales presentation skills has an effect on the chance of successfully establishing an agent-principal relationship. The construct agent sales presentation skill has three dimensions – people skills, presentation skill and listening skills. The corresponding null hypotheses are:

- a) The level of development of agent people skills has no effect on the chance of successfully establishing an agent-principal relationship;*
- b) The level of development of agent presentation skills has no effect on the chance of successfully establishing an agent-principal relationship; and*
- c) The level of development of agent listening skills has no effect on the chance of successfully establishing an agent-principal relationship.*

**Research Question 12 - Are agent sales presentation skills determinants of negotiation in agent-principal relationship establishment?**

This research question comes from the literature review.

***Definition of Terms***

All terms have previously been defined. The table below highlights the scope of this research questions and dimensions within this.

**Table 28 Scope and dimensions of Research Question 12**

<b>The scope of this research question</b>	
Includes	Agent development of sales presentation skills to influence negotiations
Excludes	What they do Where or how they present
<b>The dimensions are</b>	
Dependent Variable	Negotiation
Independent Variable	Agent sales presentation

***Measurement***

Measurement of this construct is by levels of skill development in attempts to establish relationships (successful & unsuccessful presentations).

***Hypothesis and Its Alternatives***

The level of development of agent sales presentation skills has an effect on the negotiations in successfully establishing an agent-principal relationship. Agent sales presentation skill has three dimensions – people skills, presentation skill and listening skills.

The corresponding null hypotheses are:

- a) The level of development of agent people skills has no effect on negotiation in successfully establishing an agent-principal relationship;*
- b) The level of development of agent presentation skills has no effect on negotiation in successfully establishing an agent-principal relationship; and*
- c) The level of development of agent listening skills has no effect on negotiation in successfully establishing an agent-principal relationship.*

The next section will show how a research instrument was developed to gather data to test the null hypotheses developed in this section, summarised in Table 29.

**Table 29 Null hypotheses**

<b>RQ</b>	<b>Null Hypothesis</b>	<b>H</b>
<b>1</b>	The degree of change to the terms of an agent-principal agreement submission has no effect on the chance of establishing an agent-principal relationship.	<b>1</b>
<b>2</b>	Agency imposed controls on negotiations have no effect on the chance of a successful negotiation.	<b>2</b>
<b>3</b>	Vendor information appropriation has no effect on negotiation.	<b>3a</b>
	Property information appropriation has no effect on a negotiation.	<b>3b</b>
<b>4</b>	An agent's personal value of money has no effect on property information appropriated by the agent.	<b>4a</b>
	An agent's personal value of money has no effect on vendor information appropriated by the agent.	<b>4b</b>
	An agent's personal value of altruism has no effect on property information appropriated by the agent.	<b>4c</b>
	An agent's personal value of altruism has no effect on vendor information appropriated by the agent.	<b>4d</b>
	An agent's personal value of prestige has no effect on property information appropriated by the agent.	<b>4e</b>
	An agent's personal value of prestige has no effect on vendor information appropriated by the agent.	<b>4f</b>
<b>5</b>	Who an agent represents has no effect on the chance of a successful negotiation.	<b>5</b>
<b>6</b>	An agent's value of altruism will have no effect on who they represent.	<b>6a</b>
	An agent's value of money has no effect on who they represent.	<b>6b</b>
	An agent's value of prestige has no effect on who they represent.	<b>6c</b>
<b>7</b>	Proposed advertisements have no effect on the chance of establishing an agent-principal relationship.	<b>7</b>
<b>8</b>	Vendor information appropriated has no effect on proposed advertisements.	<b>8a</b>
	Property information appropriated has no effect on proposed advertisements.	<b>8b</b>
<b>9</b>	Agent media selection has no effect on the chance of establishing an agent-principal relationship.	<b>9</b>
<b>10</b>	Vendor information appropriation has no effect on agent media selection.	<b>10a</b>
	Property information appropriation has no effect on agent media selection.	<b>10b</b>
<b>11</b>	The level of development of agent people skills has no effect on the chance of establishing an agent-principal relationship.	<b>11a</b>
	The level of development of agent presentation skills has no effect on the chance of establishing an agent-principal relationship.	<b>11b</b>
	The level of development of agent listening skills has no effect on the chance of establishing an agent-principal relationship.	<b>11c</b>
<b>12</b>	The level of development of agent people skills has no effect on negotiation in establishing an agent-principal relationship.	<b>12a</b>
	The level of development of agent presentation skills has no effect on negotiation in establishing an agent-principal relationship.	<b>12b</b>
	The level of development of agent listening skills has no effect on negotiation in establishing an agent-principal relationship.	<b>12c</b>

## **Research Instrument Development**

The purpose of this section is to establish the legitimacy of the approach taken in this thesis for collecting quantitative data. Data are used in subsequent chapters to answer the general research questions posed in the first chapter. This section will proceed by examining question design, the data collection instrument development cycle and distribution of the data collection instrument.

Churchill (1979) recommends a process for developing measures to capture constructs defined for a study. The table below shows where Churchill's (1979) recommended steps in this process are addressed in this thesis.

**Table 30 Procedure for developing measures**

<b>Steps in procedure for developing measures</b>	<b>Chapter</b>	<b>Technique</b>
<b>Specify domain of construct</b>	3	Theoretical identification of construct
	4,5, 6	Constraining the scope of the construct
<b>Generate sample of items</b>	6	Discussion of development of the final questions
<b>Purify the measure</b>	6	Reporting on pre-test & operationalisation measure performance
<b>Assess reliability with new data</b>	6	Measurement model development Measure reliability
<b>Assess construct validity</b>	6	Measure validity Organising the data set
<b>Norm development</b>	7,8	Reporting of results Hypothesis evaluation The so what.

Source: Churchill (1979, Page 66)

This section will now describe development of questions used on the research instrument by firstly explaining how the wording of questions came about and how these appeared on the research instrument. A notable body of literature on questionnaire design emerged in the 1970's from which Churchill (1979) and Dillman (1978) are used extensively as references in this section of the thesis.

### Wording of questions

Churchill (1979) recommends development of a pool of questions from discussions with numerous sources to provide insight and to tap into dimensions of critical incidents under examination (Churchill 1979, Page 198). Qualitative data from Chapter 5 were used to develop the wording of questions, from discussions prescribed by Churchill (1979). These discussions are broadly linked to Churchill's (1979) recommendations in the table below:

**Table 31 Discussions to frame wording of questions**

<b>Churchill (1979) recommends discussions with ...</b>	<b>Discussions were held with...</b>
People with responsibility for the product	Sales Representatives
Dealers	Agency Owners
Consumers	Property Sellers
Consumers	Property Buyers
Marketing Researchers	Industry members that had commissioned marketing research reports (Real Estate Industry Institute and Agency Franchise owners)
Outside Experts	Real Estate Property Manager
	Experienced Research Academics
	Family
	Partner

All categories of discussions recommended by Churchill (1979) were employed to develop the wording of questions for this thesis. The care applied in this process ensured final questions were doable and produced useful measures (Churchill 1979; Dillman 1991). The operationalised research instrument (with all final questions) is provided in the Appendix 2. Following is a list of areas that were considered most important:

- Respondents were specifically directed to consider only their last successful presentation, or their last unsuccessful submission, to control errors from respondents incorrectly answering questions (a type of response error categorised by Malhotra et al. (2002) as “inability error”);
- Linking research instrument items to theoretical constructs in the development stage provided the opportunity to link results to the proposed model;
- Instructions were designed to be actionable, clear and related to the task at hand;
- Existing scales were used where possible;
- Talking to the agents meant that concepts could be couched in language appropriate in terms of their business practices, in perspective with their understanding of terms such as ‘listening’ and ‘listing submission’ and for their education levels; and
- Language was verified with agents so that the overall presentation did not appear to be overly dense textually to increase the likelihood that respondents would participate.

Specific wording of questions is discussed more thoroughly in the Appendix 3.

### Ordering of the questions

In order to maximise the effectiveness of an instrument, questions are organised by placing easy questions first, objectionable and threatening questions last, and grouping questions into sections with like content (Dillman 1978, Pages 124 and 125).

The first question on the research instrument is:

*Does your real estate agency currently use the Internet for the purpose of advertising residential properties for sale? Please tick the appropriate box.*

This is non-threatening and simple to answer because residential property sales agents all know the answer.

The research instrument is clearly segmented into five sections, with each section labelled and starting on a new page. All questions in section one relate to Internet specific issues at the agency level. The questions were considered by agents to be a good way to generate interest in the research because Internet advertising is a topic of interest in this industry. Creating interest in the research is a valid means of improving the likelihood of a response (Dillman 1978). The following table shows research instrument items designed to capture constructs related to Internet use at the agency level.

**Table 32 Questions in Section One of the research instrument**

Construct captured	Question Number
Agency Internet Commitment	Q2
Agency commitment to Internet information currency	Q3, Q4
Objective of Internet presence	Q5, Q6
Reason for management web presence	Q7
Expected transaction change	Q8

Internet use by real estate agents is an interesting phenomena noted in the literature review, resulting from the emergence of Internet advertising as a marketing communications mechanism. To allow further exploration of this in future research, the items broadly described above were included on the research instrument. These items were based on Muhanna's (2000) Real Estate industry research, the importance of which has been noted in the literature review of this thesis. This offers further research opportunities, because it is not obvious to either agents or researchers what the precise benefit of Internet advertising is, or how return on investment should be calculated.

Questions in sections two and three on the research instrument specifically relate to the process of establishing an agent-principal relationship. Each respondent is asked to provide details on their most recent unsuccessful and successful relationship establishment attempt (REA). Data captured in this section are linked closely to theoretically defined constructs as listed in the following table.

**Table 33 Questions in Sections Two and Three of the research instrument**

Construct	Question Number
Media	Q9 & Q10
Advertising	Q9 & Q10
Vendor Information	Q11
Property Information	Q11
Agency control	Q12a
Negotiation	Q13
Agent Presentation Skills	Q14

Questions in section four specifically relate to more personal agent details whilst those in section five relate to demographic details of the agency at hand. These are detailed in the table below.

**Table 34 Other Questions in the research instrument**

Construct	Question Number
Section Four	
Number of Agent Submissions	Q22
Agent success rate	Q23
Agent Representation	Q24
Agent Values	Q25
Section Five	
Number of full time employees in agency	Q26
Agency level median sales achieved	Q27
Agent level median sales achieved	Q28
City in which agency mainly operates	Q29

Questions in Section Four were designed to capture constructs modelled as agent values and agent representation. Questions in Section Five were designed to verify that the sample was representative of the real estate agent population.

#### Layout of the questionnaire

This section will detail how the questions are positioned on the research instrument to best improve the likelihood of a person responding to an invitation to participate in a self-administered survey. Dillman (1978) argues this can also influence the quality of that response.

The questionnaire for this thesis was in booklet form and careful attention was paid to ensure the following:

- Each question had specific instructions attached (Dillman 1978, Page 138), for example “Please tick the appropriate box” or “On the following scale (where 10=Well Developed and 0=Not well Developed), please tick the box that best represents how you feel about the following statements”;
- Questions flowed logically (Dillman 1978, Page 137) with section transitions clearly explained, for example “Question Two: For this next question, please consider your agency's very own web site.”;
- Questions were numbered sequentially 1, 2, 3...;

- Questions were obviously connected to the answers (Dillman 1978, Page 142) e.g. question text was positioned as close as possible to relevant item response areas as below and respondents asked to tick the box that best represents how they feel about that question item. Anchors were appropriate to the item. For example:

	Changed A Great Deal	Not changed at all
	10 9 8 7 6 5 4 3 2 1 0	
My sales commission was	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
The sale type was	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

During development right, left and centre alignment were considered. Potential respondents (real estate agents) preferred the method used above. Labels were clearly linked to the numbers at the anchor points (Nunnally and Bernstein 1994, Page 52);

- Wording was verified with agents so that questions could not be misinterpreted (no 'frequent' or 'seldom' descriptors were used), (Nunnally and Bernstein 1994, Page 52);
- Questions did not flow over pages and new sections commenced on a new page (Dillman 1978, Page 144); and
- Although the overall length of the questionnaire and appearance of each page were a consideration, pages contained as much white space as possible.

Design of the research instrument cover was simple, graphically uncomplicated and professional. Support of the university was clearly identified. Ethical requirements were complied with and the title of the research clear. Neither the front nor rear covers contained questions relating to the research, although the rear cover offered agents the opportunity to provide contact details and unstructured feedback about the research if they desired. Inside the front cover was an outline of the questionnaire, an approximation of the time commitment required, confirmation of anonymity, expression of gratitude and instructions for returning completed questionnaires. Additionally, the respondent was asked to provide an email address to which results could be sent upon completion of the research if they so desired.

### **The Research Instrument Development cycle**

Generation of initial pools of items provide the opportunity to refine and focus the items for a research instrument (Churchill 1979). The collaborative effort between real estate agents and the researcher in many kinds of discussions generated pools of items for this thesis. As mentioned in the previous section, questions were designed so that agents just had to 'tick a box'. The next section explains the scales used.

### **Scales**

Bipolar scales were used consistently throughout the instrument. These scales have descriptors as anchors that are verbal opposites, producing a level of scale sensitivity that assists with data analysis. Bipolar scales are used in this thesis because "*people are better at making comparative judgements than absolute responses*" according to Nunnally and Bernstein (1994, Page 51). Scales had eleven boxes from which an agent

could select their preference because scales with 11 or more data points can be considered continuous rather than discrete (Nunnally and Bernstein 1994, Page 115), offering a compatibility with SEM. Development of the measures used in this thesis is discussed next.

### **Measures from the literature**

Existing measures are better than self-developed measures because reliability and validity can be verified objectively (Peter 1981). Existing measures used in this thesis are discussed now.

#### Agent Values

Pryor (1997) developed measures that have been adapted for this thesis in his Work Aspect Preference Scale (WAPS). WAPS was developed specifically to determine what a person considers worthwhile and rewarding in work. Both theorists and practitioners consider these to be influential in a person's personal and career pursuits. Internal consistency and stability of the framework is well proven and documented in the WAPS manual. Reliability and validity are examined by Pryor (1997) from the perspective of homogeneity of subscales and subscale intercorrelations. WAPS uses a 5-point bipolar scale, with anchors of extremely important to totally unimportant. The author finds money and prestige to exhibit a high correlation. This relationship will be explored more fully in the context of data collected for this thesis in subsequent sections but is flagged here as a point of interest.

Pryor (1997) defines Money, Altruism and Prestige as:

- **Money:** A concern for obtaining large financial rewards from one's work;
- **Altruism:** A concern for assisting others; and
- **Prestige:** A concern for recognition and status in the eyes of others.

This thesis adopts these definitions. Internal reliability of scales for these constructs provided by Pryor (1997, Page 20) is based on Spearman-Brown's prophecy formula.

Test-retest reliability figures are provided by this author for two separate samples.

Sample 1 is a sample of 508 students from New South Wales and Sample 2 is a sample of 439 students from Victoria. Both samples were taken in Australia in data collection prior to publishing of WAPS in 1979.

**Table 35 WAPS scale reliability**

	<b>Sample 1 (WAPS 3)</b>		<b>Sample 2 (WAPS 4)</b>	
	Reliability	Test-retest	Reliability	Test-retest
<b>Altruism</b>	0.82	0.83	0.79	0.72
<b>Money</b>	0.82	0.88	0.78	0.77
<b>Prestige</b>	0.80	0.81	0.79	0.72

Source: Pryor (1997, Page 22).

The table above shows the constructs to be consistently tight measures with good reliability estimates. Pryor (1997) reveals inter-correlation figures for Sample 1 - WAPS 3 (and Sample 2 inter-correlation figures in brackets - WAPS 4) to be:

- Money & Prestige = 0.45 (0.49);
- Money & Altruism = -0.21 (0.06); and
- Prestige & Altruism = 0.27 (0.38).

These inter-correlations suggest the constructs are, in fact, distinct. Data collected in the course of this research were also be examined for discriminant validity in this way.

Items in question 25 on the research instrument capture the construct Agent Values. The legitimacy of this claim is established because previous research (Pryor 1997) validates the wording, definitions and scales used in this thesis. Definitions used in this thesis matched those of another author. Items were firmly anchored in material found in the literature review and wording was consistent with agent understanding.

### Sales Presentation

As an important resource in the area of personal sales literature, Quigg and Wisner (1998) identify a 'checklist' of skills that can be developed to improve the effectiveness of a sales presentation. These authors define a sales presentation as: *Persuasive attempts to sell a product to a buyer*. In the case of real estate relationship establishment, the product is the service offered to a vendor and the sales presentation is the agent's persuasive attempt to sell this service to the vendor.

In this thesis agents were asked to self-evaluate their level of skill development for each skill component identified by Quigg and Wisner (1998). Self-assessment has been used by researchers to gather information pertaining to personal characteristics of sales people (Lamont and Lundstrom 1977), with a recent emphasis on its usefulness as an education opportunity for those participating in data collection (Brown 1998). Noting implications for issues of measure validity, Posakoff and Organ (1986) argue that this method of collection provides measures that can be shown to be distinct and can be trimmed to eliminate overlaps effectively, particularly with structural equation modelling, on condition that issues of social desirability are considered.

The scale was validated in both pre-testing and operationalisation in this thesis. Sales presentation skills were captured in Question 14 of the research instrument. The legitimacy of this claim is established because definitions used in this thesis match those of other authors, items were firmly anchored in material provided in the literature review, and wording was consistent with agent understanding.

### Representation

Moore, Smolen, and Conway (1992) developed a scale to evaluate the representation of an agent. These authors define agent representation as: *whom an agent represents*. The scale developed by these authors proposed five alternative models. These include: seller's agent; buyer's agent; middleman; mediator; and, dual agent. This representation is a measure of an agent's attitudinal characteristics with regard to the role of that agent (Moore et al. 1992, Page 223). These authors use a five point Likert scale to capture agent representation data and did not include specific scale reliability and validity measures in their publication. This thesis provides these figures for the adapted 11-

point Likert scale used on the survey instrument at operationalisation to capture agent representation. This construct was captured because definitions used in this thesis match those noted here. Whilst anchors have not been altered, the number of categories, and the number of items, were increased to capture the necessary sensitivity for SEM analysis. Wording was consistent with agent understanding.

Despite an extensive search of marketing scales handbooks, academic publications and other literature, no other scales were found to suit the rest of the attributes defined in the literature review of this thesis. Measure development for these attributes was therefore based on theoretical aspects identified in the Literature Review and Method Chapters of this thesis with the assistance of practitioners in the field, through both focus group and interview techniques detailed in Chapter Four and Five of this thesis. Self-developed measures will be discussed now. All measures were validated in both pre-testing and operationalisation.

### **Self-developed measures**

Intermediate steps for developing these measures are further detailed in Appendix 3.

#### **Proposed Advertisements & Media Selection**

In the literature review, proposed advertisements were observed to be influenced by specific characteristics of the media considered but agents claimed: *“The Internet does nothing that other advertisements can’t do”* and *“It has...many constraints currently”*.

While the literature review revealed media specific aspects of advertising, the real estate agents were apparently not certain that this exists in practice. For this reason,

differences between Internet and non-internet advertising and media selection were used to examine the practice of proposing advertisements and agent media selection.

Previous sections of this chapter defined aspects of proposed advertisements to include all recommended advertisements in a proposed agency agreement and exclude all other terms and conditions of agreement and moderation of terms and conditions that influence negotiation. This construct was captured because definitions in this thesis matched those used for real estate agent advertising and media selection found in the literature review. Research instrument items were firmly anchored in terminology found in the literature review and terminology was acceptable to the respondents so that wording was consistent with agent understanding.

#### Information

Information about the vendor was distinct from information about a property. One agent advised that:

*"We try to find out as much as we can about the vendor so we know how to work with them. For example if the female client is experiencing a marriage break up then we need to know so we can send a woman and accept that the client hates men. We, ask them questions constantly throughout a presentation and property evaluation to get an understanding of the competition and the client's expectations"*

Agents ask a potential client for property specific information such as

*"Is there a history attached to the house? Does it have a name? Can we give it a name?"*

Information of this nature was collected in addition to conventional property details empirically studied by authors such as Benjamin and Chinlo (2000), and Jobson (1991), such as the number of bedrooms or bathrooms in a property.

This thesis has defined aspects of information appropriation to include the acquisition of property and vendor information but excludes how the agent uses the information, how the agent acquires the information, whether the information was requested, offered directly, observed indirectly, or acquired by other means, or the quantity of information about the vendor. Intermediate steps in development of this measure are further detailed in Appendix 3. Information appropriation was captured because definitions used in this thesis matched those identified in the literature review and by agents, items were firmly anchored by material found in the literature review and wording was consistent with agent understanding.

#### Agency control

In the literature review of this thesis it was revealed that an agent is accountable to the agency for whom they operate and that the agency constrains commission and non-commission aspects of agent-principal relationships. This research has defined aspects of agency control to include the agency's constraint of the negotiation, and exclude how agency controls are imposed, what controls are imposed, and identification of all components that an agent is at liberty to negotiate. The legitimacy of capturing agency control with this measure is established because definitions used in this thesis matched those in the literature review, items were anchored firmly in material provided in the literature review, and wording was consistent with agent understanding.

## Negotiation

The literature review identified agent-principal relationship establishment to be a process of coming to an agreed set of terms between the agent and the client. Some of these terms are negotiated and changed to establish the agent-principal relationship. If something is changed, then it must have been subject to negotiation. It is upon this premise that aspects of a typical real estate agent-principal (listing) agreement are included for consideration in this construct (see Appendix 3).

This research has defined aspects of negotiation to include negotiating (bargaining, trading-off, 'haggling', discussing) with the view to changing terms of the agent-principal agreement and to exclude the design, plan and assembling of the agent proposal, anything prior to the completion of initial client evaluation of the agent proposal, anything prior to both parties establishing their goals, measurement of the client's previous experiences, and anything to do directly with potential buyers.

The legitimacy of this measure is based on definitions used in this thesis that match those in the literature review. Items were anchored firmly in material provided in the literature review and wording was consistent with agent understanding.

The next section describes the process of pre-testing the research instrument prior to the data collection instrument finally going to the field.

## **Pre-testing the instrument**

Five stages of pre-testing were performed before the final instrument was operationalised. These are described here.

### Stage One.

All scale development material available, as described in the previous section, was considered in the design of the research instrument. A first draft of the instrument was assembled and discussed with other researchers, academics and two residential property sales agents.

From this, the layout was changed from circling of numbers to ticking of boxes. The ordering of questions also changed to more clearly define the boundaries of sections of the research.

### Stage Two

The adjusted Stage One instrument was given to a real estate agent and a non-agent individual (i.e. partner to researcher) to evaluate the suitability of wording. At this stage it became evident that the agent could understand proposed wording but that individuals unfamiliar with the industry terms could not relate to some terminology used in the instrument. This was an acceptable situation providing evidence that the instrument was suitable for the specific research purpose at hand. This also indicated that the instrument would not function well in another context without significant reworking.

Demographic questions were added following this stage to assist in classification of data later.

### Stage Three

The adjusted Stage Two research instrument was tested in an agency with every one of the ten residential property sales agents completing the questionnaire. The agency owner described his employees as typical real estate agents. “*We’re not brain surgeons here*” [Owner of the pre-test agency]. Each agent was able to successfully complete the questionnaire in less than thirty minutes. Discussions with some of these agents caused further changes to the wording of two questions to more clearly delineate components of agent proposed advertising.

The test data were entered and analysed with SPSS to evaluate the robustness of the instrument. Reliability analysis, Correlation analysis, Exploratory Factor analysis and Comparison of means were performed to evaluate internal consistency and highlight any interrelationships between questions. Results of this analysis are presented in the next section.

This pre-test phase of the research did not reveal some of the more interesting findings that emerged with the real data because this could not be examined with large sample analysis tools used on the final data (AMOS). Artificially inflating the test data sample size by duplicating respondents’ responses further produced results that suggested operationalisation was required to evaluate final robustness. Churchill (1979) recommends the use of more than a single data collection to finally purify measures so both pre-test and operationalisation data were analysed. Nunnally and Bernstein (1994) further refer to an iterative process to select a set of items to be used as measures for constructs (Nunnally and Bernstein 1994, Page 328).

#### Stage Four

The adjusted Stage Three instrument was proof read by a teacher, psychologist, marketing academic and the researcher prior to printing and distribution.

#### Stage Five

An agent and a non-agent were asked to complete the final questionnaire in the presence of the researcher to verify the meanings of language used, presentation of the instrument and research pack, and time taken to complete. Re-worked scales confirmed by these individuals were used for operationalisation of the research instrument.

#### **Scale purification**

Scale purification for this thesis examined Alpha values and Factor Analysis in the test environment. Scales were adjusted where necessary and then verified in a second environment using the data collected at operationalisation. These adjustments were based on both theory and the data in accordance with iterative processes described by Churchill (1979). The following table shows results of the purification process for data collected in both Stage Two of the instrument development (documented in the previous section) and final operationalisation of the instrument.

**Table 36 Scale performance at pre-test and operationalisation**

Construct	Pre-test			Operationalisation		
	Alpha	Items	EFA Components	Alpha	Items	EFA Components
Vendor Information	0.63	2	1	0.78	4	1
Property Information	-3.73	3	1	0.74	2	1
Agent Media Selection	0.96	3	1	0.85	3	1
Proposed Advertisements	0.99	6	1	0.83	5	1
Negotiation	0.99	5	1	0.89	5	1
Agent Representation	0.66	3	1	0.74	3	1
Agency control	0.89	4	1	0.61	3	1
Agent Values						1
Altruism	0.91	4	1	0.91	4	
Money	0.83	4	1	0.71	4	1
Prestige	0.71	4	1	-	-	-
Agent Sales Presentation						
People	0.56	4	2	0.79	4	1
Listening	0.66	4	1	0.87	4	2
Presentation	0.89	4	1	0.87	4	1

A discussion, by construct, of the contents of this table is included in the appendices detailed below including:

- Exploratory factor analysis results (Appendix 4);
- Changes in wording, layout, format and number of items between pre-test and operationalisation for each construct (Appendix 3); and
- Item level correlation matrices to substantiate these changes (Appendix 3).

At this point however, it is important to note several things with reference to the table above that verifies that this development cycle worked:

- Slight decreases in alpha values from pre-test to operationalisation for Media, Advertising and Negotiation may be attributable to the changed sample. These values are acceptable by conventional standards (Finn and Kayande 1997);
- A substantial drop in the Alpha value from 0.89 to 0.61 for Agency control implies reduced reliability of the measure at operationalisation. This drop from four to three items reflects artefacts evident in the small pre-test samples that were overcome at operationalisation. However, because this research does not lead directly to important decision-making in an applied setting an alpha of 0.6 suffices (Churchill 1979, Page 199);
- Improvement of Alpha values for Information, Value of Money & Representation verifies the benefit of the rigorous instrument development process of this thesis with implicit increased measure reliability; and

- Such measure improvement is supported by the evident single dimensions of the scales in all cases except listening skills produced by Exploratory Factor Analysis. This attribute is excluded from model specification for reasons described in Appendix 4.

Having verified characteristics of the measures with two lots of data (at pre-test and operationalisation), the next section will describe the process of actually collecting the data.

## **Collecting the Data**

In order to confirm a model such as the one proposed in the literature review of this thesis a large number of responses are required. But how many is this?

### Response targets

Sample size is important for three reasons. Firstly, model complexity plays a part in determining the required numbers of responses because of the number of related degrees of freedom (parameters to be estimated) (Kline 1998). Secondly, it has implications for accuracy of analysis, for example P-tests are less accurate for SEM with small samples but t-tests are not affected (Arbuckle and Wothke 1999, Page 74). Finally, the chance that a sample does not represent a population is calculated as 1 divided by the square root of the sample size (the margin of error in a sample). For example, a sample of 200 would be result in a 7.07% (0.0707) chance that the sample does not represent the population.

Respondents provided in total 274 usable relationship-establishment attempts. The dataset was split into successful and unsuccessful relationship attempts, effectively halving the sample. Examination of chi-square indicators is a process that is dependent on sample size (Kline 1998, Page 131). Reducing the sample size to 137 for each outcome does not, however, mean the data are inadequate because Hayduk (1996) argues that a sample of 70 is adequate for single indicator models such as ours. From this literature, this thesis legitimately uses the 137 successful and 137 unsuccessful relationship establishment attempts, to test the model developed in the course of this research with structural equation modelling (SEM).

#### Missing answers

This section details the process adopted for treating responses that were not complete. Of the questionnaires received, not all respondents completed all parts of all questions. After considering levels and patterns of missing responses, Dempster et al.'s (1986) expectation maximisation was used to impute values. This method is recommended by authors such as Figueredo et al. (2000) and Flury and Zoppe (2000) to best preserve the integrity of a data set.

Detailed fully in Appendix 5, this process involved:

- Classifying the nature of missing data and rates of missingness (Roth and Switzer III 1999);
- Identifying a method for remedy (Figueredo *et al.* 2000);
- Imputing values by construct; and
- Comparing imputed and estimated mean values at the construct level to show that the estimates were close to actual values (Appendix 6).

### Method of distribution

Email (and online), telephone, personally administered and self-administered surveys were all considered. Email was eliminated in the variance decomposition analysis because the physical form of a data collection instrument (the mode) needs to be related to respondents' everyday business activities. Telephone surveys were prohibited because of the mobile nature of agents in their line of work and the difficulties experienced in contacting agents directly through preliminary phases of the research. Personally administered surveys were also eliminated because of the time constraints under which agents work. They need to be available for listing enquiries at any time. In addition, the requirement for high volumes of responses meant that self-administered questionnaires were preferable. The implication here is that the fieldwork is designed with precision to eliminate noncoverage, nonresponse and measurement errors (Dillman 1991).

The research instrument in this thesis was distributed by mail to cover the volumes required for analysis. Much literature exists regarding how best to implement this delivery mode. Authors used most extensively in this thesis are Borque and Fielder (1995) and Dillman (1978). Based on the findings in their publications, a research 'pack' was sent to real estate institute members (See Appendix 2).

In a meta-analysis of mail surveys, Dillman (1991) found a level of interaction between the following to be an important contributor to the maximisation of response rates and quality: Follow-ups, Prior notice, Financial Indicators, Special postage, Sponsorship, Stamped Returned envelopes, Personalisation, Interest, Cover Letters, Anonymity, Deadline date, Size & colour, and Population. Yu and Cooper (1983) similarly observe a benefit from such a holistic approach to design of mail survey distribution.

Dillman (1991) recommended a process that combines multiple rounds of distribution, reminder notifications and follow-up phone calls. But the number of questionnaires sent is an issue of sampling that is discussed in the next section.

### Sampling

The Real Estate Institute of Victoria (RIEV) supplied the sample frame for the research. Fields in the file included business name, address, phone, fax, email and number of REIV members in the real estate business. This last detail was requested by the researcher as a guide to the size of the organization.

The number of organizations listed on the database was 2358. Not all Property Sales Representatives are registered industry association members. Estimates provided by the Real Estate Institute of the number of members eligible for this research was 4485. Only Residential Property Sales Representatives were required for this thesis. Organizations that were obviously non-residential real estate professionals were eliminated from the sample. Random sampling of the database was then done by assigning a random number to each record, sorting by size of the random number and selecting sufficient elements to generate the targeted number of returns (Dillman 1978).

#### Process of distribution

This thesis uses Dillman's (1991) four-step process for distribution of a mail questionnaire.

#### ***Step One***

An algorithm was applied to the number of members in the sampling frame to determine the number of surveys to send to an agency. Generally there is more than one residential property sales agent in an agency, not all of who are registered members of the Real Estate Institute. If the number of members registered for an agency was less than three, then three surveys were sent to the agency. This allowed for those agents in an agency who were not registered members of the Real Estate Institute to complete the survey. Agencies with up to eight registered members were sent a survey for each registered member. A maximum of eight surveys were sent to any single agency.

The research pack sent to agents was designed to build trust, show gratitude, imply subordination of the researcher, express the value of their special contribution, offer an incentive of access to results following participation, clarify the time cost of participation and the absence of financial and vocational cost in participation (Dillman 1978, Page 12) (See Appendix 2). The pack included:

- One single page letter asking for agent assistance on Monash University  
Department of Marketing Letterhead

This letter was short, expressed gratitude in advance, plainly presented a request for their help and advised them of the support obtained from their industry association;

- One single page letter of endorsement from the Real Estate Institute of Victoria on their letterhead, drafted by the researcher and signed by the Chief Executive Officer, the letter acknowledged the benefits of industry research and encouraged members to participate in the research; and

- Questionnaire (either multiple or single questionnaires depending on eligibility).

Two items were inserted in the cover of the actual survey to minimise the impression of a text rich survey instrument. These were a single page explanation of the research on Monash University Department of Marketing Letterhead and a Monash University Department of Marketing reply paid envelope for return of surveys. The letter complied with ethical regulations, identified the researcher and provided the participant with information on the purpose and benefits of the research.

The letter included an approximation of the time commitment required, confirmation of anonymity, expression of gratitude and instructions for returning completed questionnaires. Additionally, the respondent was asked to provide an email address to which results could be sent upon completion of the research.

These documents were ordered in envelopes as presented in this list.

### ***Step Two***

Two weeks after the initial posting a first reminder was mailed. This was a single pre-printed card sent to the agency.

### ***Step Three***

Two weeks after reminder cards were mailed, telephone calls were made to investigate non-responses. Reasons given for non-response included:

- *“The survey never reached me”;*
- *“We are not a sales agency – our other office handles that”;*
- *“It was a very busy November/December because the market went flat. Houses didn’t sell at auction so we had to work very hard after auctions to close deals”;*
- *“You should have called me first”;* and
- *“We don’t do residential property”.*

### ***Step Four***

Operationalisation of the research instrument revealed a problem that was not foreseeable. “*The property market fell flat*” [Agent interview]. Properties were not selling as expected. (Richins *et al.* 1987) note that some selling situations, such as properties priced above or below and agency’s average house price, require additional selling effort. As agents were far busier than could have been foreseen, a second run of surveys were distributed at a quieter time.

Return targets were not met with the first mail-out. It was evident that the research project would be at risk if the process were not altered. Personal contacts were used to distribute surveys at this point. These contacts were established in the course of the research and were not known to the researcher prior to the research. Once contact was established with an agent, participation rates improved.

Only single surveys were included in each pack in the second round mail-out. This is because of the 90 returned questionnaires only 3 agencies returned more than one questionnaire. Distribution of surveys in this round was more dependent on contacts made in the preliminary stages of instrument development. Three agency owners, and a single agent from previous focus group discussions, were enlisted to assist with the distribution of a further 220 surveys.

In addition to these people, an agency owner with whom the researcher had not previously had direct contact (but was in fact the secretary of the Real Estate Institute) called directly to advise that:

*“The survey doesn't do what you say you are looking at...it won't work...I think you need to meet with me so I can explain a few things”.*

Being most interested in how the instrument was performing in the field and whether results would be valid to the industry, I was happy to attend such a meeting. We held an hour-long discussion. After listening to his perspective, explaining my own motivation (already detailed in the Introduction of this thesis) and the correctness of the research procedures being implemented (also detailed in this thesis) the agent took an additional eight surveys. In addition to the two handed to me at this meeting, all eight additional surveys were returned completed by his real estate sales representatives.

Explaining the importance of the research and my interest in the field increased the practitioners' propensity to help. Thanks to them, sufficient responses were received.

#### Performance of distribution

A response rate of 8% was expected because Dillman (1991) acknowledges common results of 7.5% response rates. According to this author, higher levels (from 25% to even 80%) have been achieved by balancing all interacting components. 1500 surveys were originally distributed.

The table below shows details of distribution performance.

**Table 37 Sampling and responses**

<b>Task</b>	<b>Outgoing</b>	<b>Incoming</b>
<b>Actual outgoing surveys in round one</b>	1500	
<b>Final round outgoing surveys with personal distribution</b>	200	
<b>Final round outgoing surveys with mail distribution</b>	70	
<b>Returns from round one</b>		95
<b>Returns from round two</b>		42
<b>Total survey distribution</b>	1770	
<b>Total Number of surveys entered</b>		137

Improving on the response rate from round one of 6.3%, the final response rate was 7.7%. Each response included information on two relationship establishment attempts. 137 final responses provided 274 cases for analysis. Using the method detailed on the previous page this means there is only a 6.04% (.060412) chance that the sample does not represent the populations (one divided by the square root of 274). Furthermore, 54 respondents elected to receive emailed results and 13 respondents volunteered to assist in the future. The next section provides an overview of respondents so it can be demonstrated that they were representative of real estate agents in general.

**Description of respondents**

The table below shows the geographic distribution of respondents.

**Table 38 Respondent distribution**

<b>Region</b>	<b>% of total responses</b>
Country	10
Suburban	79
Other	4
Missing	7

The categories in Table 38 are broken down into city of operations in Appendix 7.

Generally, when an agent was prepared to participate in the research, others in their area, but not necessarily in their agency, were likely to participate, with 3 suburban *cities* (municipalities). Two regional municipalities provided only one respondent.

The literature review revealed that agents seek to secure property listings. Fifty percent of respondents in this research indicated that they successfully establish a relationship with the principal in 70% or more of their relationship establishment attempts.

Respondents also indicated that of the relationship establishment attempts that were not successful:

- 15% of potential vendors decided not sell at all; but
- 71% of these potential vendors signed with another agent.

The remaining 14% were missing responses. This question was not used in SEM so this level is not problematic for analysis purposes. So then, if an agent fails to secure an agent-principal agreement another agent is most likely to secure that vendor. This thesis is about what accounts for an agent's inability to be successful in a relationship establishment attempt.

Further examination of respondents considered agent median property sales prices. The distribution of respondents and their personal previous months median residential property price sold, compared to published property prices for their city of operations, is shown in Appendix 8.

From this, two different types of agent sales performance estimations were evident.

Firstly, a large number of agents estimated their sales performance close to published

prices. These agents, on average, underestimated their sales performance compared to published sales figures by only approximately 12% (see Appendix 8). This is a relatively small discrepancy, suggesting that respondents were representative of their locations. In these cities, property prices were relatively stable at the time of this research.

Secondly, a number of agents underestimated their sales performance compared with published property prices by up to 50%. Notably these agents operated in cities that experienced large house price increases over the past 18 months. This movement of prices reveals a telescoping effect for these agents in these cities because agents were asked to consider back over time and we are taking a single snapshot. This means that should this research be replicated at a later date, with more stable property prices, it would be reasonable to expect fewer discrepancies in estimations and published prices. However, the responding agents were found to be reasonably representative of the regions in which they operate.

This section has described the process of fieldwork design in this thesis based firmly on Churchill's (1979) methodology covering question design, the instrument development cycle and instrument distribution.

## **Models**

This section will reveal model development results from operationalisation of the research instrument by demonstrating how the conceptual model developed in the literature review fit with the data collected using structural equation modelling (SEM). Additional insight was gained from more traditional analysis methods.

A first step to assembling a structural equation model is fitting a measurement model to a dataset that establishes all links between specified variables (Bollen 1989, Page 180). Similarly, McDonald and Ho (2002) observe common SEM model development practice to include specification of a measurement model as a precursor to structural model specification.

Model comparison in this thesis proceeds by implementing Anderson and Gerbing's (1988) approach of identifying a structural model that fits within the measurement model. Examining the impact of different model structures on levels of significance of resulting chi-square tests for corresponding differences in degrees of freedom this thesis details the pattern of discrepancies. This is accepted current SEM reporting practice described by McDonald and Ho (2002) in their meta-analysis of recent SEM research papers and monographs.

This section of the thesis therefore firstly re-presents the proposed conceptual model to position this afresh in the reader's mind. A measurement model is developed and then

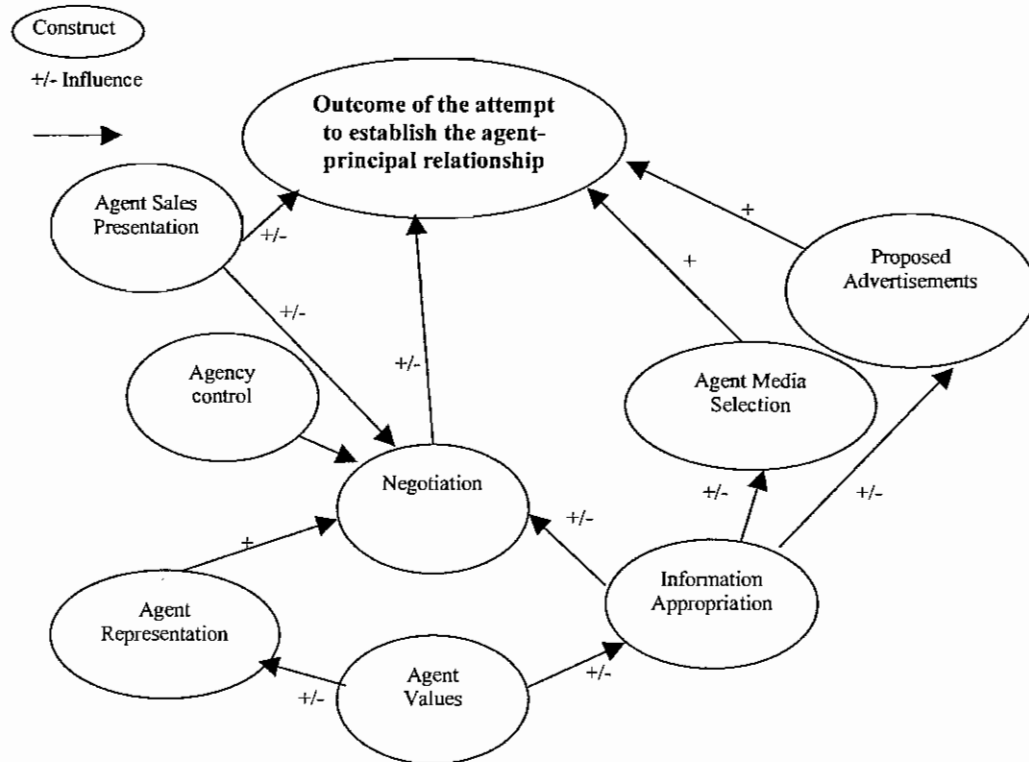
used to legitimise measures and constructs so that two things could be done. Firstly, the conceptual model is fitted to the data to show the reader how theoretically developed relationships fit with the data compared to all the relationships in the measurement model. Then a structural model is developed for use next chapter to test the conceptual model. Results of hypotheses testing are revealed in the next chapter with the assistance of this structural model.

### **Development of a measurement model**

As just mentioned, SEM is used extensively in this thesis because of the complex relationships between conceptually modelled constructs (Appendix 9). Basic theoretical assumptions of SEM have been noted in the Method chapter of this thesis (Chapter 4) regarding normality, linearity, sample size, measurement error, and residual distribution. These will all be addressed in this section of the thesis with reference to the data collected, so that SEM is done correctly.

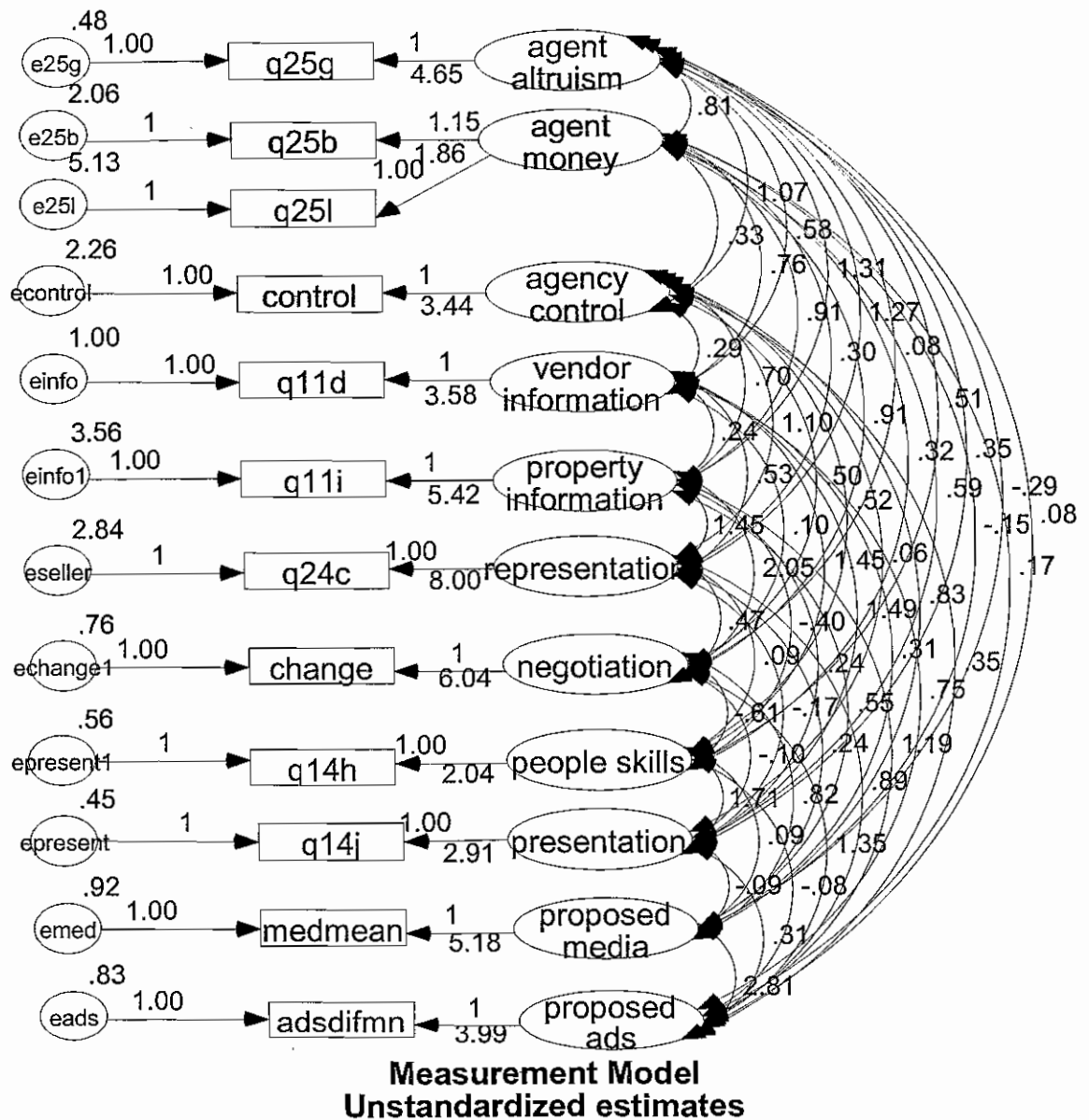
The conceptual model is shown in Figure 17 to refresh the image in the mind of the reader of the series of proposed relationships developed in the literature review.

**Figure 17 Restatement of the conceptual model**



Assembling a measurement model means establishing all links in the data between all constructs, not just the ones specified in the figure above. Unstandardised estimates for the measurement model are shown below (see Appendix 10 for standardised estimates).

**Figure 18 Unstandardised estimates for the measurement model**



Deconstructing this now, two things are important to note. Firstly, single indicators (either observed or manufactured) are used almost exclusively in the modelling for this thesis. Selection of these indicators is discussed in Appendix 11. Indicators are shown later in the current chapter to function as viable measures to overcome unwanted noise

of multi-indicator measures, maintain accuracy and represent the population at hand, and result in a structural model that works. Note also that four indicators used in the measurement model are manufactured from parcelling of observed indicators. The legitimacy of the approach used in this thesis is based on contemporary practitioners (SEMNET) and authors such as Joreskog and Sorbom (1989), Little et al. (2002) and Hayduk (1987; 1992).

Because model specification from this point in this thesis uses mostly single indicators the modelling process is implemented in two stages. Stage one involves selection of the items for inclusion in models. Stage two involves modelling of the relationships given a set of indicators. In this way multi-item indicators provide the pool of items from which single item indicators are selected. All modelling in this thesis includes appropriate documentation (Little et al. 2002), construction of measurement error terms from multiple-indicator measures and correspondingly fixing parameters (Hayduk 1996; Hayduk 1987 Page 27), removal of items from multi-item scales if items are found to measure the same thing (Nunnally and Bernstein 1994) and selection of the best indicators (those closest to the meaning of the construct) (Hayduk 1996, Page 29).

The second important thing to note is the drawing convention used in this thesis:

- Circles represent estimated measurement error terms. Parameter variance is the number offset from these circles;
- Observed and parcelled indicators are represented by rectangles;
- Latent constructs are represented by ovals and are captured by these observed indicators. Variance of these indicators is offset from these ovals; and

- Co-variances that estimate the relationship between latent constructs are shown with double-headed curved arrows.

These will be discussed further in detail in the following sections of this chapter. The model in the figure above is the preferred measurement model in this thesis for three reasons. These will be discussed now.

***a) Robustness of the model is verifiable.***

Fit indicators recommended by Anderson and Gerbing (1988) and McDonald and Ho (2002) are within acceptable limits and are detailed in the table below.

**Table 39 Measurement model fit indicators**

What is reported (McDonald and Ho 2002)	Generally considered appropriate levels	Measurement model	
<b>Discrepancies</b>	Discrepancy Degrees of freedom P value		9.830 9 0.364
<b>RMSEA</b>	< 0.05 =good < 0.08 = acceptable		0.018
<b>Fit Indexes</b>	At least two of GFI, RFI, NFI, AGFI > 0.9	Goodness of Fit (GFI) Normed Fit (NFI)	0.99 0.98
<b>Correlation/ Co-variance Matrix</b>	Matrices	Used in analysis throughout	

The indicators presented in this table will now be explained:

- *Discrepancy* is a calculation of the minimised function of the model. This indicator depends on *degrees of freedom* of the construct being modelled.

Generally though, the smaller the chi-square the better the model fit. The level of significance for this function is verifiable with the assistance of chi-square distribution tables readily located in statistics publications such as Kanji (1999);

- *P values* indicate the closeness of fit to the data. The closer to 1.00 this figure is the better the fit with the data; and
- *RMSEA* is the root mean squared error approximation for the function. Ideally this should be less than 0.05.

For a measurement model of 9 degrees of freedom, the estimated discrepancy of 9.830 is significant with “p” value of less than 0.10. With fit indicators (GFI & NFI) greater than 0.9 and estimated root mean squared error approximation (RMSEA) less than 0.05 the reasonableness of the model fit emerges. Furthermore, Bollen and Stine's (1992) robust modified bootstrap method for estimating the distribution of the discrepancy function reveals the measurement model has a P indicator of 0.497751. This means that the probability that the discrepancy function would be as large as it actually turned out to be in the current sample if a new sample is drawn is 49.7% under the hypothesis that the model is correct.

***b) The model is not dependent on sampling errors.***

The model is not dependent on sample errors because sampling with replacement from the data set 2000 times, with bootstrapping, established a discrepancy distribution within which the estimated discrepancy of 9.830 lay close to the bootstrapped mean value of 10.7145 (Arbuckle and Wothke 1999).

Three constructs in the measurement model required closer examination because estimated bootstrap standard error of the regression weights were larger than the expected maximum likelihood approximation ( $> 0.2$ ). This meant that the distribution of the parameter estimate was wider than expected under normal distribution assumption (Arbuckle and Wothke 1999).

Estimated standard errors and bias of all other regression weights were less than 0.2 and therefore acceptable (see Appendix 12). The table below examines only those extreme results noted above for skewness and outliers:

**Table 40 Resolution of distributional issues**

Items		Factors	SE	Bias	Outliers	Skewness
<b>negotiation</b>	<--	people skills	0.26	0.02	Yes	-2.50
<b>property information</b>	<--	value of money	0.21	-0.01	Yes	-0.45
<b>negotiation</b>	<--	value of money	0.23	0.03	Yes	

The magnitude of skewness in this table indicates the degree to which the distribution of estimated regression weights is symmetrical (skewness) and which side of the distribution has more observations (kurtosis). The link between people skills and negotiation is severely negatively skewed (-2.50). Other relationships in this table are less severely skewed.

In their research paper evaluating the robustness of SEM, Muthen and Kaplan (1985) find magnitude of skewness not to be problematic for models assembled with Likert scales if skewness for most distributions is less than 2. The link identified in the table above is the only standard error that had a skewness indicator greater than 2 and all other estimates are considered acceptable. In isolation this link would be problematic, but applying the logic from Muthen and Kaplan (1985) a single skewness of -2.50 does not excessively effect the overall model performance and development. Bootstrapping was used to confirm the robustness of the model developed to show that there was no adverse effect of this apparently problematic link between people skills and negotiation with a skewness of -2.50.

*c) Items included in the model are rigorously examined.*

These tests are outlined below and fully discussed in the following sections of this chapter:

- **Legitimacy of measures is established.**

Papers by important authors such as Campbell and Fiske (1959), Churchill (1979), Cronbach (1951), Finn and Kayande (1997), Menezes and Elbert (1979) and Peter (1981) are used to investigate variance and correlations so that measure reliability, validity and purity can be affirmed. This section appears at this point in the thesis because many authors mandate the need for such validation prior to structural model evaluation in order to justify implementation of a model evaluation technique (Bagozzi 1982; Bhargava, Dubelaar, and Ramaswami 1994; Churchill 1979; Finn and Kayande 1997; Menezes and Elbert 1979; Nunnally and Bernstein 1994; Peter 1981);

- **A relationship between dependent and predictor variables is established.**

A relationship between predictor variables and relationship establishment attempts (the dependent variable) is confirmed so that there is in fact something to study. Logistic regression is used so that the dichotomous outcome of a relationship establishment attempt can be captured; and

- **Relationships between predictor variables are established.**

Predictor variables are examined so that the existence of interrelationships between influencing variables can be affirmed. This is done by using linear regression between each item in the model to capture the strength and nature of the relationship between variables. These are overcome by examining the total effects indicators produced by AMOS in structural equation modelling in the next chapter.

Theoretical evidence confirmed the legitimacy of construct and item inclusion in the model so that modifications were not made on the basis of the data alone to ensure that the model could be used in a more general sense later. The next sections will now reveal results from these tests.

### **Establishing legitimacy of the measures**

This section of the thesis assesses all characteristics of the measures “*to determine whether the data have captured what we wanted to know... including the magnitude and direction of relationships in which each measure is involved*” (Peter 1981). The table below reveals the points of analysis that are used to guide this process with references to the important papers used extensively in this section of this thesis.

**Table 41 Authors directing analysis in this section of this dissertation.**

<b>Point of analysis</b>	<b>Author</b>
Variance	Finn and Kayande (1997)
Reliability	Cronbach (1951)
Validation	Peter (1981); Campbell and Fiske (1959); and Churchill (1979)
Purification	Menezes and Elbert (1979)
Model Specification & Specification of items	Little, Cunningham, Shahar & Widaman (2002) and Nunnally and Bernstein (1994)
Model Verification	Anderson and Gerbing (1988)

Organising this section of the thesis in this way ensured that necessary research assumptions of structural equation analysis and measure validity were covered in a manner that is clear and easy for the reader to follow. The next section looks at variance.

## Variance

Variance is important for three reasons. Firstly, authors such as Hill, Griffiths, and Judge (2001) and Finn and Kayande (1997) suggest that variance across variables of interest is required for there to be something to study. The table below shows levels of variance for indicators used in the measurement model.

**Table 42 Single indicator item statistics**

<b>Construct</b>	<b>Item Specified in Measurement Models</b>	<b>Variance</b>	<b>Mean</b>
Vendor Information	Q11d	4.60	8.68
Property Information	Q11i	9.02	2.66
People Skill	Q14h	2.61	8.86
Presentation Skill	Q14j	3.37	8.40
Agent Representation	Q24c	10.88	6.81
Money (salary)	Q25b	4.56	7.03
Altruism	Q25g	5.15	7.61
Money	Q25l	7.01	7.54
Agent Media Selection	Parcelled Variable	6.12	-0.22
Change	Parcelled Variable	6.82	3.71
Agency control	Parcelled Variable	5.71	6.19
Proposed Advertisements	Parcelled Variable	4.85	-1.15

Each construct exhibited some variance with a minimum of 2.60 for people skills and maximum of 10.87 for agent representation. The data warranted further investigation to more completely understand why this variance existed. Constructs captured using multi-item indicators also exhibited variance (see Appendix 4). Hill et al. (2001) suggest that variance of the nature noted with these multi-item indicators may determine whether any influential data points and interactions between variables exist. This will be further examined later.

Secondly, variance and mean values are inextricably linked because mathematically variance is the squared deviation of each point from its mean. Both means and variance are “*useful indicators of variation that contribute to developing an understanding of the distribution of data*” (Nunnally and Bernstein 1994, Page 117). Many authors do not stress this obvious link. Kline (1998) notes this oversight to be a limiting aspect of common SEM practice because important basic data characteristics can be overlooked if all aspects of the data are not considered. For this reason mean values are included in the table above. Comparing mean values using independent sample t-tests reveals that significant differences exist between successful and unsuccessful relationship establishment attempts for property information (Sig=.027) and agent people skills (Sig. < 0.0005). This is the first indication that differences exist between successful and unsuccessful relationship establishment attempts.

Finally, Hayduk's (1987) preferred method of using single indicator structural equation model specification includes a calculation involving item level variance to account for measurement error. If there is no variance then no measurement error can be specified. Processes used to constrain this error term will be discussed fully in the next section but it is noted here that variance is critical.

Items used in the preferred measurement model, as well as multiple-item indicators, have been shown to exhibit variance so the next section will investigate reliability.

## Reliability

Establishing reliability of measures has traditionally been a matter of firstly considering calculation of Cronbach's Alpha (Churchill 1979). A further use of this alpha is to estimate correlations with errorless true scores examining the match of sample statistics to population parameters indicating the likelihood that a measure will perform in the same manner again (Finn and Kayande 1997). As alpha approaches one two things happen. Scale reliability improves, depending on the number of items included in calculations, and the *k-item test correlation with true scores* improves.

But single-item measures used in the measurement model for this thesis were not examined for reliability because Cronbach's (1951) Alpha cannot be calculated for a single item. Multi-indicator scales Alpha values have been examined but are not discussed at length here because whilst providing supporting evidence of scale reliability they are not directly included in final model specification (see Appendix 4). This thesis did not calculate Finn and Kayande's (1997) generalizability co-efficient. Instead, bootstrapping was used to examine the likelihood of similar results being obtained if samples were redrawn.

Furthermore, as the number of items in model specification decreases, errors arising from measures converge to a single point (Kline 1998). Modelled error parameters are both commonly (Hair et al. 1998, Page 598) and necessarily (Hayduk, 1996; Kline 1998) fixed for single item indicators. The true identity of the concept is captured, when the error parameters are fixed (Hayduk 1987, Page 121).

Methods for fixing error variance indicators are not so obvious in the literature.

Anderson and Gerbing (1988) recommend using error estimations from previous research. These were not available at the item level, even for previously proven scales used in this thesis. Kline (1998) recommends basing calculations on experience and multiplying the item variance by a ratio drawn from this. However, Hayduk (1987) offers the following formula to be used in conjunction with constraining the link between an error term and its respective single item indicator to one as follows:

$$(1 - \text{scale } \alpha) * \text{item variance}$$

Hayduk (1987) justifies this method across Sections 4.3 to 4.5 (Pages 103 – 125) of his SEM text.

This thesis adopts Hayduk's (1987) recommended approach. Error variances were fixed so that single items could be assembled into the model for this thesis (calculations are detailed in Appendix 13). These error variances were attached to the circles in the measurement model and not estimated freely by AMOS.

### Validation of measures

This section examines discriminant and convergent validity to show why the measures used are considered valid. According to Peter (1981), examination of correlations and co-variances is the real issue of measure validation. This section will proceed by firstly defining what was looked at and then which methods were used for these investigations.

### ***Convergent validity***

Convergent validity ensures that a scale examines only one thing. If there is an absence of distractions, then measures measure only one thing converging on a single aspect or construct. Thus validity is established if:

- a) High correlations exist between the measure of interest and other measures that are supposedly measuring the same concept (Menezes and Elbert 1979); and
- b) EFA produces a single dimension (Churchill 1979; Menezes and Elbert 1979).

Convergent validity is established for indicators used in this thesis because single item models have no competing items to distract, or add noise, within any one construct.

Convergent validity is therefore assumed when using single indicators. It is not possible to test correlation between group members of a group of indicators if there is only a single indicator, nor is it possible to perform EFA. The case of establishing convergent validity with multi-item scales is discussed fully in Appendix 4.

### ***Discriminant validity***

Traditionally, low correlations between the measure of interest and other measures that are purportedly not measuring the same concept are required (Campbell and Fiske 1959; Menezes and Elbert 1979). High correlations might mean trait similarities exist or that some shared method variance exists (Campbell and Fiske 1959). If high correlations exist (either within or between items) conditional variances are also high (Belsley et al. 1980, Page 115).

For this reason, co-variances in the Measurement Model defined in this thesis are shown with double-headed curved arrows between latent constructs. Co-variance estimates between constructs that seem high require closer examination for analysis of correlations to establish discriminant validity. Examination of high correlation estimates is done in this section of the thesis using Anderson and Gerbing's (1988) method of constraining an already high correlation to 1 to see what happens to the model indicators (discrepancy and p values). Fixing a parameter in this way reduces the degrees of freedom in the model by one. This has the effect of forcing a situation of unity so that items are assumed to measure the same thing (Anderson and Gerbing 1988). Discriminant validity is established if model indicators significantly deteriorate as a result of constraining the parameter.

A full table of estimated correlations is provided in Appendix 14. Of these, the only correlation estimates closer to 1 than zero are detailed in the table below. These links are examined further to verify discriminant validity exists by examining the significance of changes to model discrepancy estimates when links are forced to take a value equivalent to a correlation value of 1 compared to the proposed measurement model discrepancy estimate of 9.832.

**Table 43 Testing discriminant validity**

	Estimated Correlation	Model Discrepancy	P value of chi-sq test of the effect on model discrepancy for a single degree of freedom
<b>Link between people skills &amp; presentation</b>	0.703	18.8	0.0027
<b>Link between media &amp; advertisements</b>	0.618	24.4	0.000133
<b>Link between vendor information &amp; people skills</b>	0.537	15.6	0.016026

This thesis has used co-variances to examine relationships between variables. Anderson and Gerbing's (1988) method of fixing correlation values to 1 was implemented in this thesis by estimating co-variance values for the links in Table 43 which were then used as inputs in AMOS estimations.

For the link between people skills and presentation:

- Estimated co-variance = 1.717; and
- Estimated correlation = .703.

$$\frac{1}{.703} = \frac{X}{1.717}$$
$$X = 2.442$$

In the first instance, fixing the link between people skills and presentation skills to the estimated co-variance equivalent of a correlation of one ( $x=2.442$ ) increased the model discrepancy from 9.832 to 18.8. Using a chi-square significance test, a model discrepancy increase of 9 for a single degree of freedom gives a P value of .0027. Such

a significantly low P value (less than .05) means that the altered model is rejected, implying that the parameter should not be set to a co-variance value equivalent to a correlation value of 1. These two items are therefore significantly distinct and considered discriminant.

Fixing the link between media and advertisements to the estimated co-variance equivalent of a correlation of one ( $\chi^2=4.55178$ ) increased the model discrepancy from 9.832 to 24.4. Using a chi-square significance test, a model discrepancy increase of 14.6 for a single degree of freedom gives a P value of .000133. Such a significantly low P value (less than .05) means that the altered model is rejected, implying that the parameter should not be set to a co-variance value equivalent to a correlation value of 1. These two items are therefore significantly distinct and considered discriminant.

Fixing the link between vendor information and people skills to the estimated co-variance equivalent of a correlation of one ( $\chi^2=2.065434$ ) increases the model discrepancy from 9.832 to 15.6. Using a chi-square significance test, a model discrepancy increase of 5.8 for a single degree of freedom gives a P value of .016026. Such a significantly low P value (less than 0.05) means that the altered model is rejected, implying that the parameter should not be set to a co-variance value equivalent to a correlation value of 1. These two items are therefore significantly distinct and considered discriminant.

This analysis has established that all measures included in the measurement model exhibit discriminant validity.

### Purification

Measure purification is a process of examining the data for violation of assumptions upon which analysis methods hinge. This appears here because “*precision about assumptions underlying the statistical model...helps reformulate or extend a model*” (Judge et al. 1982, Page 116). This section of the thesis will show whether fundamental assumptions hold for the data at hand. The table below summarises the findings.

**Table 44 Assumptions for analysis**

Criteria	Condition	Condition Met Satisfactorily	Exceptions
Absence of	Multicollinearity	No	Suspected but not confirmed so 0.10 significance used to protect P value estimates with Logistic Regression
	Effects from outliers	Yes	
	Heteroskedasticity	No	Not problematic in this context
Presence of	Homogeneity	Yes	Agent Representation
	Normality	Yes	
	Linearity	Yes	
	Independence of variables	No	As for Multicollinearity

These assumptions are observed to be important by authors such as Anderson and Gerbing (1988), Campbell and Fiske (1959), Churchill (1979), Finn and Kayande (1997), Judge et al. (1982), Little et al. (2002) and Menezes and Elbert (1979) and will now be discussed in the order presented in the table above to verify how fundamental conditions and assumptions were examined and what was done to rectify any problems with the data.

### ***Multicollinearity***

Collinearity (or multicollinearity) arises when correlations among independent variables are strong (Garson 2002, Page 16; Kline 1998, Page 78 and Belsley et al. 1980, Page 86). When this happens variables “*do not provide information that is very different from that already inherent in the other variate*” (Belsley, Kuh, and Welsch 1980, Page 86).

Examination of the magnitude of Condition Indexes, “*signifies the presence of one or more collinear...(or near)... dependencies*” (Belsley et al. 1980, Page 91). The table below shows condition indexes for modelled indicators. These are produced with regression analysis in SPSS for the dependent variable.

**Table 45 Condition Index analysis**

	<b>Eigenvalue</b>	<b>Condition Index</b>
(Constant)	9.82	1.00
Vendor Information	1.40	2.65
Property Information	0.55	4.22
People Skills	0.39	5.02
Presentation Skills	0.27	5.99
Agent Representation	0.17	7.57
Money (salary)	0.12	9.23
Altruism	0.09	10.35
Money	0.07	11.84
Media	0.05	13.92
Negotiation	0.03	17.12
Agency Control	0.02	23.99
Proposed Advertisements	0.01	27.89

Note that the Condition Index increases as Eigen-values decrease in this table to result in a model level Condition Index. Strong relationships exhibit Condition Index values greater than 30 and are assigned to items that are closely correlated (Belsley et al. 1980, Page 105). From the table above, the model level Condition Index does not reveal strong near correlations because the magnitude is less than 30. Whilst these results confirm that modelled items exhibit discriminant validity because near correlations comply with Belsley et al.'s (1980) specifications, the result is close to being unsatisfactory.

Judge et al. (1982) indicate that violation of the assumption of an absence of multicollinearity leads to understated P-values. To protect the findings of this research therefore, interpretation of this test, and other tests that depend on the assumption of independence of variables such as logistic regression, is based on a significance level of .10 instead of .05. Establishing discriminant validity in this manner strengthens the argument for accepting the modelled indicators as measures. The next section examines the measure purification process so that any violations of analysis assumptions can be noted and taken into consideration when testing modelled relationships.

### ***Outliers***

Outliers are data points that do not fit well with other data in a plot or graph. Kline (1998) describes two types of outliers that can unduly influence a distribution – univariate (within a single variable) and multivariate (between variables). Observation of plots is the method adopted in this thesis to examine data for outliers and other problematic patterns that reveal situations such as heteroskedasticity and homogeneity. Observational detection like this can reveal situations that can be resolved in some cases

by deletion of outlying cases (Belsley et al. 1980, Page 9). Potential outlying patterns include: a single anomalous data point; a large gap separating a data point from the body of data; dual and opposing extreme data points; and a pair of data points positioned a long way from the otherwise consistent data. These plots are located in Appendix 12. Visual examination of scatter plots for outliers indicate there is unlikely to be any adverse effects from extreme data-points or data patterns. Furthermore, elimination of potential outliers did not significantly change model estimates (see Appendix 12). The next two sections more closely examine assumptions that depend on identification of these conditions.

### ***Heteroskedasticity***

Heteroskedasticity is a violation of the assumption of constant error variance and is exhibited when patterns exist in the variances of residuals. *"If errors are heteroskedastic then coefficients are unbiased, but standard errors and t-tests are wrong"* (Judge et al. 1982, Page 410). In these situations significant relationships may be identified when they do not in fact exist (Dillon and Goldstein 1984, Page 380). This thesis further investigates all proposed theoretical relationships in the next chapter with SEM so results are not dependent on t-tests as they would be if using standard discriminant analysis.

The impact on sample size remains an important consideration in this thesis but this is no more important than the integrity of the data so deletion of obvious outlying residuals was considered. Deletion did not improve or reduce fit indicators significantly so there is no real reason to delete these (see Appendix 12).

### ***Homogeneity***

Homogeneity is the assumption that variance across all levels of all other constructs is constant for an indicator. This is an examination of the data while heteroskedasticity is an examination of error terms. Violation of this assumption is known as heterogeneity and discussed in Appendix 12. Levene's test of the homogeneity of variance across all combinations of between-subjects factors reveals that most items included in the model exhibited homogeneity.

The only indicator that appears to be involved consistently in heterogeneity is Agent Representation. Examining the distribution of this item it is noted that despite an absence of excessive skewness or kurtosis of indicators, responses are bunched up at the top end implying a lack of normality (see Appendix 12). The next section discusses normality and any impact this might have on modelling in this thesis. Heterogeneity identified in this section is in essence remedied by consideration of the findings in the next section. For this reason heterogeneity is considered not to adversely influence results. All other items used in the preferred models do exhibit homogeneity.

### ***Normality***

SEM and regression analysis assumes a normal distribution of data (Hill et al. 2001). The condition of normality exists with a symmetrical distribution around the mean and an absence of skewness or kurtosis.

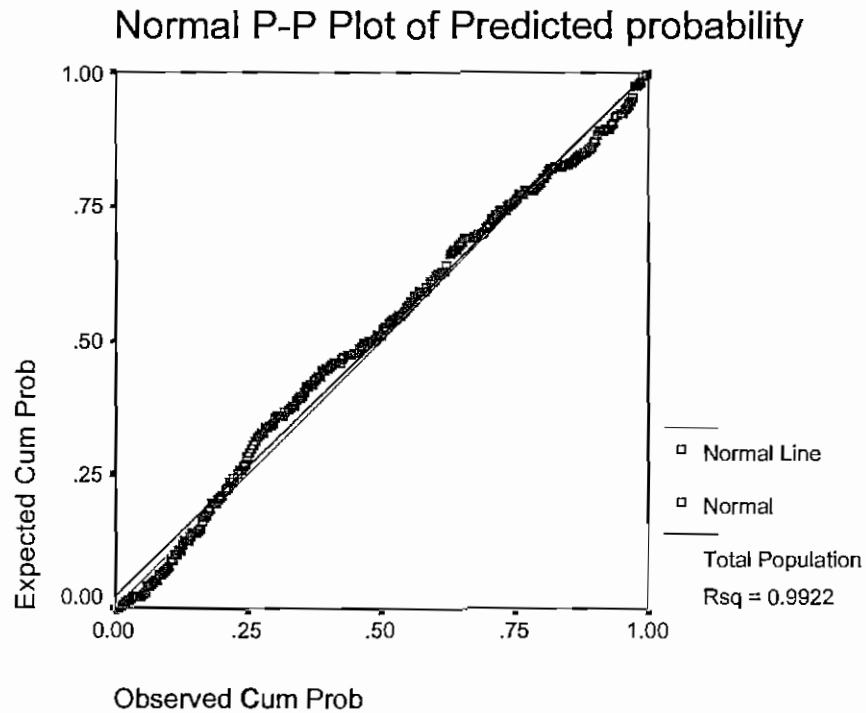
Univariate distributions are considered in Appendix 12. Acceptable levels of univariate skewness are between -1 and +1 for Likert scale models because SEM is robust enough

to cope with most indicators exhibiting skewness levels in this range (Muthen and Kaplan 1985). Chi-square values are, however, over-estimated if most indicators exhibit levels of skewness over 2 according to these authors. This is not the case with the data collected in this research. Only two indicators in the specified model for this thesis exhibit skewness levels greater than 2, so therefore chi-square estimates are likely to not be affected by univariate skewness. These indicators are people skills and vendor information.

This thesis further investigates the distribution of residuals for relationship establishment attempts because residual normality (the difference between predicted and observed values) necessarily implies variable distribution normality (Hill et al. 2001, Page 154).

Two methods are used to diagnose levels of multivariate skewness in this thesis. Firstly, the coefficient of correlation between ordered residual and expected values under the condition of normality is examined. This plot is shown in Figure 19.

**Figure 19 P-P plot of residuals**



Critical values for the correlation co-efficient in Neter, Wasserman, and Kutner's (1989) book titled "*Applied linear Regression Models*" (Page 127 Table 4.3) indicate that this level of correlation co-efficient is an extremely good fit, implying that the residuals can be considered normally distributed.

Secondly, the Kolmogorov-Smirnov Statistic can confirm the existence of normality (Malhotra, Hall, Shaw, and Oppenheim 2002, Page 494). *K-S z statistic* for all relationship establishment attempt outcomes is less than .05 so the hypothesis that the distribution of residuals deviates from a normal distribution is rejected (see Appendix 12).

Further calculations of the Kolmogorov-Smirnov Statistic for successful and unsuccessful relationship establishment attempts exhibit minor departures from normality (successful = .069, unsuccessful = .241). These departures from normality do not adversely affect the modelling process from this point because:

- Logistic regression, used on the dataset with successful and unsuccessful relationship establishment attempts combined, is dependent on normality and the complete dataset satisfies this condition; and
- Individually processed successful (and unsuccessful) relationship establishment attempts are examined for interactions between constructs within this process, rather than with any specific link to the outcome of the process (so is not in fact dependent on overall normality of either successful or unsuccessful relationship establishment attempts).

These tests demonstrate the assumption of normality holds explicitly for residuals of the agent-principal relationship establishment attempt.

### ***Linearity***

According to Hill et al. (2001), the assumption of linearity has implications for slope, elasticity and functional forms of specification but is not necessarily an assumption of a linear relationship between variables, more between parameters entered in a linear way e.g. not multiplied together, or divided. These authors recommend calculating a correlation co-efficient that measures the strength of linear association (Hill *et al.* 2001), Pages 126-130). Should an absence of linearity be suspected, then transformation of data (such as reciprocals, log-log, log-linear, linear-log, etc.) is recommended to improve results obtained.

R-squared calculations estimate the degree to which a variable is estimated by other variables and are detailed in Appendix 12 for multi-item constructs and single item indicators. Multi-item indicators are not discussed here. No single indicator has an R-squared value greater than .441 implying that variables are not significantly estimated by other predictor variables. Furthermore, SEM assists in identifying the nature of the effects of predictor variables on the dependent variable so this will be further investigated in later sections.

Concluding this section, modelled indicators have been examined to establish the absence of multicollinearity, heteroskedasticity and adverse effects from outliers; and the presence of homogeneity, normality and linearity. Residuals do not obviously exhibit autocorrelation and are normally distributed for successful and unsuccessful relationship establishment attempts. Measure purification and establishment of discriminant and convergent validity for this thesis are completed. The next section will therefore explain the process of model specification used in this thesis.

### **Model specification**

This section uses logistic regression and SEM to verify that there is something to study with respect to the dependent variable and that there are links between predictor variables that support the structure proposed in the literature review. The next chapter tests these links.

#### The dependent variable

The dependent variable in this thesis is dichotomous – either a relationship establishment attempt is successful or unsuccessful. This characteristic excludes linear analysis so logistic regression and discriminant analysis are considered. These methods are fundamentally the same and produce comparative results, although discriminant analysis is used to investigate means and logistic regression is used to investigate variance. Logistic regression is not dependent on distributional assumptions to the same degree as discriminant analysis that assumes multivariate normality and equal variance-covariance matrices, but multicollinearity among predictor variables can lead to biased estimates and problematic standard errors.

McFadden (1976) clearly demonstrates the robustness of logistic regression to overcome errors that may result from assumptions regarding variance and population distributions upon which discriminant analysis is dependent. For this reason the table below shows results generated using logistic regression.

**Table 46 Wald-statistics for single-item indicators**

<b>Construct</b>	<b>Wald Statistic</b>	<b>Sig.</b>
Vendor Information	0.42	0.52
Property Information	3.23	0.07
People skill	11.56	0.00
Presentation skill	2.72	0.10
Seller representation	0.06	0.82
Value of money (high salary)	0.05	0.83
Value of altruism	0.00	0.99
Value of money (more than normal pay)	0.02	0.90
Media	2.78	0.10
Negotiation	0.44	0.51
Agency Control	0.00	0.98
Proposed Advertisements	0.79	0.38
Constant	3.79	0.05

A test of the Hosmer and Lemeshow chi-square produces a significant Wald statistic for People skills (0.0007). From these results, the construct ‘people skills’ is the only variable with a confirmed direct link to the dependent variable agent-principal relationship establishment at a significance level of 0.05.

It is recognised at this point however, considering significance level with a “p” value of less than 0.10, Property information (0.07), Presentation skill (0.099) and Media (0.0952) also have been linked directly to relationship establishment. Further model development is therefore justified because these results demonstrate that the

determinants of relationship establishment have been linked to the dependent variable proposed in the conceptual model, albeit not in the way the model describes.

Logistic regression used to create the table above depends on the absence of interactions between predictor variables. The process used to examine interactions in this thesis is uses variables manufactured from multiplication of variables suspected of interaction effects. Results shown in Appendix 15 reveal the absence of excessive interactions that would need to be taken into consideration when establishing significance with a cut-off for analysis of results of logistic regression with “p” values less than 0.10.

#### Predictor variables

In the preliminary chapters of their econometrics text, Judge et al. (1982) discuss fundamental assumptions for data analysis and the consequences of any violations. Appendix 12 reveals a number of links between predictor variables for multi-item indicators and single-item indicators. R-squared calculations in these tables were generated using linear regression between each construct. The results support the need for analysis tools that can cope with interaction between predictors such as SEM. All variables other than agent representation are linked to some degree using this analysis method.

Consequences of assumption violations result most usually in specification errors if not treated appropriately (Judge et al. 1982, Page 117). Acknowledging this, and the possible consequence of incorrect inferences from the data, item inclusion and exclusion is considered with the assistance of SEM.

Combining indicators overcomes collinearity to avoid these ‘consequences’ according to authors such as Bhargava et al. (1994), Kline (1998), Little et al. (2002) and Hayduk (1996). The next section described the process used in this thesis to assemble latent variables representing operationalised measures described by authors such as Arbuckle and Wothke (1999) and Joreskog and Sorbom (1989).

### **Item specification**

In their two-step approach to modelling, Anderson and Gerbing (1988) recommend firstly establishing validity of items for specification and then performing a chi-square difference test to examine the fit of one model compared to proposed alternatives. Previous sections have examined the validity of items. Multi-item constructs are defined in Appendix 16. The following actions were taken to achieve the model specification adopted in this thesis. This approach is most strongly supported by Little et al. (2002).

1. Indicators of proposed advertising campaign were replaced by a single parcelled indicator. Modification Indices specified by AMOS indicate the extent to which discrepancy functions change if parameters are modified in the process of developing a model that exhibits no parameters requiring modification. Replacing this variable with a single parcelled indicator improved the discrepancy function of the model (a reduction in modification indices of 390347). This construct was perceived by agents to have two dimensions – advertisement of the property and advertisement of the sales method. Combining elements into a parcelled indicator retained a greater degree of subtlety in this instance than selection of a single observed indicator.

2. A single parcelled indicator replaced multi-item indicators for agency control to overcome numerous regression weight estimates between items of this construct and items of negotiation that were obstructing model resolution. This action retained the link between constructs that is necessary on a theoretical level because of the noted existence of agency specific goals driving operational behaviour of agents in the literature review.
3. A parcelled indicator replaced multi-item indicators of Negotiation. Replacing this variable with a single parcelled indicator improved the discrepancy function of the model (a reduction in modification indices of over 7000). The theoretical perspective observed in the literature review supported the existence of components of an agent submission to a client that were used in questionnaire development. But model specification required parcelling of these items so that the construct reflected the intentions of the researcher.
4. Individual items for other constructs were chosen because they contributed best to model discrepancy estimations. Hayduk (1996) recommends this approach so that noise is minimised and the meaning of the constructs are truly captured. Further to this aspect of the data, item selection considered the theoretical definitions of constructs so that specified items matched findings from the literature review (Appendix 11). All constructs in the conceptual model were represented in the specified models. Results from logistic regression provide evidence to support selection of individual items based on the significance of links between specific items (Table 55).

The next section details how models were assessed.

## Model comparison

Fitting the model developed on a theoretical level in the literature review to the data using the items specified produced a set of indicators detailed in the table below.

Indicators used in this thesis for reporting model development are fully described in Appendix 17. Measurement Model figures are provided here to save the reader having to reference previous sections to compare model indicators.

**Table 47 Conceptual model fit indicators**

	<b>Conceptual Model</b>	<b>Measurement Model</b>	<b>Desirable levels</b>
Discrepancy	168.655	9.830	Dependent on degrees of freedom
P	0.000	0.364	Approaching 1
Degrees of Freedom	48	9	
NFI	0.323	0.980	> .9
GFI	0.828	0.994	> .9
RMSEA	0.136	0.018	< .05
Bollen & Stine P value	0.00049975	0.497751	Approaching 1
Bootstrapped Mean Discrepancy	58.4099	10.7145	Approaching discrepancy estimates

According to the desirable levels of indicators in the last column of the table above, the measurement model is a better fitting model than the conceptual model. This condition is expected in light of Anderson and Gerbing's (1988) findings that any structural model's fit indicators are far worse than a well performing measurement model because of the imposed path constraints not evident in the measurement model. Bollen and Stine's (1992) probability estimator further suggests that the conceptual model in this thesis is a really poor fitting model with only a .049% chance that similar indicators

would emerge, given a new sample. As mentioned previously, the measurement model has a 49.7% chance of similar indicators emerging, given a new sample.

A series of proposed structural models were then fit to the measurement model, introducing further paths using the testing procedure developed by Anderson and Gerbing (1988), described in the introduction of this chapter. The next section describes results of this process.

#### Structural model development

The conceptual model developed from the literature was altered to develop a structural model by adding a number of links. Chin (1998) and Hayduk (1996;1987) both argue that such ‘tweaking’ of a model is legitimate on condition that the analysis remains confirmatory and does not slip into an exploratory mode. For this reason existing research and discussions held with industry participants are used to provide sufficient documentation to demonstrate the confirmatory nature of structural model development in this thesis. The following discussion details development of additional links noted in the table below.

**Table 48 Additional Hypotheses for structural model development**

<b>Links</b>	<b>Hypothesis ID</b>
From media to proposed ads	HX1
From altruism to agency control	HX2
From value of money to presentation skills	HX3
From value of money to negotiation	HX4
From proposed advertisements to negotiation	HX5
From agent representation to property information	HX6
From agency control to people skills	HX7
From people skills to vendor information	HX8
From people skills to property information	HX9

### ***Link from media to proposed advertisements (HX1)***

An existing body of literature advocates the integration of advertising vehicles and marketing efforts to increase advertising reach (Bishop 1998; Zeff and Aronson 1997), augment offerings (Bishop 1998; Hutt and Speh 1998) and increase precision of advertising (Linton and Morley 1995) based on perceptions of advertising tools (Bush and Bush 1998). This literature firmly suggests that media has an effect on advertisements despite agents acknowledging a narrow band of media used in practice because they are content that it works and will continue using current methods (see Chapter 2 for definitions of media use and Chapter 5 for interview findings reflecting these opinions).

A null hypothesis to test this link is:

*Media has no effect on proposed advertisements*

### ***Link from altruism to agency control (HX2)***

The original review of naturally related literature in Chapter 3, reveals that agency operations are driven by agency owners' goals, but fails to demonstrate operationalisation of this. This hypothesis therefore proposes that an agent's value of altruism has an effect on agency control because the degree to which an agent implements agency procedures may be influenced by their inclination to put others before themselves.

A null hypothesis to test this link is:

*Altruism has no effect on agency control.*

### ***Link from value of money to presentation skills (HX3)***

The original review of naturally related literature fails to explain why an agent presents him or herself the way he or she does. The literature clearly shows presentation to be important in affecting a 'sale' and this is examined in Research Questions 11 and 12. But this 'sale' may not, in fact, really be a result of negotiated relationship terms but more the 'sale' of the agent's image to a client. Agents indicate that "*We have to look successful to be successful*" [Agent X], implying that looking financially successful will lead to financial success.

A null hypothesis to test this link is

*Value of money has no effect on presentation skills.*

### ***Link from value of money to negotiation (HX4)***

This link was created because the agents find themselves in a dilemma of needing to make money for their survival but being very much aware that "*If you're in it just for the money then you won't last very long*" [Agent Focus Group]. Testing for a link between an agent's focus on money and negotiation is legitimised from the perspective of the previously noted importance of negotiation in relationship establishment and whether this perception of being driven by their value of money has an effect on negotiation.

A null hypothesis to test this link is:

*Value of money has no effect on negotiation.*

### ***Link from proposed advertisements to negotiation (HX5)***

This hypothesis exists because an agent proposes an advertising campaign to a client and seeks to establish an agent-principal relationship based on this. The hypothesis developed from the literature (Hypothesis 7) suggests that advertisements are important to an REA outcome. But practitioners propose an alternate path between advertisements and negotiation, based on current relationship establishment practice, in which a proposed advertising campaign is demonstrated to a potential client in the hope that this will influence the REA outcome. “Advertising costs are often part of a negotiation in signing up a listing” [Industry Member]. This hypothesis therefore proposes that proposed advertisements have an effect on negotiation.

A null hypothesis to test this link is:

*Proposed advertisements have no effect on negotiation.*

### ***Link from agent representation to property information (HX6)***

This hypothesis exists because the original hypothesis developed from the literature (Hypothesis 5) fails to explain what drives property information appropriation. According to the industry, agent representation is linked to information appropriation because it is necessary “to give people the information they want or they will find it elsewhere” [REIV Interview], and agent representation is about working for the seller to get what the seller wants. Information used in this context is property information only because if an agent were representing the seller, then they should not be giving out vendor information.

This hypothesis therefore comes from the industry suggestion that agent representation has an effect on property information appropriation.

A null hypothesis to test this link is:

*Agent representation has no effect on property information.*

### ***Link from agency control to people skills (HX7)***

This link exists because firstly, agents declared that they practised (rehearsed) at least weekly their relationship establishment performance [Agent Interview], and secondly, to date, agency control is not significantly linked to negotiation. Agents are suggesting that they can practice/learn these necessary skills and that this will in fact be a driver of the industry in the future [REIV Interview]. This hypothesis therefore comes from the practitioners and proposes that agency control has an effect on people skills.

A null hypothesis to test this link is:

*Agency control has no effect on people skills.*

### ***Link from people skills to vendor information (HX8)***

This link exists because agents declared that in the course of preparing a product for a potential client they constantly asked the client how they felt, what they thought and whether the agent was on track [Agent Interview]. The agents themselves suspect this link to be strong although it was not obvious in the literature. This hypothesis proposes that people skills have an effect on vendor information appropriation.

A null hypothesis to test this link is:

*People skills have no effect on vendor information.*

### ***Link from people skills to property information (HX9)***

This link exists for the same reason that the previous link was created, because of the importance of information appropriation. Testing both HX8 and HX9 examines both domains of information defined in previous chapters. This hypothesis proposes that people skills have an effect on property information appropriation.

A null hypothesis to test this link is:

*People skills have no effect on property information.*

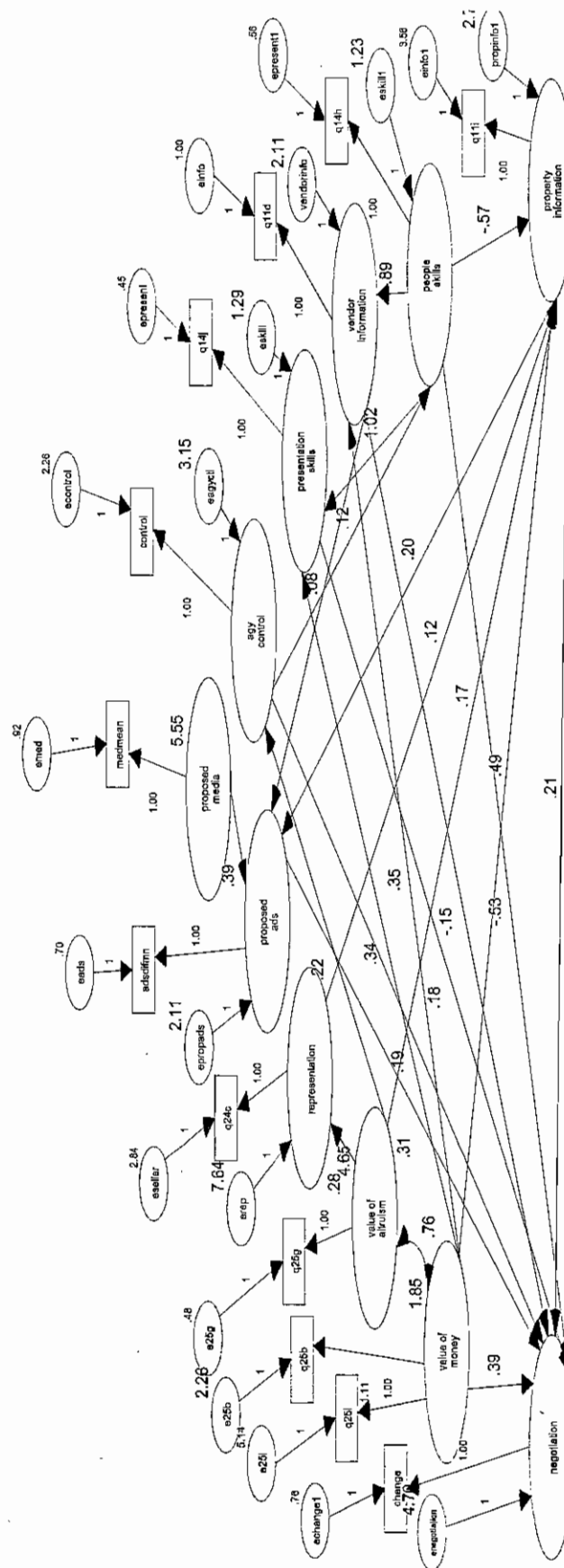
The table below summarises all links developed in this thesis for testing.

**Table 49 Summary of all links tested with structural model.**

<b>H</b>	<b>Links tested</b>	<b>HX</b>	<b>Links tested</b>
<b>1</b>	Negotiation to REA	<b>X1</b>	Media to proposed advertisements
<b>2</b>	Agency control to Negotiation	<b>X2</b>	Altruism to agency control
<b>3a</b>	Vendor Information to Negotiation	<b>X3</b>	Value of money to presentation skills
<b>3b</b>	Property Information to Negotiation		
<b>4a</b>	Value of money to property information	<b>X4</b>	Value of money to negotiation
<b>4b</b>	Value of money to vendor information		
<b>4c</b>	Value of altruism property information		
<b>4d</b>	Value of altruism to vendor information		
<b>5</b>	Agent Representation to Negotiation	<b>X5</b>	Proposed advertisements to negotiation
<b>6a</b>	Value of altruism to Agent Representation	<b>X6</b>	Agent representation to property information
<b>6b</b>	Value of money to Agent Representation		
<b>7</b>	Proposed Advertisements to REA	<b>X7</b>	Agency control to people skills
<b>8a</b>	Vendor Information to Proposed Ads.	<b>X8</b>	People skills to vendor information
<b>8b</b>	Property Information to Proposed Ads.		
<b>9</b>	Proposed Media Selection to REA	<b>X9</b>	People skills to property information
<b>10a</b>	Vendor Information to Media Selection		
<b>10b</b>	Property Information to Media Selection		
<b>11a</b>	People skills to REA		
<b>11b</b>	Presentation skills to REA		
<b>12a</b>	People skills to Negotiation		
<b>12b</b>	Presentation skills to Negotiation		

Adding these extra hypotheses rendered the previous diagrammatic presentation of the structural model overly complex. From this point the structural model is presented differently than the conceptual model. This is shown in the figure below with estimated results for each link tested.

**Figure 20 Structural model estimates**



Performance indicators for the conceptual, measurement and structural models are presented in the table below to show how the models perform comparatively. Estimated links shown as numbers in the diagram above are discussed in the following chapter by link between variables (hypotheses H & HX). Note in the structural model above the absence of the dependent variable relationship establishment. The analysis method used in this thesis compares between outcomes of a relationship establishment attempt by fixing links and examining model fits. This will be further explained in the next chapter.

**Table 50 Preferred model indicators**

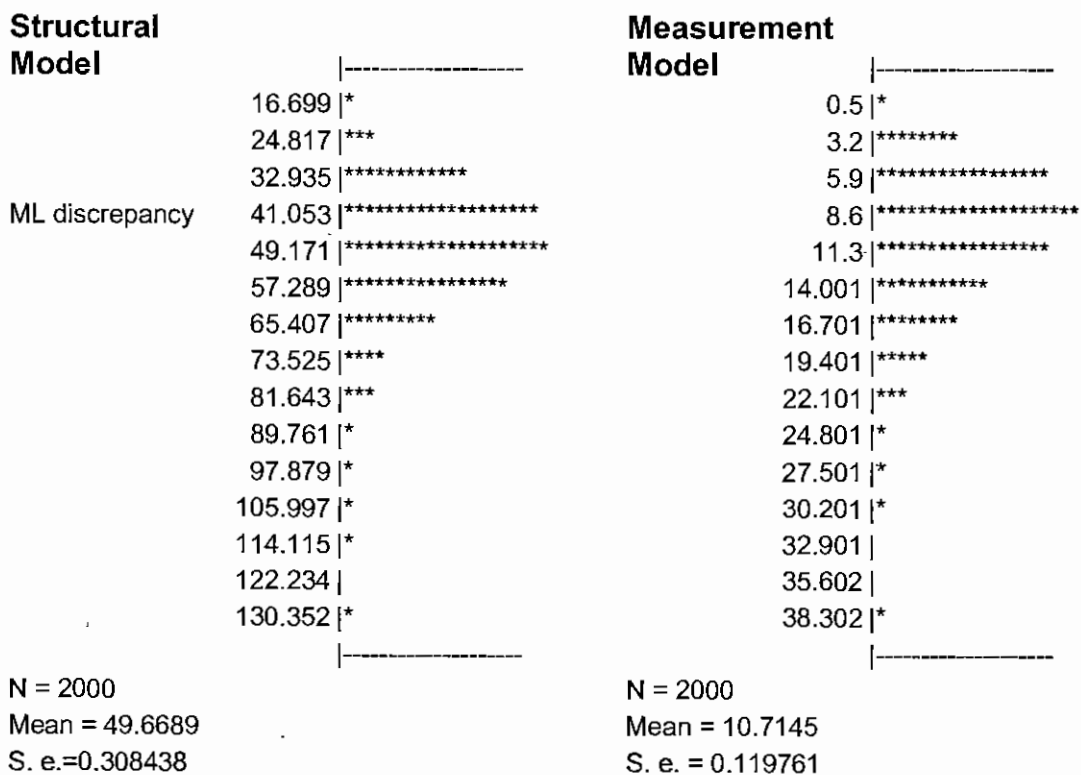
	<b>Structural Model</b>	<b>Measurement Model</b>	<b>Conceptual Model</b>
Discrepancy	52.869	9.830	168.655
P	0.121	0.364	0.000
Degrees of Freedom	42	9	48
NFI	0.891	0.980	0.323
GFI	0.969	0.994	0.828
RMSEA	.00	0.018	0.136
Bollen & Stine P value	0.3713	0.4978	0.00049975
Bootstrapped Mean Discrepancy	49.6689	10.7145	58.4099
AIC	124.869	147.830	268.655
CAIC	290.942	466.136	346.254
BIC	344.399	568.594	390.801

This table shows that the structural model has a 37% chance of producing similar results from a different sample (Bollen and Stine 1992). The proposed structural model exhibits a better set of information criterion (AIC, BCC & CAIC) than those of the measurement model (are smallest in magnitude) according to specifications of Arbuckle and Wothke (1999). (See Appendix 17 for an explanation of these Criterion Indicators).

Furthermore, bootstrapping used to verify the structural model in this thesis assists in overcoming arguments of authors such as MacCallum, Roznowski, and Lawrence (1992), that question the generalisability of this type of model assessment.

Bootstrapping is well supported in the literature by authors such as Bollen and Stine (1992) and Arbuckle and Wothke (1999). The figure below shows that both the preferred structural model and preferred measurement model exhibit acceptable discrepancy estimates compared with bootstrapped sample discrepancy estimations.

**Figure 21 Bollen &Stine bootstrapped sample discrepancy estimates**



In addition to the figures displayed in the figure above it is important to recollect that

- The Structural Model discrepancy estimate was 52.869 and
- The Measurement Model discrepancy estimate was 9.830.

These estimated discrepancies are positioned within close proximity to Bollen and Stine's (1992) bootstrapped mean discrepancy estimations in the figure above. This means that given a large number of sampling moments, the discrepancy estimates are likely to reoccur. Estimates are therefore not dependent on sampling error given the definition of the sample, respondents and research confirming the robustness of model specifications.

Furthermore, with 42 degrees of freedom, the minimum sample size for a desirable level of power of 0.60 is 168 for 40 degrees of freedom and 145 for 50 degrees of freedom (McQuitty 2003). The implication of this is that using only single-, instead of paired-, responses still means the model can be verified using SEM. Using the full dataset of 274 means the level of power in the analysis is 0.80. It is therefore "*necessary to permit greater latitude in interpretation of fit statistics that are dependent on sample size*" as the likelihood of rejecting a correct model is high (McQuitty 2003, Page 7).

This chapter has done three things. Firstly, testable hypotheses were developed, secondly, a research instrument was developed, tested and implemented and finally, a model based on the conceptual model was developed so that the next chapter can examine results of hypotheses testing.

## CHAPTER 7

### FINDINGS

The purpose of this chapter is to show the results from testing the hypotheses developed in the previous chapters of this thesis. Each hypothesis tested is a null hypothesis that relates to a specific link between modeled variables. Following sections in this chapter will describe how these are tested and results from this testing. The next chapter will interpret these results.

#### **Method of testing links**

The dependent variable in this thesis is the outcome of an agent-principal relationship establishment attempt. This outcome is dichotomous because a relationship establishment attempt is either successful or unsuccessful. For this reason, SEM is used to examine modeled links within a relationship establishment attempt but logistic regression is used to examine direct determinants of the dependent variable.

The structural model used to examine links between variables has been shown to be robust in the previous chapter based on measurement theory and stringent SEM analysis methods. The table below shows model fit details for unsuccessful and successful relationship establishment attempts using the structural model developed in the previous chapter.

**Table 51 Model fit details**

	<b>Structural Model</b>	<b>Unsuccessful Relationship Establishment Attempt</b>	<b>Successful Relationship Establishment Attempt</b>
Chi-Sq	52.827	31.140	41.873
Df	42	42	42
P	0.122	0.725	0.476
RMSEA min	0.000	0.000	0.000
RMSEA max	0.054	0.045	0.058
Indexes			
Normed Fit	0.891	0.872	0.832
Relative Fit	0.828	0.798	0.736
Incremental Fit	0.975	1.024	1.001
Tucker-Lewis	0.959	1.043	1.001
Comparative Fit	0.974	1.000	1.000
Bootstrapping			
Mean Discrep.	100.302	82.3822	87.6975
SE of MEAN	0.455302	0.395491	0.418518
AIC	124.827	108.140	113.873
BCC	128.427	115.750	121.483
CAIC	290.000	249.260	254.992
Bollen & Stine P- value	0.371314	0.677161	0.838081

Important indicators in this table that demonstrate models for Unsuccessful and Successful agent-principal relationship establishment attempts to be reasonable (and better than the structural model) include:

- Fit indicators closer to 1 than the structural model (Normed Fit, Relative Fit etc);
- Information criterion lower than the structural model (AIC, BCC etc);
- Bollen & Stine P value estimates of 67.72% under the null hypothesis that the model is correct for successful relationship establishment attempts and 83.81% for unsuccessful relationship establishment attempts; and
- Strong evidence that the likelihood that test statistics are correct exists because there is an 80% chance that acceptable models were rejected, meaning that if not rejected the statistics are more likely understated than overstated to a level of 0.8 for the full data set (McQuitty 2003, Page 7).

Differences between the successful and unsuccessful outcomes are demonstrated by forcing the unsuccessful estimates on to the successful data and *vice versa* shown in the table below.

**Table 52 Comparison of relationship establishment attempt outcomes**

	Structural Model	Successful Relationship Establishment Attempts	Forcing unsuccessful estimates on successful data	Unsuccessful Relationship Establishment Attempts	Forcing successful estimates on unsuccessful data
<b>Discrepancy</b>	52.827	31.140	121.669	41.873	113.107
<b>Df</b>	42	42	75	42	75
<b>P</b>	0.122	0.725	0.001	0.476	0.000
<b>RMSEA</b>					
<b>Min</b>	0.000	0.000	0.045	0.000	0.036
<b>Max</b>	0.054	0.045	0.089	0.058	0.083

This table shows that there are differences between successful and unsuccessful agent-principal relationship attempts because firstly, successful relationship model estimates do not fit the unsuccessful relationship establishment attempt data and secondly, the unsuccessful relationship establishment attempt model estimates do not fit the successful relationship establishment attempt data.

### **Results of testing links**

Table 53 and Table 54 following show results of testing proposed links. Links (null hypotheses) are tested for statistical significance and are supported if:

1. Wald statistic values from Logistic Regression are less than 0.10; or
2. Critical Ratio estimates from structural equation modeling for either successful or unsuccessful relationship establishment attempts are greater than 1.96 (if these are greater than 1.96, then at the .05 level of significance, estimates are considered significantly different from zero, according to Arbuckle and Wothke 1999, Page 74); or
3. Differences between relationship establishment attempt outcomes using structural equation modeling for a single degree of freedom are significant (if Discrepancy estimates are less than 3.84146 then estimates are considered significantly different from each other at a significance level of 0.05).

In his book titled “Causality”, Pearl (2000) described Simpson’s Paradox (Page 174) to explain that a result can be significant for a whole population although not significant for any subpopulations, thereby overcoming confounding effects within individual subgroups. For this reason the final column in the table following is important to the next chapter that discusses results even if significant results do not exist within successful or unsuccessful relationship establishment attempts.

Further details such as unstandardised regression weights, estimates for standard errors, critical ratios, total effects of constructs on the dependent variable and Chi-sq estimates when links are fixed to those of the opposite outcome (e.g. successful estimate fixed to value of unsuccessful estimate) are available in Appendix 18. Definitions of terms used to develop null hypotheses are described in Chapter 6.

Note in Table 53 and Table 54 following that:

- Log Reg = Logistic Regression;
- SEM = Structural Equation Modelling;
- Sig = Significance of estimated Wald statistic from logistic regression;
- N1 means that *“this cell can be read as, “the value 0.508 means that the link from Negotiation to a successful relationship establishment attempt had a Log regression with a “p” value of only 0.508, which would be considered insignificant”*. N4, N6 and N8 can be read similarly;

- N2 means that *“this cell can be read as, “the value 1.254 means that the link from Agency control to Negotiation had a critical ratio of 1.254, which would be considered insignificant”*. N7 and N9 can be read similarly; and
- N3 means that *“this cell can be read as, “the difference between successful and unsuccessful models was clearly different”*.

**Table 53 Summary of findings for original hypotheses**

HYP.	Links supported	Links not supported	Test	Successful	Unsuccessful	Diff
1		Negotiation to REA	Log Reg	0.508 (N1)	N/a	
2		Agency control to Negotiation	SEM	1.254 (N2)	-0.154	Yes (N3)
3a	Vendor information appropriation to negotiation		SEM	-0.787	1.318	Yes
3b		Property information appropriation to negotiation	SEM	1.083	1.941	
4a	Value of money to property information		SEM	2.047	1.777	Yes
4b	Value of money to vendor information		SEM	2.122	1.989	
4c		Altruism to property information	SEM	1.446	1.082	
4d		Altruism to vendor information	SEM	-0.394	0.487	
5		Agent representation to negotiation	SEM	-0.554	-0.177	
6a	Altruism to agent representation		SEM	2.056	2.049	
6b		Value of money to agent representation	SEM	0.013	0.286	
7		Proposed advertisements to REA	Log Reg	0.375 (N4)		
8a	Vendor information to proposed advertisements		SEM	0.856 (N5)	2.319	Yes
8b	Property information to proposed advertisements		SEM	2.051	2.027	
9	Proposed media selection to REA		Log Reg	0.095 (N6)		
10a		Vendor information to proposed media selection	SEM	0.348 (N7)	0.787	
10b		Property information to proposed media selection	SEM	1.767	0.111	Yes
11a	People's skills to REA		Log Reg	0.001 (N8)		Yes
11b	Presentation skills to REA		Log Reg	0.099		
12a		People's skills to negotiation	SEM	-1.090 (N9)	-1.800	
12b		Presentation skills to negotiation	SEM	0.694	0.525	

**Table 54 Summary of findings for extra hypotheses**

HYP.	Links supported	Links not supported	Test	Successful	Unsuccessful	Diff
X1	Media to proposed advertisements		SEM	8.621	5.684	Yes
X2	Altruism to agency control		SEM	2.248	2.675	
X3	Value of money to presentation skills		SEM	2.482	0.892	Yes
X4		Value of money to negotiation	SEM	1.293	1.196	
X5	Proposed advertisements to negotiation		SEM	2.269	1.580	Yes
X6		Agent representation to property information	SEM	1.248	1.671	Yes
X7		Agency control to people skills	SEM	1.616	1.155	Yes
X8	People skills to vendor information		SEM	5.325	5.874	
X9	People skills to property information		SEM	-2.52	-0.116	

Table 53 and Table 54 show that a number of hypotheses were supported because corresponding null hypotheses proposing no effect of the independent variable on the dependent variable were rejected. A null hypothesis is a statement of no relationship, so a rejected null hypothesis equates to confirmation of the relationships proposed based on literature and theory. Failure to reject a null hypothesis means that further questioning is warranted because the proposed relationship is not supported. In fact, Hayduk (1996) suggests these to be of interest as a matter of exposing possible flaws in existing research and theory, or identification of further research opportunities.

The results from a logistic regression are displayed in Table 55 following. This table shows that although people skills are the only significant link directly to relationship establishment attempt outcomes as significant with a “p” value less than 0.05, Property information (Sig=.0724), Presentation skills (Sig=.0991) and Media (Sig=.0952) are also significant with a “p” value less than 0.10. Interaction effects were tested but not found to be significant for any of the constructs used in the modelling process (see Appendix 15).

**Table 55 Logistic Regression**

	Wald Statistic	Sig
Vendor Information	0.4184 N1	0.5177 N2
Property Information	3.2280	0.0724
People skill	11.5583	0.0007
Presentation skill	2.7192	0.0991
Seller representation	0.0549	0.8147
Value of money (high salary)	0.0487	0.8253
Value of altruism	0.0003	0.9860
Value of money (more than normal pay)	0.0161	0.8990
MEDIA	2.7835	0.0952
CHANGE	0.4382	0.5080
CONTROL	0.0043	0.9474
ADVERTISEMENTS	0.7869	0.3750
Constant	3.7895	0.0516

In this table:

N1 means that *"this cell can be read as "The Wald statistic for Vendor Information was 0.414"; and*

N2 means that *"this cell can be read as "The Wald Statistic had a "p" value of 0.5177, which is considered to be insignificant".*

The next chapter will discuss all findings reported in this chapter in detail.

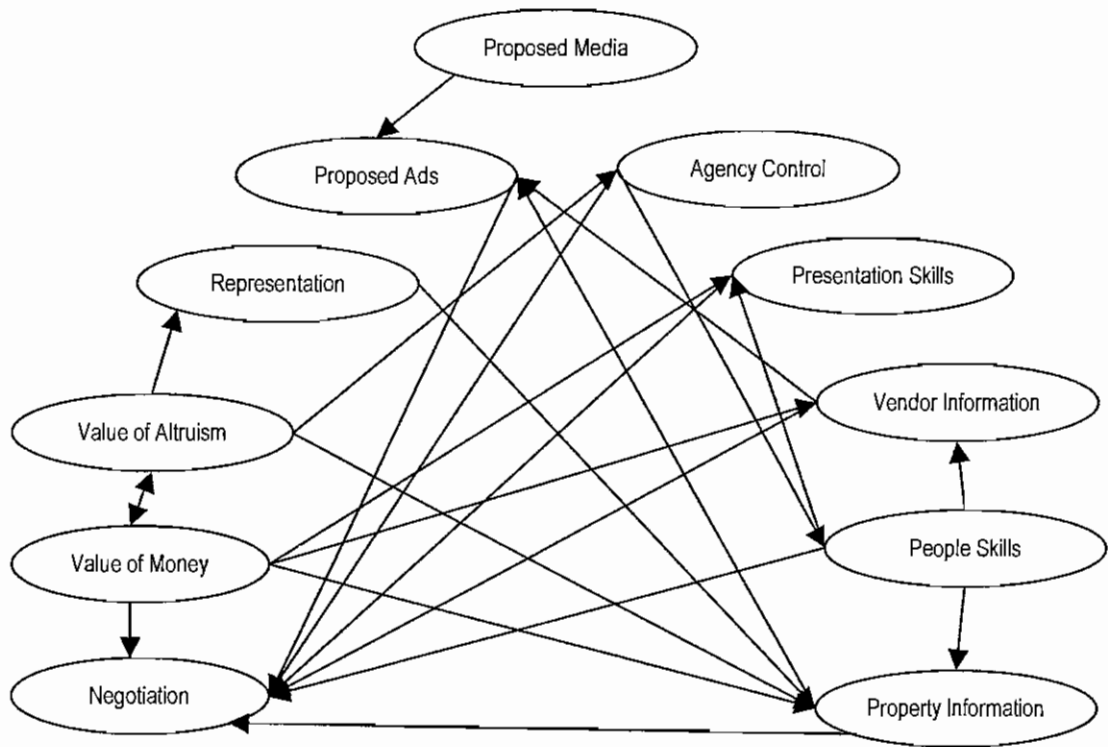
## **CHAPTER 8**

### **DISCUSSION OF FINDINGS**

This chapter will discuss the meaning of the results from the previous chapter in terms of the fundamental argument of this thesis while positioning these results in terms of theory to clearly articulate the contribution this thesis makes.

The original conceptual model developed from the literature and discussions with practitioners proposed a series of relationships that were tested in the previous chapter. This model shown in the figure below has necessarily been redrawn to include all links of the structural model among all domains of originally defined constructs plus additional links developed in chapter six.

**Figure 22 Structural model**



This model is based on the argument that an agent-principal relationship develops as a result of a process involving a number of stages and with a number of determinants.

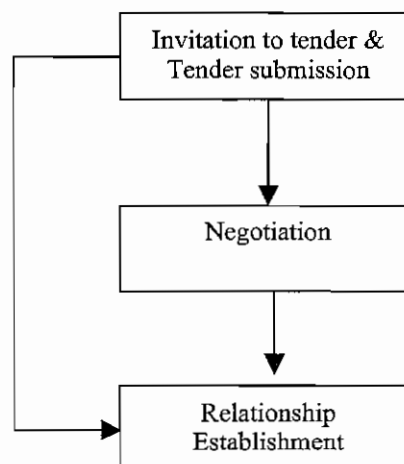
- The first stage is an invitation to tender for the agent-principal agreement in which the agent proposes relationship specifications to a potential principal.

This thesis does not deal specifically with the client's invitation to tender as it relates more to vendor searches for agent representatives.

- The second stage is a negotiation with the potential client of submitted terms of the relationship so that an agent-principal relationship can be established. This thesis compares the outcome of these negotiations but does not deconstruct the negotiation process.
- The third and final stage is establishment of the agent-principal relationship in which some aspects of the relationship may in fact be renegotiated after commencement of that agreement.

This argument is represented more simply in the figure below.

**Figure 23 Simplified model of relationship establishment**



Many of the constructs in the conceptual model developed in the literature have multiple domains that have been carefully defined in Chapters 4 through 6. The next section will proceed by discussing how each construct functions.

Some results soundly support existing literature but some of the more unexpected results suggest large departures from existing literature. For this reason the process used in this chapter is as follows:

- Fundamental arguments of key literature are reiterated;
- Empirically developed arguments of this thesis are presented and discussed in light of this literature; and
- Further anecdotal and theoretical evidence is presented to support these empirical findings.

Assembling the graphical model gradually throughout this section minimises the perceived complexity of the final model. Figures presented from this point show unsupported and supported links with the following details:

- Supported links are shown with blue lines;
- Unsupported links are shown with red lines; and
- Dashed lines represent those links that are significant with at “p” value of less than 0.10 instead of the more usual 0.05, to protect the robustness of the research findings.

### **Information appropriation**

The literature suggests that information appropriation:

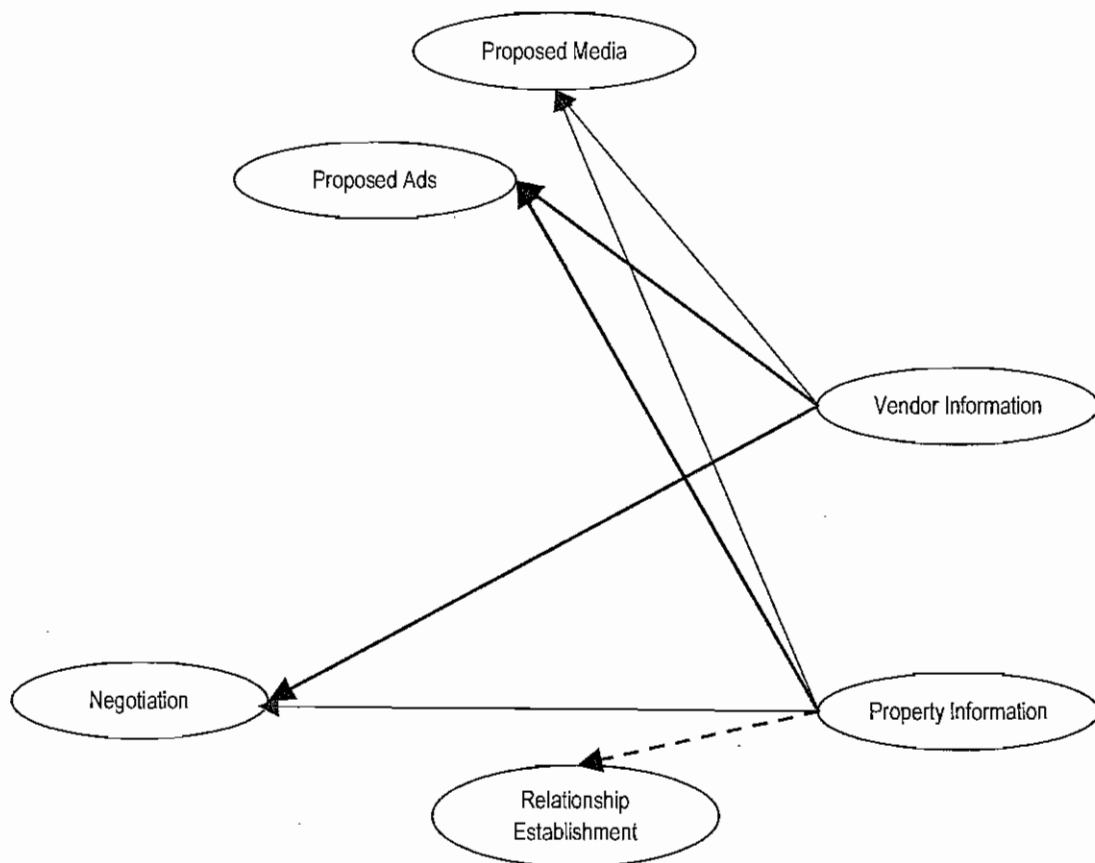
- Is important in agency relationships (Jacoby *et al.* 1978; Park and Lessig 1981);
- Is costly (Holmstrom 1980; Marsh and Zumpano 1998);
- Is an influence on proposed advertisements (Devine 1999; Lasher 1999);
- Is an influence on media selection (Muhanna 2000); and
- Is an influencer of negotiation (Molho 1997).

From this literature, this thesis proposed that:

- Vendor information has an effect on negotiation (H3a);
- Vendor information has an effect on proposed advertisements (H8a);
- Vendor information has an effect on media selection (H10a);
- Property information has an effect on negotiation (H3b);
- Property information has an effect on proposed advertisements (H8b); and
- Property information has an effect on media selection (H10b).

The figure below shows results of testing these links with supported links with a significance level with a “p” value less than 0.05 in blue, not supported links in red and links supported with a significance level with a “p” value less than 0.10 are dashed.

**Figure 24 Information appropriation**



This thesis finds empirical evidence to support the following links.

- A link from vendor information to negotiation was supported because the critical ratios for successful (-.787) and unsuccessful (1.318) relationship establishment attempts are significantly different from each other with an absolute value greater than 1.96 when the unsuccessful value was forced on the successful relationship establishment attempt model (2.216) but less than 1.96 when

successful value forced on unsuccessful relationship establishment attempt model (1.725);

- A link from vendor information to advertisements was supported because the critical ratio for unsuccessful (2.319) relationship establishment attempts was significant with an absolute value greater than 1.96;
- A link from property information to advertisements was supported because the critical ratios for successful (2.051) and unsuccessful (2.027) relationships are both significant with an absolute value greater than 1.96; and
- A further link from property information to an agent-principal relationship establishment attempt outcome was supported with a significance level with a “p” value of less than 0.10 (0.0724).

This thesis finds no empirical evidence to confirm the following links.

- A link from property information to negotiation was not supported because the critical ratios for successful (1.083) and unsuccessful (1.941) relationship establishment attempts are not significant with an absolute value less than 1.96;
- A link from vendor information to media selection was not supported because the critical ratios for successful (.348) and unsuccessful (.787) relationship establishment attempts are not significant with an absolute value less than 1.96; and

- A link from property information to media selection was not supported because the critical ratios for successful (1.767) and unsuccessful (.111) relationship establishment attempts are not significant with an absolute value less than 1.96.

These results mean that Jacoby et al. (1978) and Park and Lessig (1981) are right on the basis that information appropriation is important to proposed advertisements as part of the terms of an agent-principal agreement. Also, this thesis demonstrates that successfully established agent-principal relationships have a significantly different level of vendor specific information appropriated by agents to that of attempts to establish an agent-principal relationship that are not successful.

The findings of Devine (1999) and Lasher (1999) are also supported because vendor and property information were both empirically found to be important to proposed advertisements.

Other things, such as identification of the competition, are more likely to increase the likelihood of preparing an acceptable relationship agreement. *"We can find out who we are competing with by looking for other agents' cards...it's a small world and we all know each other's work"* [Agent Interview]. This finding reflects the work of Festinger (1957) and Hovland, Janis, and Kelley (1966) as agents try to establish the client's decision criteria to minimise the likelihood of cognitive dissonance and maximise a perception of reasonableness.

Furthermore, the findings of Molho (1997) were only partially supported because this thesis empirically verifies a link from vendor information to negotiation but no such link was found to exist between property information and negotiation. Theoretically, negotiation of an agency agreement is a matter of adjusting terms of a proposed marketing campaign (Benjamin and Chinlo 2000). It is therefore reasonable to expect that property specific facts are observable and do not influence a negotiation while less accessible and naturally private vendor information does assert some pressure on the negotiation process.

Anecdotaly, agents interviewed in the course of this research indicate that they “*are not mind readers*” and “*have to constantly check with a vendor*” to ensure that agent appropriated vendor specific information keeps the agent “*on track*” for establishing an agent-principal relationship. Agents confirm therefore that more accessible information, such as property information, is not as necessary as more private vendor information in the process of negotiating terms of an agency agreement.

Existing research shows the role of agents to exist because of restricted flows of information (Jensen 1994b; Jensen and Meckling 1976). But there is a gap in this literature because it does not describe in detail how this movement of information happens, although it does describe consequences: such as moral hazard and adverse selection. From this literature, it is apparent that agents have an interest in preserving their position of agent so they can pursue financial objectives and be involved in controlled flows of information both pre-and post contractual agency relationship establishment.

Vendor information is not publicly available and includes things like a client's motivation to become a principal, who else is being considered for the role of agent and whether there are any important influences such as whether the principal has just been through a marriage break-up. This information is specific to a single vendor and, without access to that vendor, is not available to an agent.

Examples found in the literature of things that are included in vendor information that would not be observable include:

- The attributes used to evaluate experiences that are unique and specific to an individual identified by Festinger's (1957) cognitive dissonance theory; and
- Framing effects within which a particular agent experience is evaluated before any purchase decision is made by a principal identified by Kahneman, Knetsch, and Thaler (1986).

The argument that framing effects and attributes used to evaluate experiences are not publicly available is a logical one because these cannot necessarily be observed without some level of detective work on the part of the agent. It is proposed in this thesis that accessing such information increases the agent's chance of establishing an agent-principal relationship.

Beneficiaries of restricted information differ between Festinger's (1957) work, in which the agent is clearly disadvantaged by the client owned information, and Akerlof's (1970)

and Jensen's (1994b) work on agency theory, in which the agent benefits from the client's lack of knowledge and even experience.

Anecdotally, this thesis was motivated by personally being engaged in multiple agent experiences clearly suggesting that my own agent-principal relationship establishment experience changed from one agent experience to another; "*Levels of market knowledge and professionals' inexperience are agent specific*" [Buyer Focus Group]; and "*The potential client's experience needs to be positive*" [Agent Interview].

This research argues strongly therefore that vendor information is a powerful tool that is linked to negotiation for three reasons. Firstly, Festinger (1957) tells us that a client makes a purchase decision based on a number of things and one of these is their level of cognitive dissonance. Secondly, when Jacoby et al. (1978) discuss information appropriation they are making a statement that is relevant to agent-principal relationship establishment because the point of negotiation results from inherent behavioural characteristics of the vendor and the information that the agent has managed to accumulate. Finally, agency theory indicates that such flows of information are good for maintaining the role of the agent and the existence of certain markets upon which this depends (Akerlof 1970; Jensen and Meckling 1976).

Combining these perspectives at this point, this thesis demonstrates that through appropriating vendor information an agent can avoid the opportunity for a vendor to experience cognitive dissonance to establish mutually satisfying terms of an agreement and provide terms of an agency agreement that do not require negotiation.

Testing the link between vendor information and negotiation further supports this by showing that vendor information has a part to play in negotiation through:

- The agent's understanding of the client's standard against which the agent experience is evaluated;
- The agent's understanding of what drives a client to relationship establishment; and
- The degree of change made to terms of an agency agreement.

Although Jacoby et al. (1978) and Park and Lessig (1981) find information to be important to agency relationships, this thesis is the first research to define how specific information contributes to a specific point in these relationships. This research identifies that property specific information exerts some pressure on the outcome of a relationship establishment attempt instead of negotiation. This result confirms what agents know as they seek only to find out good information about a property so that a positive image of the property can be presented to a potential principal in the process of attempting to establish the agent-principal relationship. Should the agent possess knowledge of negative property information they are legally obliged to disclose this post-relationship establishment.

This result further confirms the importance of Festinger's (1957) cognitive dissonance theory in relationship establishment as agents seek to appropriate positive property information to present a favorable image of the property to a potential principal thereby

avoiding a situation in which a potential principal might experience cognitive dissonance. If an agent makes a property look good, then the vendor will think they are likely to achieve their goals.

### **Agency control**

The literature review suggested that agency control is important to agency relationships because it:

- Influences negotiation with the regulation of levels of agent performance (agent reliability) by ensuring goal congruence (Sitkin and Roth 1993); and
- Helps an agent take advantage of the framing effects within which the agent is perceived by a principal (Kahneman *et al.* 1986).

From this literature this thesis proposed that:

- Agency control has an effect on negotiation; and
- Agency control has an effect on the development of agent people skills.

This thesis provides empirical evidence that neither of these proposed links exist because:

- Agency control does not significantly influence negotiation (H2) because critical ratios for successful (1.254) and unsuccessful (-.154) relationship establishment attempts are not significant with an absolute value less than 1.96; and

- Agency control does not significantly influence people skill development (HX7) because critical ratios for successful (1.616) and unsuccessful (1.155) relationship establishment attempts are not significant with an absolute value less than 1.96.

While Sitkin and Roth (1993) may have been partly right by empirically establishing a case that agent reliability is important to relationship establishment through negotiation, they were also partly wrong because this reliability is not necessarily a matter of agency control. This error exists because the holistic approach by this thesis is generally not adopted in previously existing research and is required to consider all controls and accurately contextualize agency control within these.

This thesis does not dispute that an agent works within many controls that include:

- Legal regulatory controls: Real estate agent practice is regulated with contract and real estate law and an industry code of ethics;
- Public pressure: Real estate industry practice is observable with a current trend of media reporting on commercial television and other media, e.g. "Location, location", "Hot Property" and weekly topical contributions in the Property Section of The Age newspaper by the Chief Executive Officer of the Real Estate Institute of Victoria;
- Consumer pressure: Consumers are protected by the Australian Commission for Competition and Consumer protection; and

- Competition: The real estate industry is very competitive “*There is always an alternative agent or agency for a potential client*” [Agent Focus Group].

These controls leave the agents feeling that “*We [the agents] don’t have any control*”[Agent X]. The contribution this thesis makes at this point is to demonstrate empirically that negotiation is not influenced so much by management control but by things like regulatory control, public pressure, consumer pressure and competition. If a client does not engage an agent, and hence a specific agent-principal relationship is not established, it is for reasons other than agency controls. The literature was therefore not quite right because it does not draw all these other forms of control together.

Furthermore the agents are not quite right either when they say:

- “*A top market submission should be basically similar each time - whether losing or winning you tune it to an edge and gradually improve it over time*” [Agent X];
- “*We practice weekly to rehearse over and over the agent’s presentation so that the skills are right and nothing is left to chance*” [Agent X];
- “*All we can do is train our members...control the levels of professional development to which agents are exposed*” [Real Estate Institute Interview];  
and
- “*The agency can control the quality and training of staff*” [Agent X].

These sources support the existence of a high level of control in some cases (such as the first two citations in the above list) and specific control of operating standards (such as the third citation). But the final citation does not support the influence of agency control because just because training is mandated at the organization or industry level does not guarantee quality assurance as it remains up to any individual agent to engage a principal.

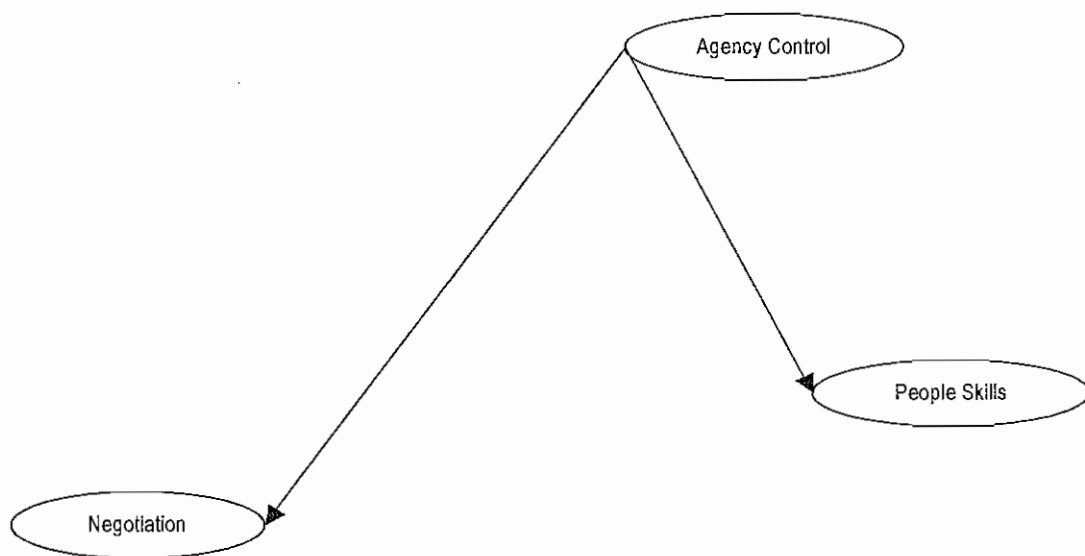
Empirically, this thesis proves that this agency control does not influence negotiation or development of agent people skills. Empirical results imply that rehearsing a presentation will not necessarily help a negotiation, nor will agency control of an agent. The reason for this is that the agent is in fact dealing with each principal's perception of the agent. Only the principal can control this but agents definitely seek to influence these perceptions. A centralized control process or organization does not necessarily allow an agent to cater for individual principals.

The findings of Festinger (1957) and Kahneman et al. (1986) are supported as they identify influences in a process of purchaser selection, such as relationship establishment and negotiation of terms of an agency agreement, to include the principal's perceptions of fairness and reasonableness. Their adoption of a behavioral perspective to defining an important part of the relationship establishment process overlooked by other literature is also supported in this thesis.

To the agent this seems to be "*a matter of luck*" rather than any function of agency control. Agents got this right too because it is fundamentally from the description found

in specific agency and real estate literature and is perceived by practitioners as ‘luck’ and a somewhat mystical and uncontrolled process. But in all reality it is a matter of being able to identify how a specific client perceives the agent experience.

**Figure 25 Agency control**



### **Agent values**

The literature suggests that agent-principal relationship establishment is moderated by conflicting self-interests (in most, but not all cases according to Sigmund, Fehr and Nowak 2002), and goals (Kaplan and Norton 1996; Marsh and Zumpano 1998), although inevitably these re-emerge (Jensen 1994a; Jensen 1994b).

Existing research does not resolve how an agent’s values influence the way they work despite evident conditions of:

- Non-profit related objectives (Psi-Delta 1999);

- Minimum requirements for honesty, disclosure and education (SUTa); and
- Work values, rather than personal values, directing work pursuits (Pryor 1997).

Whilst Babson (1999) argues aspects of morality drive agent behaviour, this thesis accepts that current controls discussed in the previous section curb unethical and immoral agent personal values to at least an operational minimum.

More important in the literature is the debate surrounding how agent work values influence agent work practices. Pryor (1997) and Sitkin and Roth (1993) state values such as altruism and value of money influence work pursuits but Moore, Smolen, and Conway (1992) claim that these will not overcome personal values. The work pursuit this thesis examines is agent-principal relationship establishment. Parts of this process examined in detail at this point are appropriation of information, negotiation, agent sales presentation and agent representation.

From this base, this thesis proposed that:

- Value of money has an effect on property information appropriation (H4a);
- Value of money has an effect on vendor information appropriation (H4b);
- Value of money has an effect on agent representation (H6b);
- Value of money has an effect on presentation skills (HX3);
- Value of money has an effect on negotiation (HX4);
- Altruism has an effect on property information appropriation (H4c);

- Altruism has an effect on vendor information appropriation (H4d);
- Altruism has an effect on agent representation (H6a); and
- Altruism has an effect on agency control (HX2).

This research finds empirical evidence to confirm the following links:

- A link from value of money to property information appropriation was supported because the critical ratio for successful (2.047) relationship establishment attempts was significant with an absolute value greater than 1.96;
- A link from value of money to vendor information appropriation was supported because the critical ratios for successful (2.122) and unsuccessful (1.989) relationship establishment attempts were significant with an absolute value greater than 1.96;
- A link from value of money to presentation skills was supported because the critical ratios for successful (2.482) relationship establishment attempts was significant with an absolute value greater than 1.96;
- A link from altruism to agent representation was supported because the critical ratios for successful (2.056) and unsuccessful (2.049) relationship establishment attempts were significant with an absolute value greater than 1.96; and
- A link from altruism to agency control was supported because the critical ratios for successful (2.248) and unsuccessful (2.675) relationship establishment attempts were significant with an absolute value greater than 1.96.

But this thesis finds no empirical evidence to confirm the following links:

- A link from altruism to property information was not supported because the critical ratio for successful (1.446) and unsuccessful (1.082) relationship establishment attempts were not significant with an absolute value less than 1.96;
- A link from altruism to vendor information was not supported because the critical ratios for successful (-.394) and unsuccessful (.487) relationship establishment attempts were not significant with an absolute value less than 1.96;
- A link from value of money to agent representation was not supported because the critical ratios for successful (.013) and unsuccessful (.286) relationship establishment attempts were not significant with an absolute value less than 1.96; and
- A link from value of money to negotiation was not supported because the critical ratios for successful (1.293) and unsuccessful (1.196) relationship establishment attempts were not significant with an absolute value less than 1.96.

These results mean that the findings of Sitkin and Roth (1993) are only partly supported. The authors identify that an agent's work values will influence their work pursuits. But because this thesis empirically finds their research is not generalisable to other work values or all work pursuits their contribution is somewhat questionable. Authors such as these failed to resolve the conflict identified in the literature between personal, work and organization objectives.

This thesis does not specifically investigate Moore et al.'s (1992) claim regarding the dominance of personal values. But implicit in an agent's vocational pursuit of agency goals is the goal congruence between agent and agency identified by Sitkin and Roth (1993). This thesis suggests therefore that if an agent establishes an agent-principal relationship that benefits the agency, the agent similarly benefits although quite possibly to a lesser degree. The findings of Moore et al. (1992) are only partly supported therefore because they do not define how personal interests lead to the operationalisation of work values.

This thesis has empirically demonstrated the following thereby supporting the work of these authors:

- The value of money influences the way agents' appropriate information and develop their presentation skills but does not influence agent representation or negotiation; and
- Altruism influences the way an agent represents their principal and how an agency can assert control but does not influence the way agents' appropriate information.

These findings are further supported anecdotally. Agents' value of money has a bearing on how they selectively get information from a vendor. Agents support this when claiming

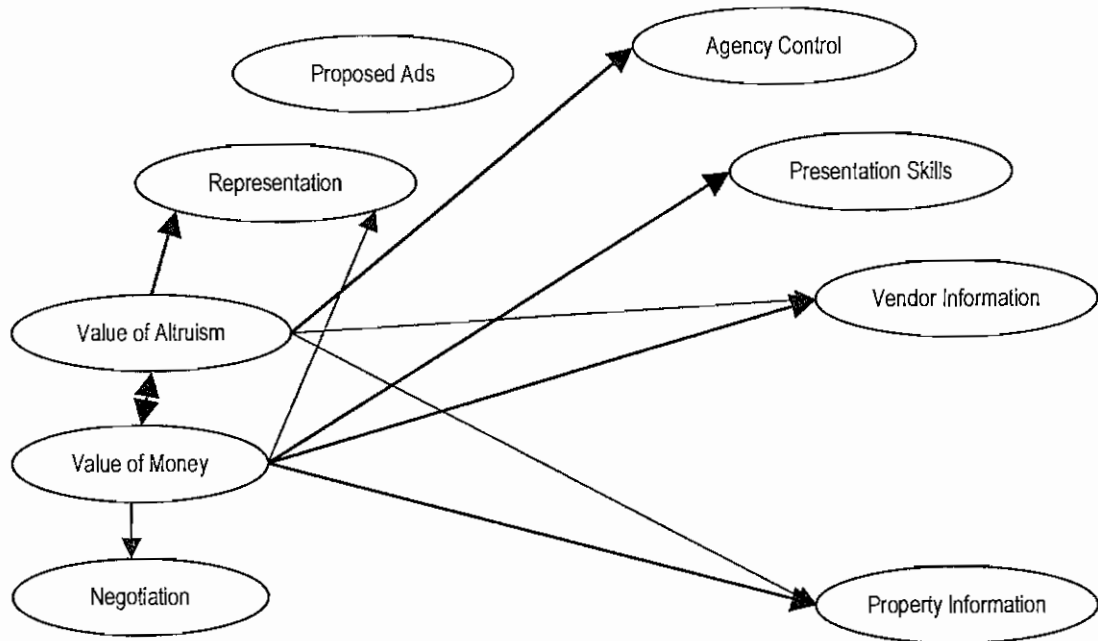
*"We do not want to know that the property had a termite problem unless the client has engaged a terminator to rectify the problem...because we would have*

*then to answer honestly if questioned about termites and this could lower the price a purchaser might offer...or whether an offer is made” [Agent Interview].*

However, considering specifically the importance of the value of money, this thesis reveals the agent’s view that *“if agent’s are only in it for the money then they won’t last long”* [Focus Group] is not correct. The data suggest that the value of money contributes to the appropriation of information, which in turn contributes to other aspects of a relationship establishment attempt. Research Questions 11 and 12 revealed that appearances are important so it is more likely that it does not look good to be concerned about money. All of this contributes to the client’s perception of the agent. According to Festinger (1957) this is measured against an individual set of attributes and the client assembles an impression of that agent that establishes trust and faith upon which a relationship can be built (Morgan and Hunt 1994).

Agents clearly indicate altruistic concerns to *“do the right thing”* and *“try and help the people themselves”* [Agent X]. But past customers of these agents explain how agent behaviour appears to be influenced by values that are not fundamentally altruistic in nature. For example: *“Agents should [but do not] get rid of sales staff who do not satisfy customer needs; communicate principles and policies to customers; and reassure professionalism and honesty”* [Client Focus Group]. Applying Festinger’s (1957) cognitive dissonance theory here, the discrepancy between views of the agent and principal suggests a level of dissatisfaction amongst past principals that agents need to address.

**Figure 26 Agent values**



### **Agent sales presentation**

The literature suggests that:

- A seller should not just rely on advertising to be persuasive (Borden and Marshall 1959; Braun 1999);
- But include also personal selling (Borden and Marshall 1959; Braun 1999) (Ryder 1998); and
- Both people and presentation skills are required (Egan 1982; Quigg and Wisner 1998).

Other literature discussing how this works includes works by Hovland, Janis, and Kelley (1966) and Levitt (1986) that identify the way an agent presents himself so that a client allows the agent to pervade their space and earn their trust. Foundations of this come from Festinger's (1957) cognitive dissonance theory. Hovland et al. (1966) note the ordering of factors within a communication process; Levitt (1986) further identifies *“things affecting relationships...from a cumulative flow before a product is delivered to after a product is delivered”*, and building trust is an integral part of extracting information, among other things (Morgan and Hunt 1994).

On the basis of this literature, this thesis proposed that:

- People skills have an effect on agent-principal relationship establishment (H11a);
- People skills have an effect on negotiation (H12a);
- People skills have an effect on vendor information appropriation (HX8);
- People skills have an effect on property information appropriation (HX9);
- Presentation skills have an effect on agent-principal relationship establishment (H11b); and
- Presentation skills have an effect on negotiation (H12b).

This thesis finds empirical evidence to confirm the following links:

- A link from people skills to agent-principal relationship establishment was supported with a significance level with a “p” value of less than 0.10 (Sig=.001);

- A link from presentation skills to agent-principal relationship establishment was supported with a significance level with a “p” value of less than 0.10 (Sig=.099);
- A link from people skills to vendor information appropriation was supported because the critical ratios for successful (5.325) and unsuccessful (5.874) relationship establishment attempts were significant with an absolute value greater than 1.96; and
- A link from people skills to property information appropriation was supported because the critical ratio for successful relationship establishment attempts was significant (-2.52) with an absolute value greater than 1.96.

This thesis finds no empirical evidence to confirm the following links.

- A link from people skills to negotiation was not supported because the critical ratio for successful (-1.090) and unsuccessful (-1.800) relationship establishment attempts were not significant with an absolute value less than 1.96; and
- A link from presentation skills to negotiation was not supported because the critical ratios for successful (.694) and unsuccessful (.525) relationship establishment attempts were not significant with an absolute value less than 1.96.

These results suggest that Festinger's (1957) argument is supported because the ability to be persuasive, or in the case of real estate to establish an agent-principal relationship, is dependent on the client's perception of the agent as they “*get along*” with that agent

(to use the terms on the research instrument). Morgan and Hunt (1994) are also supported in the case of real estate because people skills contribute to an agent's capacity to appropriate information in the process of relationship establishment.

Anecdotal evidence supporting these empirical findings includes:

- *"We need to send the right person"* [Agent X];
- *"Women agents have a different image to men ...but can't always relate better"* [Client Focus Group];
- *"The agent was: the rudest woman on earth; extremely pushy; shocking; very tough; condescending; questioned the client's ability to make purchase decisions so we did not choose them"* [Client Focus Group]; and
- *"To succeed in competition an agent needs skill, to be convincing, and to be persuasive"* [Agent X].

Similarly, Egan (1982) and Quigg and Wisner (1998) are supported. Presentation skills, identified by these authors as important aspects of personal selling, are also empirically identified as significant influences in relationship establishment or negotiation, although not to the same degree as people skills. This reveals a gap between marketing literature and personal sales literature. Hovland et al.'s (1966) and Levitt's (1986) explanation of a cumulative process found in marketing literature shows that personal selling authors such as Quigg and Wisner (1998) offer incomplete explanations.

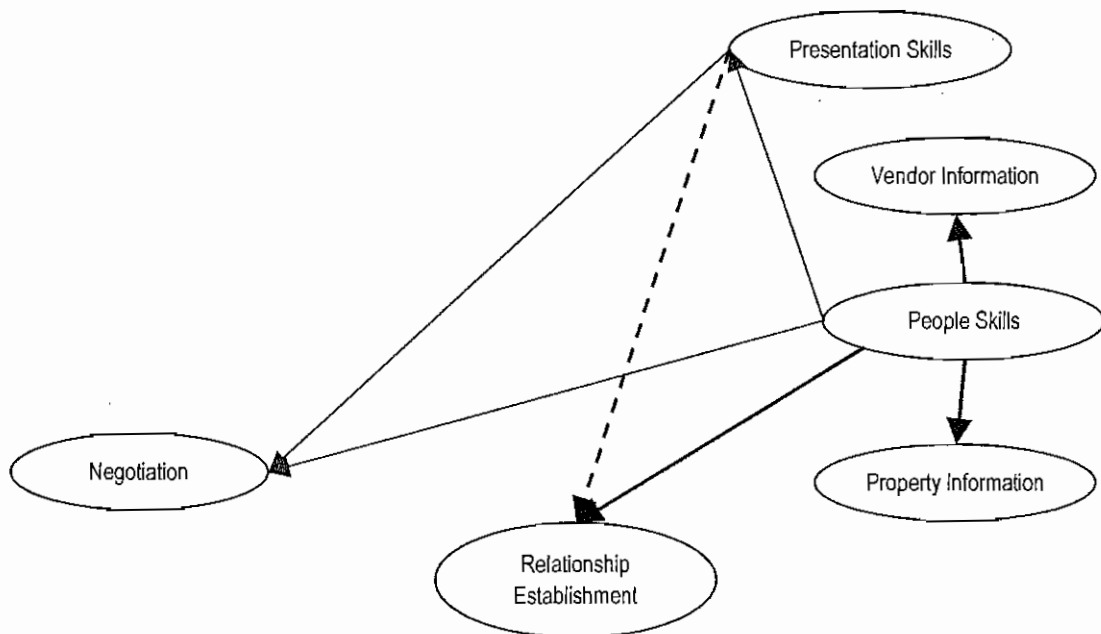
This thesis has established that presentation skills significantly influence agent-principal relationship establishment, with a significance level with a “p” value less than 0.10 but that people skills are more important, with a significance level with a “p” value of less than 0.05. Hence, people skills are the most important antecedent of agent-principal relationship establishment.

Agents fail to understand the importance of presentation properly by overemphasizing the impact on relationship establishment. Comments like “*We need to look successful*” [Agent Focus Group] and “*Our image is created through presentation*” [Agent X] are only partly supported. When agents express these beliefs that presentation is important they do two things. Firstly, they misjudge the importance of this presentation, because it has been unequivocally and empirically demonstrated to be less important to relationship establishment than presentation skills and not important to information appropriation and negotiation. Secondly, they are only partially supported because the overall image, or impression made on a prospective principal, is a combination of events that include the presentation and people skills of the agent.

An important contribution of this thesis is therefore that personal selling literature needs to be adjusted to more obviously include aspects of broader marketing theory well established by authors such as Hovland et al. (1966) and Levitt (1986) to account for a cumulative process. From initial contact to relationship establishment, the relationship establishment process is most dependent on people skills as part of agent interaction with a prospective principal but also dependent on presentation skills.

What remains for further research is to question whether people skills can be taught? Irrespectively, a perception of good people skills increases the chance of successfully establishing an agent-principal relationship and is therefore critical for agent performance.

**Figure 27 Agent sales presentation**



### **Agent representation**

Whilst Moore et al. (1992) clearly identify the range of possible parties an agent might choose to represent, legal literature mandates that the agent must serve their principal (e.g. Latimer 1999) and agency theory strongly implies the agent serves themselves with negative economic results (e.g. Jensen 1994b). This predicament seems to be currently

unresolved in the literature as it fails to distinguish between pre- and post- relationship establishment aspects of agency relationships.

Legal requirements are that the agent represents only one party (seller or buyer) and that this is disclosed to other parties (Moore et al.1992). From these bodies of literature, this thesis proposed that:

- Agent representation has an effect on negotiation (H5); and
- Agent representation has an effect on property information appropriation (HX6).

This thesis finds no empirical evidence to confirm the following links:

- A link from agent representation to negotiation was not supported because the critical ratios for successful (-.554) and unsuccessful (-.177) relationship establishment attempts were not significant with an absolute value less than 1.96; and
- A link from agent representation to property information appropriation was not supported because the critical ratios for successful (1.248) and unsuccessful (1.671) relationship establishment attempts were not significant with an absolute value less than 1.96.

Anecdotally agents argue they:

- *“Put their efforts in to representing the vendor because he pays commission NOT the purchasers”* [Agent X]; and
- *“Can only serve one master”* [Agent X].

But on another level these agents are observed:

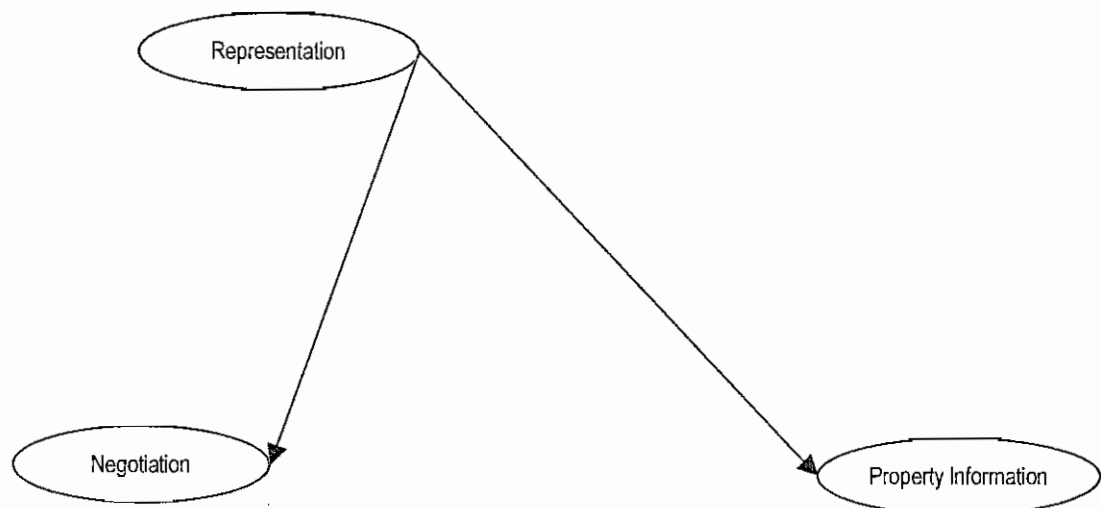
- “*To acknowledge their negative industry reputation*” [Real Estate Industry Interview];
- “*To benefit from underbidding for a listing rather than overbidding*” [Agent Focus Group]; and
- To describe members of their own industry members as “*shonky operators*” [Agent X] or “*a snake in the grass*” [Industry Expert];

The second citation above clearly demonstrates the use of specific techniques to obtain a principal that demonstrates how self-interest drives the agent in any specific relationship establishment attempt. The third citation above similarly demonstrates an absence of any genuine interest in the principal.

These empirical and anecdotal findings support Moore et al.’s (1992) finding that agents selectively direct their work practices. Legal literature (e.g. Cheshire and Fifoot 1988) does not adequately address this because identification of transgressors is often difficult, the pursuit of remedies expensive and is fundamentally a post-relationship phenomena. This thesis does not seek to invalidate this existing legal literature but instead uses these observations to strongly emphasize the previously noted absence of existing literature that examines how to establish the agent-principal relationship and the importance of the point of relationship establishment.

Empirical results at this point mean for the practitioner therefore, that whilst expressing the view “*we will work very hard for you*” to the client is a clear statement of seller directed interests and representation, this will do little for the outcome of an agent-principal relationship establishment attempt despite being an explicit statement of seller representation. The implication for practitioners is that they should not bother making such claims during relationship establishment by working at creating a favourable perception and client experience.

**Figure 28 Agent representation**



### **Proposed advertisements & media selection**

The literature suggests that:

- Proposing an advertising campaign leads to relationship establishment (Baryla and Zumpano 1995; Benjamin and Chinlo 2000; Marsh and Zumpano 1998; Richins *et al.* 1987; Yavas and Colwell 1995);
- An advertising campaign should integrate media and message (Schultz and Kitchen 1997); and
- Agents benefit specifically both from certain advertisement types (Richins *et al.* 1987) and certain media (Muhanna 2000).

From this literature, this thesis proposed that:

- Proposed advertisements have an effect on agent-principal relationship establishment (H7);
- Proposed advertisements have an effect on negotiation (HX5);
- Media selection has an effect on agent-principal relationship establishment (H9); and
- Media selection has an effect on proposed advertisements (HX1).

This research empirically confirms the following links:

- A link from media selection to proposed advertisements was supported because the critical ratios for successful (8.621) and unsuccessful (5.684) relationship establishment attempts were significant with an absolute value greater than 1.96;
- A link from proposed advertisements to negotiation was supported because the critical ratios for successful (2.269) and unsuccessful (1.580) relationship establishment attempts were significant with an absolute value greater than 1.96; and
- A link from media selection to agent-principal relationship establishment was not supported with a significance level with a “p” value less than 0.10 (Sig=.095).

But this research empirically does not support the link from proposed advertisements to agent-principal relationship establishment with a significance level with a “p” value not less than 0.10 (Sig=.375).

These results mean that agents do, to a certain degree, position advertisements based on the media types selected for use. These results verify the generalisability of Schultz and Kitchen's (1997) work because the authors' work applies to relationship establishment. Existing research, with its general post-relationship establishment focus, is supported with respect to the link between media selection and advertisements in the process of agent-principal relationship establishment.

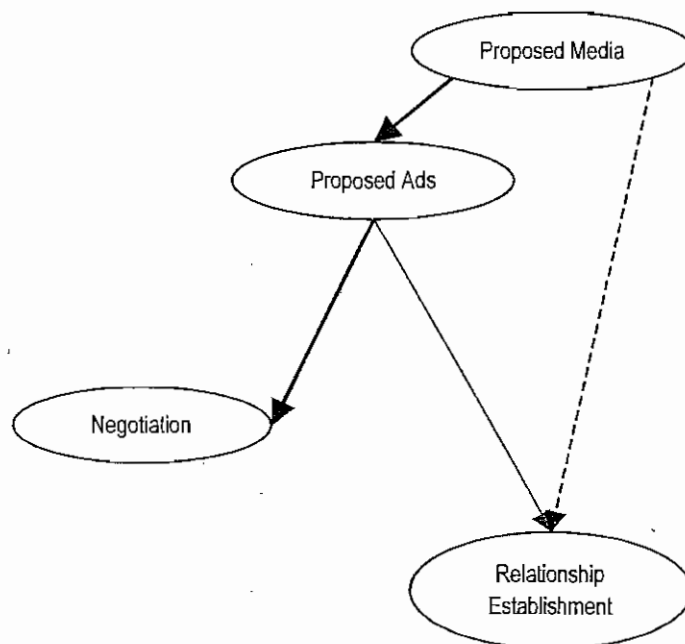
But Muhanna's (2000) findings specific to real estate and the Internet are supported. Empirical evidence confirms that a single media type does give an agent a competitive advantage. Agents holding the view that "*If a vendor wants the Internet you have to have it to compete*" [Agent X] or "*The last listing I lost was because I didn't have the Internet*" [Agent X] are also supported. However, because this link is only significant at the .10 level and not at the .05 level, the agents' view expressed here of what is required to compete reflects their inability to correctly diagnose a root cause for failing to secure any specific agent-principal relationship. Whilst media is important, this is so only because an agent needs to avoid the principal experiencing cognitive dissonance and perceiving the agent to be unacceptable. The contribution this thesis makes offers agents themselves substantial benefits by deepening their understanding of why any relationship establishment attempt outcome occurs.

Similarly, Muhanna (2000) and Richins et al. (1987) are both supported in the instance of relationship establishment because there is some evidence of a link to outcomes of relationship establishment attempts from advertisements. But because these authors adopt a post-relationship establishment focus, the presence of a Type Two error in existing literature is evident. The whole story is not examined by research that focuses only on successfully established relationships because there is media selection in unsuccessful relationship establishment attempts too and in general these are not considered.

Agents' similarly demonstrate their understanding of the role media plays in establishing agent-principal relationships in the claim that "*I did not get the listing because I did not have the Internet*" [Agent Focus Group]. However, care should be taken with this because this thesis demonstrates that media selection is only just a direct influence of the relationship establishment attempt outcome (at a significance level of .10 and not at the stronger level of .05). The implication for practitioners is that they should achieve a greater level of understanding of the agent-principal relationship establishment process and focus carefully on the ordered importance of antecedents revealed in this research.

The figure below reflects the previous discussion on the role of Proposed Media and Advertisements in agent-principal relationship establishment.

**Figure 29 Proposed advertisements and media selection**



## **Negotiation**

Existing literature suggests that negotiation is important to agent-principal relationship establishment because it:

- Leads to development of agreeable terms (Kahneman *et al.* 1986; Kennan 2001; Lewicki *et al.* 1998) from the agent proposal (Benjamin and Chinlo 2000; Cinzia 1999); and
- Is driven by the agent, principal & agency (Massengale 1991).

This literature underpins the proposition that negotiation has an effect on agent-principal relationship establishment. But this literature did not empirically demonstrate how this happens in order to establish a set of agreeable terms. By testing the proposed link from negotiation to relationship establishment, this thesis demonstrates empirically that no such link exists because the null hypothesis of no effect (H1) was not rejected (Sig=.508). Although this was not expected, this result shows that negotiation is not in fact a direct influence of agent-principal relationship establishment attempt outcomes.

Existing literature (e.g. Benjamin and Chinlo 2000; Cinzia 1999; Kennan 2001) obviously shows that the process of getting to an acceptable set of agreement terms is in fact a process that includes moderation, or modification, of proposed terms. But this thesis produces unequivocal results suggesting otherwise. Empirically, this thesis demonstrates that altering the terms of the agreement is not influential in agent-principal relationship establishment.

This thesis argues that negotiation is not even a hygiene factor in specific relationship establishment attempts by demonstrating a holistic examination of the outcome of relationship establishment attempts. A failure to negotiate does not necessarily equate to an unsuccessful relationship establishment attempt and a willingness to negotiate does not necessarily equate to a successful relationship establishment attempt. What is most important is that both successful and unsuccessful relationship establishment attempts clearly show that negotiation does not determine whether an agent-principal relationship will result. Negotiation is not an antecedent that determines relationship establishment and as such cannot be considered necessary or sufficient for establishing agency relationships.

For the literature, this means a departure from existing literature because the movement from agent proposal to relationship establishment was not found to be by the way of negotiation. Authors such as Benjamin and Chinlo (2000), Richins et al. (1987) and Yavas and Colwell (1995) that focus on components of an agency agreement that can be varied are missing the point that any such changes to a proposal do not influence the outcome of an attempt to establish an agent-principal agreement.

Most importantly, this means that marketing literature, and most specifically real estate research, must adopt a more holistic approach to relationship establishment to consider aspects of consumers' perceptions and behavioural interpretations of the product offering and agent characteristics. In doing this, marketing literature, and real estate research, will reflect the more behaviourist approaches of Hovland et al. (1966) and

Levitt (1986) that describe how a purchase decision is made outside the context of agent-principal relationship establishment.

The implications for agents in the future are more specifically discussed in the next chapter but are highlighted at this point on the basis that agents themselves need to adjust their perceptions of the agent-principal relationship establishment process.

Rather than concurring with empirical evidence produced in the course of this research, agents incorrectly support the views found in existing literature - that negotiation is important to relationship establishment.

For example:

- Vendors impose demands to which an agent must be prepared to adapt to e.g. *“Vendors were saying I need you to advertise in this place, they (vendors) pick the open times”* [Agent X];
- Agents must accommodate these demands because *“it’s not an issue of selling properties in the market it’s an issue of having properties to sell”* and it’s *“their (buyer and seller’s) commitment, it’s just the commitment that counts”* [Agent X];
- It’s all *“a bit of luck”* and we have to *“Tread carefully...and keep doing it to get vendors”* [Agent X];

- *“Information on current and past sales gives purchasers the knowledge of both comparative and competitive values which will give them a stronger position in negotiation”* [Agent X]; and
- *“Negotiation after listing is not relevant”* [Client Focus Group].

The underlying theme of this anecdotal evidence misses the fundamental issue of getting to an agreement via means other than negotiation. If agents thought more carefully about what they were saying they would more clearly understand how to establish these critical relationships with a principal. Just because relationship establishment is legally dependent on establishment of agreeable terms does not mean that it is dependent on negotiation. These quotes demonstrate that agents often fall prey to trying to adjust a proposal for the demands of a prospective principal but empirical results clearly show these should be identified before preparing their original proposal.

Therefore this thesis strongly argues the removal of the link between negotiation and relationship establishment based on empirical results. Levitt (1986) similarly observes negotiation not to be a sufficient condition for relationship establishment. Even though Levitt (1986) is specifically referring to the complexities of multiple negotiations for a single relationship establishment event he is still right. In the case of real estate agent-principal relationship establishment it is empirically demonstrated in this thesis that there is no opportunity for an agent to engage in multiple negotiations. If an agent is not successful the first time he tries to establish a relationship with a specific principal,

there is a 70% chance that a prospective principal will enter an agency relationship with another agent. Additionally there is a 20% chance of not entering any agency relationship at all with the remaining 10% of respondents unaccounted for.

This thesis does not dispute that agreement between the agent and principal to the terms of a contract is a necessary condition for contract establishment. This is well established in terms of legal precedent proposed in the literature review by authors such as Cheshire and Fifoot (1988) and Laws of Australia (2002a:2002b).

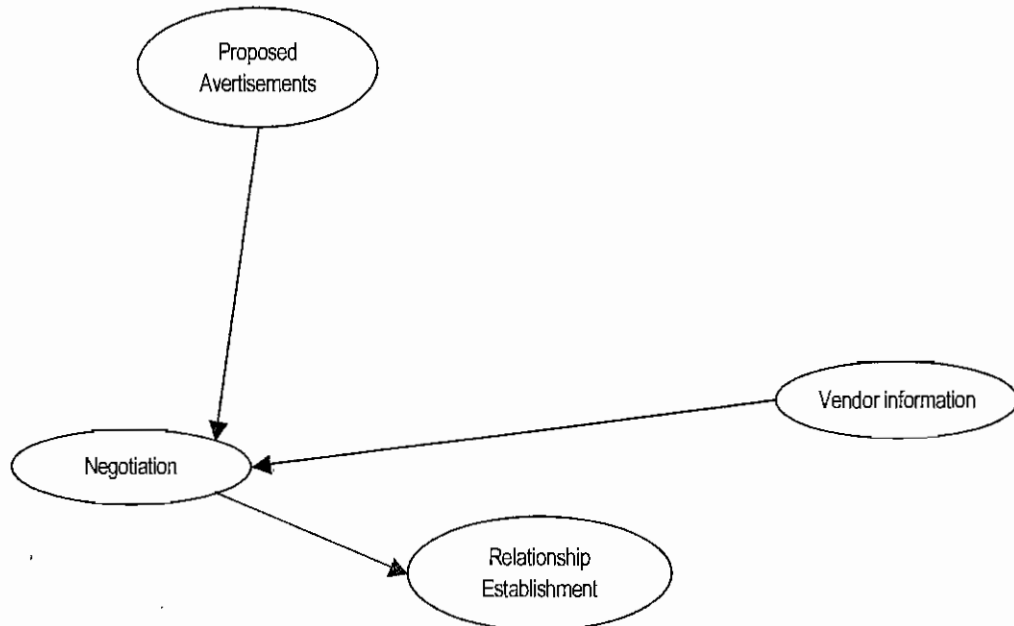
This thesis makes a contribution to research because, up to now, authors asserted that negotiation is critical for relationship establishment. This assertion, also found in existing literature, is due to a focus on the wrong thing. Previously existing research generally had a tendency to focus on successful relationship establishment only and does not consider those submissions made by agents to principals that were unsuccessful. This represents a Type Two error in the research because negotiation can occur in both unsuccessful and successful relationship establishment attempts but only successfully established relationships are described in this literature. Adopting the approach of this thesis provides the opportunity to compare outcomes and examine differences between these outcomes.

Preparing the right terms of an agency agreement is revealed as essential so that relationship establishment is not left to any negotiation of agreement terms. *"We're in the business of selling a dream to purchasers and do this by giving them (clients) what they want".*

In this case alterations to terms of an agent-principal agreement are not required. The contribution of this thesis is a major departure from existing literature because:

- Agents have misinterpreted the importance of negotiation in a relationship establishment attempt; and
- Marketing literature, and most particularly real estate specific research, needs to be broadened immediately to reflect the finding that negotiation does not influence the outcome of an agent-principal relationship establishment.

**Figure 30 Negotiation**

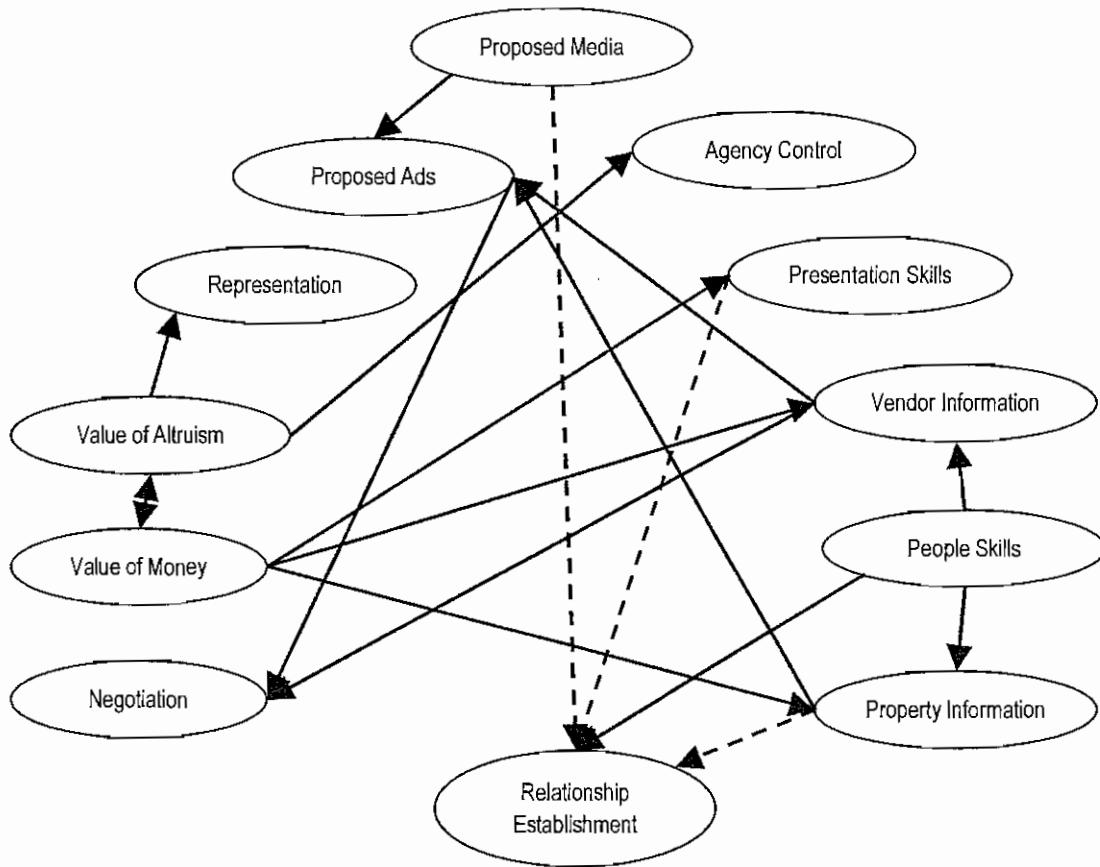


### **Summary of supported links**

This chapter has discussed results from previous hypothesis testing to demonstrate the findings of this thesis (see Appendix 19, Appendix 20 and Appendix 21 for further details). The research demonstrates through these results that agents:

- Are not able to follow up unsuccessful relationship establishment attempts – most probably due to the inaccessibility of vendors that have entered into agent-principal relationships with other agents;
- Fail to identify the client's attitudes that determine their perception of the agent's offering causing some level of cognitive dissonance resulting in their decision not to continue in the relationship with that agent (Festinger 1957); and
- Suffer themselves from their own perceptions of the agent-principal relationship experience being affected by cognitive dissonance as they rationalise the outcome of their attempts to establish the agent-principal relationship.

**Figure 31 Summary of supported links**



Concluding from this diagram, this research demonstrated 3 things:

- Support for the interaction between constructs identified in the literature;
- Support for the importance of people skills in a sales presentation; and
- No support for the positioning of negotiation proposed in the literature.

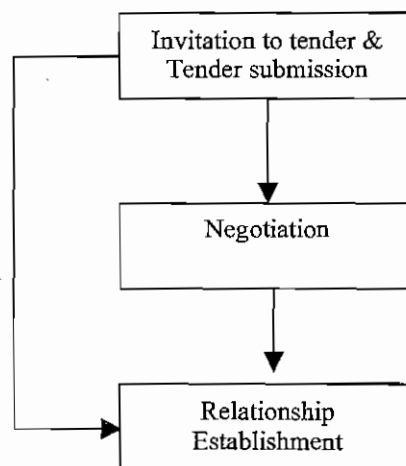
Results of statistical tests detailed in the previous chapter found near significant links from property information, presentation skill and media to the outcome of agent-principal relationship establishment attempts. These do not have any statistically significant interaction effects that would unduly influence results. It is noted here that implications for practitioners regarding the relative importance of these constructs will be further detailed in the next chapter that explains the contributions of this research to existing research and theory from the detailed examination of relationship establishment in the agent-principal relationship with a real estate perspective.

## CHAPTER 9

### CONCLUSION, IMPLICATIONS AND IDENTIFICATION OF FURTHER RESEARCH

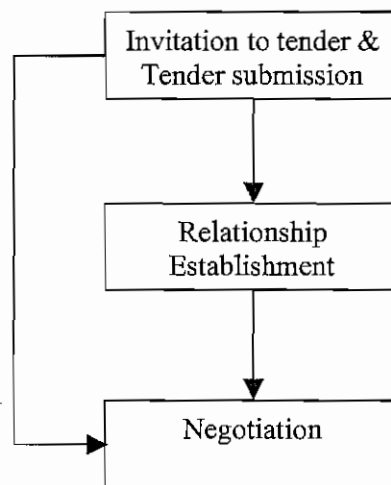
The real finding of this research is that the focus of past research in marketing literature has been inappropriate. The original model, developed from past research, assumed a sequential process of agent-principal relationship based on three stages (Figure 32).

**Figure 32 Original agent-principal relationship establishment process**



This thesis has used a process of holistic examination to completely explore the role of the steps in the model. Thus, the step of negotiation has been exposed in a new light, taking on a different role from that which is described by Baryla and Zumpano 1995, Benjamin and Chinlo 2000, Marsh and Zumpano 1998, Richins et al. 1987, Yavas and Colwell 1995 and Yavas et al. 2001. Previously existing research has not considered the whole process and has failed to examine the importance and interconnections of each of the steps during relationship establishment attempts. This research exposes a new model of relationship establishment, shown in the figure below.

**Figure 33 New model of relationship establishment**



The real difference with this new model is that the link from negotiation to relationship establishment does not in fact exist and that the order of these constructs is in fact altered.

### **Implications for theory**

This research clearly shows that the agent-principal relationship is set up, if not formally documented, at initial contact between an agent and prospective principal and not during any negotiation process. The outcome of an agent-principal relationship establishment attempt is not determined, as described by Bergen et al. (1992), by processes that follow initial contact between an agent and a principal in which terms of an agency agreement are negotiated. It is instead determined at the point at which an initial context, or reference point, is established. This point is translated by the principal into their measure, or perception, of equity and fairness that actually determines the outcome of the agent-principal relationship establishment attempt rather than any negotiation.

Without question an agent works for income. This is acknowledged by agents and evident in both legal and marketing literature (e.g. Latimer 1999; Yavas et al. 2001). Therefore, the fundamental logic of agency theory described by Akerlof (1970); Jensen (1994b) and Jensen and Meckling (1976) is flawed because the agent will continue to be accepted by the principal as long as he does not cross boundaries of equity and fairness.

With respect to negotiation, vendor information is seen as an influence of the likelihood that an agent-principal relationship will be established. This thesis empirically demonstrates that vendors benefit in an agent-principal relationship establishment attempt if agents are limited in their appropriation of vendor information. This information includes the other agents being considered, giving increased power to an

agent if they are aware of their immediate competition for the agent-principal relationship. This thesis finds that property information appropriation is influenced by an agent's concern for money, which in turn influences how a client experiences the agent presentation and consequently the degree to which cognitive dissonance is experienced by the client. Furthermore, property information is in part observable so is not necessarily exchanged directly between a client and an agent.

From the empirical examination undertaken in this research, four areas of literature are identified to require some degree of modification to maintain logic and consistency.

### **Real estate research**

This thesis finds that:

- Richins et al.'s (1987) work on real estate advertising and strategy requires repositioning because it fails to observe the dominance of media type by incorrectly retaining a focus on advertising benefits that are not a function of listing type; and
- Moore et al.'s (1992) work on the role of real estate agency information requires repositioning because it fails to observe that property information is important to agent-principal relationship establishment.

## **Agency theory**

This thesis finds that Jensen and Meckling's (1976) work requires repositioning because it incorrectly identifies the point of relationship establishment by focussing on the formalisation of this relationship. This thesis makes a substantial contribution by identifying the true point of relationship establishment and the antecedents of this.

## **Personal sales literature**

This thesis finds that from personal sales literature:

- Quigg and Wisner's (1998) work needs to be reworked to reflect the contributions of Levitt's (1986) consumer reference point thereby acknowledging attitudinal psychology;
- Braun's (1999) work needs to be modified to reflect the substantial benefit to agent-principal relationship establishment from identification of Kahneman et al.'s (1986) framing effects and Morgan and Hunt's (1994) aspect of trust in the consumer reference point; and
- Morgan and Hunt's (1994) work needs to be modified because it incorrectly overlooks the point of agent-principal relationship establishment by focussing on agent-client exchanges.

## **Marketing literature**

This thesis finds that:

- Modification of Jacoby et al.'s (1978) and Marsh and Zumpano's (1998) work is required because these authors incorrectly detail the role of information in agent-principal relationship establishment;
- Modification of Jensen's (1994b), Jensen and Meckling's (1976) and Sitkin and Roth's (1993) work is required because these authors fail to identify the limitations of management control on agent behaviour; and
- Modification of Moore et al.'s (1992) work is required because this author incorrectly overlooks that agent representation is in fact dynamic.

These findings will now be discussed fully to show how they can be implemented to complete the contributions this thesis makes.

## **Contributions to real estate research**

This research finds that media selection influences relationship establishment but that advertisements do not. Therefore, Richins et al.'s (1987) work on real estate advertising and strategy requires repositioning because it does not recognise this aspect of advertising as it focuses on type of advertisement rather than positioning of these advertisements.

This research identifies property information to influence relationship establishment. Therefore, Moore et al.'s (1992) work on the role of real estate agency information requires repositioning because it fails to observe that property information is important to agent-principal relationship establishment.

A fundamental element of consolidating an agent-principal relationship is communication between the two parties based on their interdependency. Although this thesis does not specifically focus on communication, interpersonal communication between agent and client (in gathering of client and product information and generally getting along) is shown to be paramount to relationship establishment. This is demonstrated by verifying empirically that if a product is designed correctly, with sufficient known client characteristics and wants, then the agent can prepare marketing communications to expose and stimulate desire for a particular agency agreement to represent a product in the market. Basic marketing communication principles are supported, in conjunction with consumer behaviour principles. Previously existing research had no such focus, failing to consider the relationship establishment process. Aspects of communication therefore can be more fully investigated in future research.

### **Contributions to agency theory**

This thesis finds a gap in agency theory because of Jensen and Meckling's (1976) emphasis on the role of information. In the case of real estate, the agent's position is not guaranteed just because not all information is freely available and if anything is more likely to exist in the longer term with increased information flows. Agency theory

contains no mention of a client's space and implies that a client's propensity to divulge information is a function of a market rather than a function of the individual.

Empirical evidence for identification of a consequence of incomplete exchanges of information at the point of relationship establishment to be a reduction in the likelihood of an agent-principal relationship being established now exists as a result of this research. In this case, the role of the agent disappears if information flows cease. Incomplete information exchanges exist in both directions between clients and agents in fact risking their continued existence in the market.

Information asymmetry actually negatively impacts relationship establishment if a client imparts too little information to an agent for three reasons. Firstly, the agent is more likely to prepare an unacceptable set of relationship terms; secondly, the agent is more likely to inadvertently alienate a potential client because they do not understand their terms of reference; and thirdly, the agent may not pitch the package within close proximity of competitive offerings. In this case, if an agent underbids a competitor then there are two possible outcomes. On the one hand, the agent may fail to secure the client and, on the other hand, they may obtain the client and fail to maximise their revenue potential. If these things force the agent into a situation of negotiation then in turn the chance of relationship establishment diminishes. This thesis does not assume, and nor should the reader assume, that this is necessarily to the detriment of the principal because it is the principal's choice whether to impart such information or not by trusting any specific agent.

This thesis argues that Jensen and Meckling's (1976) account of agency theory needs to be more specific and focus more heavily on consumer behavioural aspects of the relationship establishment process. By highlighting that negotiation is not a sufficient condition for relationship establishment, the inadequacy of existing literature is exposed because negotiation is about bartering. This situation arises from the clear evidence of Type Two errors in existing literature as it fails to adequately consider unsuccessful agent-principal relationship establishment attempts. Therefore the agent should avoid negotiation of terms of an agent-principal agency agreement.

Although Marsh and Zumpano (1998) correctly expose the importance of information this is misdirected to the outcome of the relationship establishment attempt rather than the process of getting to the outcome through a high level predictor variable (people skills) and the client's perception of the agent. Therefore, agency theory needs to be reworked to reflect these aspects of communication literature proposed originally by Festinger (1957) and Hovland et al. (1966) but have not been taken up in the agency literature.

### **Contributions to personal sales literature**

Bagozzi's work clearly acknowledges the role of emotions an consumer purchase decisions and the level of rationality behind agents' efforts to avert cognitive dissonance on the part of the purchaser (Bagozzi 2000; Bagozzi and Dholakia 1999; Bagozzi *et al.* 1999). But a gap exists in sales literature (e.g. Quigg and Wisner 1998) that fails to adequately encompass Levitt's (1986) ordering of components in a sales presentation,

despite Bagozzi and Dholakia (1999) defining the consumer's pursuit of specific goals. This thesis fill this gap in sales presentation literature by empirically demonstrating that, as the interface with the client, the sales presentation (including people and presentation skills) is the highest level predictor variable. People skills are the agent's mechanism with which to enter a client's space so these skills represent the highest order of the variables in relationship establishment.

Getting along with a potential client is the primary layer, with an underlying complex interactive layer of constructs in the structural model developed in this thesis. The importance of presentation (agent appearance) skills emerge as secondary to people skills in agent-principal relationship establishment. Literature in the area of real estate (e.g. Richins et al. 1987) and agency theory (e.g. Jensen and Meckling 1976) fails to acknowledge Egan's (1982) recommendation in the field of psychology, that uses Festinger's (1957) theory of cognitive dissonance to argue the importance of skills as motivators for client acceptance and commitment. Egan's (1982) research operationalises dialogue and attraction skills to reveal the ordering reflected in the field of psychology, in which getting along with the client is paramount, as the foundation for continued dialogue.

This thesis reveals a further gap between communication literature (e.g. Hovland et al. 1966; Levitt 1986) and agency theory (e.g. Jensen and Meckling 1976) based on the role of information. In the case of insufficient documentation of terms of an agency relationship a gap exists in previous research because of the evident failure to converge prior to relationship establishment, or in the process of establishing the agent-principal

relationship. Legal literature (e.g. Latimer 1999) notes that any subtle changes to terms of the agreement that are undocumented are unenforceable should relationships disintegrate, making no positive recommendation for resolution other than emphasizing the importance of documentation.

This thesis confirms marketing and legal literature and agency theory (e.g. Bergen et al. 1992; Cheshire and Fifoot 1988; Jensen and Meckling 1976 respectively) that mandates agreement of terms for any agency relationship establishment by adopting a dependent variable that is firmly based on the difference between a successful bundle of relationship terms (a successful relationship establishment attempt) and an unsuccessful bundle of relationship terms (an unsuccessful relationship establishment attempt). If a relationship establishment attempt is unsuccessful, then obviously some aspect of the relationship terms was unacceptable to at least one of the parties.

Legally, changes made to a relationship after the relationship has been may not be enforced if not documented, particularly if changes were *ad hoc*. Consequently, effects of these changes may come as a surprise to either party should they not be fully disclosed, the implementation of which is then left to individuals within the relationship for three reasons. Firstly, the agreement is not legally enforceable; secondly, representation may change as the person whose interests are being served may change; and thirdly, the relationship will continue for as long as the terms continue to be acceptable. No explanations are evident for the component of experience in both relationship establishment and renegotiation of changes to the relationship in existing legal documentation.

Prevention of Festinger's (1957) cognitive dissonance in both the agent and client so that relationships continue to be mutually satisfying over time overcomes any need for changes to legal requirements. But this is really a post relationship establishment matter this is really beyond the scope of this thesis. Further research is intended to more fully investigate this issue.

### **Contributions to general marketing literature**

This thesis uses agency control as a measure for the operationalisation of a process in which an agency owner can proceed towards his own goals by constraining agent operations. A previously existing gap between management accounting literature (e.g. Kaplan and Norton 1996) and agent operations (e.g. Psi-Delta 1999) exists because management control is found not to be excessively influential to establishment of the agent-principal relationship. The sustainability of an agency actually depends on agent values for implementation of policies, procedures and agent-principal relationship establishment.

This research firstly identifies that the local real estate industry operates within a narrow band of common controls that are less to do with control than conforming to attributes of acceptability of agents, vendors and purchasers. Further empirical contributions of this research reveal that marketing literature needs to be made more specific to reflect the inability of business owners to truly direct an organization because they are not at liberty to operate outside the bounds of current industry trends. The agent is confined to

performing only within perceptions of reasonableness and acceptability with reference to other industry operators and their marketing operations. This is not so much about fairness but perceptions of acceptability.

A gap in the works of Moore et al. (1992) and Zietz (2002), who define agent representation to be an agent's choice guided by market perception and agency control, is filled by this thesis by revealing unique aspects of relationship establishment compared to post-relationship establishment. The previously existing work of these authors needs to be repositioned because of an obvious absence of any reference to the possibility that pre-relationship establishment agent representation is different to post-relationship establishment agent representation. This research reveals that because of what an agent expects (and is expected) to do (an agent cannot locate a property buyer until the agent-principal relationship has been established) the focus has previously been on post-relationship agent efforts. Similarly, an agent cannot advertise a property for sale until he has the authorisation of the owner to do so.

This thesis empirically establishes that seller representation does not have any role before an agent-principal relationship has been established. This means that Moore et al.'s (1992) work needs to be framed more specifically. While confirming qualitatively their finding that there is value in seller representation after a relationship has been established, post-establishment is suggested to be different from pre-establishment attempt.

This thesis makes a contribution again because interpreting existing research without this distinction makes researchers vulnerable to errors that arise from partial analysis of a research issue. Real estate research is therefore extended because a precedent is established for further studies to legitimately address the point of relationship establishment as distinct from post relationship establishment.

Additionally, negotiation emerges as a demand side benefit (post relationship establishment) for pursuit of a final transaction rather than supply side benefit, as an agent mediates a negotiation between a client and a purchaser. Finding that post agent-principal relationship establishment is well covered already by existing research, this thesis reveals future research opportunities with a supply perspective of relationship establishment, because this is not so well covered.

This thesis makes another contribution by disconfirming Richins et al.'s (1987) observation that benefits of advertising are limited based on a link with listing type. Empirical evidence now exists as a result of this research demonstrating that agents strongly agree with this. Whilst advertising planning is a function of listing type this reflects a principal's perceptions of acceptability. Real estate agent media selections are made because "*It's what we always do*" (operating within a narrow band of agent perceived acceptability) and "*it works*" (operating within a narrow band of experience).

If this is due to some maturation on the part of the agents, market or clients then it might be interesting to question whether this change has stopped. This thesis does not seek to address this broader market issue outside the precise domain of specific relationship

establishment attempts. This thesis is focussed specifically on establishment of agency relationships within these boundaries.

On the other hand, empirical evidence now exists as a result of this research demonstrating that Richins et al.'s (1987) work needs reworking to differentiate between media and advertisements because proposed media significantly influences a relationship establishment attempt outcome. Whilst proposed advertisements are not important in agent-principal relationship establishment media is. Advertisements designed and specified to a principal because "*It is too hard to change the way it's done*" (operating within a narrow band of perceived opportunity) will compromise the chance of relationship establishment if not perceived as reasonable.

Although Richins et al. (1987) suggest a number of components to be important, among which advertising is considered a part, existing studies attempt to show why proposed advertisements are important after a relationship has been established and not at the point of relationship establishment. What previously existing research needs to acknowledge is that the agent's knowledge of their customers, property and the market should continue to be used as a means of building the product delivered to the client but from a predictive modelling perspective rather than just because it worked previously.

### **Implications for practitioners**

This thesis demonstrates four things empirically that have significant implications for practitioners.

These are:

- An absence of any direct link between agency level controls and relationship establishment attempt outcomes due to a narrow band of industry level operations within which agents operate;
- That negotiation is not needed for relationship establishment. Currently, this is done in the case of real estate by presenting a proposed marketing campaign to a client in the context of selective successes and failures that is often tweaked and altered at the time of relationship establishment;
- That, at the agency level, negotiation is not desirable when tendering a relationship proposal to a potential client in the process of a relationship establishment; and
- The secondary importance of presentation skills, property information and media in relationship establishment.

### **Implications for agency owners**

This thesis therefore recommends that agency owners should:

- Take care to hire agents that have excellent people skills and can get along with a potential client because of the importance of these to a relationship establishment attempt outcome directly;
- Have adequate processes in place so that agents are not put in the position of having to negotiate terms of an agent-principal relationship because this will not assist in relationship establishment;

- Allow only agents with good people skills to collect property and vendor information from a potential client that can be presented in a way that is likely to be accepted based on the client's perception of acceptability and reasonableness; and
- Ensure their controls are not outside the perceptions of acceptability of industry practices because these controls do not hinder the relationship establishment attempt if they are within these limits.

### **Implications for agents**

This thesis demonstrates that agents need to be most concerned about the extent to which they are observed by the client to 'get along with people', because this is the highest order influence in agent-principal relationship establishment.

At a somewhat lower level, agents need also to be concerned about their presentation to gain acceptance by a client. If the agent is accepted by the client at the point of initial contact then:

- The client is more likely to impart sufficient information to the agent so that the agent can prepare a marketing plan that will meet the client's expectations; and
- The client is less likely to experience cognitive dissonance that will result in an unsuccessful relationship establishment attempt.

Prior to relationship establishment it is unnecessary for an agent to emphasize their interest in truly representing the seller because agent representation has no effect on

relationship establishment, but post-relationship establishment agents should cautiously proceed within client expectations and legal boundaries.

Considering that relationship establishment is dependent on how an agent is perceived, values such as appearing altruistic may only be superficial. But as long as the client perception of these values is acceptable to that client, then the agent's fundamental goal of earning an income can progress. Whether an agent considers altruism important does not really matter. But their concern for money, on the other hand, does matter.

Finally, advertisements are not influential in relationship establishment because it is the expectation of results from these advertising that matters to the client. Agents tend to all do the same thing resulting in a lack of variance at an industry level, making it difficult to diagnose any real influence. In the case of real estate, media is allocated different information and presentation methods but is perceived by agents as *"too hard"*, *"having too many constraints"* and *"too expensive"*. The contribution this research therefore makes is identification of the situation that under-utilisation of media is a function of agent perceptions of media specific accessibility (difficulty and profit). Benefits identified by Schultz and Kitchen (1997) of effective media mixes and advertising strategies are not trusted and are not fully implemented in the case of real estate.

The secondary importance of media, property information and presentation skills must be recognised in agent-principal relationship establishment.

### **Implication for future research**

Further research into agency theory should develop in a new direction. Further research will be needed, but if this research were expanded into other forms of agent-principal relationships such as machinery sales or recruitment, and findings of this study were replicated in these areas, then a re-understanding of generalised agency theory in the context of marketing literature should emerge.

For real estate research, examination of perceptions of the role of trust, equity and fairness are of considerable importance. From the research conducted in this thesis we can clearly say that real estate practitioners impart perceptions of effectiveness at the initial contact and use subsequent contacts to ensure a continual flow of decision confirmatory experience as suggested in the field of attitudinal psychology by Festinger (1957).

Future study should investigate the level of skill development over time to determine whether necessary skills are accumulated (learned) or whether these are inherent characteristics of individual agents. Such a study would require some form of longitudinal cross case analysis which is beyond the scope of this thesis because this research seeks only to identify antecedents and their importance in relationship establishment. This future study should address questions like: Can personal skills actually be developed? Should agent-training programmes be implemented? How would these be delivered? What differentiates agents? Are these specific to agents or sales people in general?

## **Conclusion**

Through empirical investigation of agent-principal relationship establishment the inadequacies of existing research are noted and resolved. This thesis makes a substantial contribution to literature by identifying and resolving the previous absence of pre-relationship establishment literature to account for how agency relationships are formed. Identification of the importance of antecedents within agent-principal relationship establishment shows clearly the failure of existing research to truly explain how practitioners and researchers should proceed from here. Significant implications for research stem from the complete analysis of both successful and unsuccessful relationship establishment attempts in a way not done before. Significant implications for practitioners stem from the unveiling of how antecedents in the relationship establishment process interact. Therefore this thesis paves the way for further research, as described in this chapter previously, and improved work practices in, at least, the real estate industry.

## **APPENDIX 1 - VICTORIAN REAL ESTATE AGENT AUTHORITY**

### **FORMS**

Exclusive Sale Authority 002

Exclusive Auction Authority 003

AGENT

Tel: Fax: Attention:

VENDOR

PROPERTY

(which includes any chattels to be sold).

AUTHORITY PERIOD From the Date of this Agreement until days from the date of this Agreement.

If no Authority Period is inserted above then the duration of this Agreement shall be sixty (60) days. Refer Section 54(1) over page.

PRICE \$ or any other price agreed to by the Vendor, payable \* days from the day of sale

\*OR - As set out below -

or upon any other conditions of payment agreed to by the Vendor -

SUBJECT TO a condition that the Vendor will provide the Purchaser with -  
 \*vacant possession of the Property OR \*receipt of the rents & profits of the Property (where sold subject to any tenancy) -  
 upon payment of the \*full deposit \*full price \*sum of \$

## AGENT'S PROFESSIONAL FEE STRUCTURE

AGENT'S FEES \*\$ plus GST \$ = total including GST.

\*OR - The amount calculated as follows

plus GST = total including GST.

N.B. - If commission is calculated as a percentage of the price, the dollar amount of the commission which would be payable upon a sale at that price must also be inserted \$ , including GST of \$ on a selling price of \$ , excluding GST.

MARKETING EXPENSES \*\$ maximum amount for advertising costs &amp; other related expenses.

\*\$ maximum amount for other authorised expenses.

TOTAL \*\$ plus any further amount agreed to in writing by the Vendor.

Further details (if any) as attached.

NB Most Marketing Expenses will be subject to GST. The Marketing Expenses include any GST payable by the Agent.

(1) The Vendor acknowledges -

- (a) having been informed by the Agent, before signing this Authority, that the Agent's Fees and the Marketing Expenses are subject to negotiation.  
 (b) that the level of service to be provided by the Agent has been negotiated and is \*as attached \*as follows :

(2) The Vendor is obliged to pay the Agent -

- (a) the Marketing Expenses incurred during the currency of this Agreement whether or not a sale takes place.  
 (b) the maximum amount specified above for Marketing Expenses \*upon signing this Authority \*upon demand.  
 (c) the Agent's Fees if the Vendor sells the Property during the currency of this Agreement. (Note particularly the meaning of "sells" as defined in Agreed Condition 1.16 over page).

(3) A Non-Exclusive Agreement is also available in Victoria.

(4) The Vendor signed this Agreement before signing any binding Contract for the sale of the Property.

(5) When signing this Agreement the Vendor received a counterpart from the Agent.

- (6) Any complaint relating to commission or outgoings can be made to The Real Estate Institute of Victoria Ltd of 335 Camberwell Road, Camberwell, Victoria 3124, telephone (03) 9205 6666 and/or the Office of Consumer and Business Affairs Victoria (CBAV), 452 Flinders Street, Melbourne, Victoria 3000, telephone (03) 9627 7299. Unless there are exceptional circumstances, CBAV cannot deal with any dispute concerning commission or outgoings unless it is given notice of the dispute within 28 days of the client receiving an account for, or notice that the Agent has taken, the amount in dispute.

(\*Delete or complete as appropriate whenever asterisk (\*) appears.)

DATE OF THIS AGREEMENT / /

AGENT SIGNS Signed by or for the Agent

VENDOR SIGNS Signed by or for the Vendor

## IMPORTANT NOTICE

In addition to the agent's fees, the agent will receive income from service providers (newspapers, magazines, tradesperson or other suppliers) who pay volume rebates, discounts or commissions. An explanatory note is available.

In marketing your property the agent will receive the following rebates, discounts or commissions:

\$.....including GST from.....  
 (Supplier of service)

\$.....including GST from.....  
 (Supplier of service)

\$.....including GST from..... (attach additional details if applicable)  
 (Supplier of service)

If you agree, the agent will retain these rebates, discounts or commissions. If you do not agree, the agent will not retain them.

I/We agree OR I/We do not agree to the agent retaining the above rebates, discounts or commissions

VENDOR SIGNS Signed by or for the Vendor .....

Delete this clause if rebates not retained

Agent's Copy

## Agreed Conditions

EXCLUSIVE SALE 002

1. Meaning of Expressions - unless inconsistent with the context, the following definitions apply to this Appointment which includes any attachments.
  - 1.1 The expressions set out in BLOCK CAPITALS in the left margin of the Particulars of Appointment bear the meanings set out beside them.
  - 1.2 "Act" is the Estate Agents Act 1980 (as amended).
  - 1.3 "Agent" includes any licensed agent or any agent's representative employed by the Agent.
  - 1.4 "Appointment" includes "agreement" and/or "authority" and the words "appoint" and/or "appointed" shall have corresponding meanings in the same situations.
  - 1.5 "Binding Offer" is an offer on the terms set out in the Particulars of Appointment which, if obtained in compliance with this Appointment, would (or does) result in a contract enforceable against the Purchaser.
  - 1.6 "Conditions" include terms and vice versa.
  - 1.7 "GST" means any GST payable under the GST Legislation.
  - 1.8 "GST Legislation" includes A New Tax System (Goods and Services Tax) Act 1999, A New Tax System (Goods and Services Transition) Act 1999, and any other related legislation (whether or not currently in force) and any rulings, additions, amendments or alterations to the preceding legislation.
  - 1.9 "Introduced to the Property" means that the person was made aware that the Property was available to purchase irrespective from whatever source and without limiting the foregoing a person shall be deemed to have been Introduced to the Property by the Agent if the person became aware that the Property was available for purchase as a result of viewing, hearing or reading any advertisements of whatever nature or medium, any boards, placards or other literature referring to the availability of the Property that were connected to the Agent in any way.
  - 1.10 "Marketing Expenses" are the Marketing Expenses and charges of the Agent and include advertising expenses and other outgoings in respect of which any rebate, discount or commission that the Agent may receive is to be calculated.
  - 1.11 "Person" includes a corporation, institution, unincorporated body, incorporated association and any group of persons and/or any agent or associate of a person or any person appointed by the original person to take the place of the original person.
  - 1.12 "Professional Fees" are the total of the "Agents Fees" and the "Marketing Expenses" (as duly authorised and expended).
  - 1.13 "Property" means "Real Estate" as defined in Section 4 of the Act.
  - 1.14 "Purchaser" means the person to whom the Property is sold.
  - 1.15 "REIV" is The Real Estate Institute of Victoria Ltd of 335 Camberwell Road, Camberwell, 3124.
  - 1.16 "Sale" is the result of obtaining a Binding Offer and "sell" and "sold" have corresponding meanings in the same situations.
- If the Agent sells the Property during the Authority Period upon these conditions the Vendor authorises the Agent to sign on behalf of the Vendor a Contract of Sale in the form prescribed by the Rules or a Contract of Sale prepared by the Vendor's solicitor including the following conditions -
  - 2.1 The Price and the above conditions;
  - 2.2 Such other reasonable and proper conditions as are appropriate to the circumstances of the Sale.
3. The Agent will endeavour to sell the Property in consideration for which the Vendor agrees (subject to conditions 4 and 9 below) to pay the Agent's Fees if the Property is sold -
  - 3.1 during the Authority Period by the Agent or by another person (including the Vendor) for the Price and upon the above conditions; or
  - 3.2 within 120 days after the expiration of the Authority Period for the Price and on the above conditions to a person Introduced to the Property within the Authority Period (whether that introduction was by the Agent or by another person) or to a person introduced to the Property by the Agent before the Vendor signed this Appointment; or
  - 3.3 after the expiration of the Authority Period to a person Introduced to the Property within the Authority Period (whether that introduction was by the Agent or by another person) and to whom, as a result of that introduction, the Property is sold.
4. Where the Purchaser does not complete the purchase and the Vendor is entitled to a forfeited deposit the Vendor will take all reasonable steps to recover the unpaid deposit from the Purchaser and/or any other person who may be liable for payment of the deposit and to pay the Professional Fees from the sum of the deposit paid or recovered.
5. If the Vendor fails to pay the Agent any money due under this Agreement then interest at a rate four per centum higher than the rate for the time being fixed under Section 2 of the Penalty Interest Rates Act 1983 will be computed and paid to the Agent on the money owing.
6. Any signatory for a proprietary company Vendor shall be personally liable for the due performance of the Vendor's obligations as if the signatory was the Vendor. If required by the Agent the signatory shall procure the execution by all Vendor company directors of a guarantee to be prepared by or on behalf of the Agent.
  - 7.1 The Agent is irrevocably authorised to deduct from any deposit monies received all Professional Fees properly incurred by the Agent and any State or Federal Taxes required to be deducted by law, including (but not limited to) any goods and services tax or other consumption tax. This Authority may only be modified by the written consent of the Agent.
  - 7.2 If the Property is sold and no deposit is received by the Agent the Vendor will pay the Professional Fees on demand including any State or Federal Taxes, including (but not limited to) any goods and services tax or other consumption tax.
  - 7.3 Unless stated above to the contrary, the Vendor will pay the maximum amount of Marketing Expenses to the Agent upon signing this Agreement and in any event Marketing Expenses will be payable to the Agent upon demand. Upon the conclusion of this Agreement, the Agent will provide the Vendor with an itemised list of the Marketing Expenses and State or Federal Taxes expended or payable. The Agent will provide the itemised list at any other time that may be reasonably required by the Vendor.
  - 7.4 If this Authority requires the Vendor to pay reimburse or contribute to an amount paid or payable by the Agent in respect of an acquisition from a third party to which the Agent is entitled to an input tax credit (as defined in the GST Legislation) the amount for payment reimbursement or contribution will be the GST exclusive value of the acquisition by the Agent plus the GST payable in respect of that supply but only if the Agent's recovery from the Vendor is a taxable supply under the GST Legislation.
8. The Vendor will provide the Agent promptly with the Vendor's Statement/s pursuant to Section 32 of the Sale of Land Act 1962 and any other information that will assist in the sale of the Property.

### PLEASE NOTE THE FOLLOWING CONDITION

9. If the Property is not sold during the Authority Period, unless the Vendor advises the Agent in writing to the contrary, the Vendor appoints the Agent to sell the Property. In consideration of the Agent agreeing to endeavour to sell the Property the Vendor will pay the Agent the Agent's Fees if the Property is sold by the Agent for the price and upon the above conditions at any time after the Authority Period except where the Vendor has incurred a liability to pay Agent's Fees under any exclusive agency agreement signed by the Vendor after the expiration of the Authority Period.

Section 54(1) of the Estate Agents Act 1980 is in the following terms:

If an agreement stating that an estate agent is to act as the sole agent for the sale of any real estate or business does not state when the sole agency is to end, the sole agency ends -

- (a) in the case of a sale by auction, 30 days after the date of the auction;
- (b) in any other case, 60 days after the date the agreement is signed by, or on behalf of, the seller of the real estate or business.

**PLEASE NOTE** the Agent warrants (and will confirm upon request) that the Agent is at this date a member of the REIV, failing which the Vendor (and any signatory for the Vendor) is released by the Agent from any obligation to pay any Professional Fees.

AGENT

Tel:

Fax:

Attention:

VENDOR

PROPERTY

(which includes any chattels to be sold).

AUCTION DATE

/ /

at

\*am / \*pm

(or any other agreed date and/or time).

AUTHORITY PERIOD

From the Date of this Agreement until

days from the Auction Date. Refer Section 54(1) over page.

If no Authority Period is inserted above then the duration of the Agreement shall be thirty (30) days from the Auction Date.

PRICE

\$

or any other price agreed to by the Vendor, payable \*

days from the day of sale

\*OR - As set out below -

SUBJECT TO

a condition that the Vendor will provide the Purchaser with -

\*vacant possession of the Property OR \*receipt of the rents &amp; profits of the Property (where sold subject to any tenancy)

upon payment of the \*full deposit \*full price \*sum of \$

or upon any other conditions of payment agreed to by the Vendor -

## AGENT'S PROFESSIONAL FEE STRUCTURE

AGENT'S FEES

\*\$

plus GST \$

= total

including GST.

\*OR - The amount calculated as follows

plus GST

= total

including GST.

N.B. - If commission is calculated as a percentage of the price, the dollar amount of the commission which would be payable upon a sale at that price must also be inserted \$ including GST of \$ on a selling price of

\$ excluding GST.

MARKETING EXPENSES \$

maximum amount for advertising costs &amp; other related expenses.

\*\$

maximum amount for other authorised expenses.

Further details (if any)  
as attached.

TOTAL

-\$

plus any further amount agreed to in writing by the Vendor.

NB: Most Marketing Expenses will be subject to GST. The Marketing Expenses include any GST payable by the Agent.

(1) The Vendor acknowledges -

(a) having been informed by the Agent, before signing this Authority, that the Agent's Fees and the Marketing Expenses are subject to negotiation.

(b) that the level of service to be provided by the Agent has been negotiated and is \*as attached \*as follows:

(2) The Vendor is obliged to pay the Agent -

(a) the Marketing Expenses incurred during the currency of this Agreement whether or not a sale takes place.

(b) the maximum amount specified above for Marketing Expenses \*upon signing this Authority \*upon demand.

(c) the Agent's Fees if the Vendor sells the Property during the currency of this Agreement. (Note particularly the meaning of "sells" as defined in Agreed Condition 1.16 over page).

(3) A Non-Exclusive Agreement is also available in Victoria.

(4) The Vendor signed this Agreement before signing any binding Contract for the sale of the Property.

(5) When signing this Agreement the Vendor received a counterpart from the Agent.

(6) Any complaint relating to commission or outgoings can be made to The Real Estate Institute of Victoria Ltd of 335 Camberwell Road, Camberwell, Victoria 3124, telephone (03) 9205 6666 and/or the Office of Consumer and Business Affairs Victoria (CBAY), 452 Flinders Street, Melbourne, Victoria 3000, telephone (03) 9627 7299. Unless there are exceptional circumstances, CBAY cannot deal with any dispute concerning commission or outgoings unless it is given notice of the dispute within 28 days of the client receiving an account for, or notice that the Agent has taken, the amount in dispute.

(\*Delete or complete as appropriate whenever asterisk (\*) appears.)

DATE OF THIS AGREEMENT / /

AGENT SIGNS

Signed by or for the Agent

VENDOR SIGNS

Signed by or for the Vendor

## IMPORTANT NOTICE

In addition to the agent's fees, the agent will receive income from service providers (newspapers, magazines, tradespersons or other suppliers) who pay volume rebates, discounts or commissions. An explanatory note is available.

In marketing your property the agent will receive the following rebates, discounts or commissions:

\$.....including GST from.....  
(Supplier of service)\$.....including GST from.....  
(Supplier of service)\$.....including GST from.....  
(Supplier of service)

(attach additional details if applicable)

If you agree, the agent will retain these rebates, discounts or commissions. If you do not agree, the agent will not retain them.

I/We agree OR I/We do not agree to the agent retaining the above rebates, discounts or commissions

VENDOR SIGNS

Signed by or for the Vendor

Delete  
this  
clause  
if  
rebates  
not  
retained

Agent's Copy

## Agreed Conditions

**EXCLUSIVE AUCTION 003**

1. Meaning of Expressions - unless inconsistent with the context, the following definitions apply to this Appointment which includes any attachments.
  - 1.1 The expressions set out in BLOCK CAPITALS in the left margin of the Particulars of Appointment bear the meanings set out beside them.
  - 1.2 "Act" is the Estate Agents Act 1980 (as amended).
  - 1.3 "Agent" includes any licensed agent or any agent's representative employed by the Agent.
  - 1.4 "Appointment" includes "agreement" and/or "authority" and the words "appoint" and/or "appointed" shall have corresponding meanings in the same situations.
  - 1.5 "Binding Offer" is an offer on the terms set out in the Particulars of Appointment which, if obtained in compliance with this Appointment, would (or does) result in a contract enforceable against the Purchaser.
  - 1.6 "Conditions" include terms and vice versa.
  - 1.7 "GST" means any GST payable under the GST Legislation.
  - 1.8 "GST Legislation" includes A New Tax System (Goods and Services Tax) Act 1999, A New Tax System (Goods and Services Transition) Act 1999, and any other related legislation (whether or not currently in force) and any rulings, additions, amendments or alterations to the preceding legislation.
  - 1.9 "Introduced to the Property" means that the person was made aware that the Property was available to purchase irrespective from whatever source and without limiting the foregoing a person shall be deemed to have been introduced to the Property by the Agent if the person became aware that the Property was available for purchase as a result of viewing, hearing or reading any advertisements of whatever nature or medium, any boards, placards or other literature referring to the availability of the Property that were connected to the Agent in any way.
  - 1.10 "Marketing Expenses" are the Marketing Expenses and charges of the Agent and include advertising expenses and other outgoings in respect of which any rebate, discount or commission that the Agent may receive is to be calculated.
  - 1.11 "Person" includes a corporation, institution, unincorporated body, incorporated association and any group of persons and/or any agent or associate of a person or any person appointed by the original person to take the place of the original person.
  - 1.12 "Professional Fees" are the total of the "Agents Fees" and the "Marketing Expenses" (as duly authorised and expended).
  - 1.13 "Property" means "Real Estate" as defined in Section 4 of the Act.
  - 1.14 "Purchaser" means the person to whom the Property is sold.
  - 1.15 "REIV" is The Real Estate Institute of Victoria Ltd of 335 Camberwell Road, Camberwell, 3124.
  - 1.16 "Sale" is the result of obtaining a Binding Offer and "sell" and "sold" have corresponding meanings in the same situations.
2. If the Agent sells the Property (either at the auction or by private treaty) during the Authority Period upon these conditions the Vendor authorises the Agent to sign on behalf of the Vendor a Contract of Sale in the form prescribed by the Rules or a Contract of Sale prepared by the Vendor's solicitor including the following conditions.
  - 2.1 The Price and the above conditions;
  - 2.2 Such other reasonable and proper conditions usual to sales by auction or private treaty (as the case may be).
3. The Agent will arrange the auction and endeavour to sell the Property in consideration for which the Vendor agrees (subject to conditions 4 and 11 below) to pay the Professional Fees if the Property is sold -
  - 3.1 during the Authority Period by the Agent or by another person (including the Vendor) for the Price and upon the above conditions; or
  - 3.2 within 120 days after the expiration of the Authority Period for the Price and on the above conditions to a person introduced to the Property within the Authority Period (whether that introduction was by the Agent or by another person) or to a person introduced to the Property by the Agent before the Vendor signed this Appointment; or
  - 3.3 after the expiration of the Authority Period to a person introduced to the Property within the Authority Period (whether that introduction was by the Agent or by another person) and to whom as a result of that introduction, the Property is sold.
4. Where the Purchaser does not complete the purchase and the Vendor is entitled to a forfeited deposit the Vendor will take all reasonable steps to recover the unpaid deposit from the Purchaser and/or any other person who may be liable for payment of the deposit and to pay the Professional Fees from the sum of the deposit paid or recovered.
5. If the Vendor fails to pay the Agent any money due under this Agreement then interest at a rate four per centum higher than the rate for the time being fixed under Section 2 of the Penalty Interest Rates Act 1983 will be computed and paid to the Agent on the money owing.
6. Any signatory for a proprietary company Vendor shall be personally liable for the due performance of the Vendor's obligations as if the signatory was the Vendor. If required by the Agent the signatory shall procure the execution by all Vendor company directors of a guarantee to be prepared by or on behalf of the Agent.
7. The Vendor reserves the right to refuse any Binding Offer made between the date of this Appointment and the date of the auction by any person to purchase the Property and the Vendor will not be liable for the Agent's Fees if the Vendor refuses the offer between those dates even if the Agent may have "sold" the Property within the definition of that word.
  - 8.1 The Agent is irrevocably authorised to deduct from any deposit monies received all Professional Fees properly incurred by the Agent and any State or Federal Taxes required to be deducted by law, including (but not limited to) any goods and services tax or other consumption tax. This Authority may only be modified by the written consent of the Agent.
  - 8.2 If the Property is sold and no deposit is received by the Agent the Vendor will pay the Professional Fees on demand.
  - 8.3 Unless stated above to the contrary, the Vendor will pay the maximum amount of Marketing Expenses to the Agent upon signing this Agreement and in any event Marketing Expenses will be payable to the Agent upon demand. The Agent will provide the Vendor with an itemised list of the Marketing Expenses and State or Federal Taxes expended upon the conclusion of this Agreement, or as reasonably required by the Vendor.
  - 8.4 If the Property is not sold within the Authority Period the Vendor will reimburse the Agent on demand for any auction offering fee that may be agreed to by the parties.
  - 8.5 If this Authority requires the Vendor to pay, reimburse or contribute to an amount paid or payable by the Agent in respect of an acquisition from a third party to which the Agent is entitled to an input tax credit (as defined in the GST Legislation) the amount for payment reimbursement or contribution will be GST exclusive value of the acquisition by the Agent plus the GST payable in respect of that supply but only if the Agent's recovery from the Vendor is a taxable supply under the GST Legislation.
9. If this Appointment is made by a mortgagee and the sale is cancelled -
  - 9.1 within fourteen (14) days from the date of this Appointment the Vendor will pay the Agent the total of the Marketing Expenses and one quarter (¼) of the Agent's Fees payable on -
    - 9.1.1 any price set out; or
    - 9.1.2 the amount owing to the Vendor under the mortgage - whichever is the higher sum.
  - 9.2 after fourteen (14) days from the date of this Appointment but on or before the Auction Date the Vendor will pay the Agent the total of the Marketing Expenses and three (3) times the Agent's Fees calculated in the manner referred to in sub-clause 9.1.
10. The Vendor will provide the Agent promptly with the Vendor's Statement/s pursuant to Section 32 of the Sale of Land Act 1962 and any other information that will assist in the sale of the Property.

### PLEASE NOTE THE FOLLOWING CONDITION-

11. If the Property is not sold during the Authority Period, unless the Vendor advises the Agent in writing to the contrary, the Vendor appoints the Agent to sell the Property. In consideration of the Agent agreeing to endeavour to sell the Property the Vendor will pay the Agent the Agent's Fees if the Property is sold by the Agent for the price and upon the above conditions at any time after the Authority Period except where the Vendor has incurred a liability to pay Agent's Fees under any exclusive agency agreement signed by the Vendor after the expiration of the Authority Period.

Section 54(1) of the Estate Agents Act 1980 is in the following terms:

If an agreement stating that an estate agent is to act as the sole agent for the sale of any real estate or business does not state when the sole agency is to end, the sole agency ends -

- (a) in the case of a sale by auction, 30 days after the date of the auction;
- (b) in any other case, 60 days after the date the agreement is signed by, or on behalf of, the seller of the real estate or business.

**PLEASE NOTE** the Agent warrants (and will confirm upon request) that the Agent is at this date a member of the REIV, failing which the Vendor (and any signatory for the Vendor) is released by the Agent from any obligation to pay any Professional Fees.

## **APPENDIX 2 - RESEARCH PACK**

### **Contents include**

1. Introductory letter to agents
2. Explanation of the research
3. Real Estate Institute of Victoria letter of endorsement
4. Survey (An accompanying .xls file)

February, 2002

Dear Real Estate Sales Representative,

I am a postgraduate student at Monash University conducting research on The Use of Internet Advertising by Real Estate Agents. This research has been endorsed by the Real Estate Institute of Victoria. I ask for your assistance with my research for my Master of Business Degree and understand that your time is valuable. Please distribute the enclosed surveys to Residential Property Sales Representatives only. I ask the questionnaires be returned on completion in the reply paid envelopes provided.

If you have any problems or questions when completing this form please do not hesitate to contact me, by telephone on 0417 882 176, or email through [ehemphill@labyrinth.net.au](mailto:ehemphill@labyrinth.net.au). Or my supervisor Dr Chris Dubelaar, Department of Marketing, Monash University, P.O. Box 197, Caulfield East, VIC 3145 Ph:(03) 9903 1580 Fax:(03)9903 1558

Should you have any complaint concerning the manner in which this research (Project number 2001/524) is conducted, please do not hesitate to contact The Standing Committee on Ethics in Research Involving Humans at the following address: The Secretary

The Standing Committee on Ethics in Research  
Involving Humans  
PO Box 3A  
Monash University  
Victoria 3800  
Telephone (03) 9905 2052 Fax (03) 9905 1420  
Email: SCERH@adm.monash.edu.au

Thank you in anticipation.



Elizabeth Hemphill.



# Monash University Research

## Internet Advertising : A survey of Real Estate Agents

February 2002

The Internet is playing an increasingly important role in business today. Reasons given by Real Estate agents for using the Internet include "It is a strategic necessity", "It is a cost effective marketing channel", "It increases profits", "We have to have it to stay current", and "We don't understand why but we have it anyway".

These are all very interesting comments. The Internet also has an important role in marketing, both directly for communicating with customers and indirectly to position an organization in the minds of customers and competition.

However there appears to be some uncertainty among Real Estate agents as to the precise benefits from their investment in the Internet. The question is - what is the value of the Internet to a Real Estate agency, or agent? This research will conclusively answer this question by defining the value of the Internet to real estate agents. This could then help Real Estate agents to make decisions on any future Internet investment.

The attached survey has been designed based on sound research principles by Elizabeth Hemphill, a Masters of Business research student at Monash University, under the supervision of Dr Chris Dubelaar, Senior Lecturer in Marketing at Monash University. This research will help us to understand how the Internet contributes to important real estate processes. The study is being conducted solely to advance knowledge and has not been commercially sponsored in any way.

I ask that only residential property sales representatives participate in this research. You should expect to spend no more than 30 minutes completing the questionnaire should you personally choose to volunteer your time. The survey is completely anonymous and confidential. No details will be associated with any individual, or their organization, in the analysis or publication of the data. You have received this questionnaire only because your agency has agreed to participate in this postgraduate research project. If you personally do agree to complete the survey, please return it in the reply paid self-addressed envelope enclosed. There are no rewards or penalties for either completing or not completing the questionnaire.

I understand your time is valuable and thank you for your assistance in completing this survey. This research is totally dependent on your contribution. Results of the research will be available to you by email if you tick the appropriate box on the questionnaire.

If you have any problems or questions when completing this form please do not hesitate to contact me, by telephone on 0417 882 176, or email through [ehemphill@labyrinth.net.au](mailto:ehemphill@labyrinth.net.au). Or my supervisor Dr Chris Dubelaar, Department of Marketing, Monash University, P.O. Box 197, Caulfield East, VIC 3145 Ph:(03) 9903 1580 Fax:(03)9903 1558

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With thanks in anticipation,

FACULTY OF BUSINESS AND ECONOMICS

Caulfield Campus

PO Box 197

Caulfield East

Victoria 3145, Australia

Telephone: +61 3 9903 2653

Facsimile: +61 3 9903 2900

[www.monash.edu.au](http://www.monash.edu.au)

ABN: 12 377 614 012

# REIV

Real Estate House  
335 Camberwell Rd  
P.O. Box 443  
Camberwell Vic 3124

Telephone 61 3 9205 6666  
Facsimile 61 3 9205 6699  
DS No. 12150

Email: [reiv@reiv.com.au](mailto:reiv@reiv.com.au)

February 2002

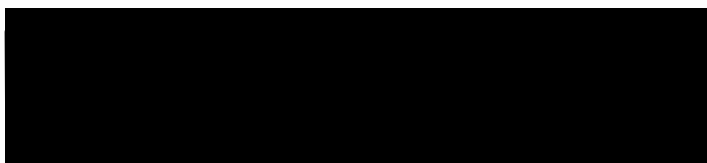
Dear Member

The Real Estate Institute of Victoria encourages the participation of its members in the enclosed Monash University Survey of Real Estate Agents.

To understand the impact of Internet advertising on our industry, your participation is important and valuable for this research.

The REIV and the real estate industry of Victoria will benefit greatly from a greater understanding of our changing industry.

Regards



ENZO RAIMONDO  
Chief Executive Officer

# **A Survey of The Use of Internet Advertising by Real Estate Agents (Victorian Residential Property Sales Representatives)**

Monash University Research Project  
for Master of Business Degree  
by E. Hemphill  
2002

Should you have any complaint concerning the manner in which this research (Project number 2001/524) is conducted, please do not hesitate to contact The Standing Committee on Ethics in Research Involving Humans at the following address:

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Victoria 3800  
Telephone (03) 9905 2052 Fax (03) 9905 1420  
Email: SCERH@adm.monash.edu.au

# A Survey of the Use of Internet Advertising

Thank you for your participation in this postgraduate research project. This questionnaire will take no more than 30 minutes of your time. Please return even partially completed questionnaires. All data will remain completely confidential. Aggregate results, that do not contain any identifying information, may be published in future academic publications.

The survey is designed in five sections.

- **Section One** relates to general issues regarding your own Real Estate agency
- **Section Two** relates to your own most recent experience of successfully securing a vendor's authority to market their property.
- **Section Three** relates to your own most recent experience of unsuccessfully attempting to secure a vendor's authority to market their property.
- **Section Four** relates more generally to your personal experiences and values as a Real Estate agent.
- **Section Five** relates to demographic details of your agency.

Please read all the questions carefully before following the instructions supplied. There are no correct or incorrect answers. Your participation is entirely voluntary. You are free to exit at any point.

Please return questionnaires in the reply paid envelope supplied. You may notice a code on the reply paid return envelope. This has been done so that you do not receive any unnecessary reminder notices for returning questionnaires once the coded envelope is returned. These envelopes will be discarded upon receipt of questionnaires and not connected with your responses in any way. Please return questionnaires at your earliest convenience.

Your participation is appreciated and valuable to this study.

Thank you for your time.

Elizabeth Hemphill.

If you would like the results of the survey sent to you, please tick the box and supply an email address. We can then forward results of the study upon completion of the study. This information will not be kept with your responses.

Please send me results of the survey.

☐

My email address is:

\_\_\_\_\_

**Section One.**

**This section relates to your real estate agency.**

- 1.1 Does your real estate agency currently use the Internet for the purpose of advertising residential properties for sale? Please tick the appropriate box.

Yes	<input type="checkbox"/>	2
No	<input type="checkbox"/>	1
Don't Know	<input type="checkbox"/>	0

If you answered yes then please go to Question 2 below. In you answered no then please continue with Question 1.2.

- 1.2 If your agency does not currently use Internet advertising for residential properties for sale, has your agency ever used the Internet for advertising residential properties for sale? Please tick the appropriate box.

Yes	<input type="checkbox"/>	2
No	<input type="checkbox"/>	1
Don't Know	<input type="checkbox"/>	0

- 1.3 If your agency does not currently use, or has never used, Internet advertising of residential properties for sale, in your own words please give your understanding of the reasons for this.

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**If your Real Estate Agency does not currently use Internet advertising for residential properties for sale, or has never used Internet advertising for this purpose, please go now to Question 8.**

- 2 Thinking now about how your real estate agency advertises on the Internet, please tick the boxes that represent how your organisation advertises residential sales properties on the Internet.

My agency has its very own web site such as <a href="http://www.woodards.com.au">www.woodards.com.au</a> or <a href="http://www.hockingstuart.com.au">www.hockingstuart.com.au</a>	<input type="checkbox"/>	1
My agency places property advertisements on our head office web site	<input type="checkbox"/>	2
My agency advertises properties with third party listing sites such as <a href="http://property.com.au">property.com.au</a> ; <a href="http://realestate.com.au">realestate.com.au</a> ; <a href="http://domain.com.au">domain.com.au</a> or <a href="http://realestateview.com.au">realestateview.com.au</a>	<input type="checkbox"/>	3
My agency places property advertisements on other web sites	<input type="checkbox"/>	4
My agency uses other web advertising options - please specify these	<input type="checkbox"/>	5

---

**For this next question, please consider your agency's very own web site. Examples of real estate agency web sites include [www.woodards.com.au](http://www.woodards.com.au) and [hockingstuart.com.au](http://hockingstuart.com.au).**

- 3 Please answer this question only if your agency does currently have its own web site, or has ever had its own web site. Using the scale below (where 10 = Agree Strongly and 0 = Disagree Strongly), please indicate how you feel about the following statements.

	Agree Strongly										Disagree Strongly		Can't Say
	10	9	8	7	6	5	4	3	2	1	0		
Our agency ...													
Updates our web site only when we have spare time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Places great importance on updating our web site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Updates our web site as soon as possible after changes to advertisements are planned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Believe that our web site is useless unless it is kept up to date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**For the next question, a third party online listing site is a web site such as [property.com.au](http://property.com.au), [domain.com.au](http://domain.com.au), [realestate.com.au](http://realestate.com.au) or [realestateview.com.au](http://realestateview.com.au). If your agency does not currently list properties, or has never listed properties, on any of these sites please go to Question 5 on the next page. If your agency does currently use a third party property listing site, please go to Question 4.**

- 4 If your agency currently does use third party online property listing sites, or has ever used such a site, please indicate how you feel about the following statements using the scale below (where 10 = Agree Strongly and 0 = Disagree Strongly).

	Agree Strongly										Disagree Strongly		Can't Say
	10	9	8	7	6	5	4	3	2	1	0		
Our agency ...													
Updates our third party online property listings only when we have spare time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Places great importance on updating our third party online property listings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Updates our third party online property listings as soon as a new listing is acquired.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Believes that our online third party property listings are useless unless they are up to date.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

5 In your opinion, what is the ONE MAIN objective of your organization's current web presence?  
Please tick ONLY ONE box.

- |                                |                          |   |
|--------------------------------|--------------------------|---|
| Promote company's brand        | <input type="checkbox"/> | 1 |
| Generate new listings          | <input type="checkbox"/> | 2 |
| Attract new buyers             | <input type="checkbox"/> | 3 |
| Provide information and advice | <input type="checkbox"/> | 4 |
| Cut transaction costs          | <input type="checkbox"/> | 5 |
| Qualify buyers                 | <input type="checkbox"/> | 6 |
| Other please specify           | <input type="checkbox"/> | 7 |

6 In your opinion, what are ALL the objectives of your organization's current web presence?  
Please tick ALL RELEVANT boxes.

- |                                |                          |   |
|--------------------------------|--------------------------|---|
| Promote company's brand        | <input type="checkbox"/> | 1 |
| Generate new listings          | <input type="checkbox"/> | 2 |
| Attract new buyers             | <input type="checkbox"/> | 3 |
| Provide information and advice | <input type="checkbox"/> | 4 |
| Cut transaction costs          | <input type="checkbox"/> | 5 |
| Qualify buyers                 | <input type="checkbox"/> | 6 |
| Other please specify           | <input type="checkbox"/> | 7 |

7 On the following scale (where 10=Significant Factor and 0=Not a Significant Factor), please tick the box that best represents what may have influenced your firm's decision to establish a presence on the web?

[illegible]

- 3 Please think now about how steps of the real estate transaction process may change as a result of the Internet. Please tick the box that best represents your feelings regarding future changes in the Real Estate exchange process as a result of the Internet.

	Change a Great Deal										Not Change at all	Can't Say
The Real Estate exchange process of ...	10	9	8	7	6	5	4	3	2	1	0	
Property listing will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buyer search will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Property evaluation will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Negotiation will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Execution/closing will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please specify and rate any other steps that will	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

The following section relates to your own most recent experience of successfully securing a vendor's authority to market their property.

## Section Two

**For this section of the questionnaire, a successful listing submission is when the presentation of a proposed marketing campaign to a potential vendor actually results in the vendor giving you the authority to market their property.**

- 9 Think now only about your last successful listing submission. If your firm currently uses the Internet for advertising residential properties for sale, on the scale provided (where 10=Definitely Included and 0=Definitely Not Included) please tick the box that best describes **Internet Advertising** details presented to the Vendor.

[illegible]

- 10 Continue to think about your last successful listing submission. On the scale provided (where 10=Definitely Included and 0=Definitely Not Included) please tick the box that best describes any **non-Internet advertising** details presented to the Vendor.

[illegible]



- 13

[illegible]

- 14

[illegible]

### Section Three

**Realistically, not all listing submissions are successful. For this section of the questionnaire, an unsuccessful listing submission is the presentation of a proposed marketing campaign to a potential vendor that DID NOT result in the vendor giving you the authority to market their property.**

- 15 Think now only about your last UNSUCCESSFUL listing submission. If your firm currently uses the Internet for advertising residential properties for sale, on the scale provided (where 10=Definitely Included and 0=Definitely Not Included) please tick the box that represents **Internet advertising** details presented to that Vendor

[illegible]

- 16 Continue to think about your last UNSUCCESSFUL listing submission. On the scale provided (where 10=Definitely Included and 0=Definitely Not Included) please tick the box that best describes any non-Internet advertising details presented to the Vendor

[illegible]



- 19 Thinking still about your last unsuccessful listing submission, on the following scale (where 10 = Changed A Great Deal and 0 = Not Changed At All), please tick the box that best represents how you feel about the following statements.

	Changed A Great Deal	10	9	8	7	6	5	4	3	2	1	Not Changed At All 0	Can't Say
Negotiations resulted in ...													
My sales commission being		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The property list price and reserve price		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The advertising campaign being		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sales dates being		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sale type being		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any other items (please specify and rate)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 20 Thinking still about your last unsuccessful listing submission, on the following scale (where 10=Well Developed and 0=Not well Developed), please tick the box that best represents how you feel about the following statements.

	Well Developed	10	9	8	7	6	5	4	3	2	1	Not Well Developed 0	Can't Say
When presenting my marketing campaign to the vendor my skill in ...													
Persuasively demonstrating my competence was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Listening to what the vendors were really saying was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting feedback, verifying my listening skills was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting to know the vendor was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hearing what the vendors had to say was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helping the vendors make a decision was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not being offensive was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting along with the vendors was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attractively grooming my hair and skin was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriately selecting my clothes to impress		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speaking distinctly and appropriately was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using manners and proper protocol was		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 21 Still thinking about the last time you unsuccessfully presented a marketing campaign to a potential vendor. Please answer the following questions by ticking the appropriate box.

Did that potential vendor sign with another agent at, or around that time?

Yes	<input type="checkbox"/>	2
No	<input type="checkbox"/>	1
Don't Know	<input type="checkbox"/>	0

Did that potential vendor decide not sell their property at that time?

Yes	<input type="checkbox"/>	2
No	<input type="checkbox"/>	1
Don't Know	<input type="checkbox"/>	0

22 In the last 12 months, how many listings have you personally presented to potential vendors?  
Please write the number in the space provided.

- 24 Think now about how you see the role of a real estate agent. Please tick the box that best represents how you feel about the following statements on the scale below (where 10=Agree Strongly and 0=Disagree Strongly).

[illegible]

- 25 Still thinking about yourself, please consider your roles other than your real estate agent role. On the scale below (where 10=Extremely Important and 0=Extremely Unimportant), please tick the box that best represents how you feel about the following.

	Extremely Important				Extremely Unimportant							Can't Say
	10	9	8	7	6	5	4	3	2	1	0	
It is important to ...												
Be looked up to by people in society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Be paid a high salary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Become quite wealthy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Get a good reputation for your good work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Give aid to those in need	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help build a better society	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help others live a fuller life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Know that other people think your work is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Make an important contribution to the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obtain a high status in the eyes of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receive enough pay to live well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receive more than your normal pay for good work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The final section on the next page relates to demographic details about your agency.**

**Section Five relates to demographic details of your agency.**

- 26 At this present time, please write the number of full time employees employed by your agency in the space provided. Include all permanent employees, not just sales employees.

- 27 In the box provided, please write the median residential property sale price for **your agency** ...

In the last month.

In the last quarter.

In the last year.

- 28 In the box provided, please write the median residential property sale price **for yourself**, as an agent...

In the last month.

In the last quarter.

In the last year.

- 29 Please tick the box that indicates the city in which your agency mainly sells property.

Banyule	<input type="checkbox"/>	1
Bayside	<input type="checkbox"/>	2
Boroondara	<input type="checkbox"/>	3
Brimbank	<input type="checkbox"/>	4
Cardinia Shire	<input type="checkbox"/>	5
Casey	<input type="checkbox"/>	6
Darebin	<input type="checkbox"/>	7
Frankston	<input type="checkbox"/>	8
Glen Eira	<input type="checkbox"/>	9
Greater Dandenong	<input type="checkbox"/>	10
Hobsons Bay	<input type="checkbox"/>	11
Hume	<input type="checkbox"/>	12
Kingston	<input type="checkbox"/>	13
Knox	<input type="checkbox"/>	14
Manningham	<input type="checkbox"/>	15
Maribyrnong	<input type="checkbox"/>	16
Maroondah	<input type="checkbox"/>	17

Melbourne	<input type="checkbox"/>	18
Melton Shire	<input type="checkbox"/>	19
Monash	<input type="checkbox"/>	20
Moonee Valley	<input type="checkbox"/>	21
Moreland	<input type="checkbox"/>	22
Mornington Peninsula	<input type="checkbox"/>	23
Nillumbik	<input type="checkbox"/>	24
Port Phillip	<input type="checkbox"/>	25
Stonnington	<input type="checkbox"/>	26
Whitehorse	<input type="checkbox"/>	27
Whittlesea	<input type="checkbox"/>	28
Wyndham	<input type="checkbox"/>	29
Yarra	<input type="checkbox"/>	30
Yarra Ranges	<input type="checkbox"/>	31
Docklands Authority	<input type="checkbox"/>	32
Other	<input type="checkbox"/>	33

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**Thank you very much for your time.**

**If you have any further comments to add to this survey please note these in the space provided on the next page.**

**If you have any comments on this survey please note these in the space provided here.**

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**If you would consider making yourself available for any follow-up contact please write your contact details in the space below.**

**Name:** \_\_\_\_\_

**Phone :** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**eMail address:** \_\_\_\_\_

**If you have any questions regarding this survey please do not hesitate to contact me by telephone on 0417 882 176, or email through [ehemphill@labyrinth.net.au](mailto:ehemphill@labyrinth.net.au).**

**Or**

**My supervisor Dr Chris Dubelaar, Department of Marketing, Monash University, P.O. Box 197, Caulfield East, VIC 3145.**

**Ph:(03) 9903 1580 Fax:(03)9903 1558**

**Thank you very much for your time.**

## **APPENDIX 3 - WORDING OF ITEMS AND MEASURE RELIABILITY**

### **Property Information**

In the pre-test stage this scale had only three items. These referred to:

*Only good things about the property;*

*Anything else the vendor would tell me unprompted about the property; and*

*Anything else the vendor would tell me when prompted about the property.*

As a scale this performed poorly with reference to both EFA and Alpha. The Alpha could be improved to 1.0 with elimination of the first item. This item in fact exhibited a highly negative factor loading originally.

In consultation with agents, redefinition and rewording the question focussed more on information acquisition as a function of selectivity of information appropriation.

Definition of information appropriation in earlier in this chapter refers to levels of discriminatory appropriation by agents as they seek to establish agent-principal relationships. This means that levels of information sought that include ONLY good and ONLY bad information will indicate the degree to which an agent discriminated in their appropriation of property specific information. Deliberately placing these items among other good and bad information related items provides a pool of items for final scale and model specification. Interestingly, the agents themselves did not confirm whether good or bad information was most important in the pre-test or consultation processes. Data have been collected for both so that analysis can examine these in more detail.

## **Agent Media Selection**

EFA performed on the combined dimensions of media and advertising reveals two factors. These are split according to dimensions of media and advertising. This verifies these are individual constructs at both pre-testing and operational levels exhibiting reasonable reliability and internal component limits.

## **Representation**

The literature review reveals that sellers and agents may have conflicting personal goals. This lack of congruency manifests itself in the focus of an agent's efforts by way of representation. Moore et al. (1992) acknowledge that when sellers use every effort to persuade the buyer to make as many concessions as possible they are behaving in a way consistent with legal definitions of an exclusive agency model – working for the seller's benefit.

Two items included in the scale captured buyer representation - Help buyer get good terms (Q24E) & Be supportive of buyer (Q24F). Local agents were asked to reflect upon their sales experiences only so these items will be excluded from this analysis.

As mentioned in earlier in this chapter, Agent Representation is meant to indicate where the agent most focuses their efforts. If an agent is most focussed on their own goals then they cannot be most focussed on the goals of another party. Likewise, if an agent is most focussed on the goals of the seller then that agent is not most focussed on the goals of the agent. The data supports the exclusive nature of this relationship. By retaining only the three seller representation items we in fact capture the degree and

direction of the agent's focus. The correlation matrix below shows figures only for seller representation items.

Additional items were included to establish a scale with multi-items because Moore et al. (1992) only used single indicators. Of the pool of items generated, the table below shows correlation results for those questions obviously related to seller representation. The item developed by Moore et al. (1992) (Q24A on our research instrument and Q20I on the pre-test instrument) has however been omitted because this could be construed as working to close a deal for reasons other than the seller's benefit.

**Table 56 Correlation matrix for agent representation (pre-test)**

	<b>Q20ii</b>	<b>Q20iii</b>	<b>Q20iv</b>
Q20ii	1.0000		
Q20iii	.5103	1.0000	
Q20iv	.0462	.8659	1.0000

While all items are positively correlated, the correlation between Q20II and Q20IV is very small. This does not really establish the measure as robust so we will look at the operationalisation to confirm what theoretically should perform well as a measure of agent representation.

**Table 57 Correlation matrix for agent representation (operationalisation)**

	<b>Q24B</b>	<b>Q24C</b>	<b>Q24D</b>
Q24B	1.0000		
Q24C	.6028	1.0000	
Q24D	.5803	.3851	1.0000

Operationalisation of the scales produces conflicting results. The problematic correlation at pre-testing is resolved but a problematic correlation arises with a previously strong link (.3851 at operationalisation compared to the same items linked at .8559 in pre-test). This apparent discrepancy between pre-test and operationalisation is not reason enough to reject a measure because it takes more than one study to establish the validity of a construct, in fact this is noted to be “*an ever-extending process of investigation and development*” (Peter 1981, Page 207). Note also that other questionnaire items relating to representation will be used in further research to pursue the findings of Moore et al. (1992).

## Agent Values

Measuring Money and Prestige was complicated because of the known condition discussed in earlier in this chapter characterised by a lack of independence between these two constructs. Pre-test data revealed a lack of independence between Money and Prestige similar to that identified by Pryor (1997), noted previously in this thesis. The table below shows correlations for these constructs in pre-testing.

**Table 58 Correlation matrix for agent values (pre-test)**

	Money				Prestige			
	Q21ii	Q21iii	Q21xi	Q21xii	Q21i	Q21iv	Q21viii	Q21x
Q21ii	1.00							
Q21iii	0.72	1.00						
Q21xi	0.75	0.49	1.00					
Q21xii	0.65	0.73	0.36	1.00				
Q21i	0.92	0.66	0.66	0.66	1.00			
Q21iv	0.28	0.67	0.12	0.43	0.23	1.00		
Q21viii	0.78	0.74	0.46	0.76	0.84	0.51	1.00	
Q21ix	0.38	0.23	0.37	0.20	0.43	-0.23	0.31	1.00

This table shows that intercorrelations between aspects of money and prestige are inconsistent. These are not two distinctly separate constructs. The table below shows that Money and Prestige exhibited similar characteristics in the larger sample at operationalisation.

**Table 59 Correlation matrix for agent values (operationalisation)**

	Money				Prestige			
	Q25B	Q25C	Q25K	Q25L	Q25A	Q25D	Q25H	Q25J
Q25B	1.00							
Q25C	0.76	1.00						
Q25K	0.32	0.26	1.00					
Q25L	0.41	0.35	0.27	1.00				
Q25A	0.56	0.47	0.28	0.22	1.00			
Q25D	0.12	0.07	0.37	0.13	0.39	1.00		
Q25H	0.36	0.23	0.26	0.12	0.32	0.10	1.00	
Q25J	0.49	0.57	0.32	0.30	0.55	0.16	0.45	1.00

This noted lack of distinction between money and prestige, and lack of homogeneity within constructs confirms an important characteristic of data collected by Pryor (1997, Page 21). A reason for this identified by Roberts and Jones (2001) is that prestige is in fact one of four dimensions of money. Money can be used as a tool to influence and impress others, as a symbol of success - a situation evident also in literature reviewed by these authors. Prestige represents a hierarchical concept of separation from others, the definition of which is based on the values of a particular group for which respect and admiration is received (Sandefur 2001). The apparent blending of dimensions of money and prestige in both the literature and our data suggest that some selection of components that best differentiate respondents from each other is justifiable. Money will therefore be retained in its entirety to capture prestige as suggested because this will capture aspects of Prestige according to Roberts and Jones (2001).

The other dimension of agent values being examined is altruism. Items within this construct exhibit high levels of intra-correlation ranging from .4515 to 1.000. Pre-test data revealed this to be a good measure- suitable for operationalisation.

**Table 60 Correlation matrix of altruism (pre-test)**

	<b>Q21v</b>	<b>Q21vi</b>	<b>Q21vii</b>	<b>Q21ix</b>
<b>Q21v</b>	1.00			
<b>Q21vi</b>	1.00	1.00		
<b>Q21vii</b>	0.65	0.65	1.00	
<b>Q21ix</b>	0.80	0.80	0.45	1.00

Problematic correlation between Q21V and Q21VI imply perfectly correlated items between which no differences exist. Operationalisation produced even better results with the lowest inter correlation being .6129 compared to .4515 in Pre-testing. Results are shown in the table below.

**Table 61 Correlation matrix of altruism (operationalisation)**

	<b>Q25E</b>	<b>Q25F</b>	<b>Q25G</b>	<b>Q25I</b>
<b>Q25E</b>	1.00			
<b>Q25F</b>	.68	1.00		
<b>Q25G</b>	.61	0.79	1.00	
<b>Q25I</b>	.64	0.82	0.72	1.00

With such consistent internal correlations, Altruism seems to exhibit characteristics of a good measure in line with requirements specified by authors such as Churchill (1979) and Finn and Kayande (1997).

## APPENDIX 4 - VALIDATION

**Table 62 Violation of assumptions**

<b>Assumption (Judge et al. 1982, Page 125)</b>	<b>Violation</b>
Dependent variable can be calculated as a linear function	Wrong regressors – omission of relevant and inclusion of irrelevant variables
	Nonlinearity
	Changing parameters during collection period
Expected value of disturbance term is zero	Biased intercept
Disturbance terms all have same variance and are not correlated with one another	Heteroskedasticity
	Autocorrelated errors
Independent observations	Errors in measures & variables
	Autoregression (lagged dependent variable as independent variable)
	Simultaneous equation estimation (simultaneous interactions causing changes in dependent variable)
Number of observations is greater than number of independent variables and no exact linear relationship between independent variables	Multicollinearity

**Table 63 Item statistics**

Item	Val-id	Miss-ing	Mean	S.E. Mean	Std. Dev	Var-iance	Item	Val-id	Miss-ing	Mean	S.E. Mean	Std. Dev.	Var-iance
q9a	232	42	7.52	0.22	3.34	11.14	q14a	242	32	8.34	0.10	1.63	2.66
q9b	235	39	7.71	0.22	3.32	11.00	q14b	247	27	8.74	0.10	1.52	2.32
q9c	233	41	7.54	0.22	3.43	11.79	q14c	244	30	8.22	0.12	1.89	3.55
q9d	229	45	7.22	0.25	3.80	14.46	q14d	243	31	8.48	0.12	1.80	3.24
q9e	231	43	7.24	0.24	3.63	13.15	q14e	244	30	8.80	0.10	1.51	2.29
q9f	232	42	8.18	0.21	3.18	10.12	q14f	244	30	8.04	0.13	2.03	4.13
q9g	224	50	5.63	0.27	4.10	16.83	q14g	244	30	8.86	0.11	1.79	3.19
q9h	229	45	6.69	0.27	4.04	16.36	q14h	243	31	8.88	0.11	1.70	2.89
q9i	231	43	7.36	0.23	3.46	11.99	q14i	244	30	8.44	0.12	1.94	3.76
q10a	227	47	8.17	0.19	2.87	8.23	q14j	243	31	8.38	0.12	1.94	3.77
q10b	227	47	7.63	0.22	3.35	11.21	q14k	245	29	8.82	0.09	1.47	2.15
q10c	229	45	7.21	0.23	3.55	12.62	q14l	233	41	9.14	0.08	1.27	1.62
q10d	218	56	8.15	0.21	3.17	10.07	q24b	256	18	8.34	0.16	2.58	6.66
q10e	224	50	8.44	0.17	2.54	6.47	q24c	254	20	6.75	0.22	3.47	12.05
q10f	226	48	8.93	0.15	2.22	4.91	q24d	254	20	9.01	0.12	1.86	3.47
q10g	216	58	7.49	0.24	3.49	12.21	q25b	266	8	7.03	0.13	2.17	4.69
q10h	223	51	7.65	0.23	3.45	11.88	q25c	264	10	6.53	0.15	2.42	5.88
q10i	224	50	8.20	0.19	2.83	8.01	q25e	266	8	8.53	0.11	1.74	3.04
q11a	253	21	9.06	0.11	1.68	2.83	q25f	262	12	8.02	0.14	2.20	4.84
q11b	251	23	7.64	0.17	2.67	7.14	q25g	262	12	7.56	0.14	2.32	5.37
q11c	254	20	8.30	0.15	2.45	6.02	q25i	262	12	7.98	0.13	2.07	4.28
q11d	250	24	8.70	0.14	2.22	4.93	q25k	266	8	8.62	0.10	1.64	2.68
q11e	250	24	8.91	0.12	1.86	3.47	Q25l	258	16	7.47	0.17	2.72	7.41
q11f	241	33	3.98	0.23	3.58	12.82	q13a	241	33	3.83	0.22	3.41	11.63
q11g	246	28	8.23	0.16	2.53	6.38	q13b	239	35	4.45	0.20	3.15	9.93
q11h	247	27	6.80	0.20	3.13	9.80	q13c	239	35	3.87	0.22	3.36	11.27
q11i	241	33	2.63	0.21	3.19	10.15	q13d	227	47	2.95	0.21	3.22	10.36
q11j	240	34	4.73	0.25	3.89	15.15	q13e	233	41	3.10	0.23	3.57	12.77
q12aii	247	27	5.04	0.24	3.73	13.92							
q12aiii	250	24	8.30	0.14	2.29	5.26	q12ai	248	26	5.12	0.25	3.90	15.25

Although some items have very low levels of variance (such as Q14l), this will be considered in final modification specification. Other items exhibit levels of variance that will provide a base for analysis.

## **Multi-item variance**

**Table 64 Multi-item variance**

<b>Construct</b>		<b>Minimum Item Variance</b>	<b>Maximum Item Variance</b>
Internet advertising		10.12	16.83
Internet media		11.00	11.79
Non-Internet advertising		4.91	12.21
Non-Internet media		8.23	12.62
Vendor information		2.83	7.14
Property information		3.47	15.15
Agency control		5.26	15.2
Negotiation		9.9	12.7
Values –	Altruism	1.74	2.32
	Money	3.0	5.3
Agent Skill –	Presentation	1.6	3.7
	People	2.8	4.1
	Listening	2.2	3.5
Representation		3.4	12.0

Each multi-item construct exhibits a range of variance and means for observed items.

Absence of variance constancy within a construct may be problematic according to Hill *et al.* (2001).

## Multi-item reliability

**Table 65 Multi-item measure Alpha values and factor analysis**

Construct	k-item correlat- ion with error-less true score	Alpha	Exploratory Factor Analysis			
		For Operational Scale	% variance Factor 1	% variance Factor 2	No Items	Number of Compon- ents
Media	0.92	0.85	77.71	13.76	3	1
Advertising	0.91	0.83	57.65	14.47	5	1
Vendor Information	0.88	0.78	62.00	18.56	4	1
Property Information	0.86	0.74	70.53	20.46	2	1
Agency control	0.78	0.61	56.04	28.79	3	1
Negotiation	0.94	0.89	69.37	11.61	5	1
Presentation						
Listening skills	0.94	0.89	72.04	13.58	4	1
People skills	0.89	0.79	61.33	15.20	4	1
Presentation Skills	0.93	0.87	72.46	18.76	4	1
Representation	0.86	0.74	68.35	20.52	3	1
Agent Values						
Money	0.84	0.71	54.76	21.32	4	1
Altruism	0.95	0.91	78.55	10.48	4	1

Although a high Alpha is desired, items with low correlations can still “*yield an interpretable scale*” (Cronbach 1951). If the calculated Alpha for a scale is low it is assumed that the sample of items capturing the construct that motivated the measure does not provide support for interpretable statements about the data (Cronbach 1951). Mathematically, the calculated Alpha is a lower bound for the coefficient of precision of the items used in that calculation based on the proportion of test variance attributable to common factors among the items (Cronbach 1951). If an alpha value is low then some

items may be considered for deletion. As mentioned already, a low Alpha is considered by Finn and Kayande (1997) to be  $< .75$  for one or two item scales to over  $.9$  for 4 item scales.

Churchill (1979) suggests that items not contributing highly to a scale's reliability should be considered for deletion. Considering that improvements to scales cannot be done just on the basis of an alpha calculation the following changes were implemented. The following discussion will firstly explain findings pertaining to Alpha calculations and then Exploratory Factor Analysis detailed in the table above.

#### Alpha calculations

Proposed Media – Altering of scale items to those based on differences between Internet and non-Internet reduced the Alpha from  $.8966$  to  $.8503$ . Because this also reduced the number of items from 6 to 3, scale reliability actually improved. The resulting scale using 3 indicators based on differences between media types more closely represents the theory that motivated the scale design to start with.

Proposed Advertising – Altering of scale items to those based on differences between Internet and non-Internet reduced the Alpha from  $.8682$  to  $.8278$ . Because this also reduced the number of items from 12 to 6 the scale reliability actually improved.

One further alteration based on the overlap of items regarding advertising costs was made before operationalising this scale. If advertising costs were changed then they must have been included in the proposed advertisements. This is therefore captured in both negotiation and proposed advertisements. The resulting scale using only 5 indicators more closely represents the theory that motivated the scale design to start with.

Property Information - Altering the scale items to be confined to those based more closely on the selectivity of information appropriation items was achieved by including only items pertaining to ONLY good or bad information. This action increased the Alpha value from .6065 to .7396 while reducing the number of items from 6 to 2. By eliminating items that do not nomologically relate to the discretionary information acquisition the result is a mathematically much more reliable scale.

Agency control – Excluding item Q12ai increased the Alpha value from .4967 to .6052 whilst decreasing the number of items from 4 to 3. Mathematically this represents a much more reliable scale. However, this is not a sufficient condition for excluding this item. This item was found to be a source of measurement error as respondents were unable to distinguish any difference between Q12ai and Q12aiii. Q12aiii could not be dropped because this was an important factor explaining the variance of the overall construct whereas Q12ai was not. This variable is in fact one that contributes more to the modelling process once parcelled but alpha calculations are used in error term computations. Implicit reliability is therefore established for all multi-item measures.

### Exploratory Factor Analysis (EFA)

The table above also shows that all constructs were considered to be uni-dimensional (with EFA revealing only single components for each construct examined). EFA was performed using multiple single indicators with a Varimax rotation. All constructs had relatively low levels of variance explained by the second factor generated. This implies that the first factor (with only one component identified) accounts adequate amounts of variance in the scale being examined. The degree to which total variance is explained by a single factor is of assistance if it is necessary to narrow the items for model specification because it is important to retain some variance for model specification (Finn and Kayande 1997).

This section has demonstrated that constructs identified are uni-dimensional and that narrowing of items is warranted to establish acceptable scale reliability.

## Multi-item convergent validity

**Table 66 Multi-item convergent validity**

Construct	Highest within construct correlation	Items	Lowest within construct correlation	Items	Difference between highest & lowest correlation
Media	0.74	Q9B&C	0.62	Q9A&B	0.12
Advertising	0.58	Q9E&F	0.34	Q9F&G	0.24
Vendor Information	0.80	Q11C&D	0.26	Q11A&B	0.54
Property Information	0.59				
Agency Control	0.53	Q12aIi&iv	0.17	Q12aiii,iv	0.36
Negotiation	0.76	Q13D&E	0.47	Q13B&D	0.28
Agent Skills					
Listening skills	0.74	Q14B&E	0.52	Q14C&E	0.22
People skills	0.55	Q14G&H	0.45	Q14F&H	0.10
Presentation Skills	0.89	Q14I&J	0.46	Q14J&L	0.43
Representation	0.60	Q24B&C	0.38	Q24C&D	0.22
Agent Values					
Money	0.76	Q25K&L	0.24	Q25C&K	0.52
Altruism	0.82	Q25F&I	0.62	Q25E&G	0.20

Very low correlations imply a lack of convergence within a construct. Items identified in the table above as exhibiting a small *highest within construct correlation* require further investigations. Although correlations approaching 1 are considered to be preferable (and many of those in the table above are less than .6) the column indicating the *difference between highest and lowest within construct correlation* adds credence to establishing convergent validity. If this difference is very small then convergent validity is implied because all items within the construct correlate similarly. But if the

*lowest within construct correlation* is very different from the *highest within construct correlation* then a lack convergence within that construct is implied.

Items identified as being involved in the *lowest correlation within a construct* identify potentially problematic paired items. For example, Agency control (Items iii & iv) and Money (Items C & K) exhibit extremely low levels of correlation.

Reading the table above, convergent validity is implied only for Altruism, Media, People skills and listening skills because the highest within construct correlation is acceptable (near 1) and differences between highest and lowest correlations are also small (near 0). Such a lack of convergence is a reported characteristic of multiple item measures (Bhargava *et al.* 1994), leading to the plausibility of reducing the number of indicators used to single items (Finn and Kayande 1997).

Further investigation of the most problematic constructs follows.

#### Agent Skills

EFA on the whole construct (People skills, listening skills and presentation skills) is shown in the table below.

**Table 67 Dimensionality of agent presentation skills.**

<b>Construct</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Skill (Domain of Construct)</b>	<b>Survey Item</b>
Agent persuasively demonstrating competence.	0.76	0.20	Listening	A
Agents listening to what vendors were really saying.	0.83	0.21	Listening	B
Agent getting feedback.	0.75	0.16	Listening	C
Agent getting to know the vendor.	0.73	0.20	People	D
Agent hearing what the vendors had to say.	0.83	0.21	Listening	E
Agents helping the vendors make a decision.	0.72	0.18	People	F
Agent not being offensive.	0.60	0.42	People	G
Agent getting along with the vendors.	0.45	0.65	People	H
Agent attractively grooming hair and skin.	0.10	0.92	Presentation	I
Agent selecting clothes to impress.	0.07	0.93	Presentation	J
Agent speaking distinctly and appropriately.	0.42	0.73	Presentation	K
Agent using manners and proper protocol.	0.46	0.60	Presentation	L

This table shows that Agent Skills does not seem to exhibit three components, but instead exhibits only two. Items defined at a theoretical level to represent listening skills in fact clearly load with people skills. This means that listening skills cannot be treated as a distinct unidimensional construct because of inter-connections with people skills. Additionally, within both Presentation and People skills there are items that noticeably cross-load (items G, H, and L). This means that even within theoretically defined constructs convergent validity cannot be finally established for these constructs.

### Agent Values

EFA on the whole construct (Money and Altruism) is shown in the table below.

**Table 68 Dimensionality of agent values**

<b>Construct</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Value</b>
To be paid a high salary	0.081	0.89	Money
To become quite wealthy	-0.044	0.87	Money
To give aid to those in need	0.82	0.05	Altruism
To help build a better society	0.93	0.04	Altruism
To help others live a fuller life	0.87	0.13	Altruism
To make an important contribution to the community	0.90	0.09	Altruism
To receive enough pay to live well	0.21	0.49	Money
To receive more than your normal pay for good work	0.02	0.64	Money

This table shows that items load strongly into their theoretically defined constructs Altruism and Money. These constructs are distinct and exhibit a lack of strong cross-loadings. This implies internal convergence despite this not being evident solely upon examination of correlations.

Further investigation of validity depends on establishing that items do not correlate more highly with items in other constructs is a matter of establishing discriminant validity.

## **APPENDIX 5 – FILE STRUCTURE, SAMPLE SIZE & MISSING**

### **VALUES**

The number of completed questionnaires in this research is 137. Each completed questionnaire contains data on one successful and one unsuccessful agent-principal relationship establishment attempt, giving a total number of observations of 274.

#### **File structure**

The final data file has two sections. Section one contains data for relationship establishment attempts while section two contains data for agent values and representation. Cases are paired, differentiated by an identifier of either successful or unsuccessful relationship establishment. For this reason it is necessary to briefly consider the consequence of re-asking a question in both the case of successful and unsuccessful relationship establishment efforts. This has the potential to produce variance from a situation known as test-retest where the results should be the same between events but are in fact answered differently.

One example to be considered is the case of agent presentation skill. Questions relating to skill development were asked twice – once with reference to a successful relationship establishment and then again with reference to an unsuccessful relationship establishment attempt. If an agent took no steps to change the level of skill development between attempts then answers for a single agent should exhibit no variance between successful and unsuccessful attempts at relationship establishment.

This was verified by comparing results to relevant questionnaire items of a random selection of half the data to those of the other half of respondents. Testing the null hypothesis that test-retest variance exists for these items produced a significant result. Rejecting this hypothesis leads to the conclusion that no significant measurement error was produced from testing-retesting the participant in this manner.

For further analysis Roth and Switzer III (1999) advise investigating the completeness of a data set. SEM in particular requires this. The next section examines the nature of completeness of the data set.

### **Missing answers**

A missing answer is considered to be a non-response. These occur at both the instrument level (respondents who choose not to participate at all) and item level (respondents who choose not to complete specific parts of individual questions) (Roth and Switzer III 1999). Instrument level missing responses were discussed in detail in the preceding chapter. This section of the thesis will focus on item level missing data.

Item level missing data can be missing completely at random (not systematically related to anything else), conditional on other variables (the reason for missingness can be measured) or related to personal characteristics of participants (Figueredo *et al.* 2000). Preservation of data integrity, and validity of conclusions, therefore depends on methods adopted for treatment of all levels of missing data, which in turn depends on identifying the nature of missingness.

*“Missing data in the range of 5% or under (for a given variable) represents a situation in which researchers probably should not worry too much about their choice of Missing Data Treatments. Even some situations with under 10% missing data are not too problematic unless the data set is quite small or relevant covariances are quite small.”* (Roth and Switzer III 1999).

Rates of missing data for all constructs except Agent Values are above 5%, with most constructs exhibiting rates of missingness 10% or greater. According to Roth and Switzer III (1999), analysis and treatment of missing data in this thesis will be considered further in the next section to allow further analysis of a complete data set.

### **Method for resolving missing values**

Whilst comparing missing data resolution methods, Figueredo et al. (2000) find that stepwise, pair wise and list wise deletion methods artificially inflate the effects of cases by reducing sample size. Such sample size reductions increase the likelihood of type two errors, whereby a null hypothesis may be incorrectly accepted. Levels of missing responses identified in the previous section mean that the data collected are not suitable for missing value treatment using deletion methods because this would excessively reduce the number of cases in the final data set, potentially leading to incorrect conclusions and hypothesis test interpretation.

Authors such as Chui and Sedransk (1986), Dempster, Laird, and Rubin (1986), Figueredo et al. (2000) and Roth and Switzer III (1999) recommend imputation to overcome sample size reduction problems and incompleteness of data. Such imputation was originally based on either between or within subject's calculations. Between

subjects imputation is observed to be problematic because justification of substitution assumes the missing datum is similar on the variable of interest to other cases with non-missing data (Dempster *et al.* 1986; Figueredo *et al.* 2000; Roth and Switzer III 1999). For this reason Figueredo *et al.* (2000) strongly advocate within subjects imputation, recommending however that a general strategy for overcoming missing data problems is to first examine the nature of missing data in the data set.

Expectation-maximisation (EM) is a widely used solution to incomplete-data problems according to Wright and Kennedy (2000). Best described by Dempster *et al.* (1986), the method is preferable to other methods because it does not depend just on replacing missing data by their conditional expectation but rather takes the expected value of the complete-data log-likelihood function, conditional on the observed data (Flury and Zoppe 2000). This process used in this thesis to impute figures close to original observed figures based on specification at the construct level.

Three important issues relevant to this thesis arose from a discussion of Dempster *et al.*'s work at a meeting of the Royal Statistical Society in 1977. Firstly, EM works better with "*judicious choice of the form of the hypothetical data*" (Little, R.J.A., in Silvey 1976).

Secondly, EM can produce results of non-unique parameter estimates resulting from a combination of starting values and dimensionality of data (Murray, G.D. in Silvey 1976). This author warns of indiscriminate use of the algorithm. EM estimates are dependent on dimensionality, or at least the items used, in calculations in our data.

Patterns of missing data, rather than just rates of missing data are examined to clearly understand what should be included in EM calculations. This is critical to this thesis because assumptions of error variance constancy depend on variance calculations that will use EM imputed values. Calculation parameters are provided so that results are reproducible.

Observable patterns of missingness in the data collected show that three cases omitted most items, four other cases omitted Non-Internet advertising questions and five other cases omitted Internet advertising questions. This amounts to a total of 13 cases with less than perfectly completed responses. Data collected remains sufficient for analysis. These incomplete cases are retained because they make a contribution as respondents that made the effort to participate.

Reasons given by agents for not responding are discussed in Chapter 5 of this thesis. Further examination of patterns of missingness revealed no significant inconsistencies. For example those respondents that did not use Internet advertising did not answer incorrectly other sections of the survey instrument. Pre-testing and design methods ensured the instrument was clear and doable, preventing inconsistencies of this nature.

Thirdly, the EM algorithm is particularly simple and useful for canonical parameters (Nelder, J.A. in Silvey 1976, Page 23). Canonical variables are latent variables that represent a set of observed variables. Constructs used in this thesis were designed to represent the set of variables observed, with the aid of the data collection instrument.

Furthermore, relationships observed between sets of dependent and independent canonical variables describe many-to-many relationships, in difference to multiple-regression that describes many-to-one relationships (Garson 2002). This is relevant because while relationship establishment is looking fundamentally at a one-to-many relationship (all the variables allegedly important predictors of relationship establishment attempts), in all reality many-to-many relationships exist between these latent predictor variables (noted by the interaction effects proposed in the theoretical model). EM is therefore particularly relevant for variables that define constructs that influence relationship establishment. The next section details the imputation method used in this thesis.

### **Imputation with Expectation Maximisation.**

SPSS Expectation Maximisation estimates the means, the covariance matrix, and the correlation of quantitative variables with missing values, using an iterative process. The assumption of normality produced results closest to original values. This minimises any extraneous variance produced by the imputation process. Future analysis of variance and co-variance is thus protected.

Valid measures only are included in imputation calculations because “*judicious choice*” of variables improves the accuracy of EM calculations, depending on rates of missingness. However, selection is not based on data alone and in fact considers items from a theoretical perspective (Peter 1981). This is a recommended technique for refining a data set to overcome subjectivity, bias and correlations of convenience (Garson 2002, Page 5).

In order to perform EM calculations only on items not recommended for exclusion one further decision is required. Two possibilities existed for the definition of input to EM. Option one depended on responses being MAR whereby interaction between items is explainable & measurable. In this case items within individual constructs are processed as a unit without other constructs. Option two depended on responses not being MAR whereby the interaction between variables necessitates all items to be used for analysis to be processed in the one batch. Comparing results of both methods, some difference exists between the two options. 34% of means calculated on imputed items using Option Two were further from original values than Option One. Therefore, constructs were processed in separate batches for EM imputation to maximise the likeness to original data collected at the construct level.

83% of mean values after EM calculations were larger than original estimates. Vendor information differed most (-.0544) from original estimates and proposed media differed least (.0025). As already discussed, these differences result from implementation of the EM algorithm only and are small in magnitude compared to standard errors. Items included in the original and calculated means are identical for each construct. This imputation method was selected for reasons already discussed to minimise any discrepancy between original estimates and calculated data points.

Although three negative values were imputed (in essence an issue of data entry) these were corrected manually so that EM did not distort the dataset and integrity of the data is therefore preserved.

## Patterns of missing data

Items with no pattern of missing values:=

Q25D;Q25B;Q25E;Q25K;Q25A;Q25C;Q25F;Q25G;Q25I;Q25J;Q25L;Q24C;Q24D;Q24F;Q24J;Q24K;Q24G;Q24B;Q24L;Q24M;Q24E; Q24I; Q24N

**Table 69 Missing value patterns**

Number of Cases

	7	87	8	4	5	4	4	5	4	3
Q24H							X			
Q13C										X
Q13A										X
Q13B										X
Q13E										X
Q13D										X
Q14C										X
Q14F										X
Q14I										X
Q14K										X
Q14E										X
Q14G										X
Q14H										X
Q14J										X
Q14A										X
Q14B										X
Q14D										X
Q14L				X						X
Q11C										X
Q11K										X
Q11A										X
Q11B										X
Q11D										X
Q11E										X
Q11H										X
Q12AI										X
Q12AIV										X
Q12AII										X

Q12BI										X
Q12BIII										X
Q12AIII										X
Q11G										X
Q11J										X
Q11I										X
Q11F										X
Q12BII										X
Q12BIV										X
Q10B									X	X
Q10A									X	X
Q10F									X	X
Q10E									X	X
Q10I									X	X
Q10H									X	X
Q10C									X	X
Q10D									X	X
Q10G									X	X
Q10J									X	X
Q9J								X		X
Q9H								X		X
Q9I								X		X
Q9F								X		X
Q9E								X		X
Q9D								X		X
Q9G								X		X
Q9C								X		X
Q9A								X		X
Q9B								X		X
Q2B								X		
Q2A								X		
Q2C								X		
Q2E								X		
Q2D								X		
Q25H					X					
Q24A						X				
Q9K		X	X	X	X	X	X	X	X	X
Q10K	X	X	X	X	X	X	X	X	X	X
Q13F	X	X	X	X	X	X	X	X	X	X
Q11L	X	X		X	X	X	X	X	X	X

(NB: Patterns with less than 1% of cases missing not shown)

## Levels of missing data

*“Missing data constitute a common but widely under appreciated problem in both cross-sectional and longitudinal research. The range of tools for multivariate analysis is restricted by conventional methods of missing data treatment ...[because they]... depend on completeness of data on all cases and all variables” (Figueredo et al. 2000).*

The table below shows the percent missing of total responses for each construct.

**Table 70 Missing responses (% of total responses)**

Con- struct	Questionnaire Item % of total responses with missing values													
Media	Q9A	Q9B	Q9C	Q10A	Q10B	Q10C								
	15.33	14.23	14.96	17.15	17.15	16.42								
Advertis- ing	Q9D	Q9E	Q9F	Q9G	Q9H	Q9I	Q9J	Q9K						
	16.42	15.69	15.33	18.25	16.42	15.69	19.34	89.05						
	Q10D	Q10E	Q10F	Q10G	Q10H	Q10I	Q10J	Q10K						
	20.44	18.25	17.52	21.17	18.61	18.25	22.99	95.26						
Infor- mation	Q11A	Q11B	Q11C	Q11D	Q11E	Q11F	Q11G	Q11H	Q11I	Q11J	Q11K	Q11L		
	7.66	8.39	7.30	8.76	8.76	12.04	10.22	9.85	12.04	12.41	8.03	90.88		
Agency Control	Q12A	Q12A	Q12A	Q12A										
	8.76	9.85	8.76	9.49										
Negot- iation	Q13A	Q13B	Q13C	Q13D	Q13E	Q13F								
	12.04	12.77	12.77	17.15	14.96	93.07								
Present- ation	Q14A	Q14B	Q14C	Q14D	Q14E	Q14F	Q14G	Q14H	Q14I	Q14J	Q14K	Q14L		
	11.68	9.85	10.95	11.31	10.95	10.95	10.95	11.31	10.95	11.31	10.58	14.96		
Repres- entation	Q24A	Q24B	Q24C	Q24D	Q24E	Q24F	Q24G	Q24H	Q24I	Q24J	Q24K	Q24L	Q24	Q24N
	13.87	6.57	7.30	7.30	8.76	7.30	7.30	9.49	10.95	6.57	6.57	8.03	8.76	11.68
Agent Values	Q25A	Q25B	Q25C	Q25D	Q25E	Q25F	Q25G	Q25H	Q25I	Q25J	Q25K	Q25L		
	3.65	2.92	3.65	2.19	2.92	4.38	4.38	9.49	4.38	4.38	2.92	5.84		

Items with very high levels of missingness are excluded from the specified model.

Items Q9K, Q10K, Q13F and Q11L are excluded because they exhibit rates of

missingness of around 90% or greater. These variables should have such high rates of missing data because the structured instrument was designed to capture responses in coded categories. Answers other than those that fit pre-coded categories would then have been placed in the items identified here. The high rate of missing values for these items merely demonstrates that coded categories were adequate and agents had little else to add. Items not being used in the conceptual model were excluded.

### **Missing value resolution method**

The EM algorithm (Dempster *et al.* 1986) is a technique that finds maximum likelihood estimates for incomplete data using an iterative procedure of repeating the following steps:

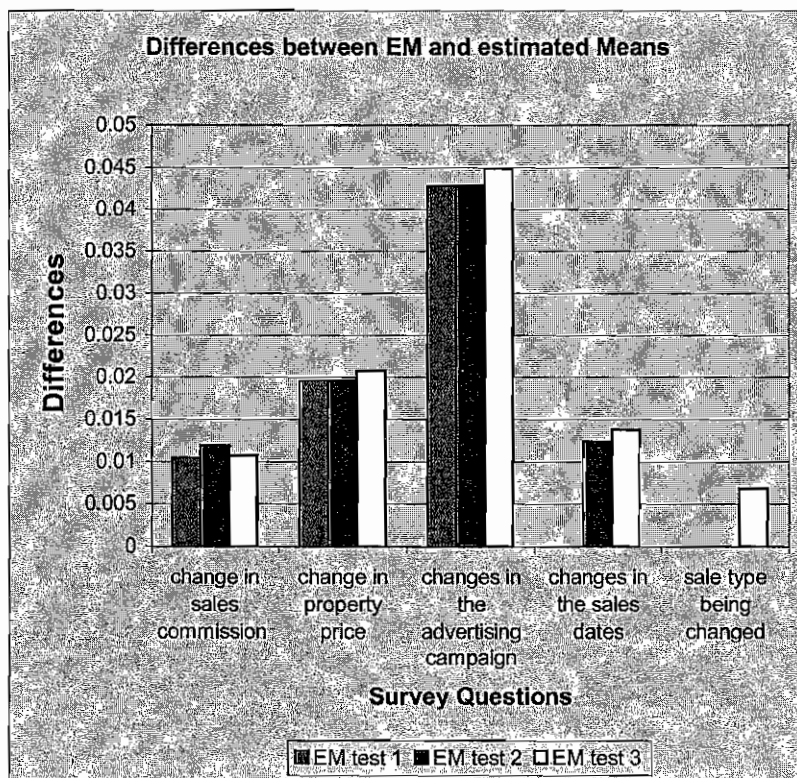
1. The expectation E-step: Given a set of parameter estimates, such as a mean vector and covariance matrix for a multivariate normal distribution, the E-step calculates the conditional expectation of the complete-data log likelihood given the observed data and the parameter estimates; and
2. The maximization M-step: Given a complete-data log likelihood, the M-step finds the parameter estimates to maximize the complete-data log likelihood from the E-step.

Expectation Maximisation is useful most particularly because of the algorithm for calculation (Figueredo *et al.* 2000; Flury and Zoppe 2000) and has a number of advantages identified clearly by authors such as Meng and Rubin (1993). But it has some limitations such as the rate of convergence depending on the fraction of missing data and the occurrence of less than optimal values with imposed iteration limits (Wright and Kennedy 2000). Noting the existence of such limitations and the numerous

variations of the EM algorithm discussed by authors such as Ueda, Nakano, Ghahramani, Hinton, and Bishop (2000), Van Dyk (2000) and Wright and Kennedy (2000), the EM algorithm has a place in this thesis to protect the sample size once the nature of missing data is examined.

The following figure shows a simple example of EM calculations by comparing results of three separate imputation runs.

**Figure 34 EM example**



This figure shows small differences between estimated means and EM imputed means that depend on the items used in the EM algorithm. Variables used in this example are from a single construct. These are:

- change in sales commission (33 out of 274 responses missing);
- change in property price (35 out of 274 responses missing);
- changes in the advertising campaign (35 out of 274 responses missing);
- changes in the sales dates (47 out of 274 responses missing); and
- sale type being changed (41 out of 274 responses missing).

EM test 1 uses the first three variables only, EM test 2 uses the first four variables only, and EM test 3 uses all five variables. Differences between EM and estimated means are not the same in each test. This illustration serves to establish grounds for caution in specification of constructs for imputation.

The next section examines the data to determine the nature of missing responses so that the suitability of the EM algorithm for this data can be established. Data can be missing:

1. Completely at random (not systematically related to anything else - MCAR), case wise deletion assumes MCAR;
2. Conditional on other variables (the reason for missingness can be measured - MAR), likelihood estimation procedures and EM both assume MAR; or
3. Related to personal characteristics of participants.

## Implementation of EM imputation

List wise and pair wise estimation depend on the assumption that the pattern of missing values does not depend on the data values. This condition is known as missing completely at random (or MCAR). Violation of this assumption can lead to biased estimates. Regression and EM estimation depend on the assumption that the pattern of missing data is related to the observed data only. This condition is called missing at random (or MAR). Such an assumption allows estimates to be adjusted using available information. We need to protect the size of the already small sample so imputation is necessary. Our data have patterns of missingness described in the previous sections well suited to EM imputation.

**Table 71 EM calculations**

Construct	Original Mean	MEAN after EM Calculation	Original Mean – Calculated Mean
Media	7.6292	7.6267	0.0025
Advertising	7.5158	7.5213	-0.0055
Information Appropriation			
Vendor	8.4230	8.4744	-0.0514
Property	6.2939	6.3071	-0.0132
Agency Control	6.1538	6.1477	0.0061
Negotiation	3.8480	3.8758	-0.0278
Presentation			
Listening skills	8.5241	8.5311	-0.0070
People skills	8.5618	8.5653	-0.0035
Presentation Skills	8.6968	8.7049	-0.0081
Representation	8.0332	8.0440	-0.0108
Agent Values			
Money	6.8993	6.9114	-0.0121
Altruism	8.0209	8.0308	-0.0099

## APPENDIX 6 - MEAN VALUES

Independent samples test – Levene's test of variance		F	Sig.	t	Sig. (2-tailed)
Vendor Information	Equal variances	0.014	0.9051516743	-0.349	0.728
	Not Equal variances			-0.349	0.728
Property Information	Equal variances	2.899	0.0897988296	2.228	0.027
	Not Equal variances			2.228	0.027
People skills	Equal variances	5.039	0.0255925309	-3.329	0.001
	Not Equal variances			-3.329	0.001
Presentation skills	Equal variances	0.338	0.5614111991	-0.162	0.872
	Not Equal variances			-0.162	0.872
Value of Money (Salary)	Equal variances	0.000	1.0000000000	0.000	1.000
	Not Equal variances			0.000	1.000
Value of Altruism	Equal variances	0.000	1.0000000000	0.000	1.000
	Not Equal variances			0.000	1.000
Value of Money	Equal variances	0.000	1.0000000000	0.000	1.000
	Not Equal variances			0.000	1.000
Media	Equal variances	0.157	0.6921998719	-1.412	0.159
	Not Equal variances			-1.412	0.159
Negotiation	Equal variances	2.067	0.1516770570	0.383	0.702
	Not Equal variances			0.383	0.702
Advertising	Equal variances	0.428	0.5136827671	0.545	0.586
	Not Equal variances			0.545	0.586
Agency Control	Equal variances	0.145	0.7037144176	-0.723	0.470
	Not Equal variances			-0.723	0.470
Agent Representation	Equal variances	0.000	1.0000000000	0.000	1.000
	Not Equal variances			0.000	1.000

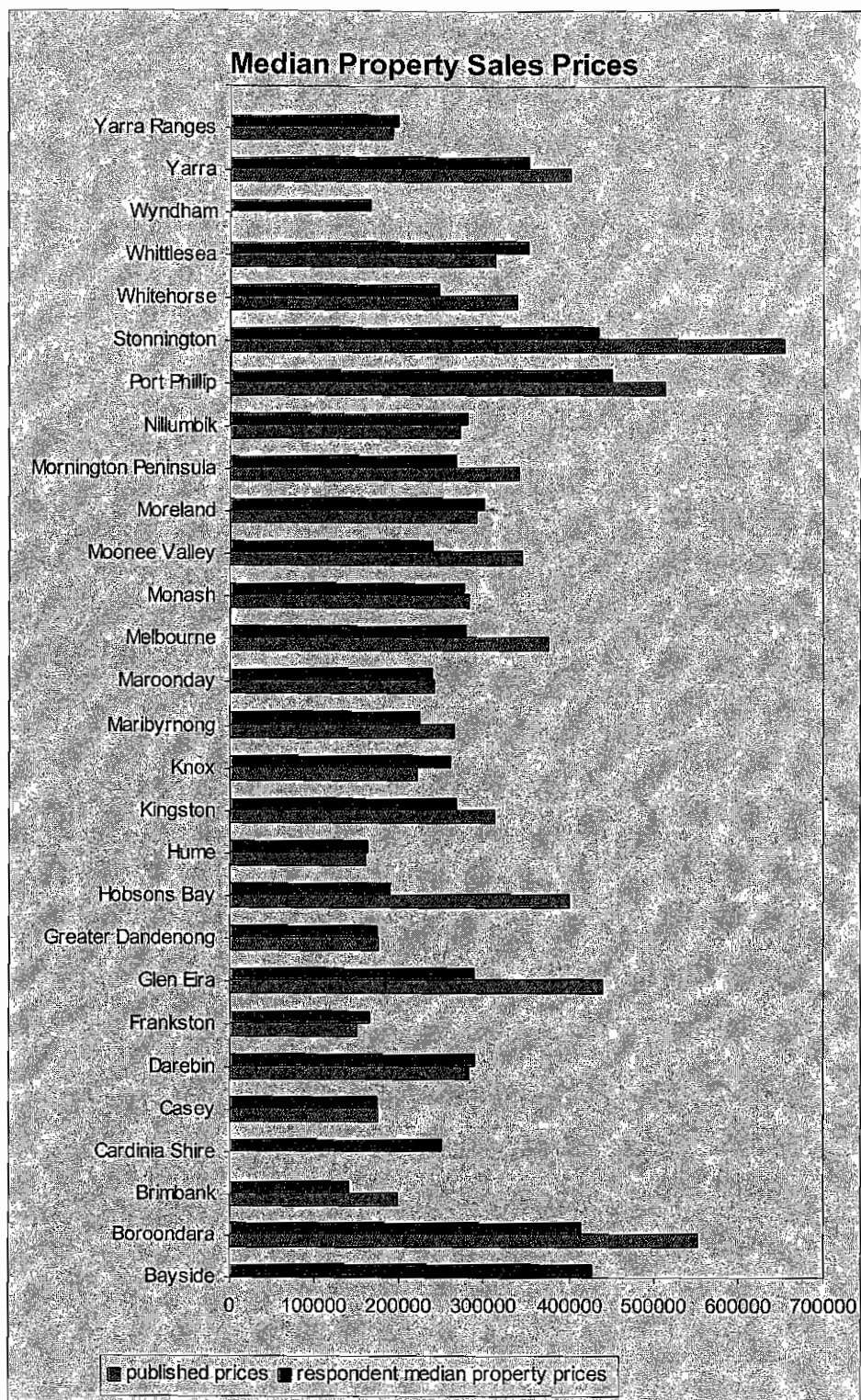
## APPENDIX 7 - CITY OF OPERATIONS

**Table 72 City of operations**

<b>Location</b>	<b>City of Operation</b>	<b>Cases</b>	<b>%</b>	<b>Discrepancy between Agent estimation and Published prices %</b>
Suburban	Banyule	16	6%	100%
	Bayside	12	4%	15.00%
	Boroondara	20	7%	33.17%
	Brimbank	2	1%	40.54%
	Cardinia Shire	8	3%	100%
	Casey	4	1%	0.57%
	Darebin	6	2%	-2.59%
	Frankston	4	1%	-9.39%
	Glen Eira	12	4%	53.37%
	Greater Dandenong	4	1%	1.16%
	Hobsons Bay	4	1%	111.64%
	Hume	4	1%	-0.58%
	Kingston	4	1%	17.06%
	Knox	10	4%	-15.00%
	Maribyrnong	12	4%	18.95%
	Maroondah	8	3%	0.70%
	Melbourne	6	2%	35.14%
	Monash	8	3%	2.70%
	Moonee Valley	2	1%	45.49%
	Moreland	4	1%	-2.92%
	Mornington Peninsula	8	3%	27.50%
	Nillumbik	2	1%	-2.98%
	Port Phillip	4	1%	14.04%
	Stonnington	8	3%	51.48%
	Whitehorse	18	7%	36.72%
	Whittlesea	4	1%	-11.12%
	Wyndham	2	1%	-100%
	Yarra	10	4%	14.78%
	Yarra Ranges	10	4%	-2.48%
Country	Ballarat/Hepburn	6	2%	
	Geelong	6	2%	
	Morwell/Gippsland	4	1%	
	Echuca	4	1%	
	Bass Coast	2	1%	
	Murrindindi	4	1%	
	Moorabool	2	1%	
Other		10	4%	
Sub-total		254	93%	
Missing		20	7%	
Total		274		

## **APPENDIX 8 - RESPONDENT PROPERTY SALES PRICES**

**Figure 35 Respondent property sales**



## APPENDIX 9 - MODEL DEVELOPMENT

Data analysis methods used to finalise measure validity and propose a course for model confirmation are presented in the table below.

**Table 73 Analysis alternatives**

<b>Method</b>	<b>Important Characteristic</b>	<b>Can be used to examine...</b>
<b>Discriminant Analysis</b>	Grouping variable has a limited number of categories	The dependent variable at the construct level if scales are not considered continuous
<b>Regression – Ordinary</b>	A continuous outcome variable relating to one or more predictors	Constructs (assuming interval scales to test interrelationships between constructs)
<b>Regression – Logistic</b>	The observed outcome is restricted to two values	The dependent variable (relationship not established/ established)
<b>SEM</b>	Measurement model identification Structural model comparisons	Constructs (assuming continuous variables)

Note: Discriminant analysis and logistic regression have similar uses with dichotomous dependent variables such as agent-principal relationship establishment.

The table below shows results of investigations of the relationship between relationship establishment and constructs defined in this thesis.

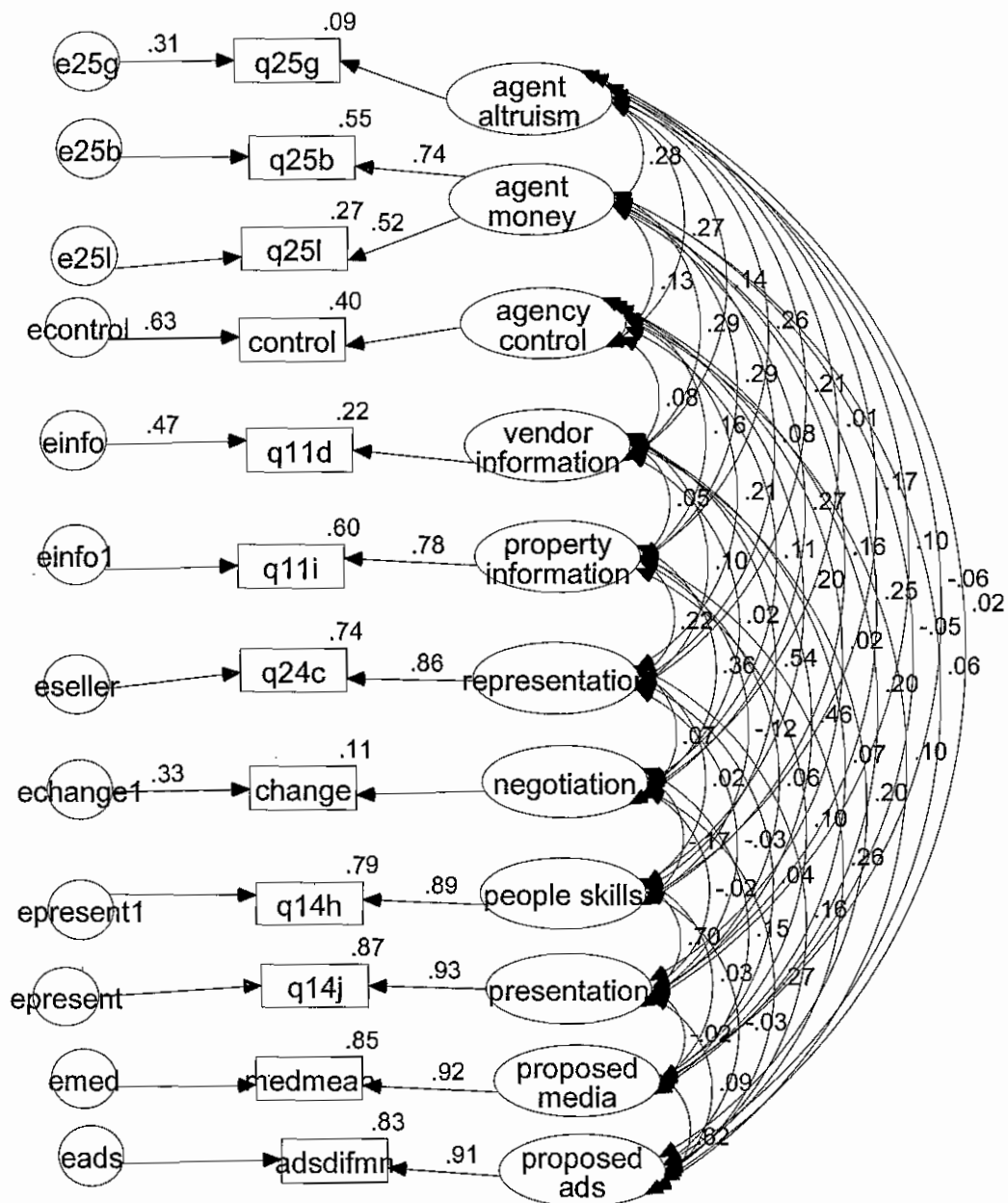
**Table 74 Multi-item Logistic regression**

Constructs	H-L test	Wald Sig	Item Sig	Item
Sales Presentation	17.21	.028	.028	14h
Advertising	13.556	.060	.041 .071 .093	Adsi, Adsg Adsf
Media	21.055	.002	.020 .042	Mediaa Mediab
Information	10.129	.256	.075	11b
Agency control	8.737	.365		
Negotiation	29.350	0.000		

In this table, where the Wald Significance is less than .05 a significant relationship exists between constructs and the dependent variable.

## APPENDIX 10 - MEASUREMENT MODEL

**Figure 36 Standardised estimates for the measurement model**



Measurement Model  
Standardized estimates

## APPENDIX 11 - ITEM SELECTION

**Table 75 Item level proposed media**

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
MEDA	-.185	.091	4.193	1	.041	.831
MEDB	.158	.078	4.122	1	.042	1.171
MEDC	.064	.066	.939	1	.333	1.066

This table shows that two components of media are significantly important to REA (MedA sig = .041 & MedB sig = .042). The table below shows that, using regression, components of both altruism and money are significantly important to information appropriation.

**Table 76 Significance of link between information appropriation and agent values.**

<b>Indicator</b>	<b>Result</b>
R	.464
Rsqr	.215
Sig	.000

**Table 77 Item level significance of the dependence of information appropriation on agent values.**

	Item	Sig.
(Constant)		.001
It is important to be looked up to by people in society		.397
It is important to be paid a high salary		.302
It is important to become quite wealthy	Q14b	.160
It is important to get a good reputation for their work		.517
It is important to give aid to those in need		.596
It is important to help build a better society		.371
It is important to help others live a fuller life	Q14g	.002
It is important to know that other people think your work is important		.458
It is important to make an important contribution to the community		.074
It is important to obtain a high status in the eyes of others		.501
It is important to receive enough pay to live well		.169
It is important to receive more than your normal pay for good work	Q14l	.001

a Dependent Variable: COMPUTE info = mean(propinfo,vendinfo) (COMPUTE)

Items marked are those included in the proposed model, two of which are the most significantly important participants in the specification of a regression equation in which Information depends on Agent Values.

Using Linear Regression, Agent Representation is significantly dependent on Agent values. The table below shows the strength of this relationship.

**Table 78 Agent values & agent representation**

Indicator	Result
R	.293
Rsqr	.086
Sig	.021

The low R squared result does not support a strong relationship but Sig is less than .05 so this is still a significant relationship.

At the Item level only two components of Altruism are significantly directly related to Agent Representation. No components of Money are significantly related to agent Representation directly.

**Table 79 Agent values at the item level & agent representation**

	<b>Sig.</b>
(Constant)	.007
It is important to be looked up to by people in society	.573
It is important to be paid a high salary	.167
It is important to become quite wealthy	.523
It is important to get a good reputation for their work	.266
It is important to give aid to those in need	.228
It is important to help build a better society	.011
It is important to help others live a fuller life	.008
It is important to know that other people think your work is important	.712
It is important to make an important contribution to the community	.718
It is important to obtain a high status in the eyes of others	.127
It is important to receive enough pay to live well	.747
It is important to receive more than your normal pay for good work	.753

a Dependent Variable: SELLER

Information Appropriation is significantly related to proposed advertisements at a construct level, using regression (Sig = .000).

**Table 80 Significance of relationship between information appropriation and proposed advertisements.**

<b>Indicator</b>	<b>Result</b>
R	.354
Rsqr	.126
Sig	.000

At the item level, a single component of both vendor and property information are significantly related to proposed advertisements in the table below.

**Table 81 Item level information & proposed advertising**

	Item	Sig.
(Constant)		.286
Why the vendor was selling		.937
Which other agents they were considering		.432
If the vendors had started to look		.327
If the vendors had already purchased	Q11d	.076
Good things about the property		.446
ONLY good things about the property		.241
All the good things about the property		.217
Bad things about the property		.430
ONLY bad things about the property		.123
All the bad things about the property	Q11j	.050
All there was to know about the property		.617

a Dependent Variable: CAMPAIGN

Individually the marked items included in model specification are either significant or nearly significantly related to the dependent variable. Items included in the proposed model are significantly directly related to Negotiation.

**Table 82 Item level presentation skills & negotiation**

	<b>Item</b>	<b>Sig</b>
Agent persuasively demonstrating competence		.309
Agent listening to what vendors were really saying	Q14B	.007
Agent getting feedback		.678
Agent getting to know the vendor		.998
Agent hearing what the vendors had to say		.193
Agent helping the vendors make a decision		.322
Agent not being offensive		.258
Agent getting along with the vendors	Q14H	.022
Agent attractively grooming hair and skin	Q14I	.093
Agent selecting clothes to impress	Q14J	.029
Agent speaking distinctly and appropriately		.760
Agent using manners and proper protocol		.458

a Dependent Variable: CHANGE

This table shows that the items included in model specification are significantly related to the dependent variable.

### Bootstrapping (estimated standard errors)

The table below shows estimated standard errors for the bootstrapped regression weights and relevant bias of these estimates. This will be explained in detail following the table.

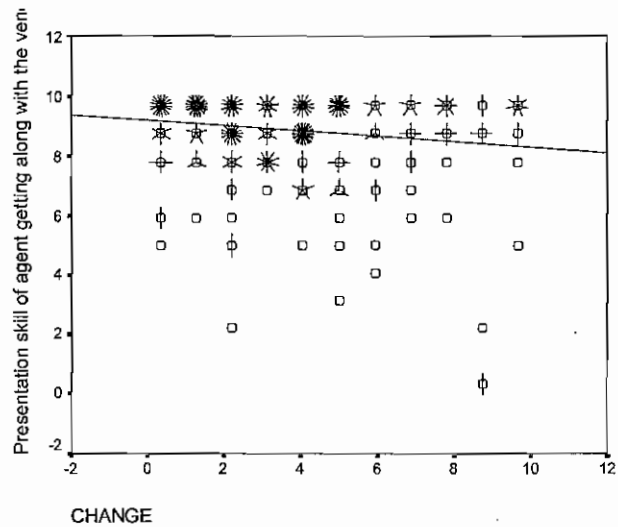
**Table 83 Standard error of bootstrapped regression weight estimates**

			S.E.	Bias
People Skills	<--	Agycontrol	0.069	0
Negotiation	<--	Agycontrol	0.113	0.012
Property Information	<--	People Skills	0.180	-0.033
Vendor Information	<--	People Skills	0.131	-0.002
Presentation Skills	<--	People Skills	0.089	-0.001
Negotiation	<--	People Skills	0.262	0.017
Negotiation	<--	Presentation Skills	0.176	-0.004
Proposed Ads	<--	Property Information	0.067	0.002
Negotiation	<--	Property Information	0.110	0.003
Negotiation	<--	Proposed Ads	0.071	-0.001
Proposed Ads	<--	Proposed Media	0.095	-0.002
Property Information	<--	Representation	0.077	0.004
Agycontrol	<--	Value Of Altruism	0.086	0
Representation	<--	Value Of Altruism	0.105	0.003
Property Information	<--	Value Of Altruism	0.091	0.004
Property Information	<--	Value Of Money	0.210	-0.008
Vendor Information	<--	Value Of Money	0.134	0.005
Presentation Skills	<--	Value Of Money	0.107	0.008
Negotiation	<--	Value Of Money	0.228	0.026
Proposed Ads	<--	Vendor Information	0.091	-0.007
Negotiation	<--	Vendor Information	0.134	-0.007

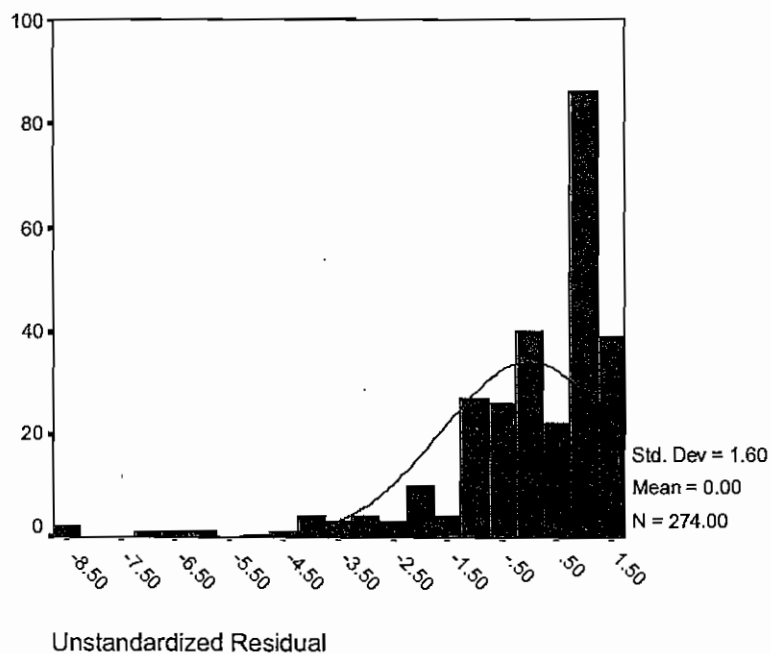
The standard error indicates the degree to which estimates of regression weights of the samples drawn from the data are appropriately positioned in comparison to original estimates of these regressions weights. The sign of the Bias indicates whether the bootstrapped regression weight is larger (positive bias) or smaller (negative bias) than the estimated regression weight (Arbuckle and Wothke 1999).

## People skills

**Figure 37 Scatter plot for people skill vs negotiation**

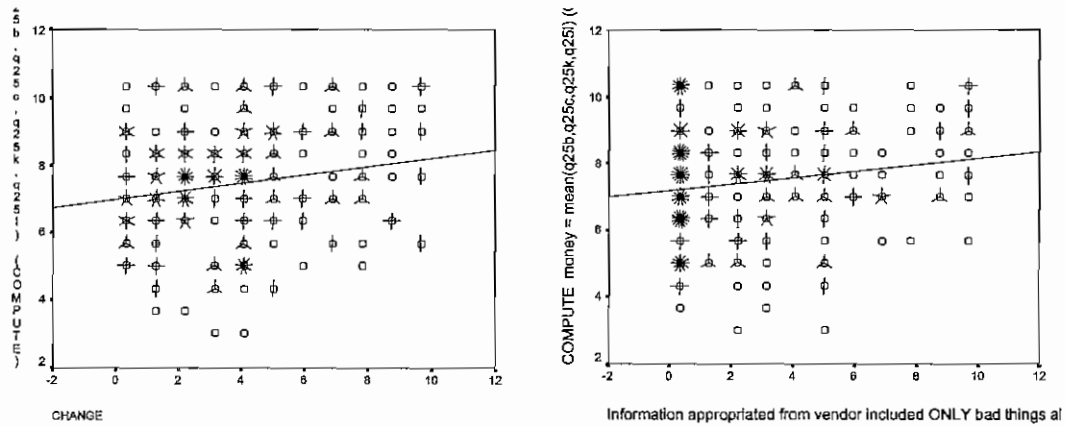


**Figure 38 Histogram of residuals for bootstrap estimations of negotiation factor**

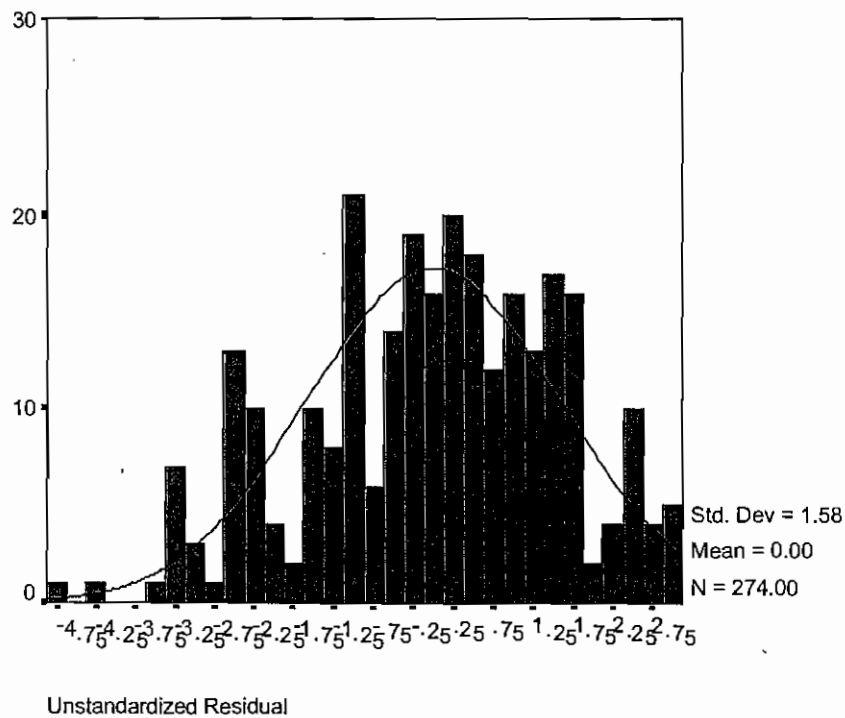


## Value of Money

**Figure 39 Scatter plots for property information & negotiation vs value of money**



**Figure 40 Histogram of residuals for bootstrapped estimations of value of money**



## APPENDIX 12 - PURIFICATION

### Multicollinearity

The table below shows R squared values between all constructs captured.

**Table 84 Multi-item R squared calculations**

Dependent Construct	Media	Ads	Vend Info	Prop Info	Agy Ctl	Neg	Pres	Rep	Values
Media	-	.550	.057	.066	.034		.158	.133	
Advertising	.498	-	.050	.112	.052	.047	.171	.129	.123
Vendor Information	.062	.165	-				.258	.288	.166
Property Information	.062	.232		-	.110	.081	.138	.274	.156
Agency Control		.149	.073	.096	-	.168	.102	.252	
Negotiation		.240		.103	.044	-	.105	.270	.206
Presentation	.187	.184	.116	.280	.108		-	.399	.098
Representation	.075		.086	.177	.092	.118	.181	-	.244
Agent Values			.101	.165		.168	.096	.311	-

Using linear regression, constructs used as dependent variables were compiled by averaging all relevant indicators. All other items were used as independent variables to calculate the figures in the table above. Many links between 'independent' variables are evident, the strongest of which are shown in this table as shaded cells. Media & ads (.498); Vendor information & presentation skills (.258), representation (.288); Property information & advertisements (.233); Agency control & representation (.252); Negotiation & advertisements (.240), representation (.270), agent values (.206); and Representation & agent values (.244).

**Table 85 Single indicator R squared calculations**

Dependent Variable	Rsq	Sig
Vendor Information	.253	.000
Property Information	.156	.000
People skills	.441	.000
Presentation Skill	.351	.000
Agent representation	.071	.050
Value of Money (salary)	.227	.000
Altruism	.143	.000
Value of money	.186	.000
Media	.302	.000
Negotiation	.156	.000
Agency Control	.102	.003
Advertisements	.351	.000

**Table 86 Item level variance**

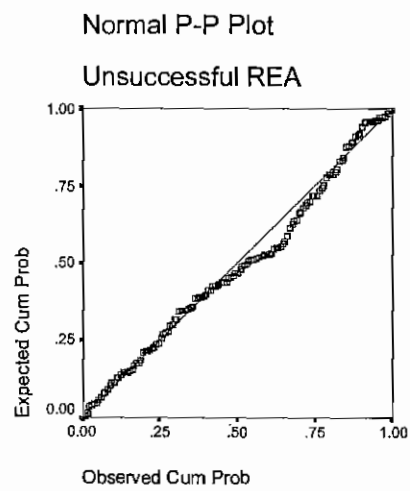
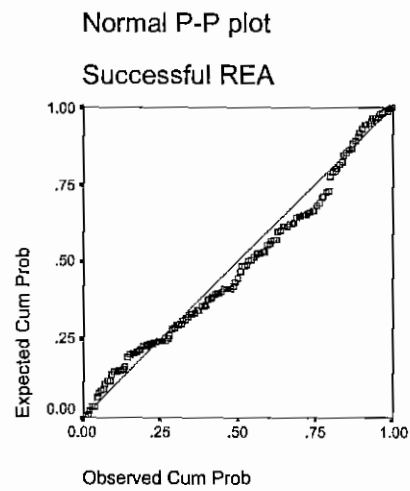
Dimension	% of Total Item Variance											
	1	2	3	4	5	6	7	8	9	10	11	12
1. (Constant)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Value of Altruism	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.28	0.14
3. Value of Money	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.02	0.00	0.00	0.26	0.09
4. Agency control	0.00	0.00	0.00	0.00	0.00	0.34	0.01	0.01	0.00	0.00	0.39	0.58
5. Vendor Information	0.00	0.00	0.00	0.00	0.00	0.07	0.03	0.84	0.00	0.00	0.01	0.06
6. Property Information	0.00	0.00	0.01	0.00	0.01	0.02	0.86	0.02	0.00	0.01	0.00	0.02
7. Representation	0.00	0.00	0.03	0.87	0.02	0.00	0.04	0.00	0.00	0.01	0.03	0.01
8. Negotiation	0.00	0.35	0.37	0.01	0.06	0.03	0.00	0.01	0.02	0.04	0.01	0.00
9. People Skills	0.00	0.58	0.56	0.06	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.00
10. Presentation skill	0.01	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.03	0.22	0.00	0.01
11. Media	0.60	0.06	0.01	0.05	0.05	0.01	0.03	0.02	0.08	0.50	0.01	0.07
12. Advertisements	0.39	0.00	0.02	0.00	0.01	0.01	0.00	0.04	0.87	0.22	0.00	0.00

## Heteroskedasticity

Numerous possible tests for heteroskedasticity exist (Gelpi 2002), such as informal methods (graphing data and looking for patterns); the *Goldfeld-Quandt* test (a comparison of separate regressions on upper and lower portions of the total sample); the *Glejser* test (a test of significance on the regressed absolute value of saved residuals); and the *Breusch-Pagan* test (squared residuals are used to estimate error and the ratio of regression sum of squares indicates variance of residuals). Hill et al. (2001) similarly describe these tests. But SPSS Version 10.0 does not automate these tests. Another inapplicable estimator of heteroskedasticity is White's estimator. Hill et al. (2001) argue that this estimator is not really applicable in the case of this thesis because it only works for large samples (Hill et al. 2001, Page 241).

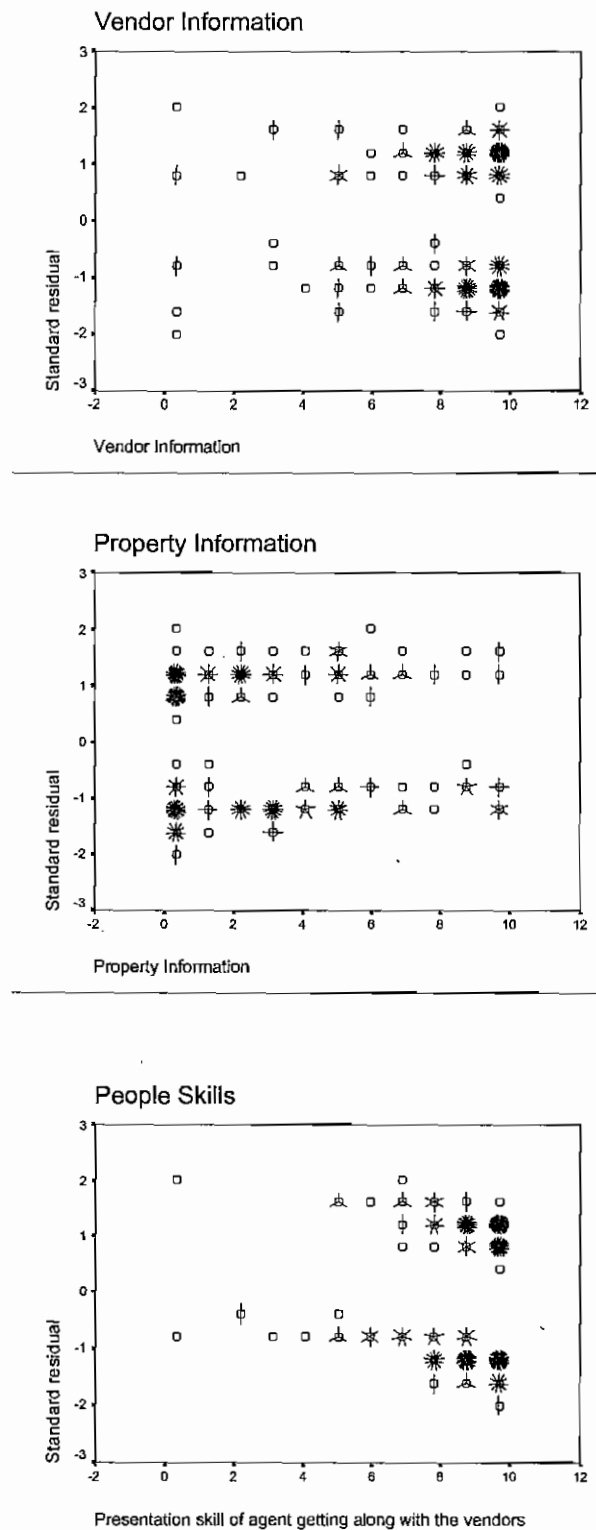
Patterns of residuals in the relationship between dependent and independent variables are discussed in the section on Normality in this thesis. The figures below show how closely observed residuals fit to predicted residuals for firstly successful and then unsuccessful relationship establishment attempts.

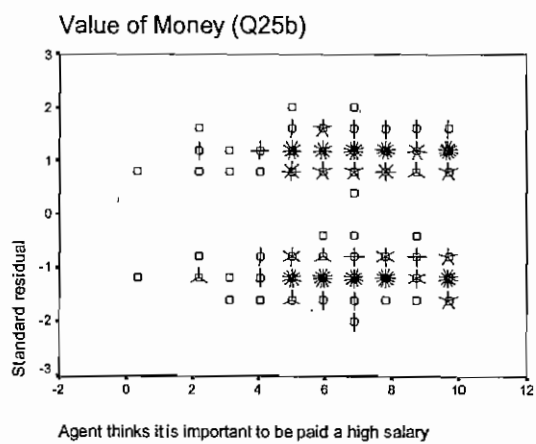
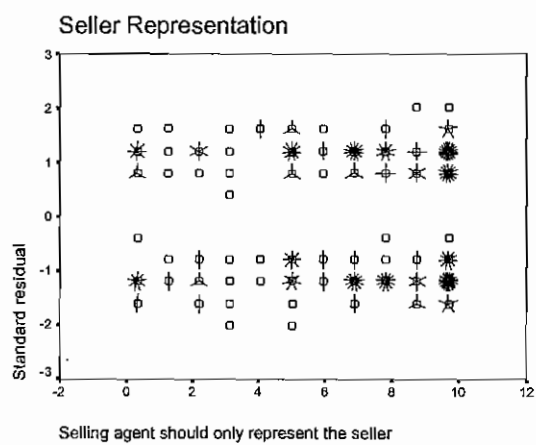
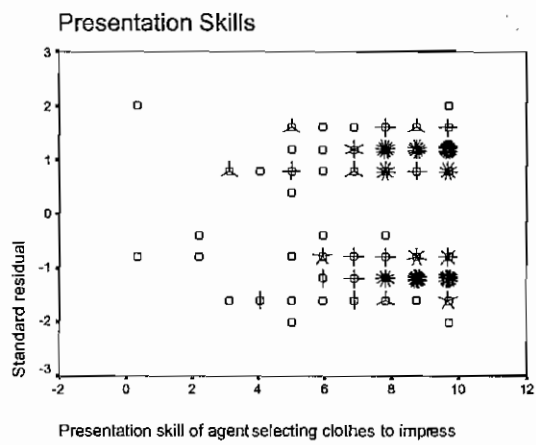
**Figure 41 P-P Plot successful agent-principal relationship establishment attempt**

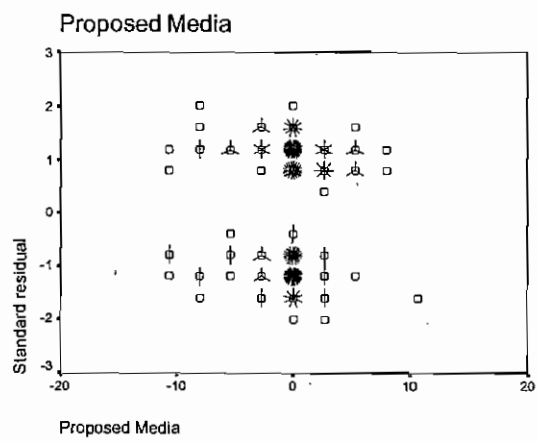
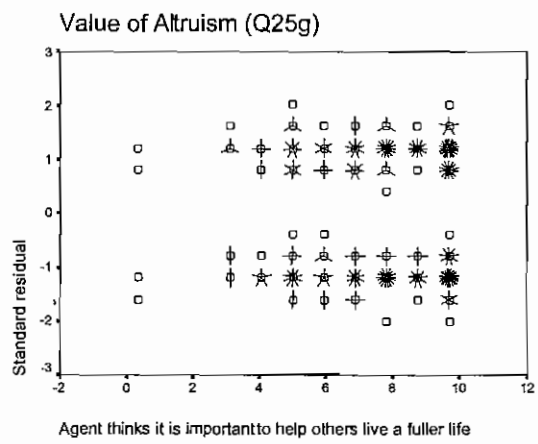
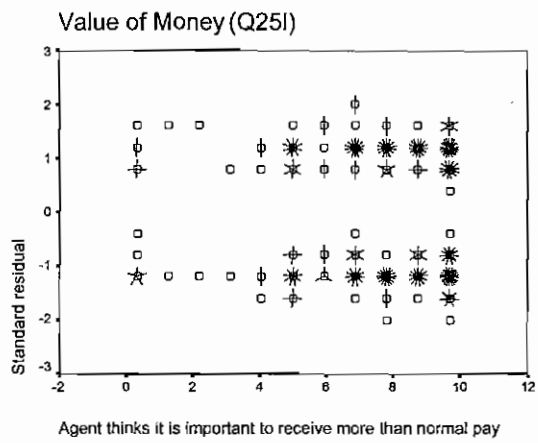


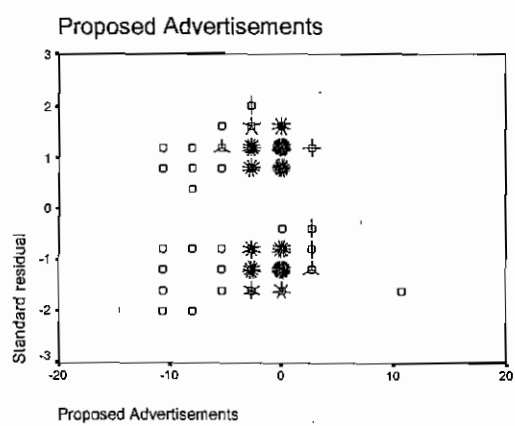
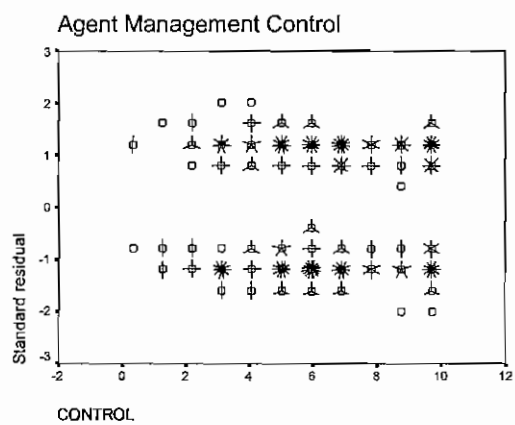
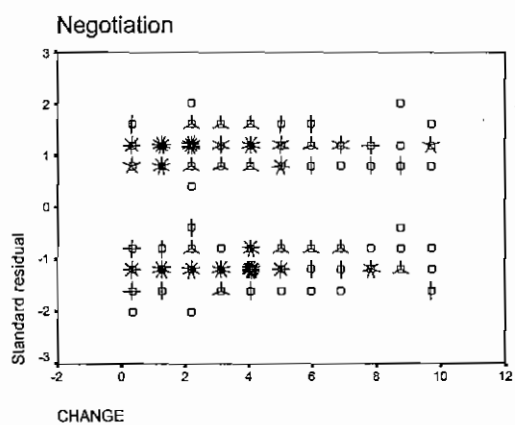
## Residual plots by predictor variable

**Figure 42 Residual plots by predictor variable**









Apparent outliers identified by case number appear in the table below.

**Table 87 Outlying residual cases**

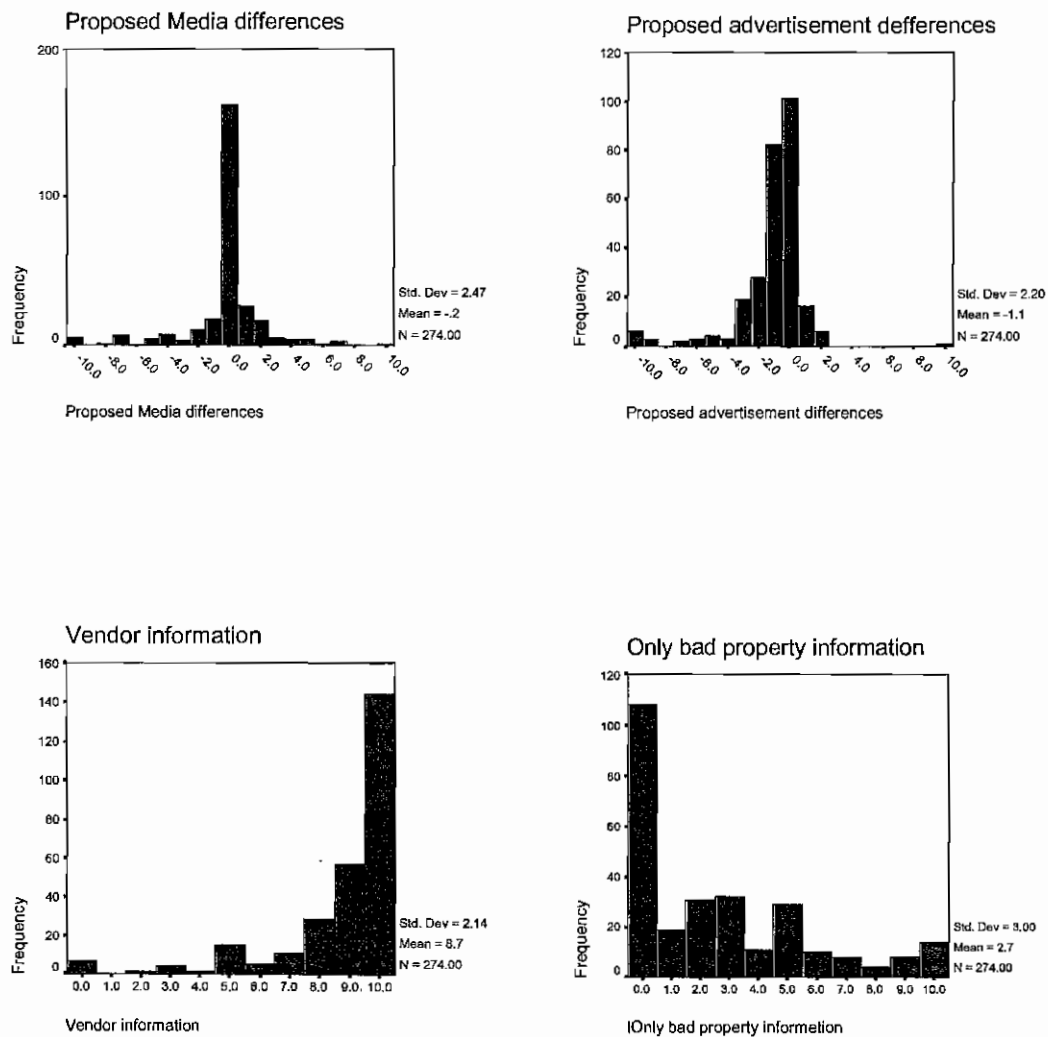
<b>Construct</b>	<b>Case ID</b>
Proposed Advertisements	154
Proposed Media	154
Altruism	1&2; 163&164
Presentation skills	37 38
People skills	37 & 38
Information	37;71;255 38;72;134;26

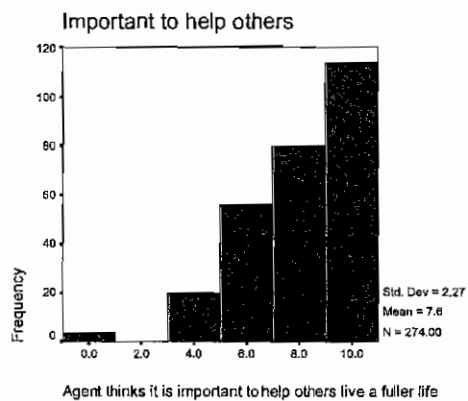
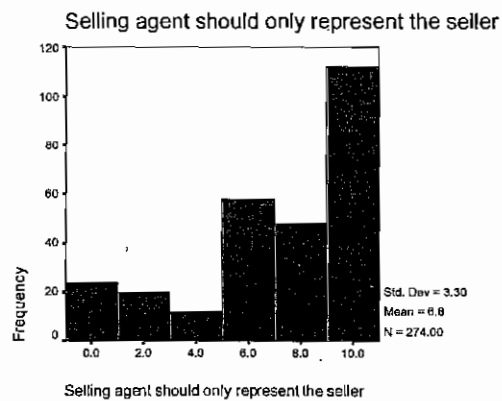
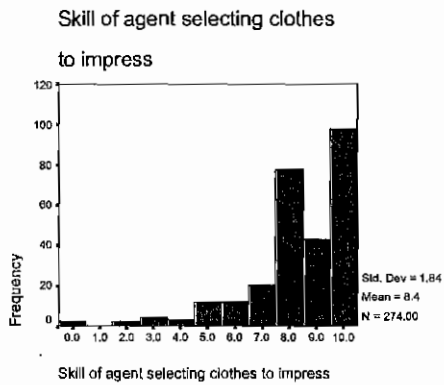
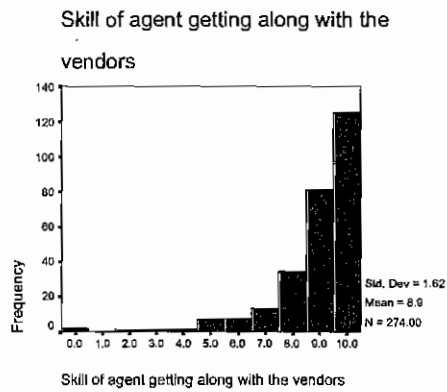
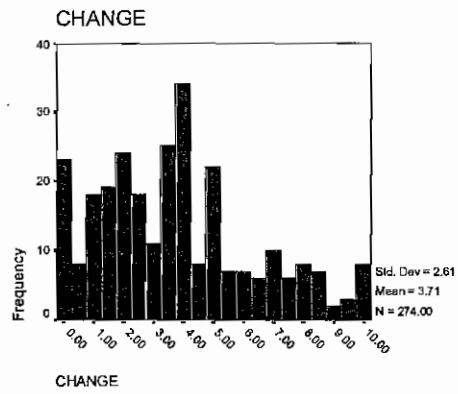
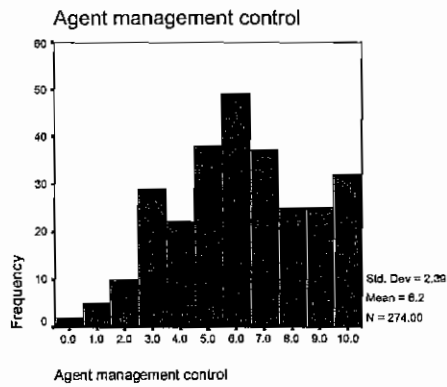
**Table 88 Effect on model indicators of removing outlying cases**

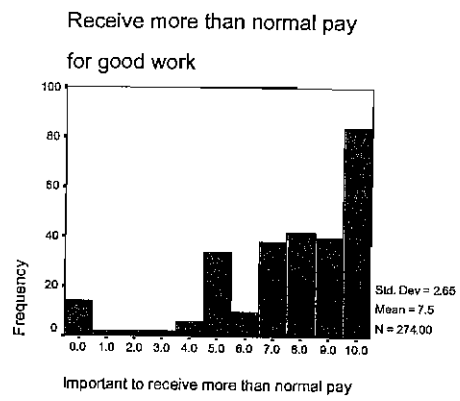
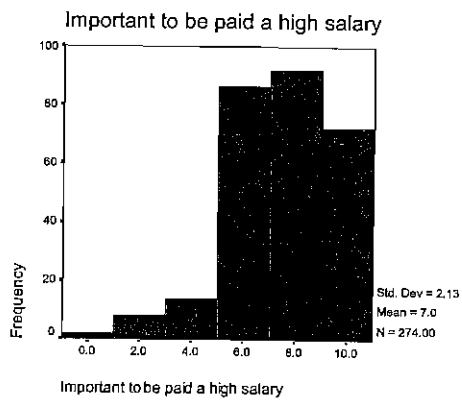
	<b>Measurement Model</b>	<b>Without Outliers</b>
RMSEA	.018	.025
GFI	.994	.994
NFI	.98	.974
Discrepancy	9.830	10.430
Degrees of freedom	9	9
P value	.364	.317

## Univariate distributions

**Figure 43 Univariate histograms**







**Table 89 Univariate statistics**

	Mean	S.E. Mean	Median	Mode	Std. Dev.	Variance	Skew	S.E. Skew	Kurtosis	S.E. Kurtosis
Media	-0.22	0.15	0.00	0.00	2.47	6.12	-1.10	0.15	5.85	0.29
Negotiation	3.71	0.16	3.65	0.00	2.61	6.82	0.61	0.15	-0.33	0.29
Agency Control	6.19	0.14	6.05	10.00	2.39	5.71	-0.12	0.15	-0.63	0.29
Advertisements	-1.15	0.13	-0.84	0.00	2.20	4.85	-1.62	0.15	7.79	0.29
Vendor Information	8.68	0.13	10.00	10.00	2.14	4.60	-2.34	0.15	5.75	0.29
Property Information	2.66	0.18	2.00	0.00	3.00	9.02	1.02	0.15	0.07	0.29
People skills	8.86	0.10	9.00	10.00	1.62	2.61	-2.50	0.15	8.49	0.29
Presentation skills	8.40	0.11	9.00	10.00	1.84	3.37	-1.72	0.15	3.74	0.29
Agent representation	6.81	0.20	8.00	10.00	3.30	10.88	-0.81	0.15	-0.56	0.29
Value of Money (salary)	7.03	0.13	7.00	10.00	2.13	4.56	-0.45	0.15	0.00	0.29
Value of Altruism	7.61	0.14	8.00	10.00	2.27	5.15	-0.82	0.15	0.31	0.29
Value of Money	7.53	0.16	8.00	10.00	2.65	7.01	-1.30	0.15	1.32	0.29

## One sample Kolmogorov-Smirnov Test significance

**Table 90 One-sample Kolmogorov-Smirnov test**

		Relationship establishment attempt	Successful attempts	Unsuccessful attempts
	K	Standard residual	Standard residual	Standard residual
	N	274	137	137
Normal Parameters		Mean	0.000762	1.1434056
		Std. Deviation	1.172139	.2419430
Most Extreme Differences		Absolute	0.240293	.111
		Positive	0.20494	.111
		Negative	-0.24029	-.078
Kolmogorov-Smirnov Z			3.977551	1.299
Asymp. Sig. (2-tailed)			0	.069

a Test distribution is Normal.

b Calculated from data.

According to Malhotra, Hall, Shaw, and Oppenheim (2002), Kolmogorov-Smirnov Z statistics in the table above that are significant mean that we can reject the null hypothesis that the distribution deviates significantly from a normal distribution.

## Homogeneity

**Table 91 Homogeneity of variance**

<b>Dependent Construct</b>	<b>Items Not exhibiting Variance Homogeneity</b>
Media	
Advertising	Q24c
Property Information	
Vendor Information	Q24c
Agency Control	
Negotiation	Q24c,
Presentation	Q24c
Representation	Q25l
Agent Values	Q24c,Q25b,Q25l
Altruism	
Money	Q24c,Q25b,Q25g

This table reveals relationships involved in heterogeneous relationships with items exhibiting non-significant variance homogeneity.

**Table 92 Agent representation distribution details**

Selling agent should only represent the seller

<b>N</b>	<b>Valid</b>	<b>274</b>
	<b>Missing</b>	<b>0</b>
Variance		10.88
Skewness		-.805
Std. Error of Skewness		.147
Kurtosis		-.562
Std. Error of Kurtosis		.293

## APPENDIX 13 - SINGLE ITEM INDICATORS, PARCELLING & ERROR TERMS

**Table 93 Error term calculations for single item variables.**

ITEM	Scale alpha	Item variance	Error term Calculation
q24c	0.7388	10.878	2.841334
q14h	0.7865	2.61	0.557235
q14j	0.8669	3.368	0.448281
q25l	0.7065	7.014	2.058609
q11d	0.7822	4.601	1.002098
Q11f	0.6065	11.35	6.883775
q11i	0.6065	9.057	3.56393
control	0.6052	5.712	2.255098
seller	0.7388	4.473	1.168348
change	0.889	6.823	0.757353
presentation	0.8288	2.024	0.346509
people	0.8146	1.816	0.336686
info	.651	3.001	1.047349
adsdif	0.8278	4.8453	0.834361
meddif	0.8503	6.1214	0.916374
campaign	0.69	4.435	1.37485

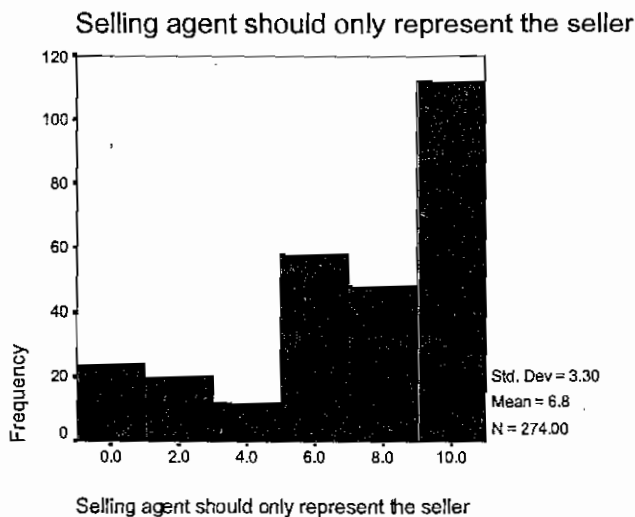
Calculation:= (1-alpha)\*item variance

The following parcelled single-item measures were used.

1. Agent Presentation Skill = mean presentation, people
  - People = mean 14d,e,f,h
  - Presentation = mean 14i,j,l
  - Listening skills have been identified as loading closely with People skills (with EFA) and exhibit a distinct lack of fit as measures of a single dimension ( $P=0$ , RMSEA=.212, Chi-square=26.514). In addition to this, agents observed a

duplication of questions when asked about listening and hearing. Agents collect information. Constructs of vendor and property information appropriation deal with this. Therefore, items previously identified as a listening skill will not be included in any further analysis.

2. Agent Values = mean altruism, money
    - Altruism = mean 25e,f,g,I
    - Money = mean 25b,c,k,l
  3. Proposed advertising campaign = mean ads, media
    - Ads = mean differences between 9 & 10 d,e,f,g,h,I,j
    - Media = mean differences between 9&10 a,b,c
  4. Information (mean vendor, property information)
    - Vendor information = mean 11 a,b,c,d
    - Property information = mean 11 I,f
  5. Costs = (mean direct costs, indirect costs)
    - Mean direct costs = mean 13a,c
    - Mean indirect costs = 13 b,d,e
- Seller = mean 24 b,c,d



## APPENDIX 14 - CORRELATION ESTIMATES

			Estimate
Representation	<-->	Presentation	-0.035
Representation	<-->	Agent Money	0.079
Presentation	<-->	Agent Money	0.255
Presentation	<-->	People Skills	0.703
Representation	<-->	People Skills	0.022
Agent Money	<-->	People Skills	0.164
Agent Altruism	<-->	Representation	0.209
Agent Altruism	<-->	Presentation	0.096
Negotiation	<-->	Representation	0.067
Agent Altruism	<-->	Negotiation	0.014
Negotiation	<-->	Presentation	-0.023
Proposed Media	<-->	Presentation	-0.024
Negotiation	<-->	Proposed Media	0.146
Proposed Media	<-->	Representation	0.038
Agent Altruism	<-->	Proposed Media	-0.059
Agent Altruism	<-->	Agent Money	0.275
Negotiation	<-->	Agent Money	0.27
Proposed Media	<-->	Agent Money	-0.049
Proposed Media	<-->	People Skills	0.028
Negotiation	<-->	People Skills	-0.173
Agent Altruism	<-->	People Skills	0.166
Vendor Information	<-->	Agent Money	0.294
Agent Altruism	<-->	Vendor Information	0.141
Vendor Information	<-->	Representation	0.099
Negotiation	<-->	Vendor Information	0.021
Vendor Information	<-->	People Skills	0.537
Vendor Information	<-->	Presentation	0.46
Proposed Media	<-->	Vendor Information	0.071
Property Information	<-->	Representation	0.221
Negotiation	<-->	Property Information	0.358
Property Information	<-->	People Skills	-0.121
Property Information	<-->	Presentation	0.061
Proposed Media	<-->	Property Information	0.105
Vendor Information	<-->	Property Information	0.054
Property Information	<-->	Agent Money	0.285
Agent Altruism	<-->	Property Information	0.261
Agency Control	<-->	Agent Money	0.132
Agent Altruism	<-->	Agency Control	0.267
Vendor Information	<-->	Agency Control	0.082
Property Information	<-->	Agency Control	0.162
Agency Control	<-->	Representation	0.211

Negotiation	<-->	Agency Control	0.11
Agency Control	<-->	People Skills	0.197
Agency Control	<-->	Presentation	0.019
Proposed Media	<-->	Agency Control	0.196
Proposed Media	<-->	Proposed Ads	0.618
Proposed Ads	<-->	Presentation	0.092
Proposed Ads	<-->	People Skills	-0.03
Negotiation	<-->	Proposed Ads	0.275
Proposed Ads	<-->	Representation	0.157
Property Information	<-->	Proposed Ads	0.257
Vendor Information	<-->	Proposed Ads	0.198
Agency Control	<-->	Proposed Ads	0.095
Proposed Ads	<-->	Agent Money	0.062
Agent Altruism	<-->	Proposed Ads	0.018

## **APPENDIX 15 - LOGISTIC REGRESSION TESTS FOR INTERACTION**

Method used to test for interactions was:

1. Standardising all variables;
2. Manufacture a new variable by multiplying two variables suspected of interaction
3. Run logistic regression with all standardised variables and manufactured variable to check statistics. Ideally Significance of Wald statistic does not change and the manufactured variable is not significant (less than .10).

**Table 94 Logistic regression with standardised variables**

Variables in the Equation

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1 <sup>a</sup>						
ZVINFO	-.099	.154	.418	1	.518	.905
ZPINFO	-.252	.140	3.228	1	.072	.777
ZPPLSKIL	.630	.185	11.558	1	.001	1.878
ZPRESSK	-.282	.171	2.719	1	.099	.754
ZREPRES	.031	.131	.055	1	.815	1.031
ZSALARY	.032	.144	.049	1	.825	1.032
ZALTRUIS	-.002	.136	.000	1	.986	.998
ZMONEY	.018	.141	.016	1	.899	1.018
ZMEDIA	.265	.159	2.783	1	.095	1.304
ZNEGOTIA	.092	.138	.438	1	.508	1.096
ZAGYCTL	.009	.133	.004	1	.947	1.009
ZADS	-.147	.166	.787	1	.375	.863
Constant	-.009	.126	.005	1	.944	.991

a. Variable(s) entered on step 1: ZVINFO, ZPINFO, ZPPLSKIL, ZPRESSK, ZREPRES, ZSALARY, ZALTRUIS, ZMONEY, ZMEDIA, ZNEGOTIA, ZAGYCTL, ZADS.

**Table 95** Correlation matrix for standardised variables

Correlation Matrix		Constant	ZVINFO	ZPINFO	ZPPPLSKIL	ZPRESSK	ZREPRES	ZSALARY	ZALTRUIS	ZMONEY	ZMEDIA	ZNEGOTIA	ZAGYCTL	ZAD
Constant		1.000	-.008	.004	-.047	-.014	.001	.004	.004	.004	.006	-.004	.001	-.01
ZVINFO		-.008	1.000	-.003	-.262	-.150	-.040	-.053	-.037	-.122	.030	-.003	.025	-.15
ZPINFO		.004	-.003	1.000	.103	-.053	-.128	-.012	-.168	-.108	-.049	-.224	-.035	-.05
ZPPPLSKIL		-.047	-.262	.103	1.000	-.512	-.021	-.006	-.089	.025	-.023	.115	-.122	.07
ZPRESSK		-.014	-.150	-.053	-.512	1.000	.062	-.072	.025	-.051	.035	-.012	.065	-.07
ZREPRES		.001	-.040	-.128	-.021	.062	1.000	-.008	-.111	.005	.051	.026	-.103	-.10
ZSALARY		.004	-.053	-.012	-.006	-.072	-.008	1.000	-.189	-.349	.093	-.149	.022	-.06
ZALTRUIS		.004	-.037	-.168	-.089	.025	-.111	-.189	1.000	.066	.069	.054	-.164	-.01
ZMONEY		.004	-.122	-.108	.025	-.051	.005	-.349	.066	1.000	-.025	-.045	-.080	.09
ZMEDIA		.006	.030	-.049	-.023	.035	.051	.093	.069	-.025	1.000	.013	-.111	-.54
ZNEGOTIA		-.004	-.003	-.224	.115	-.012	.026	-.149	.054	-.045	.013	1.000	-.075	-.16
ZAGYCTL		.001	.025	-.035	-.122	.065	-.103	.022	-.164	-.080	-.111	-.075	1.000	.01
ZADS		-.018	-.153	-.050	.070	-.074	-.103	-.060	-.010	.095	-.545	-.165	.012	1.00

**Table 96 Logistic regression - interaction between people skills and presentation skills**

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1						
ZVINFO	-.085	.155	.305	1	.581	.918
ZPINFO	-.214	.144	2.211	1	.137	.807
ZPPLSKIL	.758	.218	12.119	1	.000	2.134
ZPRESSK	-.257	.172	2.225	1	.136	.774
ZREPRES	.011	.133	.007	1	.933	1.011
ZSALARY	.029	.144	.040	1	.841	1.029
ZALTRUIS	-.017	.137	.015	1	.903	.983
ZMONEY	.007	.142	.003	1	.959	1.007
ZMEDIA	.267	.160	2.788	1	.095	1.306
ZNEGOTIA	.068	.140	.239	1	.625	1.071
ZAGYCTL	.013	.133	.009	1	.924	1.013
ZADS	-.150	.167	.812	1	.367	.860
XPERSONA	.086	.072	1.440	1	.230	1.090
Constant	-.064	.136	.223	1	.637	.938

a Variable(s) entered on step 1: ZVINFO, ZPINFO, ZPPLSKIL, ZPRESSK, ZREPRES, ZSALARY, ZALTRUIS, ZMONEY, ZMEDIA, ZNEGOTIA, ZAGYCTL, ZADS, XPERSONA.

In this table XPERSONA is a manufactured variable created by multiplying People skills x Presentation skills to examine interaction between the two.

**Table 97 Correlations for interaction between people skills and presentation skill**

Correlation Matrix													
	Constant	ZVINFO	ZPINFO	ZPPL SKIL	ZPRES SKIL	ZREPRES	ZSALARY	ZALTRUIS	ZMONEY	ZMEDIA	ZNEGOTIA	ZAGYCTL	ZADS XPERSONA
Constant	1.000	-.035	-.073	-.233	-.030	.042	.009	.034	.025	.001	.045	-.010	-.013
ZVINFO	-.035	1.000	.008	-.183	-.147	-.042	-.055	-.047	-.130	.030	-.007	.022	-.158
ZPINFO	-.073	.008	1.000	.195	-.033	-.151	-.018	-.178	-.114	-.047	-.246	-.031	-.051
ZPPLSKIL	-.233	-.183	.195	1.000	-.390	-.082	-.015	-.116	-.004	-.013	.026	-.089	.057
ZPRESSK	-.030	-.147	-.033	-.390	1.000	.053	-.076	.015	-.054	.038	-.027	.063	-.079
ZREPRES	.042	-.042	-.151	-.082	.053	1.000	-.005	-.097	.009	.048	.041	-.104	-.105
ZSALARY	.009	-.055	-.018	-.178	-.076	-.005	1.000	-.190	-.345	.097	-.144	.021	-.057
ZALTRUIS	.034	-.047	-.178	-.116	.015	-.097	-.190	1.000	.067	.068	.069	-.165	-.012
ZMONEY	.025	-.130	-.114	-.004	-.054	.009	-.345	.067	1.000	-.025	-.037	-.085	.096
ZMEDIA	.001	.030	-.047	-.013	.038	.048	.097	.068	-.025	1.000	.010	-.111	-.542
ZNEGOTIA	.045	-.007	-.246	.026	-.027	.041	-.144	.069	-.037	.010	1.000	-.074	-.160
ZAGYCTL	-.010	.022	-.031	-.089	.063	-.104	.021	-.165	-.085	-.111	-.074	1.000	.010
ZADS	-.013	-.158	-.051	.057	-.079	-.105	-.057	-.012	.096	-.542	-.160	.010	1.000
X PERSONA	-.357	.087	.230	.530	.122	-.132	-.014	-.091	-.072	.008	-.148	.032	-.015
PERSONA													1.000

In this table XPERSONA is a manufactured variable created by multiplying People skills x Presentation skills to examine interaction between the two.

**Table 98 Logistic regression – interaction between people skills and property information**

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
ZVINFO	-.092	.155	.354	1	.552	.912
ZPINFO	-.244	.141	2.985	1	.084	.783
ZPPLSKIL	.624	.193	10.474	1	.001	1.866
ZPRESSK	-.313	.173	3.259	1	.071	.731
ZREPRES	.060	.133	.199	1	.655	1.061
ZSALARY	.040	.145	.075	1	.784	1.041
ZALTRUIS	-.023	.138	.028	1	.867	.977
ZMONEY	.015	.143	.012	1	.914	1.015
ZMEDIA	.264	.159	2.760	1	.097	1.302
ZNEGOTIA	.106	.140	.571	1	.450	1.111
ZAGYCTL	.023	.134	.030	1	.863	1.023
ZADS	-.140	.167	.707	1	.400	.869
XPPLPINF	-.238	.159	2.228	1	.136	.789
Constant	-.029	.128	.051	1	.821	.971

a Variable(s) entered on step 1: ZVINFO, ZPINFO, ZPPLSKIL, ZPRESSK, ZREPRES, ZSALARY, ZALTRUIS, ZMONEY, ZMEDIA, ZNEGOTIA, ZAGYCTL, ZADS, XPPLPINF.

In this table XPPLPINF is a manufactured variable created by multiplying People skills and Property information to examine interaction between the two.



**Table 100 Logistic regression - interaction between presentation skill and media**

Variables in the Equation

Step 1

	B	S.E.	Wald	df	Sig.	Exp(B)
ZVINFO	-.103	.156	.437	1	.509	.902
ZPINFO	-.254	.141	3.276	1	.070	.775
ZPPLSKIL	.631	.186	11.512	1	.001	1.879
ZPRESSK	-.281	.171	2.688	1	.101	.755
ZREPRES	.044	.133	.108	1	.742	1.045
ZSALARY	.033	.145	.052	1	.819	1.034
ZALTRUIS	.004	.136	.001	1	.977	1.004
ZMONEY	.007	.143	.003	1	.959	1.007
ZMEDIA	.276	.162	2.905	1	.088	1.318
ZNEGOTIA	.093	.138	.454	1	.501	1.098
ZAGYCTL	.007	.133	.003	1	.958	1.007
ZADS	-.129	.168	.589	1	.443	.879
XMEDIA	-.152	.179	.721	1	.396	.859
Constant	-.013	.127	.011	1	.916	.987

a. Variable(s) entered on step 1: ZVINFO, ZPINFO, ZPPLSKIL, ZPRESSK, ZREPRES, ZSALARY, ZALTRUIS, ZMONEY, ZMEDIA, ZNEGOTIA, ZAGYCTL, ZADS, XMEDIA.

In this table XMEDIA is a manufactured variable created by multiplying Media and People skills to examine interaction between the two.

**Table 101 Correlations for interaction between people skills and property information**

Correlation Matrix														
	Constant	ZVINFO	ZPINFO	ZPPL SKIL	ZPRES SKIL	ZREPRES	ZSALARY	ZALTRUIS	ZMONEY	ZMEDIA	ZNEGOTIA	ZAGYCTL	ZADS	XMEDIA
Constant	1.000	-.014	.011	-.056	-.008	-.003	.000	.006	-.001	-.026	-.009	.005	-.028	.065
ZVINFO	-.014	1.000	-.001	-.264	-.145	-.043	-.061	-.041	-.099	.046	-.001	.010	-.146	.007
ZPINFO	.011	-.001	1.000	.095	-.052	-.132	-.006	-.170	-.104	-.051	-.227	-.039	-.049	.027
ZPPLSKIL	-.056	-.264	.095	1.000	-.514	-.019	.005	-.091	.023	.001	.121	-.126	.083	-.050
ZPRESKIL	-.008	-.145	-.052	-.514	1.000	.066	-.081	.026	-.050	.019	-.013	.070	-.085	.024
ZREPRES	-.003	-.043	-.132	-.019	.066	1.000	-.013	-.100	-.008	.052	.030	-.101	-.101	-.101
ZSALARY	.000	-.061	-.006	.005	-.081	-.013	1.000	-.188	-.348	.099	-.153	.022	-.047	-.022
ZALTRUIS	.006	-.041	-.170	-.091	.026	-.100	-.188	1.000	.057	.064	.055	-.160	-.011	-.043
ZMONEY	-.001	-.099	-.104	.023	-.050	-.008	-.348	.057	1.000	-.027	-.045	-.087	.096	.071
ZMEDIA	-.026	.046	-.051	.001	.019	.052	.099	.064	-.027	1.000	.013	-.116	-.492	-.123
ZNEGOTIA	-.009	-.001	-.227	.121	-.013	.030	-.153	.055	-.045	.013	1.000	-.073	-.164	-.018
ZAGYCTL	.005	.010	-.039	-.126	.070	-.101	.022	-.160	-.087	-.116	-.073	1.000	.005	.023
ZADS	-.028	-.146	-.049	.083	-.085	-.101	-.047	-.011	.096	-.492	-.164	.005	1.000	-.147
XMEDIA	.065	.007	.027	-.050	.024	-.101	-.022	-.043	.071	-.123	-.018	.023	-.147	1.000

In this table XMEDIA is a manufactured variable created by multiplying Media and People skills to examine interaction between the two.

## APPENDIX 16 - CONSTRUCT LEVEL MODELS

**Table 102 Measurement models for individual constructs**

Construct	Chi Sq	Df	P	Items included	RMS EA
Media (q9&q10)	-0.0			Difference between Internet & nonInternet a,b,c	
Advertising (q9&q10)	14.40	4	.006	Diff's between Internet & nonInternet e,f,g,h,I	.098
Information (q11)					
Vendor	.794	2	.672	A,b,c,d	.000
Property	284.97	14	.000	E,f,g,h,I,j	.266
Combined	7.914	8	.442	Vendor (a,b,c,d) Property (I,f)	.000
Negotiation (q13)					
All costs	58.98	5	0.00	A,,b,c,,d,e	.199
Presentation skills (q14)					
Listening	26.514	2	.000	A,b,c,e	.212
People	5.089	2	.079	D,f,g,h	.075
Presentation	146.7	2	.000	I,j,k,l	.515
Combined skills	407.3	51	.000	All q14	.163
Agency Control (q12)	-0.0			Aii,aiii,aiv	
Seller Representation & Agency Control (q24 & q12)	9.705	8	.286	24b,c,d, 12aii,12aiii,12aiv	.028
Values (q25)	41.537	19	.002	Altruism & Money	.066
Altruism	.440	2	.803	E,f,g,i	.000
Money	4.420	2	.067	B,c,k,l	.079

Several things are important in this table.

1. A chi-sq of -0.0 means that the item groups did not have enough indicators to run.
2. Constructs that perform poorly do not have a significant chi-square for the specified degrees of freedom.
3. P indicators should be approaching 1 to indicate a good fit with the data (.000 implies no fit with the data).
4. RMSEA should be less than .05 for a good fit.

## APPENDIX 17 - STRUCTURAL MODEL COMPARISONS

A series of models were developed to test the structural model. Development pursued a structural model, massaging carefully the associations between constructs to create a set of statistically acceptable models for comparisons of fit.

Model selection that considers results of Bootstrapping involves examination of the indicators presented in the table above. Arbuckle and Wothke (1999) indicate that the model with the lowest set of criterion indicators (such as AIC, BIC and CAIC) is preferable. Akaike (1987) provides two reasons that justify such a claim (Akaike 1987, Page 318). Firstly, as the number of factors in a model increases direct application of maximum likelihood model evaluation becomes less appropriate. Secondly, because factor analysis modelling is equivalent to Bayesian model selection, minimising the AIC criterion actually legitimises model construction.

The Criterion used in the table above include:

- Akaike Information Criterion - calculated on the basis of distribution rather than parameters assisting a researcher assess factors rather than parameters that should be included in a model (Akaike 1987). This criterion assumes a Bayesian structure of a model but does not apply the same mathematical rules as the BIC.
- Bayesian Information Criterion - based on an integrated likelihood approximation differing from AIC that is based on minimisation of *Kullback-Liebler* distances. Arbuckle and Wothke (1999) derive Browne and Cudeck's

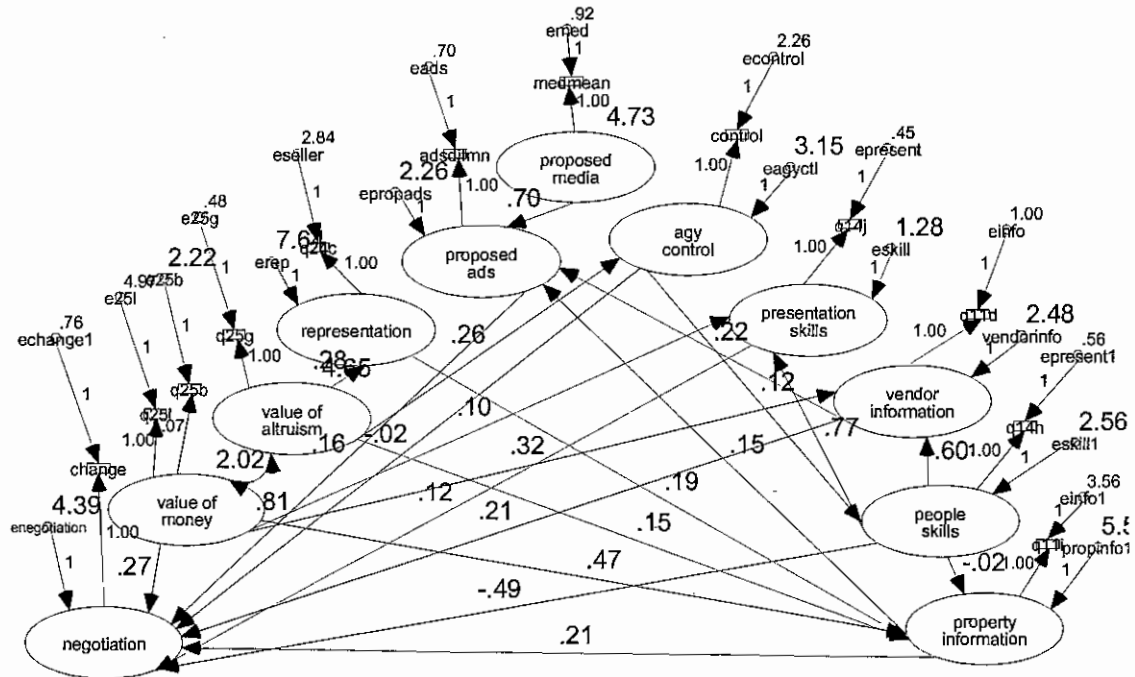
(1989) index for multiple groups. This is the only measure used by AMOS for analysis of moment structures.

- Consistent Akaike Information Criterion –AMOS uses CAIC that represents Bozdogan's (1987) criteria assigning a greater penalty to model complexity than either AIC or BCC and reporting only for the case of a single group where means and intercepts are not explicit model parameter.

The best proposed model is represented by the lowest set of information criterion (Arbuckle and Wothke 1999). This conforms to Akaike (1987)'s suggestion of information criterion minimisation for model selection.

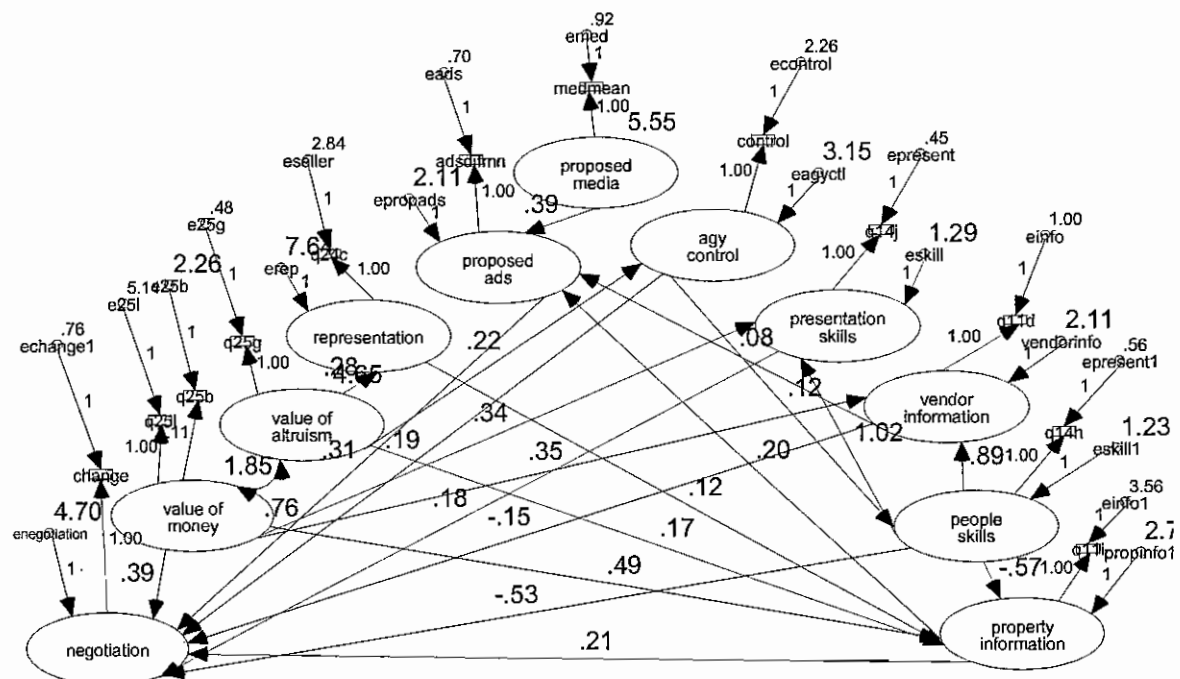
**Figure 44 USE Successful agent-principal relationship establishment attempt**

## Successful REA Unstandardized estimates



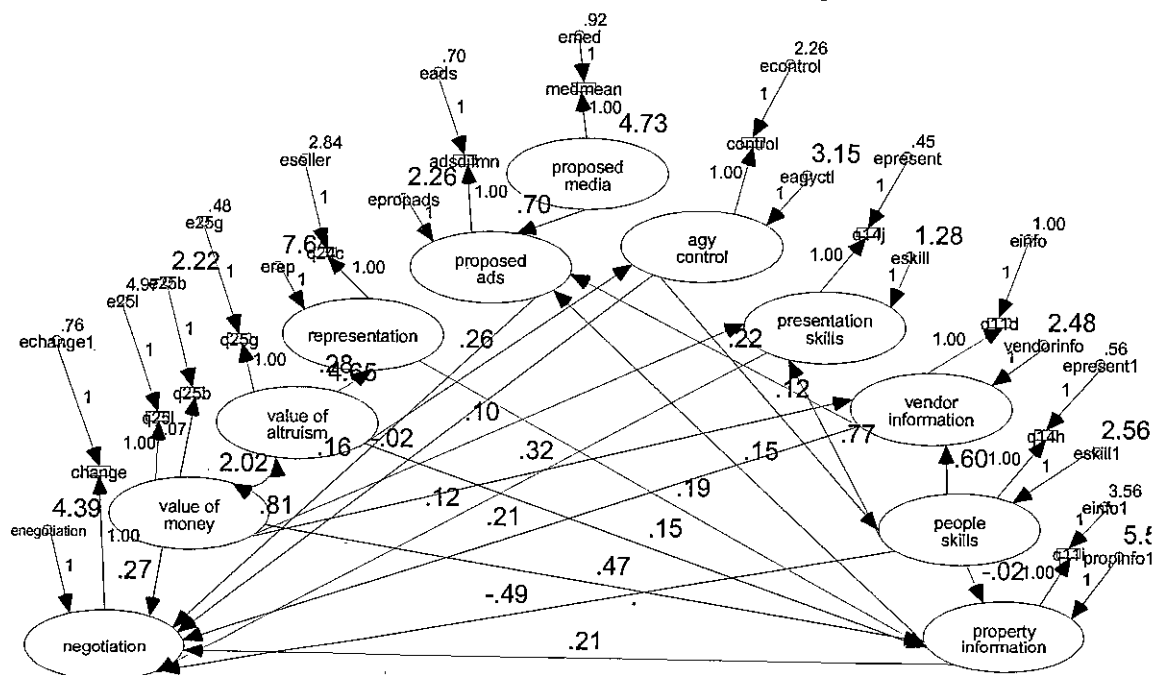
**Figure 45 USE Unsuccessful agent-principal relationship establishment attempt**

## Unsuccessful REA Unstandardized estimates



**Figure 46 Structural model**

## Successful REA Unstandardized estimates



## APPENDIX 18 - SIGNIFICANCE OF LINKS

**Table 103 Significance of links**

			Rel'n stab.		Fixing successful			Fixing unsuccessful		
			Yes	No	Chi sq dif	p	ch-sq	chi-sq	p	Chi sq dif
Value Of Money	<-->	Value Of Altruism	0.807	0.759	78.073	0.69	<b>0.015</b>	78.075	0.69	0.017
Representat'n	<--	Value Of Altruism	0.277	0.278	78.058	0.69	<b>0</b>	78.058	0.69	0
Negotiation	<--	Property Information	0.211	0.206	78.06	0.69	<b>0.002</b>	78.06	0.69	0.002
People Skills	<--	Agy Control	0.118	0.125	78.062	0.69	<b>0.004</b>	78.066	0.69	0.008
Property Information	<--	Value Of Money	0.474	0.491	78.062	0.69	<b>0.004</b>	78.063	0.69	0.005
Property Information	<--	Value Of Altruism	0.152	0.171	78.075	0.69	<b>0.017</b>	78.083	0.689	0.025
Negotiation	<--	People Skills	-0.49	-0.533	78.081	0.689	<b>0.023</b>	78.065	0.69	0.007
Vendor Information	<--	Value Of Money	0.322	0.351	78.09	0.689	<b>0.032</b>	78.088	0.689	0.03
Negotiation	<--	Present'nSkill	0.119	0.181	78.129	0.688	<b>0.071</b>	78.112	0.689	0.054
Agy Control	<--	Value Of Altruism	0.26	0.217	78.215	0.685	0.157	78.52	0.685	0.462
Negotiation	<--	Value Money	0.265	0.39	78.324	0.682	0.266	78.253	0.685	0.195
Proposed Ads	<--	Property Information	0.155	0.203	78.446	0.679	0.388	80.257	0.625	2.199
Property Info	<--	Represent.	0.185	0.116	78.449	0.679	0.391	78.611	0.674	0.553
Negotiation	<--	Proposedads	0.16	0.312	80.201	0.726	2.143	79.209	0.657	1.151
Proposed Ads	<--	Vendor Info	0.217	0.079	80.251	0.625	2.193	80.349	0.622	2.291
Negotiation	<--	Agy Control	-0.022	0.194	80.274	0.625	2.216	79.783	0.64	1.725
Present'nSkill	<--	Value Money	0.098	0.342	81.383	0.591	<b>3.325</b>	81.71	0.581	3.652
Negotiation	<--	Vendor Info	0.213	-0.153	82.602	0.553	<b>4.544</b>	81.489	0.588	3.431
Vendor Info	<--	People Skills	0.603	0.895	84.365	0.499	<b>6.307</b>	81.028	0.602	2.97
Property Info	<--	People Skills	-0.02	-0.566	86.074	0.42	<b>8.016</b>	83.643	0.521	5.585
Present'nSkill	<--	People Skills	0.768	1.023	86.314	0.44	<b>8.256</b>	81.374	0.591	3.316
Proposed Ads	<--	Proposed Media	0.702	0.387	92.608	0.268	<b>14.55</b>	96.828	0.179	18.77

**Table 104 Total effects - unsuccessful agent-principal relationship establishment attempt**

	Proposed Media	Value Of Altruism	Value Of Money	Agency Control	Representation	People Skills	Vendor Information	Property Information	Proposed Ads	Presentation Skills
Agycontrol	0	0.217	0	0	0	0	0	0	0	0
Representation	0	0.278	0	0	0	0	0	0	0	0
People Skills	0	0.027	0	0.125	0	0	0	0	0	0
Vendor Information	0	0.024	0.351	0.112	0	0.895	0	0	0	0
Property Information	0	0.188	0.491	-0.071	0.116	-0.566	0	0	0	0
Proposed Ads	0.387	0.04	0.128	-0.006	0.024	-0.045	0.079	0.204	0	0
Presentation Skills	0	0.028	0.342	0.128	0	1.023	0	0	0	0
Negotiation	0.126	0.08	0.539	0.116	0.031	-0.615	-0.13	0.27	0.325	0.182
Medmean	1	0	0	0	0	0	0	0	0	0
Q11d	0	0.024	0.351	0.112	0	0.895	1	0	0	0
Q11i	0	0.188	0.491	-0.071	0.116	-0.566	0	1	0	0
Adsdfmn	0.387	0.04	0.128	-0.006	0.024	-0.045	0.079	0.204	1	0
Q25b	0	0	1.11	0	0	0	0	0	0	0
Control	0	0.217	0	1	0	0	0	0	0	0
Q14j	0	0.028	0.342	0.128	0	1.023	0	0	0	1
Q14h	0	0.027	0	0.125	0	1	0	0	0	0
Change	0.126	0.08	0.539	0.116	0.031	-0.615	-0.13	0.27	0.325	0.182
Q24c	0	0.278	0	0	1	0	0	0	0	0
Q25g	0	1	0	0	0	0	0	0	0	0
Q25l	0	0	1	0	0	0	0	0	0	0

**Table 105 Total effects - successful agent-principal relationship establishment attempt**

	Proposed Media	Value Of Altruism	Value Of Money	Agency Control	Representat'n	People Skills	Vendor Information	Property Information	Proposed Ads	Presentation Skills
Agency Control	0	0.26	0	0	0	0	0	0	0	0
Representation	0	0.277	0	0	0	0	0	0	0	0
People Skills	0	0.031	0	0.118	0	0	0	0	0	0
Vendor Information	0	0.019	0.322	0.071	0	0.603	0	0	0	0
Property Information	0	0.203	0.474	-0.002	0.185	-0.02	0	0	0	0
Proposed Ads	0.702	0.036	0.143	0.015	0.029	0.128	0.218	0.155	0	0
Presentation Skills	0	0.024	0.099	0.091	0	0.768	0	0	0	0
Negotiation	0.116	0.035	0.469	-0.052	0.044	-0.254	0.248	0.236	0.165	0.12
Media	1	0	0	0	0	0	0	0	0	0
Q11d	0	0.019	0.322	0.071	0	0.603	1	0	0	0
Q11i	0	0.203	0.474	-0.002	0.185	-0.02	0	1	0	0
Adsdfmn	0.702	0.036	0.143	0.015	0.029	0.128	0.218	0.155	1	0
Q25b	0	0	1.075	0	0	0	0	0	0	0
Control	0	0.26	0	1	0	0	0	0	0	0
Q14j	0	0.024	0.099	0.091	0	0.768	0	0	0	1
Q14h	0	0.031	0	0.118	0	1	0	0	0	0
Negotiation	0.116	0.035	0.469	-0.052	0.044	-0.254	0.248	0.236	0.165	0.12
Q24c	0	0.277	0	0	1	0	0	0	0	0
Q25g	0	1	0	0	0	0	0	0	0	0
Q25i	0	0	1	0	0	0	0	0	0	0

**Table 106 Agent values – money & altruism**

	<b>Unsuccessful</b>	<b>Successful</b>
Co-Variance	.807	.759
S.E.	.416	.384
Critical Ratio	1.939	1.978
P	.053	.048
Effect on chi-sq of fixing estimates	.015	.017

This table shows that the direct link between money and altruism is

Significant for both unsuccessful relationship establishment attempts and successful relationship establishment attempts (C.R > 1.96) and

Not significantly different for successful and unsuccessful relationship establishment attempts.

## APPENDIX 19 - RESULTS

### Difference between successful and unsuccessful relationship establishment attempts models

**Table 107 Logistic regression**

<b>Construct</b>	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>Sig.</b>
Vendor Information	-0.046	0.072	0.418	0.518
Property Information	-0.084	0.047	3.228	0.072
People Skills	0.390	0.115	11.558	0.001
Presentation Skills	-0.154	0.093	2.719	0.099
Agent Representation	0.009	0.040	0.055	0.815
Value of Money (salary)	0.015	0.067	0.049	0.825
Altruism	-0.001	0.060	0.000	0.986
Value of Money	0.007	0.053	0.016	0.899
Proposed Media	0.107	0.064	2.783	0.095
Negotiation	0.035	0.053	0.438	0.508
Agency control	0.004	0.056	0.004	0.947
Proposed Advertisements	-0.067	0.075	0.787	0.375
Constant	-1.966	1.010	3.790	0.052

The following discussion in this section will explain this table as it relates to examination of null hypotheses. It is important to define three things at this point:

1. The chance of a successful negotiation is in fact the likelihood of establishing and agent-principal relationship establishment;
2. REA = Relationship Establishment Attempt; and
3. Results are considered at a .10 significance level.

Null hypotheses from previous chapters will now be examined with respect to unsuccessful and successful relationship establishment attempts so that all domains of constructs are included in testing.

### **Link from negotiation to REA (H1)**

The null hypothesis to test this link is

*The degree of change to the terms of an agent-principal agreement submission will have no effect on the chance of establishing an agent-principal agreement.*

#### Definitions

The dependent construct for this null hypothesis is the likelihood of establishing an agent client relationship. This is a dichotomous variable as a relationship is either established or it is not established. The independent construct for this null hypothesis is the degree of change to an agent's submission. This is a continuous parcelled variable calculated by averaging responses to specific components of a submission that may have been changed.

#### Findings

The direct relationship between constructs is not significant according to a test of the Wald statistic for the independent variable being considered (CHANGE) (sig=.508).

*This null hypothesis is not rejected.*

### **Link from proposed advertisements to REA (H7)**

The null hypothesis to test this link is

*Proposed advertisements have no effect on the chance of establishing an agent-principal agreement.*

#### Definitions

Proposed Advertisements represent the continuous independent (predictor) variable for this null hypothesis upon which the dichotomous variable chance of agent-principal relationship establishment is dependent.

#### Findings

Proposed advertisements are not significantly related to relationship establishment attempts (Sig=.375).

*This hypothesis is not rejected.*

### **Link from media selection to REA (H9)**

The null hypothesis to test this link is

*Agent media selection has no effect on the chance of establishing an agent-principal agreement.*

#### Definitions

Agent media selection represents the continuous predictor variable for this null hypothesis upon which the dichotomous variable relationship-establishment is dependent.

## Findings

Proposed media is significantly related to relationship establishment (Sig=.095).

*This null hypothesis is rejected.*

## **Link from agent presentation skills to REA (H11 )**

### Definitions

The dependent variable is the likelihood of establishing and agent-principal relationship.

The continuous independent variable is agent presentation skills. This has been identified as having two dimensions – people skills and presentation skills – in previous chapters of this thesis. So two null hypotheses are tested below.

### Findings

- a) The null hypothesis to test the link between people skills and REA is

*The level of development of people skills has no effect on the chance of successfully establishing an agent-principal relationship.*

This link between People skills and REA is highly significant (Sig = .001).

*This null hypothesis is rejected.*

- b) The null hypothesis to test the link between presentation skills and the relationship establishment attempt outcome is

*The level of development of presentation skills has no effect on the chance of successfully establishing an agent-principal relationship.*

The link between presentation skills and an REA is significant (Sig .099).

*This null hypothesis is rejected.*

## **Antecedents of REA**

This section uses the structural model for relationship establishment developed in the previous chapter to examine the remaining null hypotheses. Arbuckle and Wothke (1999) suggests that links produced when processing multiple groups with a single model can be examined by fixing the value of a link for one group to that estimated for another group. Reviewing the significance of a chi-square difference test indicates whether the null hypothesis of no difference between group estimates can be rejected (Arbuckle and Wothke 1999, Page 264). Findings presented in this section are listed here:

- Unstandardised regression weights;
- S.E. = estimate for the standard error;
- C.R. = critical ratio calculated by dividing the unstandardised regression weight by the estimated standard error to indicate whether estimates are significant given an approximate normal distribution. If this is greater than 1.96 then at the .05 level estimates are considered significantly different from zero (Arbuckle and Wothke 1999, Page 74);
- P = the approximate two-tailed probability for the critical ratio. This is valid for large samples with approximate normally distributed parameter estimates;
- Total effects on dependent variable; and
- Chi-sq significance when regression weight estimates are fixed to those of the opposite outcome (e.g. successful estimate fixed to value of unsuccessful estimate). The table below shows critical values upon which the significance of

this test is decided taken from chi-square distribution tables for a single degree of freedom. If the effect on chi-square of fixing estimates is within these critical values then the null hypothesis that successful and unsuccessful estimates are significantly different is rejected at a given level of significance.

**Table 108 Critical chi-square differences for one degree of freedom**

<b>Level of Significance</b>	<b>Critical chi-sq differences</b>
0.1	2.70554
0.05	3.84146
0.025	5.02389

### **Link from agency control to Negotiation (H2)**

The null hypothesis to test this link is

*Agency imposed controls on negotiations have no effect on the chance of a successful negotiation.*

#### **Definitions**

The dependent construct in this null hypothesis is negotiation in an REA. This is the parcelled variable used in the previous null hypothesis, a continuous scale calculated by averaging observed items of change. Agency imposed controls represent the independent (predictor) variable, also a continuous parcelled variable calculated by averaging observed indicators.

## Findings

**Table 109 Agency imposed controls**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	-.022	.194
S.E.	.141	.155
Critical Ratio	-.154	1.254
P	.878	.210
Total Effects of Agency Control on Negotiation	-.052	.116
Effect on chi-sq of fixing estimates	2.216	1.725

This table shows that the direct link between agency control and negotiation:

- Is not significant for either successful or unsuccessful relationship establishment attempts (Critical Ratio is less than 1.96 for both);
- Is different for successful and unsuccessful relationship establishment attempts at a .10 level of significance; and
- Has total effects of Agency imposed controls on negotiation that are weak and negative for successful relationship establishment attempts but mildly positive for unsuccessful relationship establishment attempts.

*This null hypothesis is not rejected.*

### **Link from information to negotiation (H3)**

#### Definitions

Negotiation is the dependent variable in this null hypothesis, defined in the previous two null hypotheses as a continuous parcelled variable derived from observed items of CHANGE. The degree to which an agent selectively engages in appropriation of information is the focus of the null hypothesis. The independent construct for this null hypothesis is information appropriation. This has been identified as containing two dimensions in previous chapters of this thesis – vendor and property information. For this reason two null hypotheses are tested.

#### Findings

- a) The Null hypothesis to test the link from vendor information to negotiation is

*Vendor information has no effect on negotiation*

The table below shows results from testing this null hypothesis.

**Table 110 Vendor information**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	.213	-.153
S.E.	.162	.195
Critical Ratio	1.318	-.787
P	.187	.431
Total Effects on Negotiation	.248	-.13
Effect on chi-sq of fixing estimates	3.431	4.544

This table shows that the direct link between vendor information and negotiation:

- Is not significant for either successful or unsuccessful relationship establishment attempts (Critical Ratio is less than 1.96 for both);
- Is different for successful and unsuccessful relationship establishment attempts at a .025 level of significance; and
- Have total effects of vendor information on negotiation that are strongly positive for successful relationship establishment attempts but negative for unsuccessful relationship establishment attempts.

*This null hypothesis is not rejected.*

- b) The Null hypothesis to test the link from property information to negotiation is

*Property information has no effect on negotiation*

The table below shows results from testing this null hypothesis.

**Table 111 Property information**

	Unsuccessful	Successful
Regression Weight	.211	.206
S.E.	.109	.190
Critical Ratio	1.941	1.083
P	.052	.279
Total Effects on Negotiation	.236	.27
Effect on chi-sq of fixing estimates	.002	.002

This table shows that the direct link between property information and negotiation:

- Is not significant for unsuccessful or successful relationship establishment attempts (C.R. < 1.96);

- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of property information on negotiation that are strongly positive for both successful and unsuccessful relationship establishment attempts.

*This null hypothesis is not rejected.*

### **Link from values to information appropriation (H4)**

#### Definitions

Agent values represent the independent variable upon which information appropriation is dependent. Information appropriation has already been defined with two dimensions – property information and vendor information. In addition to this, agent values have been defined with two dimensions – agent value of money (MONEY) and agent value altruism (ALTRUISM). To examine the null hypothesis defined in Chapter 4 links described in the following table are tested.

#### Findings

- a) The Null hypothesis to test the link from value of money to property information is

*Value of money has no effect on property information*

**Table 112 Money & property information**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	.474	.491
S.E.	.267	.240
Critical Ratio	1.777	2.047
P	.075	.041
Total Effects	.474	.491
Critical Ratio of Regression Weight	1.749	1.969
Effect on chi-sq of fixing estimates	.005	.004

This table shows that the direct link between money and property information:

- Is not significant for unsuccessful relationship establishment attempts (C.R.<1.96) but significant for successful relationship establishment attempts (C.R > 1.96);
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of Money on Property Information that are strong and positive with Unsuccessful relationship establishment attempts larger than successful relationship establishment attempts.

*This null hypothesis is rejected because the difference between successful and unsuccessful outcomes is not significant.*

- b) The Null hypothesis to test the link from value of money to vendor information is

*Value of money has no effect on vendor information*

**Table 113 Money & vendor information**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	.322	.35
S.E.	.162	.165
Critical Ratio	1.989	2.122
P	.047	.034
Total Effects	.322	.351
Effect on chi-sq of fixing estimates	.03	.032

This table shows that the direct link between money and vendor information:

- Is significant for both unsuccessful relationship establishment attempts and successful relationship establishment attempts (C.R > 1.96);
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of Money on Vendor Information that are strong and positive for both Successful and Unsuccessful relationship establishment attempts with Unsuccessful relationship establishment attempts being stronger than Successful relationship establishment attempts.

*This null hypothesis is rejected.*

- c) The Null hypothesis to test the link from altruism to property information is

*Altruism has no effect on property information.*

**Table 114 Altruism & property information**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	.152	.171
S.E.	.141	.118
Critical Ratio	1.082	1.446
P	.279	.148
Total Effects	.203	.188
Effect on chi-sq of fixing estimates	.025	.017

This table shows that the direct link between altruism and property information

- Is not significant for unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R < 1.96$ );
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of Altruism on Property Information that are strong and positive for both Successful and Unsuccessful relationship establishment attempts.

*This null hypothesis is not rejected.*

- d) The Null hypothesis to test the link from altruism to vendor information is

*Altruism has no effect on vendor information.*

This link does not exist in the structural model. With this link in, model indicators deteriorate as shown in the table below.

**Table 115 Altruism & vendor information**

	<b>Unsuccessful</b>	<b>Successful</b>
Discrepancy Estimate	35.963	41.707
Degrees of Freedom	41	41
P	.694	.440
RMSEA lower bound	0.000	.000
RMSEA upper bound	.047	.060
CR Estimate	.487	-.394

This table shows that the direct link between altruism and vendor information:

- Is not significant for unsuccessful relationship establishment attempts or successful relationship establishment attempts (C.R < 1.96); and
- Adversely affects the model indicators for unsuccessful relationship establishment attempts but has almost no impact on successful relationship establishment attempts.

*This null hypothesis is not rejected.*

### **Link from agent representation to negotiation (H5)**

The Null hypothesis to test this link is

*Who an agent represents has no effect on the chance of a successful negotiation.*

#### **Definitions**

Agent representation is a continuous single observed indicator upon which the continuous parcelled negotiation indicator is dependent. This relationship can therefore be examined with SEM.

### Findings

This link does not exist in the structural model. With this link in, model indicators deteriorate as shown in the table below.

**Table 116 Agent representation to negotiation**

	<b>Unsuccessful</b>	<b>Successful</b>
Discrepancy Estimate	35.933	41.561
Degrees of Freedom	41	41
P	.654	.446
RMSEA lower bound	.000	.000
RMSEA upper bound	.050	.060
CR Estimate	-.177	-.554

This table shows that the direct link from agent representation to negotiation

- Is not significant for unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R < 1.96$ ); and
- Adversely affects the model indicators.

*This null hypothesis is not rejected.*

### **Link from agent values to agent representation (H6)**

#### Definitions

Agent values (Money & Altruism) are the independent (predictor) variables upon which agent representation is dependent in this null hypothesis. Therefore the null hypothesis defined in Chapter 4 is divided into two testable null hypotheses.

## Findings

- a) The Null hypothesis to test the link between an agent's value of altruism and agent representation is

*Altruism has no effect on agent representation.*

The table below shows results of testing this link.

**Table 117 Altruism & agent representation**

	Unsuccessful	Successful
Regression Weight	.277	.278
S.E.	.135	.135
Critical Ratio	2.049	2.056
P	.040	.040
Total Effects	.277	.278
Critical Ratio of Regression Weight	2.049	2.055
Effect of on chi-sq of fixing estimates	0	0

This table shows that the direct link between agent value of altruism and agent representation:

- Is significant for both unsuccessful relationship establishment attempts and successful relationship establishment attempts ( $C.R > 1.96$ );
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of Altruism on agent values that are strong and positive with no difference between successful and unsuccessful relationship establishment attempts.

*This null hypothesis is rejected.*

- b) The Null hypothesis to test the link between an agent's value of money and agent representation is

*Value of money has no effect on agent representation.*

This link does not exist in the structural model. With this link in, model indicators deteriorate as shown in the table below.

**Table 118 Money & agent representation**

	<b>Unsuccessful</b>	<b>Successful</b>
Discrepancy Estimate	36.116	41.861
Degrees of Freedom	41	41
P	.687	.433
RMSEA lower bound	.000	.012
RMSEA upper bound	.048	.060
CR of estimate	.286	.013

This table shows that the direct link from money to agent representation:

- Is not significant for unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R < 1.96$ ); and
- Adversely affects the model indicators for unsuccessful relationship establishment attempts but has almost no impact on indicators for successful relationship establishment attempts.

*This null hypothesis is not rejected.*

## **Link from information appropriation to proposed advertisements (H8)**

### Definitions

Information Appropriation (Vendor and property information) represents the continuous predictor(s) upon which the continuous variable proposed advertisements are dependent.

Two null hypotheses are stated so that the link between information and advertisements can be properly examined incorporating all domains of purified measures.

### Findings

- a) The null hypothesis to test the link between vendor information appropriation and proposed advertisements is

*Vendor information has no effect on proposed advertisements.*

**Table 119 Vendor information & proposed advertisements**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	.217	.079
S.E.	.094	.092
Critical Ratio	2.319	.856
P	.020	.392
Total Effects	.218	.079
Effect of on chi-sq of fixing estimates	2.291	2.193

This table shows that the direct link between vendor information and proposed advertisements

- Is significant for unsuccessful relationship establishment attempts (C.R> 1.96) but not for successful relationship establishment attempts;
- Is significantly different for successful and unsuccessful relationship establishment attempts at a .05 level of significance; and
- Have total effects of Vendor information on proposed advertisements that are strong and positive for successful relationship establishment attempts but weak and positive for Unsuccessful relationship establishment attempts.

*This null hypothesis is rejected with qualification because of the significant difference between successful and unsuccessful relationship establishment attempts outcomes.*

- b) The null hypothesis to test the link between property information and proposed advertisements is

*Property information has no effect on proposed advertisements.*

**Table 120 Property information & proposed advertisements**

	Unsuccessful	Successful
Regression Weight	.155	.203
S.E.	.076	.099
Critical Ratio	2.027	2.051
P	.043	.040
Total Effects	.155	.204
Effect of on chi-sq of fixing estimates	2.199	.388

This table shows that the direct link between property information and proposed advertisements:

- Is significant for both unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R > 1.96$ );
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Has total effects of property information on proposed advertisements that are strong and positive for both successful and unsuccessful relationship establishment attempts, although stronger for unsuccessful than successful.

*This null hypothesis is rejected.*

### **Link from information appropriation to agent media selection (H10)**

#### Definitions

Agent information appropriation (Vendor & property information) is the continuous predictor variable upon which the continuous variable agent media selection is dependent.

#### Findings

Two null hypotheses that test the link from agent information appropriation to proposed advertisements are

*Property information has no effect on media selection*

And

*Vendor information has no effect on media selection*

**Table 121 Property information and media**

	<b>Unsuccessful</b>	<b>Successful</b>
Discrepancy Estimate	36.185	38.858
Degrees of Freedom	41	41
P	.684	.566
RMSEA lower bound	.000	.000
RMSEA upper bound	.048	.054
CR of estimate	.111	1.767

This table shows that the direct link from property information to media:

- Is not significant for unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R < 1.96$ ); and
- Improves successful model indicators but adversely affects the model indicators for unsuccessful relationship establishment attempts.

This null hypothesis is not rejected.

**Table 122 Vendor information and media selection**

	<b>Unsuccessful</b>	<b>Successful</b>
Discrepancy Estimate	35.565	41.737
Degrees of Freedom	41	41
P	.710	.439
RMSEA lower bound	.000	.011
RMSEA upper bound	.046	.060
CR of estimate	.787	.348

This table shows that the direct link from money to agent representation:

- Is not significant for unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R < 1.96$ ); and
- Adversely affects the model indicators for unsuccessful relationship establishment attempts and successful relationship establishment attempts to a lesser degree.

This null hypothesis is not rejected.

No direct link between Information appropriation and proposed media is established.

This null hypothesis cannot be rejected. Final models do not support any link or total effects between the predictor variable of information appropriation and media selection.

### **Link from agent presentation skills to negotiation (H12)**

#### Definitions

Presentation skills (People skills & Presentation Skills) are the continuous predictor variables upon which the continuous variable negotiation (CHANGE) is dependent.

Two testable null hypotheses are required to examine the proposed null hypothesis.

#### Findings

- a) The null hypothesis to test the link from people skills to negotiation is

*People skills have no effect on the negotiation.*

**Table 123 People skills & negotiation**

	Unsuccessful	Successful
Regression Weight	-.49	-.533
S.E.	.272	.489
Critical Ratio	-1.800	-1.090
P	.072	.276
Total Effects	-.254	-.615
Effect of on chi-sq of fixing estimates	.023	.007

This table shows that the direct link between people skills and negotiation:

- Is not significant for either unsuccessful relationship establishment attempts or successful relationship establishment attempts (C.R < 1.96);
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of People skills on Negotiation that are extremely negative for Unsuccessful relationship establishment attempts and strongly negative for Successful relationship establishment attempts.

*This null hypothesis is not rejected*

- b) The null hypothesis to test the link between presentation skills and negotiation is

*Presentation skills have no effect on negotiation.*

**Table 124 Presentation skills & negotiation**

	<b>Unsuccessful</b>	<b>Successful</b>
Regression Weight	.119	.181
S.E.	.228	.261
Critical Ratio	.525	.694
P	.600	.488
Total Effects	.12	.182
Effect of on chi-sq of fixing estimates	.054	.071

This table shows that the direct link between presentation skills and negotiation:

- Is not significant for either unsuccessful relationship establishment attempts or successful relationship establishment attempts ( $C.R < 1.96$ );
- Is not significantly different for successful and unsuccessful relationship establishment attempts; and
- Have total effects of presentation skills on negotiation that are strong and positive for Unsuccessful relationship establishment attempts but mildly positive for Successful relationship establishment attempts.

*This null hypothesis is not rejected.*

### **Additional links**

The table below shows results of testing extra hypotheses (HX1 to HX9) using the following criteria:

- Estimated regression weights;
- Critical ratios (greater than 1.96 reveal significant regression weights); and

- The significance of the difference between relationship establishment attempt outcomes determined by the level of significance between successful and unsuccessful regression weights tested in the same way as in the previous chapter using Anderson and Gerbing (1988) and Arbuckle and Wothke's (1999) recommendations. The table below shows critical indicators for this test.

Level of Significance	Critical chi-sq differences
0.1	2.70554
0.05	3.84146
0.025	5.02389

**Table 125 Results from testing additional hypotheses (HX)**

Link	Hypothesis	Regression weight estimates		Critical ratios		Chi-sq difference from Constraining link	
		Succ	Unsucc	Succ	Unsucc	Succ	Unsucc
From media to proposed ads	HX1	.702	.387	8.621	5.684	14.55	18.77
From altruism to agency control	HX2	.26	.212	2.248	2.675	.157	.462
From value of money to presentation skills	HX3	.304	.098	2.482	.892	3.325	3.652
From value of money to negotiation	HX4	.390	.265	1.293	1.196	.266	.195
From proposed advertisements to negotiation	HX5	.312	.160	2.269	1.580	2.143	1.151
From agent representation to property information	HX6	.116	.185	1.248	1.671	.391	.553
From agency control to people skills	HX7	.125	.168	1.616	1.155	.004	.008
From people skills to vendor information	HX8	.895	.603	5.325	5.874	6.309	2.97
From people skills to property information	HX9	-.566	-.020	-2.52	-.116	8.016	5.585

Reading this table the following findings are evident.

***Link from media to proposed ads (HX1)***

The null hypothesis tested here is

*Media has no effect on proposed ads*

This relationship is:

- Significant for both successful and unsuccessful relationship establishment attempts; and
- Highly significantly different between REA outcomes.

*This null hypothesis is rejected .*

***Link from altruism to agency control (HX2)***

The null hypothesis tested here is

*Altruism has no effect on agency control*

This relationship is:

- Significant for both successful and unsuccessful relationship establishment attempts outcomes; and
- Not significantly different between these outcomes.

*This null hypothesis is rejected because of the significance within each outcome type.*

### ***Link from value of money to presentation skills (HX3)***

The null hypothesis tested here is

*Value of money has no effect on presentation skills.*

This relationship is:

- Significant for a successful relationship establishment attempts but not significant for an unsuccessful relationship establishment attempts; and
- Significantly different between these outcomes.

*This null hypothesis rejected for successful relationship establishment. This is one of the more complex outcomes discussed in detail in the next chapter.*

### ***Link from value of money to negotiation (HX4)***

The null hypothesis tested here is

*Value of money has no effect on negotiation*

This relationship is:

- Not significant for either successful or unsuccessful relationship establishment attempts outcomes; and
- Not significantly different between these outcomes.

*This null hypothesis is not rejected.*

***Link from proposed advertisements to negotiation (HX5)***

The null hypothesis tested here is

*Proposed advertisements have no effect on negotiation.*

This relationship is:

- Significant for a successful relationship establishment attempts but not significant for unsuccessful relationship establishment attempts; and
- Significantly different between these outcomes.

*This null hypothesis is rejected.*

***Link from agent representation to property information (HX6)***

The null hypothesis tested here is

*Agent representation has no effect on property information.*

This relationship is:

- Not significant for either successful or unsuccessful relationship establishment attempts outcomes; and
- Is significantly different between these outcomes.

*This null hypothesis is no rejected.*

***Link from agency control to people skills (HX7)***

The null hypothesis tested here is

*Agency control has no effect on people skills.*

This relationship is:

- Not significant for either successful or unsuccessful relationship establishment attempts; and
- Significantly different between these outcomes.

*This null hypothesis is not rejected.*

***Link from people skills to vendor information (HX8)***

The null hypothesis tested here is

*People skills have no effect on vendor information.*

This relationship is:

- Significant for both successful and unsuccessful relationship establishment attempts outcomes; and
- Not significantly different between these outcomes.

*This null hypothesis is rejected.*

***Link from people skills to property information (HX9)***

The null hypothesis tested here is

*People skills have no effect on property information.*

This relationship is:

- Significant for successful relationship establishment attempts but not significant for unsuccessful relationship establishment attempts; and
- Not significantly different between these outcomes.

*This null hypothesis is rejected for successful relationships only.*

## Advertising

Integrated marketing communications (IMC) literature examined in the literature review reveals that media and advertisements are inextricably linked together with other issues such as the target audience and the intended purpose of the communication. AMOS estimates in the table below for agent's proposed advertisements are therefore very interesting.

**Table 126 Links to proposed advertisements**

Construct	Successful REA		Unsuccessful REA		Level of Sig Diff b/n
	R.W.	C.R.	R.W.	C.R.	Successful & Unsuccessful
Proposed Media	.387	5.648	.702	8.621	.025
Vendor Information	.079	.856	.217	2.319	.10
Property Information	.203	2.051	.155	2.027	.10

Variables used to capture proposed media and advertisements were examined for discriminant and convergent validity and found to be distinct in Chapter Six of this thesis. The data therefore confirms what is evident in the literature because media and advertisements are significantly linked. Proposed media, as some function of proposed advertisements, is an issue of concern more so for unsuccessful relationship establishment attempts than successful relationship establishment attempts because of the significant difference between REA outcomes and magnitude of regression weights. This poses an opportunity for further research to investigate details of specific media types and advertising information.

Other relationships identified in the table above have been discussed in previous sections of this chapter. Note that as vendor and property information appropriation increase so too do details included in the proposed advertising.

Vendor information is not significantly important to proposed advertisements in a successful relationship establishment attempts while it is important in an unsuccessful relationship establishment attempts. These differences imply that vendor information is used in advertisement preparation more so in successful than unsuccessful relationship establishment attempts. This is likely to be an issue of people skills because an increase in people skills coincides with increased vendor information in proposed advertisements.

Property information is important to advertisements in both successful and unsuccessful relationship establishment attempts and the difference between outcomes is also significant. This is fairly logical because proposed advertisements are meant to entice a potential purchaser to enquire about a property from the characteristics described in that advertisement. If property specific information is not contained in an advertisement then the potential purchaser has nothing to enquire about, and the less negative information included in an advertisement the greater the chance of obtaining enquiry at a high property price.

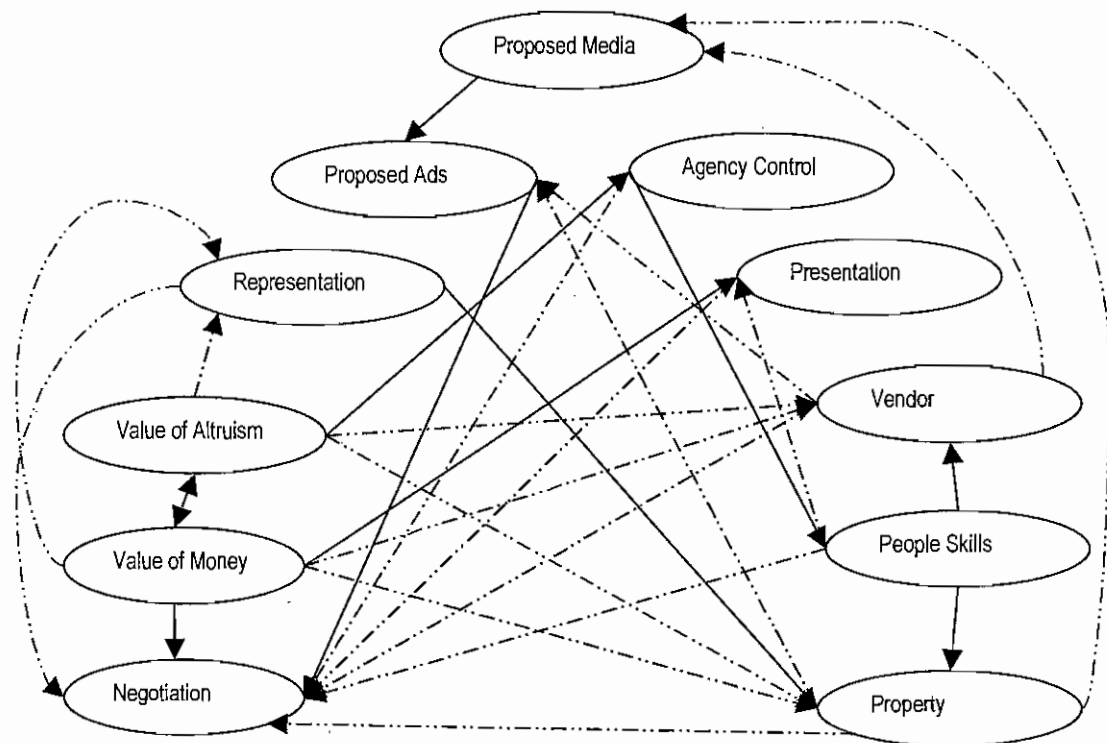
## APPENDIX 20 - DETAILED LINKS

**Figure 47 All links tested in this model**

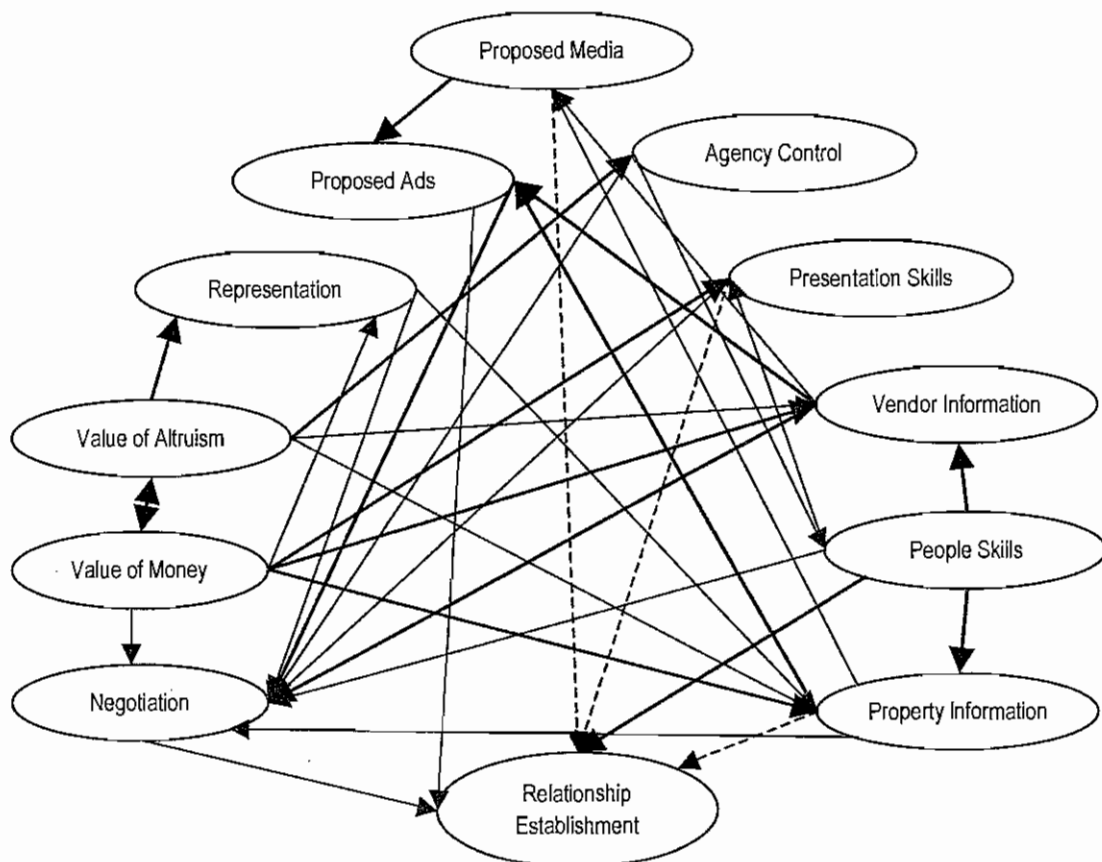
dotted = hypothesis tested

solid = structural only

conceptual=hypothesis tested



**Figure 48 Results of testing all links**



NB: More complex links are considered for the purpose of understanding agent client relationship establishment to be supported because of the nature of the tests used to determine significance of links. These links include:

- The link from vendor information to proposed advertisements
- The link from proposed advertisements to negotiation
- The link from value of money to presentation skills

Although all tests between and within models were done with a sample size of 137, the tests between models is considered less reliable because it has a greater sensitivity to issues of sample size (chi-square significance tests) than the tests used to determine significance of links within a model (t-values that determine significance differences from zero). For this reason when conflicting results emerge such as these more complex links the less sensitive test is considered more useful.

## APPENDIX 21 - TOTAL EFFECTS

**Table 127 Total effects of information appropriation**

<b>Property Information</b>	<b>Unsuccessful</b>	<b>Successful</b>
Altruism	.203	.188
Money	.474	.491
Agency control	-.002	-.071
Representation	.185	.116
People Skills	-.020	-.566
Vendor Information		
Altruism	.019	.024
Money	.322	.351
Agency control	.071	.112
People Skills	.603	.895

**Table 128 Total effects of proposed advertisements**

	<b>Unsuccessful</b>	<b>Successful</b>
<b>Media</b>	.702	.387
<b>Altruism</b>	.035	.040
<b>Value of money</b>	.143	.127
<b>Agency control</b>	.015	-.006
<b>Representation</b>	.029	.024
<b>People Skills</b>	.128	-.045
<b>Vendor Information</b>	.217	.079
<b>Property Information</b>	.155	.203

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