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Sales performance and intuition – the role of gut feelings

David Locander
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SALES PERFORMANCE AND INTUITION –

THE ROLE OF GUT FEELINGS

by

David Locander, B. A., M.B.A.

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Business Administration

COLLEGE OF BUSINESS
LOUISIANA TECH UNIVERSITY

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We hereby recommend that the dissertation prepared under our supervision by David Locander entitled "Sales Performance and Intuition - The Role of Gut Feelings" be accepted in partial fulfillment of the requirements for the Degree of Doctor of Business Administration.

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ABSTRACT

This dissertation extends the dual theory of salesperson information processing by examining the relationship between salespersons' emotional intelligence (EI) and their preference for and use of decision-making styles (intuition and/or deliberation) in the selling process. This dissertation contains two studies, Study 1 employs a descriptive research design and Study 2 uses experimental manipulations to investigate the role that intuition and deliberation play within the sales process. Data for both studies come from a sample derived from a national online panel of business to business salespeople.

Study 1, using a survey approach, assesses two competing models and one post hoc model that are theoretically differentiated on the bases of cognitive awareness and effort. Findings from Study 1 demonstrate that a salesperson perceived use of intuition and deliberation are unique constructs that each positively influence creative selling and job performance. Also, emotional management relates to intuition and is a positive antecedent to deliberation. This provides supporting evidence for the theory of emotional intelligence. Finally, the post hoc model reveals that creative selling plays an important supporting role in shaping job performance.

Study 2 employs a between subjects 2 (intuition versus deliberation decision mode) X 2 (positive versus negative emotional perception) X 2 (positive versus negative message) experimental design.
Findings from Study 2 reveal that salesperson deliberation is necessary to perceive accurately emotions in others. This is in line with the theory of emotional intelligence, which holds that EI is an ability. In addition, there is evidence that subjects in the intuition condition retain less information regarding the sales dialogue but have roughly the same pattern of responses for purchase probability, tone of the sales dialogue, and attitude toward the product. This provides evidence that a salesperson’s intuition is a valuable input to guide actions during the sales interaction. Finally, there is evidence of the two processing systems, deliberation and intuition, working together and affecting how salespeople process information and make decisions. These findings support the theory of dual processing and provide insight into the decision making process within the context of sales. The work also provides a strong basis for future research.
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Date 5-15-2014
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CHAPTER 1

INTRODUCTION

Nature of the Problem

No matter what industry in which a competitive organization conducts its business, survival is dependent upon generating revenue through sales. The sales force generates the sales revenue providing any business with the needed cash flow to survive. Salespeople’s effectiveness is based on their performance, which has been conceptualized as resulting from a vast array of endogenous, moderator, and mediating variables (Anderson & Oliver 1987; Babakus, Cravens, Grant, Ingram, & LaForge, 1996; Churchill, Ford, Hartley, & Walker, 1985; Verbeke, Dietz, & Verwaal, 2011). Previous research on salesperson performance has focused on topics like salesperson selection, buyer–seller interactions, job design, incentive systems, sales controls, supervision, and many other topics in the sales/sales management domain. This prior research has only been able to explain a relatively small amount of variance in sales performance (Evans, McFarland, Dietz, & Jarmillo, 2012). Thus, there is no consensus among researchers as to what makes one salesperson more effective than another. Therefore, it may be time to take a more intuitive route in an attempt to explain salespersons’ job performance by examining their decision making, emotional intelligence and creative selling ability.
The dual processing model of decision making is not a new concept to marketing. However, much of the research done within marketing and sales has focused on System 2 thinking (deliberation), a label used by Haidt (2001) who claims research suffers from the "worship of reason" or an over focus on rational, analytic thought as an explanatory basis for human behavior. However, recent research into information processing and in psychology leads to the possibility of multiple decision-making processes; System 1 thinking represents an intuitive process offered as an additional explanation portraying other ways that people come to act beyond through System 2 thinking. Among the difficulties in researching intuition are a lack of definitional clarity (Volz & von Cramon, 2006; Salas, Rosen, & DiazGranados, 2010) and measurement/operationalization problems (Glöcker & Witteman, 2010). However, with the lack of progress in explaining sales’ performance using System 2 concepts, it is time to investigate the notion of salesperson’s intuition within a sales context.

**Purpose of the Research**

The purpose of this research is to examine how one’s intuition interacts with cognitive intelligent processes (emotional intelligence, deliberation, and creative selling) and ultimately how these processes interact to affect both behavioral and outcome aspects of salespersons job performance.

**Objectives**

Given that research on intuition in a sales context remains in its infancy, one basic objective of this research is clarifying what intuition is (and is not) and how salespeople use intuition in the sales process. The essence of intuition is a feeling of knowing,
although coming with different degrees of certainty, without knowing why, that cannot be rationally justified at the time of awareness. This feeling is based on a confluence of phenomena including one's own cumulative past experiences that interact with environmental cues to produce an intuitive feeling (a.k.a. gut feeling). Intuition has been referred to as an automatic process because it happens without the person's knowledge or use of conscious cognitive effort. Therefore, the automatic intuitive process produces a feeling, not action. When a person becomes aware of this feeling, the intuitive process has concluded. However, the intuitive feeling that is produced is not done. Once the feeling enters conscious awareness, it has entered the deliberative process; which has three options accept, reject or investigate further.

Deliberation is a "decision mode following explicit evaluation, beliefs, and reasons" (Betsch & Kunz, 2008, p. 536). Deliberation is a calculating process that weighs relevant information systematically and rationally to come to a conclusion which can be justified and verbally explained (Alexander, 1979). Deliberation provides an ability to understand cause and effect relationships and is a driving force behind mathematical and scientific thinking (Epstein, 2010). The major differences between intuition and deliberation are those of cognitive effort and conscious awareness as can be seen in Figure 1.1.
Figure 1.1 *Guiding Model*

At the top of Figure 1.1, the box labeled *conscious cognitively demanding processes* contains emotional intelligence, deliberation, and creative selling. Each represents a process that requires a person to put forth conscious cognitive effort. When any of these processes are engaged, individuals are using effortful cognitive resources, which can be mentally draining. Salovey and Mayer offer a brief discussion of the remaining two cognitively demanding processes—emotional intelligence and creative selling.

Salovey and Mayer (1990) introduce the concept of ability-based Emotional Intelligence (EI), which is an adaption of the study of social intelligence. Salovey and Mayer defined EI as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions (Salovey & Mayer, 1990, p. 189).” They conceptualized EI as a higher-order construct, which consists of four dimensions:
perceiving, facilitating (or using), understanding, and managing emotion. Later, Joseph and Newman (2010) conceptualized EI as a cascading model using three of the four dimensions: emotional perception, emotional understanding, and regulation of emotion. Joseph and Newman (2010) dismiss the notion of any automatic process within the cascading model because it would violate the causal structure. The first objective of this dissertation is to determine if intuition, an automatic process, can be incorporated into Joseph and Newman’s cascading model of emotional intelligence.

The second objective of this research is to answer the call for more research on creativity which has been identified as one of the five under-researched topics in the sales literature (Evans et al., 2012). Along with, Wang and Netemeyer (2004) call for research on the antecedents and consequences of creative selling. Creative selling is a concept introduced by Wang and Netemeyer (2004) and is considered part of the cognitively demanding conscious processes in Figure 1.1. This is because it requires salespeople to use cognitive resources to analyze selling situations and to come up with new and innovative ideas, behaviors, and problem solutions. Wang and Netemeyer (2004) conceptualize salesperson creative performance “as the amount of new ideas generated and novel behaviors exhibited by the salesperson in performing his or her job activities (p. 806).” With the paradigm shift away from product pushers and more toward customer oriented and problem solving selling, it is evident that creative selling is an important concept that needs to be better understood in relation to salesperson’s decision making and emotional intelligence.

The third objective of this dissertation is to examine what are some of the cognitive antecedents for job performance, and what is the role of salesperson intuition as
it pertains to job performance. By examining salespersons’ intuition in relation to these conscious and cognitively demanding processes previously discussed, its role in the sales process will be uncovered. It may be that salespeople who rely on their gut feelings are the key to understanding a missing factor in explaining job performance. The void created by not incorporating intuition in past research on job performance leaves room for exploring its relationship to salesperson productivity. By incorporating gut feelings, we will gain a more complete picture and possibly identify the role of one’s gut in creating sales performance.

Contributions

While the significance of determining what contributes to high sales performance is evident to researchers and practitioners, there has been little progress in our ability to do so (Evans et al., 2012). This study can lead to several important advances to the marketing and sales literature as well as to practitioners.

Theoretical Contributions

First, this dissertation incorporates a neglected area of research within the marketing and sales literature by including intuition into a more complete view of decision making. It is not until one begins to work with a concept like intuition that they realize how often it is used in both personal and professional contexts. For example, one may read in an article or hear a conference presentation where the phrase “it was intuitively obvious” is frequently used. However, there is very little academic research on intuition done in the domain of marketing and sales. By focusing on intuition, the dissertation research intends to advance the topic as a more accepted and valuable
research endeavor. Thus, there is the potential to move forward the theory on how salespeople make decisions by integrating an automatic process -- intuition.

Second, with such a disappointing research record in predicting salespeople's job performance, this dissertation may provide the initial insight into the power of a salespersons' intuition and how it interacts with other cognitive concepts to produce an ideal mix of a salespersons' guts and brains. Thus, intuition may be the missing link into providing reliable salespeople's job performance predictions.

Third, over the years, researchers have contributed a substantial amount of work to emotional intelligence (EI). However, past conceptualizations of EI have neglected automatic processes and intuition. This dissertation looks to redefine how the concept of emotional intelligence is conceptualized to incorporate intuition. That is, it is reasonable that EI theory should incorporate intuitive process manifesting itself in gut feelings while disregarding other automatic processes that result in action. By doing so, this may stimulate the research on intuition and help clarify how emotional intelligence actually works.

Finally, this dissertation answers the call by Evans et al., (2012) for research on creativity within the academic field of sales force performance. By examining salesperson creativity along with EI, intuition, and deliberation; the results will indicate whether or not salesperson's creativity is a predictor of job performance. This dissertation will also allow us to get a better understanding of the antecedents to creative selling. For example, are deliberate or intuitive people better at creative selling? This can give us a glimpse into what kind of person is better suited for various types of selling contexts.
Research Contributions

This dissertation makes two contributions to the methodology literature. First, in Study 1, the survey portion, the scale items will be framed in the context of a salesperson/buyer interaction. That is, items will be adapted from their generic wording to a more context specific wording. This is intended to capture the use of the constructs (intuition, and deliberation) in a sales interaction. For example, one of the faith in intuition items from Epstein, Pacini, Denes-Raj, and Heier (1996).

Old: My initial impressions of people are almost always right.

New: My initial impressions of customers are almost always right.

Creative selling and EI do not need to be adapted because they are already framed in a selling context. By incorporating context specific measures, this should more accurately represent the actual use of the constructs in a sales interaction. Also, researchers have discussed the contextual nature of these constructs and how they should be researched in the relevant context (Epstein, 2010 for intuition and deliberation) (Kidwell, Hardesty, Murtha, & Sheng, 2011 for emotional intelligence) (Wang & Netemeyer, 2004 for creative selling). By adapting these scales, other researchers will be able to use the adapted items in their own work; thus making a contribution to the methodology literature in sales.

Second, Study 2 is an experiment that is intended to capture a salesperson’s use of intuition in a simulated sales interaction. If the experiment produces valid results, the contribution will likely be unique and significant. This is because Glöcker and Witteman (2010) identify methodological issues such as tracing unconscious processes as one of the four major challenges to studying intuition. An experimental methodology can be
reproduced in a variety of settings across the field of marketing. Also, if the results demonstrate that respondents who are high in intuition on the adapted intuition scale and perform well in the intuitive experimental condition, this will provide evidence to the validity of the adapted intuition scale.

**Managerial Contributions**

This dissertation has the potential to have a significant practitioner impact, especially for sales managers and human resource professionals. That is, if these studies demonstrate that a salesperson’s reliance on intuitive feelings or some combination with deliberation or creative selling leads to better job performance; then companies can test job applicants for their intuitive ability as a way of screening job applicants. In addition, companies can implement training programs designed to increase sales peoples’ development of their intuitive feelings. By doing so, a company could end up with a superior sales force giving them a competitive advantage. Also, sales management policies can be altered to allow more freedom for creative processes to be practiced by sales personnel.

Second, this dissertation will examine creative selling. The results of this study will determine whether creative selling is an antecedent to job performance. In addition, this study also examines creative selling’s antecedents. The results of this study can be used to determine the most effective combination of personal attributes which make up effective creative sellers. Thus, this dissertation will provide practitioners with the information on whether creative selling leads to better job performance and what to look for in a person to see if they have the potential to be an effective creative seller. In addition, creative selling requires that a company allow salespeople the latitude to
implement the creative selling process. Thus, companies can change their policies to allow their salespeople the freedom to implement creative selling.

**Organization**

This dissertation is organized in the following manner. Chapter 1 provides a brief overview of decision making (intuition and deliberation), emotional intelligence, creative selling along with an introduction to the research problem and contributions. Chapter 2 presents the literature review and outlines the hypothesized competing models and presents the research questions. In Chapter 3, the research methods for Study 1 and 2 are presented. Study 1 is a rather straight forward survey while the experiment in Study 2 is more complex and will require a comprehensive explanation. Also in Chapter 3, the data collection methods and analysis procedures will be presented. Chapter 4 will contain the data analysis and empirical results for both studies. Chapter 5 is the final chapter of this dissertation and will present the findings and discussion. In addition, it will outline in more detail the theoretical contributions, managerial implications, limitations and suggestions for future research.
CHAPTER 2

LITERATURE REVIEW, AND

HYPOTHESES DEVELOPMENT

This literature review focuses on research and theoretical developments in the following areas: marketing, sales, decision-making, management, and cognitive and social psychology. The review concentrates on salespeople’s intuitive and deliberative decision-making processes, emotional intelligence, and creative selling. The literature review concludes with a theoretical synopsis including a set of research questions that guide the dissertation research.

Research on Decision Making

*History of Decision Making and Dual Processing Models*

One of the most interesting questions that researchers in a variety of fields have tried to answer is, “how do humans make decisions?” The first normative theory of decision making was proposed by John von Neumann and Oskar Morgenstern in 1944, the Expected Utility Theory (EUT). Their model was not intended to describe how people actually behave, but rather offer a normative theory portraying how people should behave based on certain requirements of rational decision making. This theory posits that people make decisions that maximize their utility -- the sum of the utilities of all outcomes multiplied by probability that these outcomes occur (Glöcker & Witte, 2010). Later,
researchers identified a major problem with expected utility theory and its subsequence spin-offs because they required considerable cognitive effort and analysis when making decisions. Herbert Simon (1955) challenged the notion that people maximize their utility because of limitations in their cognitive capacity and thus proposed the notion of bounded rationality. Bounded rationality professes that, while humans may try to be rational decisions makers, it may be impossible for them to do so because of limitations in knowledge, computational capacity, and time (Flaherty & Pappas, 2004). Simon essentially put forth two alternative process models: an adaptive strategy selection and partially automatic processes. This approach adopts the view of dual-processing of information theories, which argue that two systems, System 1 (an intuitive system) and System 2 (a deliberative/rational system), underlie human thinking and reasoning (Stanovich & West 2000). The operating characteristics of the two systems are presented in Table 2.1 (Sadler-Smith, 2008, p. 202). Over the years there have been many variations of dual-processing models, most notably Petty and Cacioppo’s (1986) Elaboration Likelihood Model (ELM) and Chen and Chaiken’s (1999) Heuristic Systematic Model (HSM). While both of these models were theoretically developed using System 1 and System 2 processing, they differ in their ability to work together and operate simultaneously. That is, in some dual-processing models like the HSM, both System 1 and System 2 are seen to work in some combination when processing information and making decisions (Evans, 2008; Weber & Johnson, 2009; Glöckner & Witteman, 2010).
Table 2.1

*Characteristics of System 1 and System 2 Processes*

<table>
<thead>
<tr>
<th>System 1 Processes</th>
<th>System 2 Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associative</td>
<td>Rule-based</td>
</tr>
<tr>
<td>Holistic</td>
<td>Analytic</td>
</tr>
<tr>
<td>Automatic</td>
<td>Controlled</td>
</tr>
<tr>
<td>Cognitively undemanding</td>
<td>Cognitively demanding</td>
</tr>
<tr>
<td>Fast</td>
<td>Slow</td>
</tr>
<tr>
<td>Involuntary</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Acquired through biology, exposure,</td>
<td>Acquired through cultural formation and formal/explicit</td>
</tr>
<tr>
<td>informal/implicit learning and experience</td>
<td>learning</td>
</tr>
<tr>
<td>interactional intelligence</td>
<td>Analytic intelligence</td>
</tr>
<tr>
<td>Intuiting</td>
<td>Analyzing</td>
</tr>
</tbody>
</table>

*(Sadler-Smith, 2008, p. 202)*

While System 1 and System 2 processing seems straightforward, they have become universal headings that contain many subsystems (Hogarth, 2001). Epstein et al. (1996) postulated that System 2 (deliberative) contains abilities like mathematical, verbal, abstract logic, introspection, etc.; while System 1 (intuitive) contains abilities like visualization, imagination, and aesthetic sensibility. Evans (2008) proclaims that it is “almost certainly wrong to think of System 1 as one system” (p. 17). Within the paradigm of decision making, much of the research is based on dual processing incorporating a deliberation system (which essentially is System 2) and an intuition system (which essentially is System 1). This distinction is an important part of the theoretical foundation for this dissertation.
Evolution of Deliberation and Intuition

Deliberation

The terms deliberate and rational are used interchangeably in Betsch and Kunz’s definition of deliberation as a “decision mode following explicit evaluation, beliefs, and reasons” (Betsch & Kunz, 2008, p. 536). While there are numerous accounts of rational decision making in a wide variety of literatures, Sadler-Smith (2008) recount Benjamin Franklin’s letter to a friend advocating a rational utility approach to making decisions. Franklin’s letter reads as follows:

Divide half a sheet of paper by a line into two columns; writing over the one Pro, and over the other Con. Then, during three or four days consideration... when I have got them all together in one view I endeavor to estimate their respective weights... and though the weights or reasons cannot be taken with the precision of algebraic quantities when... the whole lies before me I think I can judge better and am less liable to make a rash step (Sadler-Smith, 2008, p. 35).

Ben Franklin, by advising a list of pros and cons, was advocating that a rational/analytic model be used to make the best choice. The rational model has been carried forward in academic and professional circles as the way to analyze and solve problems. As shown in Figure 2.1 and alluded to by Benjamin Franklin, the rational/deliberative process is a step-by-step approach over time to making rational choices. Figure 2.1 also has a similar structure to the scientific method. While Franklin’s quote and the model presented in Figure 1 are compelling, it is reasonable to see that an orderly process over an extended period of time would be extremely burdensome if every decision was made this way.
That said, Sadler-Smith (2008) quote Connolly, Arkes, and Hammond (1999) that the rational choice model has many attractive features including:

1. Consistency: It allows for consistency of decision making (i.e. it is repeatable);
2. Generality: It is a general decision aid (i.e. it can be applied across many different situations);
3. Training: It helps novices to learn how to solve problems and make decision (i.e. it is a rigorous training tool);
4. Transparency: It forces the decision maker to make explicit the bases for a decision (i.e. is open to scrutiny and can be verbalized) (p. 36-37).

With these four characteristics, it is no wonder that rational models have been embraced by our scientific oriented society.
Epstein (2010) sees deliberation as having served mankind very well as is evidenced by the remarkable accomplishments brought about by rational/analytic thinking. The ability to analyze problems at a complex level of abstraction aided by a body of knowledge has served society very well. Understanding cause and effect relationships has allowed cultures to progress by mathematic and scientific thinking. While the early pioneers of the study of decision making recognized intuition, much of the scientific work focused on rational judgments rather than intuitive inferences.
Cognitive processes have been viewed as integral to decision making which consists of utilizing relevant information, like costs and benefits, eventually coming to a deliberate choice (Alexander, 1979). This is consistent with the research on individual cognitive ability that robustly contributes to all manner of human performance including job performance. Cognitive ability directly facilitates the accrual of job knowledge and connects this knowledge with skills (Hunter & Hunter, 1984; Schmidt, Hunter, & Outerbridge, 1986). A number of studies have shown that people higher in general cognitive ability are better at finding correct solutions to problems in logic, probability, and decision making (Stanovich, 1999; Stanovich & West, 2000; Capon, Handley, & Dennis, 2003; De Neys, 2006; Klaczynski, 2000; Klaczynski & Daniel, 2005; Klaczynski & Gordon, 1996; Newstead, Handley, Harley, Wright, & Farelly, 2004). Dewall, Baumeister, and Masicampo (2008) provided experimental evidence suggesting that a conscious, reflective processing system is vital for logical reasoning to occur. With all of the great achievements associated with the deliberative process it is no wonder why so much research attention has been devoted to rationality. Bargh (2002) noted that while there has been increased “attention to the possibility that there may be automatic or nonconscious influences on choices and behavior, the field still appears dominated by purely cognitive approaches, in which decisions and actions are made deliberately” (p. 280). Thus, it is time to broaden the scope of research to incorporate automatic or non-conscious influences, like intuition, into the field of sales and marketing.
Intuition

To avoid any confusion throughout this literature review on intuition, the term “intuiting” is often used to describe the process associated with the production of intuition (the outcome) (Dane & Pratt, 2007).

Intuition’s roots in the business literature can be traced back to Chester Barnard’s lecture to the engineering faculty at Princeton in 1936 entitled “Mind in Everyday Affairs: An Examination into Logical and Non-logical Thought Process.” Barnard recognized the significance of intuition and also its importance in management education when he observed that “this . . . source of non-logical mental processes greatly increases with directed experience, study and education” (Sadler-Smith & Burke 2009, p. 239). It is interesting that, with Barnard’s influence on the field of business, his thoughts on intuition have not been embraced by researchers until recently (Novicevic, Hench, & Wren, 2002). With the demands of the 21st century, incorporating intuition into managerial decision-making has finally become legitimate (Sadler-Smith & Burke., 2009).

Even with the recent emphasis placed on the importance of intuition in decision making, there has been relatively little scientific research done on the topic compared to traditional information processing (Salas et al., 2010). One reason for the lack of intuition research may be due to issues of definitional clarity (Salas et al., 2010) and its unidentified underlying process (Dane & Pratt, 2007; Glöckner & Witteman, 2010). The literature identifies a number of definitions of the concept of intuition as shown in Table 2.2.
<table>
<thead>
<tr>
<th>Source</th>
<th>Definition of Intuition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jung (1933)</td>
<td>That psychological function transmitting perceptions in an unconscious way.</td>
</tr>
<tr>
<td>Wild (1938)</td>
<td>An immediate awareness by the subject, of some particular entity, without such aid from the senses or from reason as would account for that awareness.</td>
</tr>
<tr>
<td>Bruner (1962)</td>
<td>The act of grasping the meaning, significance, or structure of a problem without explicit reliance on the analytic apparatus of one’s craft.</td>
</tr>
<tr>
<td>Westcott &amp; Ranzoni (1963)</td>
<td>The process of reaching a conclusion on the basis of little information, normally reached on the basis of significantly more information.</td>
</tr>
<tr>
<td>Rorty (1967)</td>
<td>Immediate apprehension.</td>
</tr>
<tr>
<td>Bowers, Regehr, Balthazard, &amp; Parker (1990)</td>
<td>A preliminary perception of coherence (pattern, meaning, structure) that is at first not consciously represented but that nevertheless guides thought and inquiry toward a hunch or hypothesis about the nature of the coherence in question.</td>
</tr>
<tr>
<td>Shirley &amp; Langan-Fox (1996)</td>
<td>A feeling of knowing with certitude on the basis of inadequate information and without conscious awareness of rational thinking.</td>
</tr>
<tr>
<td>Shapiro &amp; Spence (1997)</td>
<td>A nonconscious, holistic processing mode in which judgments are made with no awareness of the rules of knowledge used for inference and which can feel right, despite one’s inability to articulate the reason.</td>
</tr>
<tr>
<td>Burke &amp; Miller (1999)</td>
<td>A cognitive conclusion based on a decision maker’s previous experiences and emotional inputs.</td>
</tr>
<tr>
<td>Policastro (1999)</td>
<td>A tacit form of knowledge that orients decision making in a promising direction.</td>
</tr>
<tr>
<td>Lieberman (2000)</td>
<td>The subjective experience of a mostly nonconscious process—fast, alogical, and inaccessible to consciousness—that, depending on exposure to the domain or problem space, is capable of accurately extracting probabilistic contingencies.</td>
</tr>
</tbody>
</table>
Thoughts that are reached with little apparent effort, and typically without conscious awareness; they involve little or no conscious deliberation.

The capacity for direct, immediate knowledge prior to rational analysis.

Thoughts and preferences that come to mind quickly and without much reflection.

1) Intuition involves a sense of knowing without knowing how one knows.

2) Intuition involves a sense of knowing based on unconscious information processing.

The outcomes [of intuition] are typically approximate (not precise) and often experienced in the form of feelings (not words)” (p. 9). “The correlates are speed, and confidence” (p. 10). “Intuition or intuitive responses are reached with little apparent effort, and typically without conscious awareness; they involve little or no conscious deliberation” (p. 14) “[but are reached] in a largely tacit, unintentional, automatic, passive process” (p. 21). “We know, but we do not know why” (p. 29).

Intuition is an involuntary, difficult-to-articulate, affect-laden recognition or judgment, based upon prior learning and experiences, which is arrived at rapidly, through holistic associations and without deliberative or conscious rational thought”.

Intuition is the way we translate our experiences into judgments and decisions. It’s the ability to make decisions using patterns to recognize what’s going on in a situation and to recognize the typical action scripts with which to react. Once experienced intuitive decision makers see a pattern, any decision they have to make is usually obvious.

Intuition is a process of thinking. The input to this process is mostly provided by knowledge stored in long-term memory that has been primarily acquired via associative learning. The input is processed automatically and without conscious awareness. The output of the process is a feeling that can serve as a basis for judgments and decisions”.

As affectively charged judgments arising through rapid, nonconscious, and holistic associations.

Feelings which guide our common actions.
While this list of definitions is not mutually exclusive or collectively exhaustive, it does demonstrate the wide array of conceptualizations of intuition. In addition to the various definitions of intuition, some researchers have begun to propose different categorizations and multifaceted frameworks of intuition based on the underlying possess (intuiting) and its outcomes (intuitions) (Dane & Pratt, 2007; Glöckner & Witteman, 2010; Gore & Sadler-Smith, 2011). For example, Glöckner and Witteman (2010) propose a categorization based on the underlying cognitive processes (intuiting): “(a) associative intuition based on simple learning–retrieval processes, (b) matching intuition based on comparisons with prototypes/exemplars, (c) accumulative intuition based on automatic evidence accumulation, and (d) constructive intuition based on construction of mental representations” (p. 1). Gore and Sadler-Smith (2011) proposed a multifaceted framework of intuition based on intuiting and its outcomes (types of intuition). Their framework proposes that there are four primary types of intuition (problem-solving, social, moral, and creative). Their work is based on Dane and Pratt’s (2007) definition that “intuitions are affectively charged judgments that arise through rapid, non-conscious, and holistic associations” (p. 40). However, the problem with these conceptualizations of intuition is that they are not mutually exclusive and lack the empirical testing needed to determine its viability. In addition, most of the outputs from these different types of intuiting and intuitions are considered affect type feelings. Beyond the theoretical differences, there exist methodological issues associated with measuring the underlying process of intuition. Therefore, this dissertation will focus on salesperson’s reliance on intuitions, which are feelings of knowing.
One of the best ways to understand intuition is to examine commonalities in conceptualizations (Table 2.2) and operating principles (also referred to as intuiting), as seen in Table 2.3 (Table taken from Epstein, 2010). From Tables 2.2 and 2.3, it can be seen that there are some common themes throughout the different conceptualizations of intuition. First, intuition is associated with affect. Dane, Rockmann, and Pratt (2012) describe intuition as affectively-charged judgments, which is consistent with others describing intuition as gut feelings, feeling of knowing, hunch, and vibes, etc. (Epstein et al. 1996; Klein 2003; Volz & Cramon, 2006; Dane & Prett, 2007; Betsch T., 2008; Glöckner & Witteman, 2010; Gore & Sadler-Smith, 2011). One of the reasons intuition is associated with affect is due to the way people perceive them. Both intuition and feelings are caused by inputs from the environment (Volz & Cramon, 2006) and arise involuntarily and immediately breaking into one’s consciousness (Zajonc, 1980). These intuitive feelings guide human decisions and are not considered to cause deliberative action. Thus, when an individual becomes aware of an intuitive feeling, any action based on such feeling is considered part of the deliberative process; this will be discussed in more detail later in the dissertation.

Second, intuiting is considered an automatic (involuntary) process that produces intuitions (the conscious recognition of the intuiting). Therefore, intuition falls under the System 1 label of dual processing (see Table 2.1) which is considered an automatic process (Sadler-Smith, 2008). Many researchers refer to intuition as automatic because it does not require conscious attention or effort to occur and involuntarily brakes into one’s consciousness (Epstein et al., 1996; Hogarth 2001; Hadit, 2001; Dane & Pratt, 2007; Sadler-Smith, 2008; Epstein 2010; Volz & von Cramon, 2006; Hodgkinson, Sadler-
Smith, Burke, Claxton, & Sparrow, 2009; Hogarth, 2010; Glöckner & Witteman, 2010; Gore & Sadler-Smith, 2011; Dane et al. 2012). As such, intuitive feelings appear without any intent to create and cannot be stopped, but they can be dismissed. Intuitive feelings appear seemingly from nowhere without any conscious cognitive effort being put towards the task. The intuitive process takes in specific situational cues that automatically activate a mnemonic network which integrates the entire stream of prior experiences that are all critically relevant to the situation (Volz & Cramon, 2006). Thus, the term automatic is used to describe the intuiting (intuitive process) that produces intuitions which are the conscious recognition of this process.

The third common theme, and one that is very closely related to the second, is that the intuitive process or (intuiting) operates outside of human recognition. Individuals have knowledge at a subconscious level, however they have no idea what it is or that it exists (Glöckner & Witteman, 2010). Intuition has been characterized as unconscious, subconscious, preconscious, and nonconscious (Epstein, 1994; Hogarth, 2001; Jung, 1933; Reber, 1992). While these terms have slightly different meanings (see Kihlstrom, 1987, for a review), Dane and Pratt (2007) describe intuition as nonconscious because it is common among the descriptors. Much like the characteristic automatic, nonconscious is applied to intuition because it occurs outside of one’s conscious intended thought process and involuntary appears in consciousness. Thus, the origins of an individual’s intuition occur outside the realm of human consciousness.

Finally, intuition is considered to be context specific. Betsch T. (2008) proposes that knowledge stored in long term memory gained through prior experiences serves as the inputs to the intuitive process. Epstein (2010) believes that intuition is context
dependent because the intuitive system encodes experience or knowledge primarily, but not entirely, in the form of context-specific concrete mental representations (e.g., images, scenarios, affect, and physical sensations) (Epstein, 2010). That is, intuitions are caused by some stimuli in the environment causing intuiting to draw on the knowledge gained from one's own personal experiences. Klein (2003) believes intuition is one way people can translate their experience into action (Klein, 2003). The idea that intuition is context specific is discussed later in this dissertation.

**Intuition and Deliberation and Their Interaction**

The difference between deliberation and intuition can be seen in the comparison of the two concepts in Table 2.3 (Epstein, 2010). Intuition is seen as stemming from experience-based affect while the deliberative rational system operates at a conscious level of reasoning without affect. Experiences create associative bonds between stimuli, responses, and outcomes while cause and effect relationships are the product of a deliberative system. For intuition, behavior is automatically produced by a sensation, called by some researchers 'vibes', which draw on one's experiential knowledge.

Rational behavior is seen as a function of deliberative, conscious appraisal of the issue at hand and careful analysis of alternatives, much like the process shown in Figure 1. Intuition takes a more holistic gestalt-like view of decision making but in a rapid, effortless manner, using little cognitive effort. Deliberation, on the other hand, is methodical, more effortful, and usually is characterized by delayed action. People using their intuition tend to categorize context-specific information more broadly than those using deliberation who tend to employ highly integrated principles of decision making. Each system is experienced differently where intuition is passive, preconscious, and
validity is self-evident, and the rational system is experienced actively requiring cognitive justification via logic and thoughtful examination of evidence.

Table 2.3

Comparison of the Operating Principles and Attributes of the Experiential/Intuitive and Rational/Analytic Systems

<table>
<thead>
<tr>
<th>Experiential/Intuitive Systems</th>
<th>Rational/Analytic System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operates by automatically learning from experience.</td>
<td>1. Operates by conscious reasoning.</td>
</tr>
<tr>
<td>2. Emotional.</td>
<td>2. Affect-free.</td>
</tr>
<tr>
<td>3. Motivated by hedonic principle to maximize pleasure &amp; minimize pain.</td>
<td>3. Motivated by reality principle to construct a realistic, coherent model of the world.</td>
</tr>
<tr>
<td>4. Associative connections between stimuli, responses, &amp; outcomes.</td>
<td>4. Cause-&amp;-effect relations between stimuli, responses, &amp; outcomes.</td>
</tr>
<tr>
<td>8. Effortless &amp; minimally demanding of cognitive resources.</td>
<td>8. Relatively effortful and demanding of cognitive resources.</td>
</tr>
<tr>
<td>10. Resistant to change: changes with repetitive or intense experience.</td>
<td>10. Changes more readily: changes with speed of thought.</td>
</tr>
<tr>
<td>11. More crudely differentiated: broad generalization gradient; categorical thinking.</td>
<td>11. More highly differentiated; dimensional &amp; nuanced.</td>
</tr>
<tr>
<td>13. Experienced passively and we are seized preconsciously: by our emotions &amp; have uncontrolled spontaneous thoughts.</td>
<td>13. Experienced actively and consciously: we believe we are in control of our reasoning.</td>
</tr>
</tbody>
</table>
In the pursuit to understand decision making, researchers have continued to explore decision making as a product of two minds, deliberative and intuitive, capable of analysis and automatic decisions respectively (Bestch T., 2008). Deliberation and intuition are not two ends of a continuum but rather are two distinct constructs that operate independently and can interact (Dreyfus & Dreyfus, 1986; Denes-Raj & Epstein, 1994; Hammond, 1996; Sinclair & Ashkanasy, 2005; Volz & von Cramon, 2006; Sadler-Smith, 2008; Epstein, 2010). According to Epstein (2010), the two systems can bi-directionally, simultaneously and sequentially interact. The interaction between the two systems can occur simultaneously where both systems can be in agreement and/or divergent for each other at the same time (Epstein, 2010). The sequential interaction can occur because the intuitive system is considered to operate faster than the deliberation systems (see Table 2.3). So, peoples' initial reactions may be produced by the intuitive system. If the intuition is deemed unacceptable, then the deliberative system is often able to adjust or suppress the intuition. If the intuition is deemed appropriate, then it will be expressed (Epstein, 2010). The sequential nature of the interaction still holds for the opposite direction of influence. For example, a person may experience an intuition about a deliberative conclusion which may alter their subsequence actions. Epstein's (2010) concluding remarks about sequential interaction are that “rather than just an interaction between single responses in the two systems, the two systems can interact in the manner of a dance, in which a step in one of the systems elicits a step in the other system” (p.300). Thus, the interaction between the two systems can operate bi-directionally, simultaneously and sequentially.
Another key component to understanding intuition and how it affects decision making is that intuition only influences the deliberative system (Volz & von Cramon, 2006; Salas et al., 2010). Once a person is aware of the intuition, the deliberative process can act by accepting or rejecting the intuitive feelings. Volz and von Cramon (2006) make the similar point, in that, intuitions result in intuitions (a.k.a. gut feelings) which can influence rational thought. This has led some scholars to describe deliberation as the “executive function” with intuition functioning as an input in the deliberative process (Salas, Rosen, & DiazGranados, 2010).

**Affect and Emotion**

In this section, the terms affect and emotion are used interchangeably (Bagozzi, Gopinath, & Nyer, 1999). Intuition and emotion are two very closely related concepts which can be seen from the definitions in Table 2.2 where 30 percent of the definitions make some reference to emotion, affect, and or feelings. In addition to the definitions, Slovic, Peters, Finucane, and MacGregor (2005) discuss the affect heuristic as having a direct and important influence on intuitive thinking. While Chen and Chaiken (1999) believe that the intuitive process may be revealed by emotions, others (e.g., Agor, 1986; Barnard, 1938; Shapiro & Spence, 1997; Dane & Pratt, 2007; Gigerenzer, 2008) have described the intuitive process as affectively-charged judgments, gut feelings, gut instincts, and a feeling in our marrow. These intuitive feelings are produced automatically and can guide human actions (Bastick, 1982), much in the same way as emotions do. Burk and Miller (1999) see intuitions as cognitive conclusions based on past experiences and emotional inputs.
Sadler-Smith (2008) believes that emotion and intuition are similar, in that they both occur automatically and are reactions to some stimulus in the environment. Intuition and emotion differ in that emotions are caused by clear cut and identifiable stimuli; while the causes of one's intuition are often less clear cut or unknown at the time of awareness. Emotions tend to be shorter in duration while intuitions are relatively longer lasting. Emotions are distinct (i.e. anger or joy) whereas intuition is general and produce less distinct 'feelings'. Intuitions are harder to identify and articulate than emotions like happiness. Emotions tend to produce more intense feelings while intuition produces less intense feelings brought on by awareness of some set of cues (Sadler-Smith, 2008, p. 276).

As can be seen, there are many different opinions regarding how and in what way affect, emotion, and intuition influence decision making. In Glöckner and Witteman's (2010) discussion of the different types of intuition, they note that depending on the theoretical viewpoint, affect is as important an input to as well as an output of the intuitive process. Epstein (2010) concluded that there is still considerable disagreement among researchers about whether feelings are an important aspect of intuition and points out the need to resolve how emotion and intuition interact.

**Intuition and Closely Related Concepts**

Table 2.3, adapted from Epstein (2010), outlines the differences between intuition and deliberation, which were discussed previously. However, further distinctions are needed to clarify the differences between intuition and other closely related concepts: heuristics, automaticity, insight, and human instincts.
Heuristic

Past research on intuition has been strongly associated with heuristics (Sloman, 2002; Tversky & Kahneman, 1974). However, this association may not be warranted because it is based on the notion of bounded rationality which states that humans have limited available cognitive capacity and they look for ways to reduce the amount of cognitive effort put forth when engaged in thought processing. The concept of heuristics was introduced to help explain decision making within the paradigm of bounded rationality. Tversky and Kahneman (1974) proposed that decisions are made faster and with less cognitive effort by using simple decision rules or short cuts that result from deliberate thoughts. They called these rules heuristics. “An example would be lexicographic strategies (Fishbein, 1974), people compare options by considering attributes in a stepwise manner and selecting the option that is best on the first differentiating attribute without considering the remaining attributes” (Glocker & Witteman, 2010, p.5). While lexicographic heuristics reduce the amount of cognitive effort required to make decisions, they are still carried out consciously and deliberately as opposed to intuition which are affective charged judgments that arise through rapid, nonconscious, and holistic associations without conscious deliberation (Dane & Pratt, 2007).

Another one of Tversky and Kahneman’s (1974) heuristics is the availability heuristic. It states that “a person is said to employ the availability heuristic whenever he estimates frequency or probability by the ease with which instances or associations can be brought to mind. To assess availability it is not necessary to perform the actual operations of retrieval and construction. It suffices to assess the ease with which these
operations could be performed, much as the difficulty of a puzzle or mathematical problem can be assessed without considering specific solutions" (Bestch T., 2008, p.10). It can be seen that the availability heuristic does require some cognitive effort and thus is distinguished from intuition on the bases of cognition and effort expended. Heuristics, to a substantial extent, rest on the deliberative processing and should be considered shortcuts to deliberation rather than being intuitive strategies (Betsch T., 2008). In summary, (Betsch,T., 2008, p.11) argues that “If one equates intuition with heuristics processing, one would neglect the nature and power of intuition”.

**Insight**

Insight is a concept that is related to extended problem solving. Insight usually occurs after a person has been working to find a suitable solution and cannot. When dealing with difficult problems over time, people may have a mental burst of insight or a *eureka* moment. Insight comes when a person is not consciously thinking about the problem and may happen during a break when the solution appears seemingly from nowhere. The psychological concept of insight should not be confused with empirical insight. Empirical insight is some evidence or empirical finding from an investigation using the scientific method and not a mental break through (insight) into a problem. Intuition and insight both occur without conscious deliberation. However, insight produces an answer that can be rationally explained and justified while intuition produces a feeling of knowing without knowing why and cannot be rationally explained or justified at the time of awareness. Thus, one difference is that insight produces a cognitive answer and intuition produces a feeling (Hodgkinson et al., 2009). In many instances there is some kind of external cue that triggers the insight. Hodgkinson et al. (2009) provides the
following example of insight in the story of Archimedes of Syracuse (287-212 BC) trying to determine the volume of a golden crown given to King Hiero II. Archimedes was stumped until he was getting into a bath and noticed that the water rose in proportion to his body mass. In this example, the rising water was an external stimuli that provided the solution to the problem of determining the volume of the crown. Insights occur suddenly and unexpectedly much in the same way as intuition. However, with insight, the solution is the product of extended problem solving over time and can easily be put into words and explained logically. In contrast, intuition is a reaction to some environmental cue producing a feeling absent of logical explanation at the time. Intuition and insight also differ with respect to frequency of occurrence. Intuition occurs frequently in everyday life whereas insights require challenging problems where solutions occur more suddenly.

Instincts

Instincts have been associated with intuition in that they both are uncontrollable and automatic. Instincts have even been described as a close neighbor of intuition (Sadler-Smith, 2008). However, instincts are biological reflex actions that people and animals have at birth (Sadler-Smith, 2008). Previously, researchers have made the distinction between a person’s intuition and biological instincts on the bases that instincts are “hardwired” responses or autonomic reflexes to stimuli in one’s environment and are innate capabilities that originate outside the experiential processing system (Hogarth, 2001; Epstein, 2010; Dane & Pratt, 2007; Hogarth, 2010). For example, an autonomic reflex occurs when people shutter their eyes when coming in contact with bright light. Also, instinctual autonomic responses result in an action whereas intuitive responses result in a feeling. Therefore, instincts do not rely on past experiences and learning
because individuals are hardwired for instinctual responses. Intuition is the product of associative learning and is triggered by cues. Thus, the distinction between intuition and instincts is carried forward and instincts are not the focus of this dissertation.

**Automaticity**

Automaticity is a concept with a long history in the psychological literature starting with the work of James (1890) and continuing the present (Moors & De Houwer, 2006). Despite the concept’s relevance in many areas of psychological research, there is no consensus among scholars as to what automaticity means (Moors & Houwer, 2006). What is theorized is that automaticity is rule-based behavior practiced to the point where it can be performed without conscious effort (Moors & De Houwer, 2006). At a low level of problem solving, automatic choices result from stored rules. In consumer behavior, routine problem solving involves the application of stored rules in a nearly effortless decision making event (Babin & Harris, 2014). Thus, automaticity shares the automatic response feature with intuition but can be distinguished from intuition by responses being the product of highly practiced behaviors. Intuition is not the product of a routine practiced behavior, but arises from a domain or problem space where courses of action are multiple and uncertain eliminating the possibility of a routine response.

**Role of Experience**

With respect to experience, intuition is “the way we translate our experience into action” (Klein, 2003, p. HVI Preface). Experiential knowledge is recalled automatically and pre-consciously providing intuitive feelings of knowing without being able to identify the source of knowledge. This recall process relies on an individual’s knowledge
knowledge gained from many different sources. These sources range from formal settings such as college classes and training seminars to more informal ones where learning is the product of life experiences, personal or interpersonal. The role of experience in supporting one’s intuition is best shown in the following account of intuition in action:

The Monaco Grand Prix is one of the most famous races in the world and one of the most well-known sporting events in general. The Grand Prix’s track is set in the narrow, winding streets of Monte Carlo. The track in Monaco has one very interesting feature: A significant portion of it is an underground tunnel making it difficult for drives to adjust their eyes from the light of day to darkness and then back.

The Argentine racer Juan Manuel Fangio, known as “El Maestro” (Spanish for “The Master”), is regarded by many as the best race car driver of all time. Fangio started the 1950 Monaco Grand Prix in the pole position, and he held the lead after the first lap. As he emerged from the tunnel into daylight, Fangio braked suddenly instead of maintaining his speed into the straightaway and raised his hand to warn other drivers. In doing so, he avoided a pileup around the blind corner obscured by the balustrade on the side of the track.

On the first lap behind him, Nino Farina had skidded out because a section of the track—after the chicane (small S-curve) and before the corner known as the Tobacconist’s corner—was wet from blowing sea spray. Eight separate cars crashed into the pileup. That meant that half the lineup—9 of the 18 cars—was involved in this one crash. Fortunately, no one was seriously injured.

Why had Fangio braked? “I could detect agitation among the spectators,” he recalled. “They were not looking at me leading the race, but were looking the other way.” As Fangio noted, they normally would be facing the lead car in the race, alerted to his presence by the deep resonating rumble as he came out of the tunnel. However, instead of seeing the crowd’s faces this time—which would make the spectators a relatively light-colored blur as he passed by at high speed—he was seeing a darker blur from the backs of their heads as they turned away to look at the crash. Out of the corner of his eye, this triggered something in his subconscious, right-brain thinking.

At the speeds of a Formula One race, even in 1950, drivers had no time for deliberative, conscious decision making. El Maestro’s intuition and quick reaction saved the race—and possibly his life. Juan Fangio didn’t have a bias against his intuition; he knew to trust it. If you want to be a master trader, you need to learn to trust your intuition, too.

Adapted from: Trading from Your Gut by Curtis Faith
In the example, the seasoned race car driver had years of experience which allowed him to unconsciously perceive a number of contextual variables and to feel that something was not right in the stands. This intuitive feeling led to the reaction of applying the brakes. Juan Manuel Fangios' intuition enacted a feeling that something was not right and before he understood the root of this feeling he applied the brakes hard. This example shows how the two systems, intuition and deliberation, work together. The driver became aware of his intuitive feeling and before investigating, he deliberately applied the brakes. However, he did not carry out the full deliberative process as shown in Figure 1. A novice driver in the same situation may not have sensed the crowd's reaction to the accident and suffered a different outcome. That is not to say that novices do not possess intuition. Rather, their intuition is limited by their level of specific experience in certain situations. Novices may rely on intuitions that are drawn from other experiences that do not directly relate to the situation at hand. For example, novice salespeople making their first sales call may have intuitive feelings drawn on experiences gained from dealing with people throughout their lives or from their sales training. Thus, as novices gain more experience in a specific domain, their expertise in that domain increases. This is why some intuition researchers have described intuition in terms of "expertise intuition" (Salas et al., 2010).

The Context of Intuition

The phenomenon of intuition has been suggested to be context dependent because the intuitive system encodes experience or knowledge primarily, but not entirely, in the form of context-specific concrete mental representations (e.g., images, scenarios, affect, and physical sensations) (Epstein, 2010). This concept can be seen in the Juan Manuel
Fangio example noted where Juan’s intuition was working off his mental images of what has been coded from past experiences. Juan experienced an intuitive feeling because the image he was experiencing did not match his mental image for past experiences in the form of darkness within the crowds. Once Juan became aware of his intuition, he deliberately applied the brakes without knowing the cause of the intuition. Intuitions are acquired in specific context. The learning that takes place is in a specific setting leads to intuition about that context (Hogarth, 2001). Individuals have acquired knowledge throughout their lives at a subconscious level, however these individuals have no idea what it is or that it exists (Glöckner & Witteman, 2010). Knowledge like this is stored in long term memory which Bestch (2008) believes is the primary source of knowledge from which intuition draws. It is in the situational cues that intuition or deliberation will be evoked (Hammond, Hamm, Grassia, & Person, 1987). Over time, some people develop a preference for one strategy or the other (Betsch C., 2008) with intuition being triggered by emotional reaction in some people while others come to prefer deliberative, reflective thinking (Betsch C. & Kunz, 2008).

Role of Gender in Intuition

Women are commonly believed to have a higher innate intuitive ability than men. This belief can be seen in the sayings “a mother’s intuition” or “a woman’s intuition.” Some theories address why women are seen as more intuitive; first, women are better encoders and decoders of nonverbal communication (Hall, 1984). Also, it has been suggested that female intuition is a result of their higher levels of estrogen (Lieberman, 2000). Previous research on the role of gender intuition has produced mixed results. Some findings support the commonly held belief that women are more intuitive than men.
(Agor, 1986; Pacini & Epstein, 1999; Parikh, Lank, & Neubauer, 1994; Pelham et al., 2005), while others have not identified any significant differences (Taggart, Valenzi, Zalka, & Lowe, 1997; Hayes, Allinson, & Armstrong, 2004). Other studies have reported that women scored higher on analysis (Allinson & Hayes, 1996; Kirton, 1994). In Burk and Miller's (1999) in-depth interviews of executives, it was reported that "nearly 80% of their interviewees did not cite gender when listing people they had witnessed using intuition" (p. 94). Supporting the notion that there are no differences in gender intuitive ability, Hayes et al. (2004)'s found no difference between female and male managers in terms of intuitive orientation. However, they did find that female non-managers were more analytical than both male non-managers and female managers. Downey, Papageorgiou, and Stough (2006), in an investigation of the relationship between leadership style, intuition, and emotional intelligence, found that female managers displaying transformational leadership behaviors were more likely to display higher levels of emotional intelligence and intuition than female managers who displayed less transformational leadership behaviors. In another study, researchers studied empathic abilities and identified three categories: vicarious emotional responding, nonverbal decoding ability, and empathic accuracy (i.e. being able to infer the content of another person thoughts or feelings) (Graham & Ickes, 1997). The findings showed that women possess greater intuitive ability than men for vicarious emotional responding and nonverbal decoding ability but not empathic accuracy. Because of the mixed findings, some researchers have chosen to control for gender when studying intuition (Dane et al. 2012).
Methods Used to Study Intuition

One of the biggest problems hindering research on intuition has been how researchers capture a mental process that occurs without conscious awareness. This is why most of the research on intuition has focused on outcomes and not the underlying process. The methods used in the past and some of the findings are as follows.

Experiments

Experimental research on intuition, like all experimental research, has its positives and negatives. While experiments provide the researcher with some control, they lack the ability to guarantee that respondents are actually using their intuition. One way researchers have induced intuitive responses is by placing respondents under time pressure. The theory behind this technique is that time pressure reduces the amount of cognitive resources available for deliberation because the respondents are using those resources to monitor the time. There are three ways that researchers have induced time pressure; a signal forced response like a visual warning or beep noise, a countdown bar or clock, and or instructed time pressure to make an intuitive decision (Glöckner & Witteman, 2010). While the use of time pressure has a promising role in studying intuition, it has been suggested that time constrains alone do not ensure that the intuitive process is activated and that it should be used in some combination with other techniques (Horstmann, Horstmann, & Ryf, 2010).

In Bolte and Goschke's research (2005), they used a beep noise to signal response time where subjects had to discriminate between coherent and incoherent word triads under time pressure. Respondents were given between one and two seconds, depending on which treatment received, before the response beep sounded signaling to make a
selection. They found that respondents were able to discriminate reliably between coherent and incoherent word triads better than chance. This finding provides evidence that intuitive judgments can be made quickly, without deliberation. Bowers, Regehr, Balthazard, and Parker (1990) conducted a study where participants were shown triads of words on each trial, e.g., the words “playing, credit, report” and “still, pages, music”. Only one triad in each pair was semantically coherent in the sense that all three words in the triad were semantically related to a fourth word that was not presented. In the example, it would be “card”. While participants showed no ability to verbally report the common association, they showed an intuitive preference for the internally coherent triad in a forced choice measure (Glöckner & Witteman, 2010).

Another way researchers are studying intuition is through the use of computers and computer based software. Norman and Schulte-Mecklenbeck (2010) attempted to study automatic decision processes using computer-based information board called Mouselab. Mouselab is computer based program where subjects are forced to select, under time constraints, between two or three alternatives (e.g. which city has the largest population). They found that people very quickly integrated information into a weighted compensatory manner. They also believe that, while Mouselab is useful for decision research, it might not be the best way for studying intuition. This is because the way in which the information is displayed on the computer most likely induces subjects into a deliberate strategy (Norman & Schulte-Mecklenbeck, 2010). Also, eye-tracking software has been employed as a means of capturing the use of intuition. Eye-tracking software works by measuring how long the respondent’s eyes are fixated on something. The fixation length is correlated to the amount of cognitive processing. Therefore, when
respondents are given a decision task and if their eyes do not fixate on any information for very long, they are believed to be making an intuitive decision. This is based on the assumption that individuals who mainly scan the screen of information are more likely relying on their intuitive processes of information integration; whereas, individuals who are more attentive in their information screen search are more likely relying on their deliberative process. Glöckner and Herbold (2011) conducted a study on automatic decisions, where information about two choices was presented to respondents in a matrix type layout on separate halves of the screen. They measured respondent’s eye movement and choice behavior. The analysis showed that respondent’s fixation patterns and duration indicated that there were quicker (<250 ms) fixation moments which resulted in less deliberation. Long fixation times (>500 ms) were seldom recorded. Thus, the results were best explained by models that at least partially rely on some intuitive elements in the decision-making process. Glöckner and Herbold (2011) noted that one limitation of this study could be that the fast fixation time (<250 ms) may have been too high. These experiments were discussed to demonstrate the different methods previously used and to show some of the methodological difficulties. For example, while not explicitly expressed, there is no way of guaranteeing that all of the subjects were relying on their intuition or deliberation.

Research on mood and decision strategy has revealed that people in a sad mood tend to analyze information deliberately and when people are in a happy mood they tend to analyze information more intuitively (De Vries, Holland, & Witteman, 2008). However, other decision-making research suggests that positive mood enhances problem solving effectiveness relative to the experience of a negative mood (Babin, Griffin,
Borges, & Boles, 2013). Another way researchers are attempting to induce intuitive response is by the use of a distraction task. Under the dual-task paradigm, respondents are given multiple tasks at the same time. This prevents subjects from cognitively thinking about the decision task, especially if one task is cognitively demanding requiring a lot of attention (Fisk, Derrick, & Schneider, 1986). Plessner, Betsch, Schallies, and Schwieren (2008) investigated intuition by examining peoples' automatic formations of summary evaluations of political candidates. They had respondents read randomly selected statements (positive and negative) made by different candidates, each appearing for five seconds. The deliberative condition was told to pay attention to what the candidates were saying while the intuitive condition was given the task of determining whether the state was in passive or active voice. They found that respondents were able to correctly identify the politician with the overall positive or negative tone of their statements. However, neither group was able to correctly match each statement to the correct politician beyond chance. Hammond, Hamm, Grassia, and Pearson (1987) found that expert engineers were more effective at designing highways with an emphasis on esthetics when they used intuition over an analytical approach. Wilson, Dunn, Kraft, and Lisle (1989) found that respondents who analyzed the reasons for their attitudes were less capable of predicting their behavior later, than those who responded intuitively. Wilson et al., (1993) found that respondents that analyzed a take home gift before choosing it were less satisfied with the gift after two weeks than those who selected the gift using their gut. Research on students versus experts found that students performed better when making intuitive judgments over carefully thought out ones when compared to experts (Wilson & Schooler, 1991). Researchers found that experiential/intuitive processing can more
effectively solve some kinds of complex problems than rational/analytic processing (Dijksterhuis, 2004; Reber, 1993). Pretz (2008) primed respondents to make decisions using their intuition by providing them intuitive problem solving strategies guides. They found that an analytical approach to problem solving was more appropriate as their level of experience increased and that the intuitive approach was more appropriate for novices.

Within the field of consumer research, Bargh (2002) noted that research in the field has overlooked an important development in social cognition research. That is, much of social judgment and behavior occur without conscious awareness or intent. Therefore, the field of consumer research and marketing needs to address how nonconscious processes, like intuition, are affecting behavior. Chartrand and Bargh (2002) experimentally primed respondents and showed that nonconscious goal pursuits exhibited all of the same features as did conscious goal pursuits, such as flexibility, persistence, and effects of success and failure on mood. Recently, Pham, Lee, & Stephen (2012) introduced the notion of the “emotional oracle effect” in which “individuals who have higher trust in their feelings can predict the outcomes of future events better than individuals with lower trust in their feelings” (p. 461). They provided evidence of the emotional oracle effect across eight studies where respondents were manipulated based on the ease-of-retrieval to trust their feelings.

Measuring Intuition

In addition to experimental research, researchers have developed psychometric scales in an attempt to measure intuition. Probably, the most famous measure of intuition is the The Myers-Briggs-Type Indicator (MBTI) (Myers and McCaulley, 1985). The MBTI is a psychometric measure of how people perceive the world and make decisions.
Among other traits, the MBTI captures the disposition of individuals to behave in an intuitive manner (Betsch C. & Kunz, 2008) and does not account for affect, which has been proposed as an important part of intuition (Langan-Fox & Shirley, 2003). Another theory that incorporates intuition is Seymour Epstein’s cognitive-experiential self-theory (CEST). CEST is based on the dual process theory and that people process information using the experiential/intuitive system and or the rational/analytic system (Epstein, 2010). While Epstein’s experiential/intuitive system encompasses a much more extensive domain than intuition, the experiential/intuitive system operates using the same rules and attributes (see Table 2) (Epstein, 2010). Through the years, Epstein has produced a series of scales from his CEST theory starting with the rational experiential inventory (REI) (Epstein et al., 1996) and then, after revisions, reporting his most recent scale in 2011 (Norris & Epstein, 2011). The CEST theory is based on the dual processing theory and incorporates the rational (deliberation) and experiential system (where intuition is incorporated). Norris and Epstein’s (2011) version of the CEST has a much larger conceptualization of the experiential system and posits that if intuition is the primary research objective, then the faith in intuition scale developed by Epstein (1996) should be used. Cornelia Betsch (2008) developed a scale that captures both decision making strategies, intuitive and deliberate. It explicitly contrasts decision making based on cognitions vs. affect (Betsch & Kunz, 2008). The scale is known as Preference for Intuition and Deliberation scale (PDI) and captures a person’s perceived preference of how they make decisions.

Other measures have been developed for specific groups of people and or situations, such as, the perceived modes of processing inventory (PMPI) (Burns &
D'Zurilla, 1999). The PMPI was developed to assess intuition in stressful and coping situations. However, PMPI is much like CEST in that its domain is much broader than intuition. Also, the Cognitive Style Index (CSI) was designed by Allinson and Hayes (1996) for the specific use with managers and other professional groups. For more information regarding these scales and other ways of measuring intuition, see Glöckner and Witteman's (2010) book Foundations for Tracing Intuition Challenges and Methods.

In-depth Interviews

Some researchers have taken the qualitative approach to studying intuition. Burke and Miller (1999) interviewed 60 experienced professionals and asked them about the use of intuition within the workplace. They found that over 90% of respondents said that combined intuition with data analysis (deliberation) when engaged in deductive decision making. When responding to frequency they found that 89% used intuition to some degree in their decision-making, with 59% responding that they “always or often” make decisions based on intuition. Overall, they reported that 67% believed that the use of intuition led to better decisions. Hensman and Sadler-Smith (2011) conducted semi-structured interviews with experienced bankers found that “participant’s reliance on intuition was related not only to the nature of the task (e.g., factors of time and uncertainty) and individual factors (e.g., participants experience and confidence), but also organizational contextual factors (e.g., constraints and conventions, accountability and hierarchy, team dynamics and organizational culture)” (p.51).
Emotional Intelligence

The concept of emotional intelligence (EI) is rooted in the study of social intelligence; which has a long and disappointing research and empirical record (Landy, 2005; 2006; Zeidner, Matthews, & Roberts, 2012; Joseph & Newman, 2010). The idea of social intelligence (SI) can be traced back as far as Dewey in 1909 (Landy, 2006). However, most researchers attribute the term SI to Thorndike in a 1920's Harper's Magazine article. In the article, Thorndike puts forth that people have three modes of intelligence: abstract, mechanical, and social (Landy, 2005). Social intelligence has been defined “as the ability to perceive one’s own and others’ internal states, motives and behaviors and to act toward them optimally on the basis of that information” (Mayer & Salovey, 1993, p. 435). However, some believe that the concept of SI remains undefined and unmeasured (Cronbach, 1960; Joseph & Newman, 2010). Therefore, the concept underwent some refinement and emerged as emotional intelligence. In the early 1990’s, Salovey and Mayer were among the first researchers to introduce the concept of emotional intelligence. They defined EI as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions (Salovey & Mayer, 1990, p. 189).” In addition to the definition, EI is considered a member of the class of intelligences including the social, practical, and personal intelligences that are known as the hot intelligences (Mayer & Mitchell, 1998; Mayer, Salovey, & Caruso, 2004). However, many of the theoretical and methodological issues associated with SI have followed its newest manifestation, emotional intelligence. Critics of EI have their doubts as to accuracy of the definition of the construct and it’s measurements.
Specifically, there are questions about whether the different measurements of EI are capturing the essence of its definition. In addition, EI critics are debating the relative contribution of EI in organizational contexts over personality traits and cognitive ability (Landy, 2005; Locke, 2005; Murphy, 2006; Van Rooy & Viswesvaran, 2005).

There have been two different models put forth to explain the concept of EI: an ability-based model and a mixed model (Law, Wong, & Song, 2004; Joseph & Newman, 2010). While both approaches claim to be examining the same construct, their theoretical and methodological approaches differ causing some to wonder if they were examining the same construct or two separate entities (Joseph & Newman, 2010; Zeidner et al., 2012).

**Mixed-Model Approach to EI**

The mixed-model approach of studying EI has been described as an umbrella term due to the broad array of constructs that are associated with the mixed model and its non-redundancy with cognitive intelligence (Joseph & Newman, 2010). That is, it is not considered an intelligence (Kidwell et al., 2011; Zeidner et al., 2012) but rather integrates EI ability and various measures of personality and affect (Petrides & Furnham, 2001; Joseph & Newman, 2010). The mixed-model approach has been defined as “an array of non-cognitive capabilities, competencies, and skills that influence one’s ability to succeed in coping with environmental demands and pressures (Bar-On 1997; p. 14).” Typical mixed-model approaches use a mixture of introspective self-reported EI measures along with ability-based measures, either self-reported ability or performance based ability. Over the years, many researchers have criticized the mixed model definition of EI on the basis of its close relation to personality traits (Daus & Ashkanasy, 2003; Conte, 2005;
Van Rooy, Dilchert, Viswesvaran, & Ones, 2006; Zeidner et al., 2012). This may be due, in part, to the use of self-reported measures which prior studies have found to be highly correlated with personality (Mayer, Roberts, & Barsade, 2008; Zeidner, Matthews, & Roberts 2004). Also, mixed models have been criticized because they present EI as a characteristic or trait rather than a cognitive ability (Elfenbein, 2008; Locke, 2005; Murphy, 2006; Zeidner et al., 2004).

Much of the criticism surrounding mixed models of EI deals with the use of self-reported measures (Joseph & Newman, 2010). Self-reported measures are based on the assumption that people are able to objectively assess their own emotions and how these emotions are functioning within their lives (Zeidner et al., 2012). Criticism of this assumption is due to the fact that individuals are poor at reporting their own emotions (Ehrlinger & Dunning, 2003; Mabe & West, 1982). Individuals are susceptible to faking (Day & Carroll, 2008), inaccurately reporting personal abilities (Paulhus, Lysy, & Yik, 1998), and giving socially desirable responses (Kidwell et al., 2011). In addition, past research has shown low association between ability models and self-report scales (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006), demonstrating that these approaches produce different information about the same individual (Brackett & Mayer, 2003) and questioning whether they are measuring the same construct.

Because of the problems associated with self-reported measures, the theoretical validity of the mixed model is questioned. Murphy (2006) described mixed EI models as a muddled construct that is an ill-defined composite of ability, personality, affect, and possibly other poorly specified content. However, Joseph and Newman (2010) concluded from their meta-analysis that mixed-based EI, while empirically stronger yet theoretically
weaker, predicts job performance better than ability-based EI. Critics still believe that mixed models are profoundly flawed (Murphy, 2006) and that ability-based EI models are the only ones worth studying (Daus & Ashkanasy, 2005). Since ability-based model have received less criticism, they are typically used in marketing research (Kidwell et al., 2011). Thus, ability-based EI models will be the focus of this study.

**Ability-Based Approach to EI**

The ability-based approach posits that EI is the ability to accurately rationalize emotions and use emotions as well as emotional knowledge to enhance thought (Mayer, Roberts, & Barsade, 2008). Recent research on EI has called for domain specific and ability-based research in emotional intelligence (Kidwell et al., 2011). This is because of the problems associated with mixed models as well as past findings using domain general EI measures have produced mix results for domain specific outcomes (i.e. job-related outcomes) (Zeidner et al., 2004). Domain general assessments of EI don’t take into account situational contexts such as selling interactions (Kidwell et al., 2011). Kidwell et al., (2011) states that:

"... knowing which emotions are useful when interacting with customers involves more specialized emotional abilities than managing emotions in general. This does not mean that people who are generally emotionally skilled cannot perform well specifically; rather, assessing specific emotional abilities likely enhances assessment of a unique domain (p. 80)."

Researchers have suggested that underlying peoples’ emotional abilities are unique levels of emotional knowledge which develop throughout one’s childhood and are dependent upon environmental conditions (Mayer & Salovey, 1997). The ability-based model has received less criticism and it is the type of EI typically used in marketing research (Joseph & Newman, 2010; Kidwell et al., 2011) due to its applicability in
marketing and selling situations. The ability-based model proposes that EI is a type of intelligence that enables a person to accurately assess emotions and posits the ability to use emotion to enhance thought and therefore should overlap with cognitive ability (Mayer et al. 2008). That is, people who are high on objective EI measures (ability/performance measures, like Kidwell et al. 2011) will perform better at activities associated with emotions than those that score lower (Joseph & Newman, 2010; Zeidner et al., 2012). There have been two ways to measure ability: self-reported ability and performance based ability. Joseph and Newman’s (2010) meta-analysis revealed that self-reported abilities are susceptible to the same problems as mixed model self-reported measures and recommend that only the performance-based EI models are appropriate for studying emotional intelligence.

The mental-ability of EI is comprised of four dimensions known as the four-branch model: perceiving emotion, use emotion to facilitating (using), understanding emotion, and managing emotion (Mayer, Salovey, & Caruso, 2004). Salovey and Mayer’s (1990) mental-ability framework of EI is a composite of the four branches that accounts for distinct reasoning abilities that allow individuals to process emotion-relevant information (Mayer et al., 2004). Each dimension is objectively assessed using performance-based ability measures (Mayer, Salovey, & Caruso, 2002). Apart from Salovey and Mayer’s (1990) model of EI, there are two more recent conceptualization of EI. First, Kidwell et al. (2011)’s domain specific second order model of the four branches and Joseph and Newman’s (2010) cascading model which uses three of the four dimensions. By using an ability-based approach, researchers can better understand how
the concept of EI is used within the domain of selling and customer interactions (Kidwell et al., 2011).

The four dimensions of Mayer and Salovey’s (1997) ability-based emotional intelligence theory are arranged in such a way that the foundation of their model is emotional perception; and thus a more advanced ability, to some degree, depends upon a person’s emotional perception ability (Brackett et al., 2006). The first dimension, perceiving emotion, is the ability to accurately recognize and interpret emotions in one’s self and others (Mayer et al. 2002; Roberts, Zeidner, & Matthews, 2001; Kidwell et al., 2011). As defined by Mayer and Salovey’s (1997) ability model, emotional perception refers to “the ability to identify emotions in oneself and others, as well as in other stimuli, including voices, stories, music, and works of art” (Brackett et al., 2006, p. 781). Perceiving emotions involves the ability to recognize emotional cues such as facial expressions and tone of voice that can be used to adapt one’s selling approach (Kidwell et al., 2011). Some scholars have taken a different approach in that they separate ability to identify emotions in oneself and others in two different dimensions (appraisal and expression of emotion in oneself and appraisal and recognition of emotion in others) (Davies, Stankov, & Roberts, 1998; Law et al., 2004). However, previous research has shown that there is sizeable overlap between the ability to perceive self-emotion and to perceive others’ emotion (Joseph & Newman, 2010; Wong & Law, 2002). Therefore, perceiving emotions in one’s self and others should be treated as part of emotion perception. As seen in Figure 2.2, emotional perception is placed first in Joseph and Newman’s (2010) cascading model because the better persons and perceiving their emotions, the more accurate their appraisal can be.
The second dimension is facilitation (or using) emotion. That is, facilitation of emotion is the ability to access, generate, and use emotions for the purpose of facilitating thought (Mayer & Salovey, 1997). Part of EI is developing an emotional knowledge from past experiences from which facilitation emotion can draw (Mayer et al., 2004). Using emotion involves mentally assimilating basic emotional experiences from one’s emotional knowledge (Mayer et al., 2004) and includes comparing these emotions against other sensations and thoughts (Kidwell et al., 2011). This allows emotion to be used in goal oriented behavior and is a vital component for selective attention, self-monitoring, and self-motivation (Roberts, et al., 2001). Joseph and Newman (2010) removed emotional facilitation from their cascading model due to its conceptual redundancy with emotional regulation as well as empirical support demonstrating superior fit for a three factor model.

The third dimension, understanding emotion, is the ability to analyze and understand emotions and their potential outcomes (Mayer et al., 2004). It requires the ability to reason through complex emotional problems and understand consequences (Mayer et al., 2004; Kidwell et al., 2011). It also involves the ability to understand how emotions interact with each other, evolve, and differ from each other (Mayer & Salovey, 1997; Joseph & Newman, 2010; Kidwell et al., 2011). EI and understanding emotion is a cognitive ability and requires cognitive resources (Joseph & Newman, 2010). That is, it
relies on one’s emotional knowledge structures that require cognitive resources to interpret and understand what is being processed (Joseph & Newman, 2010). Thus, EI does not account for automatic processes.

The omission of automatic processes in Joseph and Newman’s (2010) cascading model is caused by the order of the casual path, where emotion understanding is expected to fully mediate the relationship between emotion perception and emotion regulation abilities. However, if emotion understanding was to partially mediate the relationship between emotion perception and emotion regulation abilities, this would mean that emotion perception and one’s ability to regulate emotion do not rely on accurate emotion understanding. This would violate Mayer and Salovey’s (1997) definition of emotion regulation as the conscious regulation of one’s emotions. This is in line with the literature on self-regulation ability “which separates effortful or conscious self-regulation from automatic or unconscious self-regulation due to their distinct neurological origins, antecedents, and outcomes (Joseph & Newman, 2010, p. 58).”

The final dimension is managing emotion or emotional regulation. This is the ability to regulate emotions in one’s self and other’s emotions so that desired outcomes are achieved (Mayer & Salovey, 1997; Kidwell et al., 2011). Mayer and Salovey define emotion regulation as the “conscious regulation of emotions to enhance emotional and intellectual growth” (1997, p. 14). It involves the ability to maintain an internal neutral emotional state and influence positive emotions within others (Kidwell et al., 2011). Managing emotion has also be called emotion regulation and was defined by Gross (1998) as “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions (p. 275).” Emotion
regulation is the final stage of Joseph and Newman’s (2010) cascading model and has been shown to have a positive relationship with job performance.

**Emotional Intelligence Findings**

Kidwell et al. (2011) found greater predictive validity for their domain-specific EIME scale over the domain-general MSCEIT scale providing support for the notion that a domain-specific assessment is necessary. They also found that customer orientation and manifest influence (customer changed their decisions based on sellers performance) are more positively related to performance when salespeople possess high EI. In their findings, EI mediates the relationship between customer orientation and sales performance, suggesting that salespeople with moderate to high EI will be better at customer orientated selling. Overall, EI was an important antecedent to sales performance and linked to successful selling. They also provided insight into the relationship between EI and cognitive ability, in that, moderate to high EI ability enhanced the relationship between cognitive ability and sales revenue. Their research provides insight into the context of EI and personal selling where understanding and managing emotions seems particularly useful in real estate contexts. Whereas, perceiving, facilitating, and managing emotions are more salient in the insurance context. Thus, different aspects of EI may be more important depending on the selling situation. Thus, they found that salespeople with high-EI were better at effectively employing customer-oriented selling and influencing customer decisions and ultimately higher job performance. In addition, previous research has shown that salespeople with higher emotional recognition ability were better at getting results that were mutually beneficial (Elfenbein, Foo, White, Tan, & Aik, 2007). Borg and Johnston (2013) examined the link between interpersonal skills (IPS) and
emotional intelligence (EQ) within the sales process. They defined interpersonal skill as including "such skills as knowing how to cope with and resolve conflict and understanding, persuading and getting along with others, ability to listen, and empathy (Rentz, Shepherd, Tashchian, Dabholkar, & Ladd, 2002, p. 15)." Since business to business selling is essentially the interaction between a seller(s) and buyer(s), it is clear from the cited research that EI and related variables are context dependent.

Previous research has found that EI and emotional creativity (EC) are independent abilities and should be studied separately (Ivcevic, Brackett, & Mayer, 2007). Ivcevic et al., (2007) proposed that creative thinking could be enhanced by certain aspects of EI: 1) the generation of emotions and the ability to better understand and express them, 2) by the consideration of numerous perspectives gained from different emotions, 3) or through focusing on activities that are enhanced by certain emotions (Mayer & Salovey, 1997; Palfai & Salovey, 1993). That is, emotional intelligence incorporates the three aspects of emotional thinking which could be integrated into the creative process. For example, salespeople who understand emotions and how they affect people can integrate an action into a creative selling presentation to induce a desired emotional response.

Research of a salesperson’s ability to perceive emotions in customers within the buyer seller interaction has found that when a salesperson has the ability to accurately appraise the emotions of others, it strengthens their adaptive selling ability and customer-oriented selling (Kidwell et al., 2007). That is, salespeople with high EI should be able to recognize others’ emotions better and use the emotional information to better adapt within the selling interaction and solve customer’s problems in a value adding manner, which improves sales lead conversion rates (Kidwell et al., 2007). Kidwell et al. (2007)
also found the inverse be true for salespeople with low EI. Other studies have shown the merits of high EI in that those “individuals received greater merit increases and held higher company rank than their counterparts. They also received better peer and/or supervisor ratings of interpersonal facilitation and stress tolerance than their counterparts. With few exceptions, these associations remained statistically significant after controlling for other predictors, one at a time, including age, gender, education, verbal ability, the Big Five personality traits, and trait affect (Lopes, Grewa, Kadis, Gall, & Salovey, 2006, p. 132).” This study shows the importance of EI in that individuals who are high in EI are more likely to succeed.

Cognitive Ability and Emotion

Joseph and Newman (2010) endorse two definitions of cognitive ability. Humphreys (1979) defines cognitive ability as the entire repertoire of acquired skills, knowledge, learning sets, and generalization tendencies considered intellectual in nature that is available at any one period of time; and second is Ackerman’s (1996) conceptualization of intelligence development as intelligence-as-process, personality, interests, and intelligence-as-knowledge. Both of these definitions highlight knowledge as a primary factor in cognitive ability. The management literature shows that this component of cognitive ability is central to influencing job performance (Hunter, 1986; Schmidt and Hunter, 2004). By acquiring more job-related knowledge, employees with high cognitive ability translate that knowledge into higher job performance. Thus, it is reasonable to argue that the ability to understand emotions represents a knowledge base for using those emotions in a particular context (Mayer & Salovey, 1997). Likewise,
Joseph and Newman (2010) found that individuals with high cognitive abilities displayed higher understanding of their emotions.

Cognitive ability has received considerable attention for its impact on sales performance (Churchill et al. 1985; Sujan, Weitz, & Kumar 1994; Walker, Churchill, & Ford 1977; Weitz 1981; Weitz, Sujan, & Sujan 1986). Research shows that salesperson’s level of specific knowledge of customers (Weitz, 1978), products (Szymanski, 1988), and competitors (Sujan, Sujan, & Bettman 1988) predicts sales performance. Given the prevalence of cognitive ability studies, recent research suggests that emotional ability is as important, if not more so, than cognitive ability in marketing settings (e.g. Schmidt & Hunter 2004). Kidwell et al. (2011) suggested that cognitive ability and EI make independent but complementary contributions to performance. Kidwell et al. (2011) also found that emotional intelligence increases revenue and customer retention beyond cognitive ability and that EI and cognitive ability are complementary. That is, a salesperson cognitive ability has its greatest impact when it is combined with moderate and high levels of EI (Kidwell et al., 2011).

**Selling Style**

A major breakthrough in the study of personal selling was the conceptualization of adaptive selling because it accounted for the marketing message to be adapted to each customer and selling situation (Spiro & Weitz, 1990). Weitz et al., (1986) defined as “the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation (p. 175).” Weitz et al., (1986) also presented a framework which focuses on the ability of a salesperson to alter communications during the sales interaction. Salespeople can observe customer
reactions during the sales interaction and adjust to another preconceived selling approach. Research has shown that adapting is a fundamental component to selling success given its positive effect on salespersons' attitudes and behaviors (Fang, Palmatier, & Evans, 2004; Park & Holloway, 2003). Previous work on adaptive selling has shown that emotional intelligence positively influences one's ability to employ adaptive selling (Kidwell et al. 2007). A key finding from a meta-analysis of 155 samples and more than 31,000 salespeople is that adaptive selling behavior has stronger effects positive on job performance and satisfaction than customer orientate selling (Franke & Park, 2006).

A related concept, but different from adaptive selling, is that of agility selling. Agility is a strategic asset incorporating an ability to deal with variability in the market place (Yusuf, Sarhadi, & Gunasekaran, 1999). That is, for a company to be considered agile, it needs to possess the flexibility and speed necessary to respond to customer or market changes in a way that takes advantage of these opportunities (Chonko & Jones; 2005). Agility selling introduces the notion of time or speed during sales interactions with customers. With increasingly faster changing market conditions, salespeople must be able to respond more quickly than traditional approaches might suggest. Agility has been described as dynamic, context-specific, change embracing, and growth oriented (Goldman, Nagel, & Preiss, 1995). Chonko and Jones (2005) identify two main elements of sales force agility:

1. The ability of the sales force to respond to changes in proper ways and in due time.
2. The ability of the sales force to exploit changes and take advantage of them as opportunities (p. 372).
For salespeople to employ agility selling, they must have organizational support, resources, and cognitive ability to be prepared to meet changing consumer demands by being agile sales people who can deliver value to customers expeditiously and partner with them so as to provide total solutions (Chonko & Jones, 2005).

Relationship building between buyer and seller leads to a number of positive outcomes for the seller including job satisfaction and performance (Humphreys & Williams, 1996; Boles, Brashear, Bellenger, & Barksdale, 2000). Behaviors like cooperative intentions, mutual disclosure, and intensive follow-up contact lead to strong buyer seller relationships (Crosby, Evans, & Cowles, 1990). The dyadic relationship of buyer seller interaction has been the subject of much research (Evans et al., 2012). It is at the point of contact between these two actors that relationships are built and sales goals are achieved. The give-and-take of the buyer/seller relationship is dependent upon the interpersonal skills of the seller (Jones, Busch, & Dacin, 2003). Boles et al., (2000) note that not all salespeople possess skills necessary to implement relational selling. Mutual disclosure is aiming the skills crucial to establishing a solid relationship between both parties (Derlega, Winstead, Wong, & Greenspan, 1987) which is the foundation of a reciprocal dyad. Borg and Johnson’s (2013) IPS-EQ model of the interpersonal relationship between buyer and seller explores the link between interpersonal skills and emotional intelligence. Their model, however, draws heavily on a cognitive approach to emotional intelligence.

Creativity Within Organizations and Sales

The concept of creativity is not new and research has spanned many fields from fine arts to architecture and business (Fillis & McAuley, 2000). Creativity is a difficult
concept because it can be messy, unexpected, or frustrating (Fillis & McAuley, 2000) and potentially leads to organizational conflict (Zhou & George, 2003). However, when a person’s creative ideas are successful, these individuals are glorified and held as geniuses (Staw, 1995). In today's complex and highly competitive business environment, tapping a work force’s creativity is needed to survive and prosper (Lassk & Shepherd, 2013). Within the work place, for an idea to be considered creative, it must be both novel and useful (or appropriate) (Amabile, 1983; Zhou & George, 2003). That is, a novel idea alone is not sufficient to be considered creative because it cannot be usefully implemented. In addition, Zhou and Georg (2003) describe creative activities as being affect or emotion laden. Within the sales literature, creativity has been identified as one of the most under-researched topics (Evans et al., 2012) and determining the antecedences of creativity and creative behavior is of the utmost importance (Wang & Netemeyer, 2004; Coelho & Augusto, 2010).

The concept of creative selling was developed to address the gap between practitioner’s identification that creativity is a common characteristic of successful salespeople and the lack of empirical research in the sales literature (Wang & Netemeyer, 2004). This has led to researchers beginning to explore the role creativity plays in the selling process and it’s antecedents and outcomes (Wang & Netemeyer, 2004; Lassk & Shepherd 2013; Agnihotri, Rapp, Andzulis, & Gabler, 2013). The study of creative selling is rooted in social and cognitive psychology examining both personality variables and cognitive ability (Williams & Yang, 1999). Contemporary psychology views creativity not as a personality trait or a general ability but rather as behaviors stemming from the interaction of personal characteristics, cognitive abilities, and the social
environment (Amabile, 1983). That is, creativity comes about by a complex interplay between individuals and the environment (Sternberg & Lubart, 1999).

When studying creativity in a work environment, research suggests that both job characteristics (i.e. having job autonomy to implement creativity) and specific work situations (i.e. involved in problem solving situations) should allow for creativity to occur (Mumford, Whetzel, & Reiter-Palmon, 1997). Coelho and Augusto 2010 identify linkages between Hackman and Oldham’s (1980) component-wise approach to job characteristics, where job characteristics are made up of five “core” components (task variety, task identity, task significance, autonomy, and feedback), and creativity. Here are the definitions provided by from Coelho and Augusto (2010) and their rationalization as to why these job characteristics are linked to creativity.

- **Job autonomy**— is the degree to which employees are free to determine the schedule of their work and the procedures and equipment they will use to carry out their assignments. This job characteristic is often linked to intrinsic motivation and creativity. High levels of autonomy provide the salespeople the freedom to exercise their own judgment in the selling task, thereby encouraging greater levels of intellectual and creative engagement.

- **Task variety**— is the extent to which an employee has to perform a wide range of activities and/or operate with a variety of equipment and procedures, involving the utilization of diverse skills. Non-redundant work is more likely to result in addressing issues with less routine and thereby more creative approaches.

- **Task identity**— is the degree to which the job requires the jobholders to identify and complete a workplace with a visible outcome. Workers experience
more meaningfulness in a job when they are involved in the entire process rather than just being responsible for a part of the work. Personal attachment to the work product and the resolution to address a particular customer’s needs elevates the incentive to find creative solutions.

- **Task feedback**— is the degree to which employees obtain, while in work, clear and direct information regarding their job performance. Information that assists the salesperson in improving domain-relevant skills thereby elevating the salesperson’s ability to engage in more effective problem solving.

- **Task significance**— is the extent to which the employee perceives the job to make a substantial contribution to the organization or other people. Tasks with higher significance place greater value on finding winning solutions that are more often than not due to creative problem solving. However, Coelho and Augusto did not find support for their hypothesis liking task significance to creativity.

These job characteristics are very prevalent among sales positions making sales an ideal place to study creative behavior. Most salespeople are not tied to a desk, they deal with customers on a wide range of tasks from cold calls to solving existing customer’s problems, which provides job autonomy and task variety. Task identity can be seen in a salesperson’s sales quota and in following up with customers to ensure their satisfaction. Salespeople are target driven and through sales goals and progress reports, they receive task feedback. Finally, even though Coelho, Augusto, and Lages (2011) did not find a significant relationship with task significance, it can be justified that salespeople see themselves as important to the organization because they are the ones who
create revenue and build customer relationships. Thus, it can be seen that selling is an ideal place to study creative behavior within organizations.

**Salesperson Creative Performance**

Wang and Netemeyer (2004) introduce the concept of creative selling behavior and define "salesperson creative performance as the amount of new ideas generated and novel behaviors exhibited by the salesperson in performing his or her job activities (p. 806). However, Wang and Netemeyer (2004) do not specifically follow Amabile's(1983) notion that creative ideas have to be both novel and useful or appropriate in their definition of creative selling behaviors. They do not include "usefulness" or "appropriateness of the ideas and behaviors" in their definition. These new ideas and behaviors are generated and performed because salespeople think they may be useful and appropriate in solving the unstructured sales problems (Wang & Netemeyer, 2004, p.806). Creative selling behavior was developed to identify seven ways for salespeople to employ creative behaviors when engaged in job activates:

1. Making sales presentations in innovative ways,
2. Carry out sales tasks in ways that are resourceful,
3. New ideas for satisfying customer needs,
4. Generating and evaluating multiple alternatives for novel customer problems,
5. Having fresh perspectives on old problems,
6. Improving methods for solving a problem when an answer is not apparent, and
7. Generating creative selling ideas.
Creativity becomes important for salespeople when making presentations, handling customer objections, dealing with customer problems, and devising new and innovative ways to use products or services. In this light, a salesperson's ability to generate many alternatives is a fundamental aspect of creativity (Wang & Netemeyer, 2004). As such, "creative ideas may improve the efficiency and effectiveness of daily task activities, help expand the customer base, and increase customer satisfaction, thereby contributing to overall sales performance (Wang & Netemeyer, 2004, p.806)."

Agnihotri et al. (2013) integrated Wang and Netermeyer's (2004) conceptualization of a salesperson's creative selling to test their Componential Conceptualization of Creativity which was adapted from Amabile (1983) (shown on the left side of the figure). The proposed componential framework of creativity is based on the interaction of contextual factors and individual factors in generating creative responses for boundary spanners' (i.e. salespeople). There model's theoretical basis is that creativity consist of three components. The first component is domain-relevant skills and abilities, this includes job specific technical knowledge and skills, and is dependent upon an individual's inherent cognitive abilities and perceptual skills. The second component is creativity-relevant skills and abilities. This includes a suitable cognitive style that is able to understand complexities and has the capacities for both solving problems and generating novel ideas. Creativity-relevant skills and abilities are dependent on an individual's behavioral training, personality traits, exposure to situations, and jobs requiring idea generation. The final component is task motivation which includes job attitudes and motivation control. It determines how an individual approaches an assignment (Amabile, 1983). Task motivation is depended on an
individual’s intrinsic motivation and extrinsic support. All three individual creativity components facilitate an individual’s ability to engage in the creativity process seen in Figure 2.3.

![Creativity Process Diagram]

**Figure 2.3 Componential Conceptualization of Creativity Agnihorti et al. (2013)**

The creative process (on the left side of Figure 2.3) is a schematic representation of a componential framework for the creative process (Amabile, 1983). The creative process framework “describes the way in which an individual might assemble and use information in attempting to arrive at a solution, response, or product” (Amabile, 1983, p. 367). Building off the componential framework Agnihotri et al. (2013) investigate the antecedents, job-specific knowledge (domain-relevant skills and abilities), emotional
intelligence (creativity-relevant skills and abilities), and managerial feedback (task motivation), to creative selling behavior. They propose that "what employees will do in terms of creativity is determined by their knowledge and EI in conjunction with factors that facilitate an intrinsically motivated state" (p.4). They find that knowledge, emotional intelligence, and managerial feedback positively influence boundary spanner creative selling behavior, which positively influences their problem solving and job performance. In addition, an interaction between knowledge and EI revealed that a greater level of creative behavior is achieved when both domain-relevant (knowledge) and creativity-relevant (emotional intelligence) skills and abilities are in place. Problem solving is considered one of foundations of relationship selling and partnering with customers (Weitz, Sujan, & Sujan, 1998; Agnihotri et al., 2013) because solving customer’s problems or filling needs is a means of creating value for the customer, which in turns creates value for the company (Agnihotri et al., 2013). In a recent study, Wang and Ma (2013) examined psychological climate for innovation, learning orientation, and job satisfaction as antecedents to creative selling behavior. They found that both psychological climate for innovation and learning orientation had a positive effect, while job satisfaction actually produced a negative effect on creative behavior.

The concepts of emotional intelligence and creativity have begun to receive more intention in the literature. Salespeople interact in a complex and high pressured work environment where handling their own and customer’s emotions is part of the daily routine. Salespeople’s emotional intelligence aides in the ability to effectively perform customer-oriented tasks (Rozell, Pettijohn, & Parker 2006), which influences performance, (Wong & Law 2002; Kidwell et al. 2011; Lassk & Shepherd 2013)
customer relationships (Kidwell et al. 2011) and job satisfaction (Wong & Law 2002; Lassk and Shepherd 2013). Zhou and Georg (2003) proposed that emotional intelligence is one way for leaders to effectively promote creativity among their subordinates. Agnihotri et al. (2013) believe that positive and negative emotions spark creativity by increasing the scope of the cognitive material from which they can draw. They found EI to be an important antecedent to salesperson perceived creative behaviors and which has a positive effect on customer problem solving and objection measure of job performance. In addition, Lassk and Shepherd (2013) found that emotional intelligence had a positive relationship with salesperson creativity and that this creativity led to a positive relationship with salesperson job performance and satisfaction.

It has been suggested that intuition and creativity share common properties and intuition is a first and necessary stage of creativity and is some sort of preconscious activity which guides an individual to novel ideas (Burk & Miller 1999). Creative and intuitive processes have been described as engaged in Pas de Deux, where the ideas move together as one (Janesick, 2001). Dane and Pratt (2009) propose a classification of different types of intuition, one being creative intuition and is described as feelings that arise when knowledge is combined in novel ways. Gore and Sadler-Smith (2011) propose a different view in that creative intuition is “Slow-to-form affectively charged judgment occurring in advance of an insight that combines knowledge in novel ways based on divergent associations, and which orients behavior in a direction that may lead to a creative outcome” (p.309). That is, creative intuitions occur after an incubation phase and are the interpretation of intuitions (gut feelings) that conjectures (creative intuition) what may work. While the work on creative intuition highlights the sentiment that
intuition and creativity are interrelated, empirical tests are needed to determine the viability of the multifaceted view of intuition. However, from theoretical developments of intuition and the notion of creativity, it can be seen why the two processes are considered interrelated. Thus, creativity and intuition both consist of some form of affect and creativity is guided by preconscious activity, which could be intuition.

**Job Performance**

A sales force and its performance are vital to the success of almost every company in every industry (Behnman & Perreault, 1982). Since, so much of company’s success is dependent upon the sales force’s ability to generate sales; it is no wonder that sales people are ultimately evaluated by their performance. Within the marketing and sales literature, sales performance has been conceptualized as resulting from combinations of endogenous, moderator, and mediating variables (e.g., Anderson & Oliver 1987; Babakus et al. 1996; Churchill et al. 1985; Verbeke, Dietz, & Verwaal, 2011; Evans et al., 2012). However, the extant research has only been able to explain a relatively small amount of the variation in sales performance (Evans et al., 2012).

Within the sales literature, there have been two predominant ways of measuring salesperson performance. The first is through company supplied objective sales data (e.g. units sold, dollar amount, and percentage of goal completed). However, academics have found it difficult to find companies willing to turn over sensitive objective data (Bommer, Johnson, Rich, Podsakoff, & Mackenzie, 1995; Benkhoff, 1997). Therefore, most of the sales performance research is done using subjective measures that evaluate performance as technical knowledge, teamwork, presentation, and planning skills (Jaramillo, Mulki, & Marshall, 2005). Jaramillo et al. (2005), in a meta-analysis on salesperson organizational
commitment, found that only one out of 51 studies used an objective measure of job performance. Subjective measures of job performance, like those in Behrman and Perreault (1982) and Dubinsky and Mattson (1979), rely on self-reported or supervisory ratings. Past research has shown no upward bias for self-reported salesperson job performance (Churchill et al., 1985).

Salespeople have control over their actions during the selling process (i.e., sales strategy), but the outcome of the sales process may be influenced by factors outside their control (e.g., company resources and support) (Baldauf, Cravens, & Piercy 2005; Miao and Evans, 2007). Therefore, when investigating salesperson job performance, it is appropriate to examine both behavior and outcome aspects separately (Miao & Evans, 2007). Behavioral performance refers "to the activities and strategies salespeople carry out in the selling process, whereas outcome performance represents the quantitative results of salespeople's efforts (Baldauf et al., 2005)" (Miao & Evans, 2007, p. 92). Previous research from the sales control literature has suggested a positive causal relationship from behavioral performance to outcome performance and that when studying job performance it is critical to incorporate both of these aspects (Cravens, Ingram, LaForge, & Young, 1993; Jaworski & Kohli 1991; Miao & Evans, 2007). That is, selling behaviors like maintaining good customer relationships, providing accurate information, completing paper work, and possessing complete product and industry knowledge (behavioral performance) will have a positive effect on the salespeople's ability to contribute to the firm's market share, generate a high level of dollar sales, sell to major accounts, and exceed annual sales goals (outcome performance) (Miao & Evans,
Thus, when assessing a salesperson’s effectiveness, it is important to incorporate both behavioral and outcome aspects of their performance.

**Competing Models**

This dissertation is designed to explore how a salesperson’s perceptions and use of intuition and deliberation, in conjunction with emotional intelligence, affect the creative selling process and ultimately their behavior and outcome sales performance. To avoid confusion a clarification between emotions and emotional intelligence is needed. Emotions are not the same concept as emotional intelligence. Emotions are psychobiological reactions to one’s environment. They are psychobiological because they involve psychological processes and biological reactions (Babin & Harris, 2014). Whereas, emotional intelligence is an ability that deals with accurately rationalizing emotions and using emotions as well as utilizing emotional knowledge to enhance thought (Mayer et al., 2008).

In general, intuition is an interesting concept because everyone has it, knows about it, and talks about it; but researchers have not been all that clear on what it is and how people use it. This lack of clarity has inhibited research on the topic and thus has led to misunderstanding and confusion. Many researchers acknowledge intuition’s close relationship to affect because they both occur automatically and are reactions to some stimulus in the environment (Sadler-Smith, 2008). It is generally accepted that the intuitive process results in a feeling of knowing (Hogarth, 2010). While both intuition and emotions deal with “feelings,” there is considerable disagreement among researchers about whether feelings are an important aspect of intuition (Epstein, 2010). With Joseph and Newman’s (2010) recent proposal of the three dimensional cascading model of
emotional intelligence, which does not incorporate automatic processes, it makes sense to explore the relationship between intuition and the cascading model.

Past research has suggested that learning takes place in specific settings (Hogarth, 2001; Hogarth, 2010) and that past experiences are mentally encoded in the form of context-specific concrete mental representations (e.g., images, scenarios, affect, and physical sensations) (Epstein, 2010). Likewise, Kidwell et al. (2011) studied EI in the context of a marketing exchange and calls for EI to be studied in a domain specific fashion. This is because a person may have a high EI in one setting (e.g. selling to customers) and a low EI in another (e.g. teaching a kindergarten class). In a similar line of thinking, T. Betsch (2008) proposed that intuition is a process that relies on knowledge stored in long-term memory that has been primarily acquired via associative learning. Since learning takes place in specific settings and through past experiences, the knowledge one has acquired is mentally encoded in the specific context where the learning took place. Therefore, when studying decision making (intuition and deliberation) and EI, it is important that researchers take into account the contextual nature of their study. In addition to decision making and EI, creative selling has contextual elements which can be seen in Evans’ et al. (2012) five linkages between job characteristics and creativity. For salespeople to employ creative selling techniques, they must be given the latitude by their organization to try new things. Therefore, salespeople without adequate autonomy may not have the opportunity to be creative and be confined to more traditional methods (e.g. script selling). Thus, this dissertation will study these concepts within a buyer seller interaction where the seller has the freedom (autonomy) to use different selling techniques.
In order to shed light on intuition's role in relation to emotional intelligence in both decision making and creative selling processes, a competing models approach seems appropriate for this investigation. In that, Model 1 follows Joseph and Newmans (2010) cascading model of emotional intelligence and does not hypothesize any relationship between intuition and emotional intelligence. However, model 2 looks to incorporate intuition into the cascading model. The first hypothesized model is shown in Figure 2.4.

![Hypothesized Model 1](image)

**Figure 2.4 Hypothesized Model 1**

Model 1 makes the distinction between emotional intelligence (EI) and intuition on the theoretical basis of conscious awareness and cognitive effort. Here, the three dimensions of emotional intelligence are independent of intuition. According to Joseph and Newman (2010), EI is an intelligence that requires both cognitive ability and effort; and thus does not account for any automatic processes. At the top left side of Figure 2.4, Joseph and Newman’s cascading model begins with Emotional Perception (EP) that must causally precede Emotional Understanding (EU) which precedes Emotion Regulation (ER) (Joseph & Newman, 2010). Emotional perception has been defined as “the ability to
identify emotions in oneself and others, as well as in other stimuli, including voices, stories, music, and works of art” (Brackett et al., 2006, p. 781). Previous research on emotional perception has demonstrated considerable individual differences in one’s ability to perceive emotion (Ekman & O’Sullivan, 1991; Matsumoto et al., 2000). According to Joseph and Newman (2010), individuals who are better at recognizing emotional cues are also better at emotional understanding and emotional regulation which allows them to pinpoint an emotion and regulate it; this is because a person must first be able to recognize emotions before they can understand and regulate them. However, the inverse does not hold for individuals with lower emotional perception. This ability difference may be attributed to individual differences in one’s emotional knowledge base that develops over time. Because of the causal relationships between the three dimensions of EI, Model 1 does not account for any automatic processes. Joseph and Newman (2010) acknowledge that “the automatic processes that allow the perception of emotion to directly influence the regulation of emotion are not included in the cascading model” (p. 58). Therefore, Figure 2.4 (model 1) hypothesizes Joseph and Newman’s (2010) causal cascading mode, which does not allow the relationship between emotional perception and emotional regulation. Thus, emotional perception will have a positive relationship with emotional understanding and emotional understanding will have a positive relationship with emotional regulation.

Intuition, on the other hand, has been theoretically distinguished from other concepts like EI on such bases as its origin, amount of cognitive effort expended, and conscious awareness. From the literature review, the essence of intuition is a feeling of knowing, without knowing why, that cannot be rationally justified at the time of
awareness, and comes with different degrees of certainty. These feelings can be the driving force behind one’s decision (C. Betsch, 2008). The feeling occurs automatically without conscious cognitive effort and appears seemingly from nowhere, but these feelings are drawn from one’s own knowledge base which is comprised of past experiences and information learned. These intuitive feelings tend to be more general in nature and longer lasting than emotional feelings (not EI). Also, the origins of emotions are caused by clear cut and identifiable stimuli, whereas the sources of intuitive feelings are unknown at the time of awareness. However, emotion and intuition are similar in that they both occur automatically and are reactions to some stimulus in the environment. Also, the stimulus or source of the emotion is clear cut and identifiable. Contrary to emotional perception, intuitions are gut feelings, in which the stimulus or source cannot be determined at the instant one becomes aware of the feelings. Therefore, Figure 2.4 (model 1) hypothesizes no relationship between any aspect of emotional intelligence and intuition. Thus, it is expected that intuition is a separate construct and demonstrates discriminant validity between intuition and all aspects of EI.

Now that the distinction between emotional intelligence and intuition has been made in Figure 2.4, the remainder of Model 1 can be explained. General cognitive ability has been found to be a predictor of job knowledge and one’s job knowledge leads to job performance (Hunter, 1986; Schmidt & Hunter, 2004). But, how do people use their cognitive ability beyond general job knowledge? Ability-based emotional intelligence has been conceptualized as requiring cognitive ability and demanding conscious cognitive effort. Past research on emotional intelligence and cognitive ability has found an independent, but complimentary relationship between the two abilities as they relate to
performance (Kidwell et al., 2011). Deliberation is also a conscious effortful process that has been found to be positively associated with cognitive ability (Stanovich, 1999; Stanovich & West, 2000; Capon, Handley, & Dennis, 2003; De Neys, 2006; Klaczynski, 2000; Klaczynski & Daniel, 2005; Klaczynski & Gordon, 1996; Newstead et al., 2004). Therefore, salesperson will use cognitive effort within the cascading model of emotional intelligence to perceive, understand, and regulate their emotions and that these regulated emotions can be incorporated into the deliberative processes as information. If salespeople do not account for their emotions, then the deliberative process runs the risk of being hijacked or altered by their emotions. Thus, emotional regulation should have a positive relationship with deliberation.

In addition to this proposed relationship, emotional regulation also may be a positive antecedent of both behavioral and outcome job performance. Kidwell et al., (2011) showed that emotional intelligence had a positive influence on customer orientation and manifest influence which, in turn, had a positive influence on job performance. Their study concluded that emotional intelligence was an important antecedent to job performance. Also, Lassk and Shepherd, (2013) found that emotional intelligence had a positive relationship with job satisfaction and performance. Thus, it is believed that emotional regulation will have a positive influence on both behavioral and outcome job performance.

Deliberation is a demanding cognitive process that has served mankind well as evidenced by the remarkable accomplishments brought about by rational/analytic thinking (Epstein, 2010). Deliberation can be viewed as integral to decision making which consists of utilizing relevant information like costs and benefits eventually coming
to a deliberate choice (Alexander, 1979). Deliberation has been defined “as a decision mode following explicit evaluation, beliefs, and reasons” (Betsch & Kunz, 2008, p. 536). The ability to logically think may be a vital characteristic of a good salesperson. A number of studies show that people with higher general cognitive ability are better at finding correct solutions to problems of logic, probability, and decision making (Stanovich, 1999; Stanovich & West, 2000; Capon et al., 2003; De Neys, 2006; Klaczynski, 2000; Klaczynski & Daniel, 2005; Klaczynski & Gordon, 1996; Newstead et al., 2004). Also, previous research has shown that a salesperson’s deliberative thought process has a positive relationship with salesperson job performance (Locander, Mulki, & Weinberg, 2014). Therefore, I hypothesize that a salesperson ability to think deliberatively will help them in their jobs and thus have a positive relationship with both behavioral and outcome job performance.

Not all customers and their needs are the same. In an era where salespeople are expected to be problem solvers, not product pushers, they need to be given the flexibility to try new and creative techniques. The deliberative process has the ability to analyze and understand problems at a complex level of abstraction (Epstein, 2010), which should serve useful in creative selling. Wang and Netemeyer (2004) introduced the concept of creative selling as a cognitive ability and defined it as “salesperson creative performance as the amount of new ideas generated and novel behaviors exhibited by the salesperson in performing his or her job activities (p. 806).” For a salesperson to display creative ideas and behaviors, they must have the cognitive ability to understand the selling situation and assess what actions to take. Therefore, for a salesperson to effectively use creative selling techniques, he/she needs to possess the ability to rationally think through any selling
situation. Thus, it is hypothesized that deliberation will have a positive relationship with creative selling.

Emotional intelligence and creativity are linked through: 1) the generation of emotions and the ability to better understand and express them, 2) by the consideration of numerous perspectives gained from different emotions, 3) or through focusing on activities that are enhanced by certain emotions (Mayer & Salovey, 1997; Palfai & Salovey, 1993). Also, previous research on salesperson’s emotional intelligence found that it was positively related to individual creativity; and that both emotional intelligence and creativity were positively related to job satisfaction and performance (Lassk & Shepherd, 2013). Thus, it is hypothesized that salesperson emotional regulation is positively related to creative selling and that creative selling is positively related to both behavioral and outcome job performance.

As shown in Figure 2.4, intuition has hypothesized relationships with three constructs: deliberation, creative selling, and job performance. Intuition and deliberation are not two ends of one decision making continuum; rather they are two separate dimensions. Some researchers have described deliberation as the “executive function” with intuitions being inputs to the process (Salas et al., 2010). Volz and von Cramon (2006) make the similar point that intuition results in “gut feelings” which influence thought and inquiry. Therefore, when a person becomes “aware” of their intuitive feelings, the intuition process is finished and the deliberative process takes over. That is, the executive function may reject, accept, or further investigate intuitive feelings. However, when an intuitive feeling enters awareness, it begins to use cognitive effort that was once allocated to the deliberative process. Also, one’s intuition is not perfect and
sometimes may be a source of biases, which may not be acceptable for some individual’s deliberative thought processes. Thus, a salesperson’s preference for relying on intuition will have a negative relationship with one’s preference for deliberation.

If the concept of creative selling is to come up with novel ideas and actions, then intuition should have a positive effect on the creative selling process. This is because, when generating creative ideas for selling, salespeople do not have to have all the issues completely thought out because the creative selling process entails trying to come up with new ideas from new perspectives. While creative selling is a cognitive process, intuition is not. Intuitions are feelings that have been characterized as fantasy, creativity, imagination, visual recognition, and associative memories (Sloman, 2002). They are feelings that present themselves through images, metaphors, and stories (Norris & Epstein, 2011). Salespeople’s intuition takes a holistic view of the selling environment and produces these feeling that can add in the creative selling process by automatically coming up with new and innovative ideas that may be beyond one’s rational abilities. The person may not be able to detail or rationalize the thought process behind an idea immediately; but it is an idea and idea generation is the driving force behind creative selling. Thus, intuition has a positive relationship with creative selling.

Previous research has demonstrated that intuition in certain situations can lead to better out comes than deliberative analytical considerations (Hammond et al., 1987; Wilson et al., 1989; Wilson et al., 1993; Wilson & Schooler, 1991; Dijksterhuis, 2004). However, little work has been done on intuition in the context of selling. Locander et al. (2014) demonstrated the mediating influence that intuition has on deliberation and adaptive selling, which leads to higher job performance. However, they did not use a
contextually adapted measure of intuition which could lead to different outcomes do to the contextual nature of intuition. The interaction between a salesperson and a buyer can be fast. That is, when buyer and seller are engaged in dialog, the salesperson may not have the time to deliberately think through every possible approach and turn to their intuition for guidance due to its speed and the sense of confidence it instills. One of the primary features of intuition is that it is faster than the deliberative process (Bestch C., 2008; Epstein, 2010; Norris & Epstein, 2011). Therefore, salespeople who have a preference for making intuitive decisions will rely on them and not expend as much cognitive effort allowing their cognitive energy to be applied elsewhere. Thus, intuition will have a positive relationship with both behavioral and outcome job performance.

The final hypothesized relationship in Model 1 is between the two job performances. It has been proposed that the outcome of the sales process is sometimes affected by outside factors (e.g., company resources and support) and thus outside the seller’s control (Baldauf et al., 2005; Miao & Evans, 2007). Therefore, to accurately gauge a salesperson’s performance both behavior and outcome factors need to be incorporated into accounting for their job performance. Previous research from the sales control literature has suggested a positive causal relationship from behavioral performance to outcome performance and that, when studying job performance, it is critical to incorporate both of these aspects (Cravens et al. 1993; Jaworski & Kohli 1991; Miao & Evans, 2007). This causal relationship demonstrates that good selling behaviors (i.e. good customer relationship) will have a positive effect on their outcome performance (i.e. high sales). Thus, selling behavior performance will have a positive effect on outcome performance.
Figure 2.4 (model 1) is based on the theoretical distinction of consciousness and cognitive effort. That is, intuition is a subconscious/automatic process that does not require cognitive effort and, according to Joseph and Newman (2010), advancement of emotional intelligence theory should not be incorporated in the cascading model. However, if emotional intelligence is the process of perceiving, understanding, and regulating emotions and intuition is a feeling of knowing; it begs the question, what role (if any) does intuition play in emotional intelligence? Specifically, does one’s emotional perception and intuition differ and should emotional perception be considered a cognitive ability and thus be included in the cascading model of emotional intelligence? Figure 2.5 presents a competing model to the one in Figure 2.4 that investigates these questions and incorporates the intuitive process within the cognitive ability framework of Joseph and Newman’s cascading model of emotional intelligence.

Haidt (2001) calls much of the recent research on decision making the “worship of reason”. This holds true within the marketing and sales domain where EI, deliberation,
and creative selling are all considered cognitive abilities (cognitive abilities are not the same a cognitive intelligence) which require cognitive effort and attention. However, this dissertation investigates whether everything researchers are calling a cognitive ability deserves this title. Also, how should researchers incorporate automatic processes like intuition into their decision-making frameworks? Mainly, this raises the question of whether emotional perception should be categorized as a cognitive ability that requires cognitive effort and attention. In the competing model portrayed in Figure 2.5 (model 2), it is hypothesized that there is no discriminate validity between emotional perception and intuition. Thus, if no discriminate validity is found, then emotional perception should be removed from the cascading model and serve as an input to the cognitive ability portion (emotional understanding and emotional regulation) of the cascading model.

Joseph and Newman (2010) exclude automatic processes from their emotional intelligence model in that emotional perceptions cannot directly influence emotional regulation. This is because the path from emotional perception to emotional regulation is not considered intelligence. Rather, “intelligence can be viewed as representing, primarily, the capacity to carry out abstract thought, as well as the general ability to learn and adapt to the environment (Sternberg & Detterman, 1986; Terman, 1921; Wechsler, 1997)” (Mayer et al., 2004, p. 198). That is, for emotional intelligence to occur, emotional understanding must fully mediate the emotional perception and emotional regulation relationship (as was hypothesized in model 1). Joseph and Newman present the reasoning as to why automatic processes are to be excluded from the cascading model of emotional intelligence.

It is possible to imagine contexts in which the relationship between emotion perception and one’s ability to regulate emotion does not rely on
accurate emotion understanding (e.g., the perception of fear can lead to automatic down-regulation of fear, even without knowledge of how the fear developed or of the nature of the fear itself). That is, emotion perception can directly affect emotion regulation if this process occurs automatically or without voluntary control.

However, Mayer and Salovey defined the concept of emotion regulation as the "conscious [emphasis added] regulation of emotions to enhance emotional and intellectual growth" (1997, p. 14). This suggests that unconscious regulation similar to that of the automatic down-regulation of fear should not be included in the cascading model of EI. The exclusion of unconscious emotion regulation is consistent with the literature on general self-regulation abilities, which separates effortful or conscious self-regulation from automatic or unconscious self-regulation due to their distinct neurological origins, antecedents, and outcomes (for a review, see Eisenberg, Smith, Sadovsky, & Spinrad, 2004). Because EI was originally conceptualized as a model of conscious regulation (Mayer & Salovey, 1997) and self-regulation theories suggest that voluntary and involuntary emotion regulation are dissimilar enough not to be described with one model, our cascading model focuses solely on conscious processes. Therefore, the automatic processes that allow the perception of emotion to directly influence the regulation of emotion are not included in the cascading model. As a result, we expect the ability to understand emotion to completely mediate the relationship between the ability to perceive emotion and the ability to regulate emotion, because we are dealing with a conscious emotion regulation process.” (Joseph & Newman, 2010, p.57-58)

From the quote, Joseph and Newman make a compelling argument as to why automatic processes should not be incorporated in intelligence models. However, when they describe automatic process, like automatic down-regulation of fear, they are referring to a process where the end result is an action without voluntary control (emphasis added). For example, if a person sees what could be a snake or stick in the grass, the automatic down-regulation action will be to remove oneself from danger. This kind of automatic reaction can be seen as instincts that people are born with and cannot be taught or educated. If the goal of emotional intelligence is to enhance emotional ability and intellectual growth, then it makes sense to omit automatic processes.
However, if we look at the concept of an automatic process through intuition, it provides a different explanation. The difference lies in the outcomes of the automatic process where the process results in *action without voluntary control*; but intuition's outcome results in a *feeling* of knowing without knowing why at the very time of awareness. After an individual becomes aware of an intuitive feeling, the intuitive process is over and feeling has entered into conscious deliberation. This is why many researchers discuss the intuitive and deliberative process as interacting with each other (Dreyfus & Dreyfus, 1986; Denes-Raj and Epstein, 1994; Hammond, 1996; Sinclair & Ashkanasy, 2005; Volz & von Cramon, 2006; Sadler-Smith, 2008; Epstein, 2010) and where deliberation is described as the executive function (Salas et al., 2010). In addition to the outcome differences between the two automatic processes, they also differ on the ability to be educated. Since intuition is the automatic process that draws on one's knowledge and experiences, researchers believe that "intuition can be explicitly educated" (Hogarth, 2001, p.4). If Mayer and Salovey’s intent was to enhance emotional and intellectual growth with their view of emotional intelligence, then the automatic intuitive process should be incorporated in emotional intelligence conceptualizations.

If we examine this in light of the race car example, we can see that *Juan Manuel Fangio* became aware of a feeling that something was not right and decided to hit the brakes harder than usual. It was not until later that he reached an understanding, even though he made a deliberative decision. If we examine this example using Joseph and Newman cascading model, *Juan Manuel Fangio* perceived his intuitive feeling and regulated it without understanding it. However, hitting of brakes was a deliberative action rooted in a feeling that is based on personal knowledge and past experiences. From this
real world example, we can see that the intuitive feeling entered into awareness, just for a second, and allowed him the opportunity to take deliberative action (break or gas) and this happened without an understanding at the time.

Now that the distinction between the Joseph and Newman’s notion of automatic response (automatic down-regulation) and the automatic intuitive system has been made. Figure 2.5 addresses the notion of how intuition fits into emotional intelligence. The first step (emotional perception) of Joseph and Newman’s cascading model is based on Mayer and his colleague’s work which breaks emotional intelligence down into four branches. Branch one is:

“the perception of emotion and involves the capacity to recognize emotion in others' facial and postural expressions. It involves nonverbal perception and expression of emotion in the face, voice, and related communication channels (Buck, 1984; Ekman & Friesen, 1975; Nowicki & Mitchell, 1998; Scherer, Banse, & Wallbott, 2001)” (Mayer et al., 2004, p.199).”

This notion of emotional perception is very similar to the way intuition purportedly functions. In that, they both are taking in environmental cues to form an opinion based on the information input. Also, since intuition can be educated, this means that it is learned through experiences much in the same way as emotional perception. However, they are distinguished by the concept of conscious awareness and effort. Emotional perception is conscious monitoring of oneself and others from emotional cues. This can be seen in the quote from Kidwell et al., (2011):

“Perceiving emotion is the ability to recognize and appraise emotions accurately (Mayer, Caruso, and Salovey 1999). Perceiving involves awareness and the ability to interpret and differentiate emotions in the self and in others (Roberts, Zeidner, and Matthews 2001). Specific to marketing exchanges, perceiving involves recognizing emotions from facial expressions. For example, emotionally perceptive sales professionals are more likely to recognize when a customer is bored or
excited, interested or confused, and relaxed or annoyed. Such perceptions can provide information that salespeople can use to adapt their approaches and effect successful exchanges.” (Kidwell et al., 2011)

However, I argue here that within the paradigm of bounded rationality, people do not consciously, continually, and cognitively monitor their environment for these emotional cues. This would be too cognitively demanding and would use precious cognitive resources that can be delegated to other activities. Also, according to the literature on emotions, they are caused by clear cut identifiable sources. However, this identification does not take place until the second step of Joseph and Newman’s cascading model (emotional understanding). Thus, emotional perception is the ability to recognize a change in self or others. But, at the time of awareness, the source of these perceptions is not known. So, does emotional perception differ from intuitions? They both perceive environmental information in the form of cues, produce a feeling or perception, and at the time of awareness, the source has not yet been identified. Therefore, Figure 2.5 (model 2) hypothesizes no discriminant validity between emotional perception and intuition.

In accordance to Joseph and Newman’s model, the relationship between emotional perception and emotional regulation is not hypothesized due to the causal structure of their cascading model. However, as was discussed before, intuition can affect the deliberative process directly. Because the source of intuitive feelings are not known at the time of awareness, can intuitive feelings follow the same path as emotional perception while at the same time affecting deliberation directly? Intuitions can take one of two paths: 1) directly affect deliberation and directly affect action as in the Juan Manuel Fangio example and 2) as the person becomes aware of their intuitive feelings they
search for understanding before taking action. The path one’s intuition takes is dependent on situational factors such as time and amount of certainty associated with their intuitive feelings.

Figure 2.6 (new conceptual model) proposes a theoretical process that I will test with the findings from this dissertation. I believe that emotional perception exists independently of emotional intelligence and therefore should be removed from the emotional intelligence concept and placed as an antecedent along with intuition. Emotional intelligence consists of two constructs, emotional understanding and emotional regulation.

By removing emotional perception from emotional intelligence, the intuitive process can be incorporated into the interplay of emotional intelligence and decision making. Also, through the use of retrospection a person can trace the source of the intuition and by understanding the source of the intuition, one can learn why and for what reason a feeling occurred. This can facilitate experiential learning through corrective action and can help a person better understand and regulate emotions and intuitions.
Research Questions

Research Question 1: “How does emotional intelligence fit into the decision making process and is there a distinction between a salesperson’s intuition and emotional perception?”

As discussed, past research has dismissed the idea of any automatic process occurring within emotional intelligence (Joseph & Newman, 2010) as shown in Figure 2.2. However, this dissertation looks to incorporate intuition into emotional intelligence by testing to see if there is any discriminant validity between the automatic intuitive process and emotional perception. While emotional perception is the ability to recognize emotions in one’s self and others, and according to Mayer and Salovey (1997), is considered one of the dimensions of emotional intelligence. This dissertation proposes that emotional perception should not be part of emotional intelligence as shown in Figure 2.6 (new conceptual model) because when salespeople interact with customers, they are not consciously putting effort into analyzing their own and other’s emotions. That is, salespeople only perceive their own and other’s emotions when there is an emotional spike from the norm. When an emotional spike occurs, the cause of this spike is unknown and remains unknown until it is investigated during in the emotional understanding dimension of emotional intelligence.

If the emotional perception dimension is to be removed from the emotional intelligence construct, it will need to be studied in multiple ways. Therefore, this is investigated in both of the present studies which are outlined in Chapter 3. In the experimental study, respondents will either be told to pay attention to the salesperson and buyer interaction or they will be distracted. Throughout the experiment, the emotions of the salesperson and buyer will be changing dependent upon the condition. This is intended to capture the salesperson emotional perception in a realistic manner. In addition
to this, responses to validated emotional intelligence measures will be gathered. By doing this, I am hoping to gather enough evidence to answer the questions, how we can incorporate intuition into emotional intelligence and is their discriminant validity between intuition and emotional perception?

Research Question Two: “What is the relationship between intuition and deliberation?”

This question is essential in determining whether the deliberation process acts as the executive function? Previous researchers have described the intuitive and deliberative process as interacting with each other (Dreyfus & Dreyfus, 1986; Denes-Raj & Epstein, 1994; Hammond, 1996; Sinclair & Ashkanasy, 2005; Volz & von Cramon, 2006; Sadler-Smith, 2008; Epstein, 2010) and where deliberation is described as the executive function (Salas et al., 2010). When a person recognizes their intuitive feeling, the intuition process is over and they have entered into deliberation. Therefore, this dissertation examines this relationship and its role in both studies. Study 1 will capture a person’s preferences for using intuition and deliberation within the sales context. In addition, Study 2 looks to examine this relationship through experimental manipulations. By taking two different approaches to investigating the interplay between intuition and deliberation, this dissertation should help answer the question how do these two systems work together to guide salespeople during a buyer/seller interaction?
Research Question Three: “What are the antecedents to effective creative selling?”

As businesses shift away from a transactional focus to a more customer focused approach to sales, the question becomes what other selling techniques might be employed beyond adaptive selling to increase sells and customer retention. Creative selling is one’s ability to come up with new and innovative ways to sell (Wang & Netemeyer, 2004). Wang and Netemeyer’s 2004 call for future research into the antecedents and consequences of creative selling. Therefore, this dissertation addresses the questions of how a salesperson’s decision-making process and emotional intelligence affects the use of creative selling and do these concepts interact with creative selling that may ultimately lead to better job performance.

Research Question Four: “What are the predictors of job performance in the context of an intuitive decision-making model?”

Salespeople are numbers driven in that they are evaluated for their selling performance. However, previous research on salesperson job performance has had limited success (Evans et al., 2012). These results may be, in part, due to past studies focusing on salesperson’s cognitive ability and related constructs. That is, past research has neglected intuition and other automatic systems. This dissertation investigates the role that intuition plays in generating higher job performance, either directly or through another construct. In addition to intuition’s impact on performance, this dissertation investigates how other cognitively driven constructs affect salespeoples’ job performance. This is intended to shed light on what makes one salesperson more effective than another.
CHAPTER 3

RESEARCH DESIGN AND METHODS

This section discusses the research design for testing the proposed theoretical competing models outlined in Chapter 2. The competing models and Research Questions section in Chapter 2 includes the models (Figure 2.4 and 2.5) and definitions of the constructs along with their theoretical rationale. For this to be accomplished, a new self-report scale for salesperson ability-based, emotional intelligence needed to be developed. Following the scale development section, Chapter 3 will outline Study 1 and 2 procedures and their differing approaches.

First, Study 1 involves a descriptive research design using a survey methodology. In the next section, I will outline the sample, means of collecting the data, various measures and how they will be adapted into a selling context, and how the data analysis will be approached. I will also discuss how the data will be used to help answer the research questions. Next, I will outline Study 2, which involves a causal research design using an experimental method. In this section, I will discuss the development and pretest of the experimental stimuli along with the procedures and data collection methodology. Also, a discussion of how the data was analyzed and how the findings will help answer the research questions (in addition to the findings from Study 1 will be included).
Salesperson’s Self-Reported Ability-Based Measure of EI (SPEI) Development

The salesperson’s self-reported ability-based measure of EI (SPEI) is based on the Mayer and Salovey’s (1997) theory of emotional intelligence which consists of four ability-based dimensions of EI: emotional perception, facilitation of emotion, understanding of emotions, and emotional management (also known as, and referred to in this dissertation as emotional regulation) modified to the domain specific context of selling. This scale development in a sales context follows the theoretical development of Kidwell et al. 2011’s notion that EI is a domain specific construct. That is, for a salesperson, a context specific self-reported ability-based measure was created for each of the four dimensions. This will allow for the testing of the Joseph and Newman’s (2010) cascading model shown in Figure 2.2. The SPEI scale, created here, is similar to the Law, Wong, and Song’s scale (2004) (WLEIS); which is a self-reported ability measure. However, the WLEIS is based on Davies et al.’s (1998) proposed four-dimensional definition of EI consisting of: appraisal and expression of emotion in oneself, appraisal and recognition of emotion in others, regulation of emotion in oneself, and use of emotion to facilitate performance. Because this scale does not uniquely capture each dimension of the cascading model, it is not sufficient for studying the cascading. Thus, a similar but more appropriate scale is needed.

While there are other scales that capture the four relevant dimensions of EI, these measures are not ideal for testing Joseph and Newman’s (2010) cascading model due to their higher-order conceptualization. For example, Kidwell et al. (2011) reports the Emotional Intelligence in Marketing Exchanges (EIME) scale as an ability-based, objective domain specific measure of salesperson’s EI. The EIME does capture the
relevant dimensions of the cascading model, however, due to its higher-order construct conceptualization, testing each dimension by itself may not be optimal. In addition, Mayer-Salovey-Caruso’s Emotional Intelligence Test (MSCEIT) (Mayer, Salovey, & Caruso, 2002) is an objective generic ability-based measure that is also conceptualized as a higher order construct. Because these measures are conceptualized as higher-order constructs and they result in a single, overall EI score; they are not be the best approach for testing the cascading model. That is, the SPEI measure was conceptually developed around Mayer and Salovey’s (1997) theory of emotional intelligence. To accomplish this, an overall salesperson’s emotional intelligence definition is given, followed by definitions for the four dimensions that make up the SPEI construct. Salesperson emotional intelligence (SPEI) is the salesperson's ability to monitor one’s own and others' feelings and emotions to discriminate and understand them so as to facilitate the use of this information to guide salespeople’s his/her and actions during a sales interaction.

Definitions of SPEI Four Dimensions

*Emotional Perception*

The first dimension of EI is emotional perception, which consist of two sub-dimensions is considered the foundation of a person’s emotional intelligence ability (Brackett et al., 2006). It has been described as “the ability to identify emotions in oneself and others, as well as in other stimuli, including voices, stories, music, and works of art” (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006, p. 781). Using this definition as a starting point, the SPEI is intended to capture both the emotions in oneself and others, while excluding concepts like music and works of art that are not as
relevant in a selling interaction. Within the SPEI, emotional perception is defined as the ability to perceive emotions in oneself and others, as well as in other stimuli, (i.e. voices and body language) while engaged in selling activities. Because emotional perception is considered the ability to perceive emotion in oneself and others, it is represented in two sub-dimensions. The first sub-dimension of the SPEI is self-emotional appraisal and is defined as the ability to perceive emotional changes within oneself while interacting with customers. Second, customer-emotional appraisal is defined as the ability to perceive emotional changes within customers while engaging in selling activities.

Facilitation of Emotion

The second dimension of EI is facilitation (or assimilation) of emotion and has been described as the ability to access, generate, and use emotions for the purpose of facilitating thought (Mayer & Salovey, 1997). The facilitation of emotion involves assimilating basic emotional experiences into mental life (Mayer, Caruso, & Salovey, 1999) and has been described as the ability of marshaling emotions in the service of a goal (Roberts et al., 2001). Joseph and Newman did not incorporate facilitation of emotion into the cascading model due to its conceptual redundancy with the other dimensions of EI and lack of empirical support. However, due to the advancement of the theory of EI as domain specific (Kidwell et al., 2011), it may end up serving salespeople in their ability to facilitate emotional thoughts during a sales interaction. Therefore, facilitation is incorporated into the SPEI and is defined as the perceived ability to access, generate, and use emotions for the purpose of facilitating sales effectiveness while dealing with customers.
**Emotional Understanding**

The third dimension of EI is emotional understanding, which has been described as the ability to analyze and understand emotions and their potential outcomes (Mayer et al., 2004). That is, emotional understanding involves how emotions evolve over time, how emotions differ from each other, and which emotion is most appropriate for a given context (Mayer & Salovey, 1997). Emotional understanding is the second stage of the cascading model and in the SPEI it is defined as the perceived ability to analyze and understand emotions, how they evolve, interact, differ from each other, and their potential outcomes while engaged in selling activities.

**Emotional Regulation**

The final dimension of EI is emotional regulation (or management) which has been previously defined as the “conscious regulation of emotions to enhance emotional and intellectual growth” (Mayer & Salovey, 1997, p. 14). Thus, emotions are managed in the context of the individual’s goals, self-knowledge, and social awareness and has been described as “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). Joseph and Newman (2010) identify emotion regulation as the key dimension of EI that influences job performance. Thus, regulation of emotion is a key dimension for the SPEI and is defined as the perceived ability to which a salesperson believes that they can control their own and others emotions and recover from psychological distress while engaged in selling activities.
SPEI Item Generation and Expert Judges

Items were created for all four dimensions of the SPEI, even though Joseph and Newman (2010) leave out emotional facilitation from their cascading model. Facilitation of emotion was incorporated into the SPEI measure because, within the domain specific conceptualization of EI, facilitation may be an important part of a salesperson’s emotional intelligence and how they deal with customers. However, it is not incorporated in the testing of the cascading model. Items for the SPEI will include the same self-reported method as the WLEIS measure created by Law, Wong, and Song (2004).

An initial pool of items was created by adapting some items from existing measures of domain general EI (Law, Wong, & Song (WLEIS) 2004; Schutte et al., (SREIT) 1998) into a sales context. These items, as well as some original ones, are written for a sales context and designed to capture the perceived EI ability of a salesperson while engaging in selling activities. The item creation process produced an initial pool of 64 items, which can be seen on the left side of Table 3.1.

The 64 items are subjected to an expert categorization test. Four expert judges are given the overall definition of SPEI as well as the definitions for each of its four dimensions (as discussed previously) and asked to place each item into one of the dimensions and to indicate any items that do not represent the overall definition of SPEI. All items are given to each judge in a random order to prevent any ordering effects. Any item that received 75 percent higher agreement is retained for further development. This procedure resulted in the elimination of 19 items (see Table 3.1). Items that are removed have an X under the column heading expert judges.
Table 3.1

Salesperson's Emotional Intelligence (SPEI) Item Progression and Elimination

<table>
<thead>
<tr>
<th>Items for the four dimensions of SPEI scale:</th>
<th>Pretest 1 (N=143)</th>
<th>Pretest 2 (N=164)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional Perception</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-Emotions Perception:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am always completely aware of my emotions during sales calls.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I sense minor emotional changes within myself when dealing with customers.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><em>I rarely realize my emotions during a sales call.</em></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>When dealing with a customer, I recognize things that will make me emotional.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I ignore my emotions when dealing with customers so I can focus on relevant information.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>When selling, I’m ‘in touch’ with my emotions.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>During a sales call, I pay a lot of attention to my emotions.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><em>I only react emotionally to customer exchanges after the sales call.</em></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Customers know how to get my emotions up.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I don't think about the non-verbal messages my emotions send to customers.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I am aware of my body language when dealing with a customer.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.1 (Continued)

**Others-Emotions Perception:**

<table>
<thead>
<tr>
<th>Statement</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often misread my customer’s emotions.</td>
<td></td>
</tr>
<tr>
<td>I am always fully aware of my customers’ emotions when communicating with them.</td>
<td></td>
</tr>
<tr>
<td>A customer’s emotions are a mystery to me.</td>
<td></td>
</tr>
<tr>
<td>When selling, I perceive a customer’s emotions from his/her body language.</td>
<td></td>
</tr>
<tr>
<td>When selling, I know what a customer is feeling based on changes in his/her voice inflections.</td>
<td></td>
</tr>
<tr>
<td>I recognize the emotion in a story a customer tells me.</td>
<td></td>
</tr>
<tr>
<td>I try not to pay attention to a customer’s emotions to keep from becoming distracted.</td>
<td></td>
</tr>
<tr>
<td>I can’t pick up on how customers feel by the tone of their voice.</td>
<td></td>
</tr>
<tr>
<td>I pay close attention to changes in a customer’s facial expressions.</td>
<td></td>
</tr>
<tr>
<td>The emotions customers express are the most relevant aspect in selling.</td>
<td></td>
</tr>
</tbody>
</table>

**Facilitation (assimilating or using) Emotion**

<table>
<thead>
<tr>
<th>Statement</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>During a sales call, my selling is enhanced by the emotions my customers show.</td>
<td></td>
</tr>
<tr>
<td>When selling, emotions help connect with past selling experiences.</td>
<td></td>
</tr>
<tr>
<td>I harness the power of my emotion to pursue a sale.</td>
<td></td>
</tr>
<tr>
<td>I never let emotions influence my train of thought when dealing with customers.</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.1 (Continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>When I am faced with a difficult customer, I remember how I dealt with</td>
<td>X</td>
</tr>
<tr>
<td>similar customers.</td>
<td></td>
</tr>
<tr>
<td>I motivate myself by imagining what it feels like to close a sale.</td>
<td>X</td>
</tr>
<tr>
<td>When selling, my emotions tend to facilitate new ideas.</td>
<td>X</td>
</tr>
<tr>
<td><em>I disregard my customer’s emotions and rely on factual information when selling.</em></td>
<td>X</td>
</tr>
<tr>
<td>When selling, thinking about emotions helps me be creative.</td>
<td>X</td>
</tr>
</tbody>
</table>

**Understanding Emotions**

<table>
<thead>
<tr>
<th>Statement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>When selling, I have a good understanding of my own emotions.</td>
<td>X</td>
</tr>
<tr>
<td>My emotions indicate how a sales effort is going.</td>
<td>X</td>
</tr>
<tr>
<td><em>When selling, I rarely understand why I feel the way that I do.</em></td>
<td>X</td>
</tr>
<tr>
<td>Once aware of an emotion during a sales call, I understand exactly what</td>
<td>X</td>
</tr>
<tr>
<td>emotion it is.</td>
<td></td>
</tr>
<tr>
<td>When selling, I understand which emotions will occur.</td>
<td>X</td>
</tr>
<tr>
<td>I take corrective actions when I see a negative emotion in a customer.</td>
<td>X</td>
</tr>
<tr>
<td>When selling, I can understand complex emotional problems.</td>
<td>X</td>
</tr>
<tr>
<td>I understand the consequences of displaying emotions during a sales call.</td>
<td>X</td>
</tr>
<tr>
<td>I understand how emotions differ when selling than when I’m at home.</td>
<td>X</td>
</tr>
<tr>
<td>I know the difference between an anxious and disinterested customer.</td>
<td>X</td>
</tr>
</tbody>
</table>
Table 3.1 (Continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>When selling, I know the difference between an excited customer and a content customer.</td>
<td>X</td>
</tr>
<tr>
<td>When selling, I understand how my and the buyer’s emotions interact.</td>
<td>X</td>
</tr>
<tr>
<td>When I sense the customer is excited, I know what will happen next.</td>
<td>X</td>
</tr>
<tr>
<td><em>I don’t analyze the feelings of a customer.</em></td>
<td>X</td>
</tr>
<tr>
<td>I understand how to maintain positive emotions during a sales call.</td>
<td>X</td>
</tr>
<tr>
<td>By looking at customer’s facial expressions, I understand the emotions they are experiencing.</td>
<td>X</td>
</tr>
<tr>
<td>When selling, I know what things will trigger an emotional change.</td>
<td>X</td>
</tr>
<tr>
<td>I know what customers are feeling just by looking at them.</td>
<td>X</td>
</tr>
<tr>
<td><em>It is difficult for me to understand why customers feel the way they do.</em></td>
<td>X</td>
</tr>
<tr>
<td><em>I find it hard to understand the non-verbal messages of customers.</em></td>
<td>X</td>
</tr>
</tbody>
</table>

**Emotional Regulation (Management)**

<table>
<thead>
<tr>
<th>Statement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I use stories to express my emotions to customers.</td>
<td>X</td>
</tr>
<tr>
<td>I regulate my emotions to stay positive during sales calls.</td>
<td>X</td>
</tr>
<tr>
<td>When selling I am able to control my temper so that I can handle difficulties rationally.</td>
<td>X</td>
</tr>
<tr>
<td><em>During a sales call, emotions just flow so I don’t try to control them.</em></td>
<td>X</td>
</tr>
<tr>
<td>When a customer frustrates me, I can always calm myself down quickly.</td>
<td>X</td>
</tr>
</tbody>
</table>
Table 3.1 (Continued)

<table>
<thead>
<tr>
<th>Statement</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I get excited during a sales call, I can always calm down to a natural state.</td>
<td></td>
</tr>
<tr>
<td>During a sales call, I always stay positive even if it has a negative outcome.</td>
<td></td>
</tr>
<tr>
<td>I regulate my emotions to increase my sales performance.</td>
<td></td>
</tr>
<tr>
<td><em>Whatever emotion I'm feeling during a sales call I express them.</em></td>
<td>X</td>
</tr>
<tr>
<td><em>When I'm in a stressful selling situation, I say or do things without thinking them through.</em></td>
<td>X</td>
</tr>
<tr>
<td>When dealing with customers, I try to have good thoughts no matter how bad I feel.</td>
<td>X</td>
</tr>
<tr>
<td>During a sales call, I know how to cope with my emotions.</td>
<td>X</td>
</tr>
<tr>
<td>I don't let negative emotion from one customer influence me to the next customer.</td>
<td>X</td>
</tr>
<tr>
<td><em>During a sales call, I try not to let the emotions that I sense control my body language.</em></td>
<td>X</td>
</tr>
</tbody>
</table>

*Note: Reversed items are in italics*

SPEI Pretest 1

The second stage, Pretest 1, involved testing the remaining 45 items for their dimensionality. Respondents are internet workers (Mturk). Respondents self-reported being from United States, learning English as their first language and being employed in a job that regularly deal's with customers. After the data was methodically cleaned of incompletes, duplicate responses, and non-salespeople, straight lining, among other things, the resulting usable sample size is 142. The sample consists of 50% male and 50% female, with a mean age 33.5 (sd 10.44) and 79 percent indicating their ethnicity
as white/Caucasian. A principal component factor analysis with a Varimax rotation resulted in 12 factors with eigenvalues greater than 1, explaining 67.6% of the variance. From the 12 factor results, there is no indication that any of the conceptualized dimensions held together. All items with factor loadings of 0.5 or higher are kept. This resulted in the deletion of four items, which can be seen in the Column, Pretest 2, in Table 3.1. Thus, 41 items remained and are tested in the Pretest 2.

**SPEI Final Pretest**

The final pretest, denoted as Pretest 2 in Table 3.1, used the remaining 41 items from the SPEI along with other measures so that convergent and discriminate validity could be determined. Respondents are internet workers (Mturk). Respondents self-reported being from United States, learning English as their first language, and being employed in a business to business selling position. After the data was meticulously cleaned of incompletes, duplicate responses, and non-salespeople, among other things, the resulting usable sample size is 163. The sample consists of 54.6% male and 45.4% female respondents with a mean age of 35.3 (sd 11.9) and 79% indicating their ethnicity as white/Caucasian. A principal component analysis with a Varimax rotation resulted in nine factors with eigenvalues greater than one, explaining 64.9% of the variance. There is no consistencies among the item loadings and there theoretical dimensionality. These inconsistencies among items even held when the data is forced to a 5-factor solution. There were attempts made to determine if there is some other underlying explanation as to why items were loading the way they were (i.e. controlling and reading body and voice emotion). However, there is no rational explanation for why the items load in this manner. At this juncture in the dissertation, the decision is made to drop any further
attempts in developing the SPEI (as seen in Table 3.1) and to move forward using the Kidwell et al. (2011) Emotional Intelligence in Marketing Exchanges (EIME).

**Potential Explanation for Failed SPEI Development**

One potential explanation for the lack of empirical support for the self-reported ability-based measure of salesperson emotional intelligence (SPEI) scale could be the self-reported ability measurement method. Joseph and Newman (2010) proposed "that self-reports of ability EI are similar to mixed-based measures of EI in that research has yet to confirm exactly what set of constructs are being measured with these scales" (p.71). That is, mix models have been described as an umbrella term which covers a large assortment of constructs that are only connected by their non-redundancy with cognitive intelligence (Joseph & Newman, 2010). In addition, self-reported ability-based measure have been criticized for being susceptible to socially desirable responses (Paulhus et al., 1998) and asking respondents to basically report on their own intelligence (Zeidner et al., 2012). Joseph and Newman (2010) concluded by stating “The only ….. appropriate use of the label emotional intelligence is the performance-based EI model, which is theoretically based in emotion and emotion regulation literature and has a relationship with general cognitive ability, as the name intelligence implies” (p.71). Thus, following the failed SPEI development, it is decided to employ Kidwell et al. (2011) Emotional Intelligence in Marketing Exchanges (EIME) scale, which is an objective ability-based (performance-based) measure in a selling context. The EIME scale follows Joseph and Newman’s recommendation that only performance-based EI model be used when studying emotional intelligence.
Study 1: Methodology and Procedures for Survey Study

As discussed in Chapter 2, many of the constructs in Study 1 should be measured in the context in which they are employed (i.e. selling). Intuition and emotional intelligence has been described as context dependent (Epstein, 2010; Kidwell et al., 2011 respectfully) because much of human knowledge and experiences are encoded into memory in the form of context-specific concrete mental representations (e.g., images, scenarios, affect, and physical sensations) (Epstein, 2010). Any study of intuition must be contextualized because specific situational cues can automatically activate past experiences that result in an intuitive feeling of knowing (Volz & Cramon, 2006). Also, Kidwell et al. (2011) introduced the need for a domain specific measure of Emotional Intelligence; arguing that some people will have high EI in one setting and low EI in another. Therefore, all measures used in Study 1 of this dissertation are in a sales context. To accomplish this, any construct that is not contextually context specific is adapted into a selling context that keeps the intended meaning, while placing the respondent in a selling frame of mind. Table 3.2 shows the transformation from domain general to a domain specific construct for both Epstein et al.’s (1996) 5-item faith in intuition (FI) scale and one additional item that is added by the researcher (during the sales process, I rely on my intuition). Also in Table 3.2 is Norris and Epstein’s (2011) 12-item rational (deliberation) (DEL) scale. Both faith in intuition and deliberation are measured using a 7-point Likert type with end points strongly agree to strongly disagree.
Table 3.2

*Item Transformation into Selling Context*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measures Before Adaption</th>
<th>Measures After Adaption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faith in Intuition <em>(Epstein et al., 1996)</em></td>
<td>I trust my initial feelings about people. I believe in trusting my hunches. My initial impressions of people are almost always right. When it comes to trusting people, I can usually rely on my &quot;gut feelings.&quot; I can usually feel when a person is right or wrong even if I can't explain how I know.</td>
<td>I trust my initial feelings about customers I listen to my hunches during a sales call My initial impressions of customers are almost always right. When it comes to dealing with customers, I can usually rely on my &quot;gut feelings.&quot; I can usually feel when a customer is positive or negative even if I can't explain how I know. <strong>During the sales process, I rely on my intuitions.</strong></td>
</tr>
<tr>
<td>Rational or Deliberation <em>(Norris and Epstein 2011)</em></td>
<td>I enjoy problems that require hard thinking. I am not very good in solving problems that require careful logical analysis. I enjoy intellectual challenges. I prefer complex to simple problems. I don't like to have to do a lot of thinking. Reasoning things out carefully is not one of my strong points. I am not a very analytical thinker. I try to avoid situations that require thinking in depth about something. I am much better at figuring things out logically than most people.</td>
<td>I enjoy dealing with customers problems that require hard thinking. I am not very good in solving customers problems that require careful logical analysis. When selling, I enjoy intellectual challenges. When selling, I prefer complex to simple problems. When selling, I don't like to have to do a lot of thinking. During a sales call, reasoning things out carefully is not one of my strong points. When interacting with customers, I am not a very analytical thinker. I try to avoid selling situations that require thinking in-depth about something. I am much better at figuring out selling activities logically than most other sales people.</td>
</tr>
</tbody>
</table>
I have a logical mind. | When dealing with customers, I have a logical mind.
---|---
Using logic usually works well for me in figuring out problems in my life. | Using logic usually works best for me in figuring out how to approach customer problems.
Knowing the answer without understanding the reasoning behind it is good enough for me. | Knowing the answer to a customer's question without understanding the reasoning behind it is good enough for me.

*Note: all bolded items were added by the researcher and was not part of the original scale.*

The constructs of emotional intelligence, creative selling and job performance (behavioral and outcome) are sales context specific and thus do not need any adaptation. The four dimensions of emotional intelligence, emotional perception (3 items), emotional understanding (4 items), and emotional regulation (4 items), that are used to test Joseph and Newmans (2010) cascading model along with facilitation of emotion (4 items) are measured using Kidwell's et al, (2011) Emotional Intelligence in Marketing Exchanges (EIME) scale. Since the EIME is an objective, higher order construct, each of the four dimensions are measured by calculating a score for each item within each dimension and then summed. The dimension scores are based on weights that were developed by expert judges (see Kidwell et al., 2011 for more details). Creative selling is measured using Wang and Netemeyer's (2004) 7-item scale of Salesperson Creative Performance (SCP) and measured on a 5-point Likert type scale with endpoints of practically never to almost always. Job performance consists of two dimensions, a behavioral and outcome performance, both measured using an adapted version of Behrman and Perreault (1982) as was done by Miao and Evans (2007). Behavioral and outcome performance both consists of four items and is measured on a 7-point Likert
type scale with end points of strongly agree to strongly disagree. The survey used in Study 1 and all items included can be found in the Appendix 1.

Study 1 is a descriptive research design using a survey methodology with a sample consisting of business-to-business salespeople. The sample is obtained using a national online panel source (Qualtrics). At the beginning of the survey, all respondents agreed to the IRB statement informing them that all responses are anonymous and confidential before entering the survey. The sample consists of business to business salespeople employed in the United States with at least two years of total selling experience. In addition, respondents are screened for their ability to employ creative selling techniques in their present sales position. That is, the respondents must have the latitude to use various creative selling techniques in their jobs. For this reason, sales people who are required to follow a certain sales format or script were excluded from the study. To make sure that respondents meet these requirements, filter questions placed at the beginning of the survey screening out any respondent who did not meet the criteria. In addition, respondents who reported the use of their mobile phones in taking the survey were screened out.

Analysis is conducted using structural equation modeling (SEM) and uses the two stage approach as outlined by Hair, Black, Babin, and Anderson (2010). First, a measurement model was subjected to a confirmatory factor analysis (CFA). The appropriateness of the CFA model is assessed using a combination of a chi-square test and other Goodness-Of-Fit indices, along with construct validity and reliability. The process and suggested cut off levels recommended by Hair et al., (2010) are used. Once the confirmatory factor analysis demonstrates adequate fit, the second stage of the
process, the structural model is tested. Once the structural model demonstrates adequate fit, the path relationships are assessed, for both of the competing models. A chi-square difference test is used to determine which of the competing models best fits the data.

From the results of the structural model, conclusions and inferences are drawn. These results help shed light on the research questions. The full analysis of the research questions contained a combination of results and interpretation of both studies. However, Study 1 specifically provides insight into all of the research questions:

Research Question 1: How does emotional intelligence fit into the decision making process and is there a distinction between a salesperson’s intuition and emotional perception? The results of Study 1 provided insight into the relationship between intuition and emotional perception and intuition and emotional understanding. Additional insight is gained from the chi-square test comparing the two models.

Research Question 2: What is the relationship between intuition and deliberation? The results of the structural model provide insight into the relationship between intuition and deliberation. This addressed questions such as, is intuition an antecedent to deliberation or is it a mediating variable to creative selling and/or job performance (behavioral and outcome)?

Research Question 3: What are the antecedents to effective creative selling? Study 1 helped determine the antecedents to creative selling. The relationship with emotional regulation, deliberation and intuition helped determine what kind of person effectively implements creative selling performance. Also, by examining the structural model, the results demonstrate whether creative selling leads to behavioral and or outcome job performance; or does it play a moderating role? These results answer the
Research Question 4: What are the predictors of job performance in the context of an intuitive decision-making model? The structural model provided insight into are the direct antecedents of behavioral and outcome job performance or are there some combination of mediating variables to both types job performance? Will a salesperson’s faith in their intuition have a direct influence on behavioral and job performance outcome, or does it work through deliberation and/or creative selling? This provided insight into the role of the automatic intuitive process and how it affects both behavioral and outcome job performance.

Study 2: Experimental Design, Pretest and Procedures

Study 2 is set up and administered by Qualtrics. A sample of 160 business to business salespeople (20 per condition) are recruited through a national panel. Subjects are screened in the same manner as Study 1, with one additional question, were they in a quiet location where they will be able to hear the audio in a video. Each subject receives the condition instruction and video followed by two sets of questions regarding the video. After completing the video related questions, subjects answered the same scale items, job related, and demographic questions as in Study 1 before completing the survey. There are three additional attention check questions to ensure that respondents are reading the items before selecting an answer.

Study 2 experimentally tests a salesperson’s ability to distinguish between a positive or negative sales encounter using either their deliberative or intuitive
processing systems. That is, subjects are exposed to a short video portraying a sales interaction. The positive and negative aspects of each video are determined by a combination of the dialogue and emotions displayed by the actors playing the buyer and seller. To accomplish this, Study 2 employs a between subjects 2 (intuition versus deliberation decision mode) X 2 (positive versus negative emotional reaction or perception) X 2 (positive versus negative message) experimental design, as shown in Figure 3.1. Subjects are assigned randomly to one of the eight conditions.

<table>
<thead>
<tr>
<th>Deliberation</th>
<th>Deliberation</th>
<th>Deliberation</th>
<th>Deliberation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
</tr>
<tr>
<td>Positive Message</td>
<td>Positive Message</td>
<td>Negative Message</td>
<td>Negative Message</td>
</tr>
<tr>
<td>Intuition</td>
<td>Intuition</td>
<td>Intuition</td>
<td>Intuition</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
</tr>
<tr>
<td>Positive Message</td>
<td>Positive Message</td>
<td>Negative Message</td>
<td>Negative Message</td>
</tr>
</tbody>
</table>

Figure 3.1 2X2X2 Experimental Design

**Decision Mode Manipulation**

To test the experimental design shown in Figure 3.1, the experiment manipulated the subject decision method, the emotions portrayed by the buyer and seller, and the message content. This is accomplished by randomly assigning subjects to one of two paths through the experiment; these paths are referred to as the intuition and deliberation paths. Each subject is first shown the IRB statement informing them that all responses are anonymous and confidential. After the subjects answers the same screening questions as in Study 1, one additional question asking if they are in a quiet
place so that they can hear the video was asked, before receiving any experimental conditions. After, subjects are randomly assigned to either the intuition or deliberation condition, this is the decision mode manipulation. This manipulation is accomplished by altering the subjects focus as can be seen from the deliberation and intuition instructions.

**Deliberation Instructions**

You will be shown a one minute video portraying a sales meeting between a buyer (building contractor) and seller (building supplies sales rep). The buyer and seller have been in contact before the meeting and this video is only a small portion of the sales process. In the video, the buyer and seller’s pictures will be displayed at the bottom of the screen. They are shown in still pictures. A blue frame will highlight the person speaking at any given time.

While watching the video, your task is to watch and listen to the individuals in the conversation. After the video is over, you will be asked to supply information about the sales meeting, as if you were in this selling situation.

**Intuition Instructions**

This study tests your ability to detect things in a crowded background while being distracted by another person. On the next page, try to detect things in the background! Afterwards we will quiz you on things like how many automobiles go by out the window, among other things about the background scene.

By manipulating the task, subjects’ attention is focused on different aspects of the video stimulus (crowded background or interaction) which affected how and what
information is processed and stored by subjects (Plessner et al., 2008; Dane et al., 2012). In addition to the different conditional instructions, the background noise is removed from all deliberation condition videos. This created a clear audio track and removed all audio distractions from the deliberation condition giving subjects the optimal opportunity to gather and retain information.

The deliberation decision mode manipulation is intended to cause subjects to explicitly encode and store information pertaining to the buyer and seller (emotions) along with the sales dialogue (positive and negative outcome) using the deliberative process. However, by having subjects explicitly focus on the sales interaction, the deliberation condition subjects implicitly encode and store information pertaining to the street scene. Conversely, subjects in the intuition condition are given the task of counting the number of automobiles and discovering other information regarding the street environment. This is intended to have the subjects explicitly encode and store information pertaining to the background environment and implicitly encode and store information pertaining to the sales interaction. By using two distinct sets of instructions, all subjects used both deliberate and intuitive processing. However, what information is being processed (sales interaction or environment) by which system is dependent upon what condition.

In addition to the task instructions, both the deliberation and intuition conditions give examples of what types of information subjects should retain. For example, the deliberation condition subjects are asked to supply information regarding the sales meeting, as if they were in the selling situation. The subjects in the intuition condition need to recall the number of automobiles while detecting things in the background. By
providing subjects with hints of the type of information they should retain, this reinforced the condition instructions.

While receiving the condition instruction subjects are told not to rewind or pause the video. Once subjects arrive to the page of the video an embedded timer automatically advanced to the next page after 80 seconds. This prevented subjects from watching the video more than once and rewinding or pausing the video. Each video stimulus is 1:07 long and started with a three, two, one countdown providing time for the subjects to prepare for the coming video. To help explain what the video looks like, a still frame shot from the actual video is provided in Figure 3.2. Each video is comprised of four elements: 1) visual video background street scene (which is the same for each condition), 2) buyer and seller pictures, 3) audio dialogue, and 4) background noise (the last three are dependent upon the condition).

**Video Stimuli**

The visual video background street scene, which is common for all condition, was filmed through a restaurant window in the French Quarter of New Orleans, Louisiana. The background video is 61 seconds long and captures 42 people walking by (including the buyer and seller) and 13 automobiles driving by. Among other distractions, there is a mysterious man standing on the corner holding a green case throughout the video.
Following the conclusion of the video, subjects in the intuition and deliberation condition receive a different set of instructions regarding how they should answer the question pertaining to the video. Subjects in the deliberation condition are told to take their time and carefully think about each question and try to recall what was going on and what was said when answering the questions. Subjects in the intuition condition are told to answer these questions as quickly as they can by selecting the answer they felt was correct (Zakay 1993; Bolte & Goschke, 2005). By having subjects in the intuition condition focus on the background and answer the question quickly by selecting the answer they felt was correct, these instructions are in accordance with Betsch and Kunz (2008) and Horstmann et al.’s (2010) recommendation that, when studying intuition, a single method like a time constrained task alone is not enough to insure the use of one’s intuition.
Emotional Perception Manipulation

Contained within the video was the emotional perception manipulation. It is intended to tap a subject’s ability to recognize a change in another’s emotion. Some measures of EI have respondents examine a still picture and select the amount of a certain emotion that is being displayed (Mayer, Salovey, & Caruso, 2002; Kidwell et al., 2011). However, it is argued here that people’s emotions are not stationary, rather they change. Therefore, the way to capture a person’s ability to perceive emotions should more closely match the way individuals experience emotions in the real world. To accomplish this, two sets of changing photos (one of the buyer and one of the seller) each displaying different emotions are portrayed within the video. To capture true emotional reactions, two confederates (a buyer and a seller) are videotaped while watching emotion inducing video clips, from YouTube. The video clips are chosen to induce a ranged of positive, neutral, and negative emotions. Still frame snap shots are cut from the reaction videos in order to pretest what emotions people perceived are being displayed. This process generated an initial pool of 48 pictures, 24 for the buyer and 24 for the seller.

Pretest 1 consists of 27 undergraduate students from a southeastern university. Each respondent is shown one picture at a time and asked to rate it on three 100 point slider scales with end points of dominant/submissive, disinterested/interested, and displeased/pleased. They also indicated which emotion they believe is being displayed in the picture, from joy, acceptance, fear, surprise, excited, sadness, anticipation, anger, disgust, bored, or other. If the respondent selected other, they are asked to provide what emotion they thought is being displayed. After coding the responses, some patterns
arose from the “other” option where respondents wrote in the emotion they believed is being displayed. From this analysis, two additional categories are added, confused and interested for the second pretest.

Pretest 2 is set up to classify what emotion is being displayed in each picture. To accomplish this, the two additional categories from Pretest 1, confused and interested, are added to the list of emotions the respondent could select. The “other” answer option is removed so that respondents are forced to select from the categories provided. The pictures of the buyer and seller were split into two separate surveys in order to reduce the number of pictures each respondent had to review and to remove any biases that may occur between the two confederates. Both surveys are conducted using an online internet workers (mturk) and, after extensive cleaning of the data, resulted in 76 usable responses for the buyer and 70 for the seller. The results reveal a common trend, that pictures the researcher believed were displaying positive emotions are being classified across several related emotions (i.e. joy, excited, acceptance, and surprise). This trend is also found for the pictures that the researcher thought were negative (i.e. fear, sadness, anger, and disgust). Therefore, the researcher, with the help from other emotion experts, reclassified the 12 emotional response categories in to positive, negative, and neutral. This reclassification of the emotions better fit the overall design of the experiment more than attempting to identify specific emotions. The reclassification of emotions went as follows: positive emotion consisted of joy, acceptance, surprise, and excited; neutral emotions consisted of anticipation, bored, confused, and interested; and negative emotions consisted of fear, sadness, anger, and disgust. The results of a frequency analysis provided enough information to group five different pictures of the buyer and
seller for each of the positive, neutral, and negative classifications. The picture and there final classification are shown in Table 3.3 along with the number of recoded responses and the percentage of the total sample.

The emotional perception manipulation is accomplished by the ordering and timing of the photos. Each photo is displayed for six seconds before transitioning to the next photo, except for the final photo of the video which is displayed for seven seconds. The transition to the next photo occurred simultaneously for both the buyer and seller. The photos are arranged in a specific order so to mimic a normal sales conversation. In that, both the positive and negative conditions begin with the five neutral photos of the buyer and seller. This is done, so that an emotional change can be created within the emotion conditions. It also stands to reason that both the buyer and seller will start a sales interaction with an open or neutral mind. These neutral photos ran for the first 30 seconds before transitioning in to the positive or negative emotional conditions that are shown in Table 3.3. At this juncture of the video, the emotions began to change in accordance with the respected experimental conditions. That is, for the negative condition the 6th photo displayed is the first picture of the negative section of Table 3.3 for both the buyer and seller. The same goes for the positive condition. Also, the positive emotion condition does not contain any photos from the negative sections of Table 3.3 and vice versa. In addition, as Figure 3.1 shows, there are no conditions where the buyer and seller are displaying different emotions at the end of the video (i.e. buyer positive and seller negative). The emotional transitions happen around the same time as the dialogue begins to turn towards its message content conditional outcome. By taking this approach, subject's ability to perceive another's emotions while being distracted or
dealing with dialogue congruencies/discrepancies is tested. This more accurately captured the subject's emotional perception ability within a simulated sales setting.

Table 3.3

*Buyer and Seller Picture Emotional Rating*

<table>
<thead>
<tr>
<th>Picture Number</th>
<th>Buyer Neutral Pictures</th>
<th>Positive Rating</th>
<th>Neutral Rating</th>
<th>Negative Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>817</td>
<td></td>
<td>n=15</td>
<td>n=45</td>
<td>n=16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19.7%</td>
<td>59.2%</td>
<td>21.1%</td>
</tr>
<tr>
<td>635</td>
<td></td>
<td>n=19</td>
<td>n=47</td>
<td>n=10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25%</td>
<td>61.8%</td>
<td>13.2%</td>
</tr>
<tr>
<td>201</td>
<td></td>
<td>n=21</td>
<td>n=47</td>
<td>n=8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.6%</td>
<td>61.8%</td>
<td>10.5%</td>
</tr>
<tr>
<td>10005</td>
<td></td>
<td>n=2</td>
<td>n=74</td>
<td>N=0</td>
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<tr>
<td></td>
<td></td>
<td>2.6%</td>
<td>97.4%</td>
<td>0%</td>
</tr>
<tr>
<td>744</td>
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<td>n=73</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>3.9%</td>
<td>96.1%</td>
<td>0%</td>
</tr>
<tr>
<td>Buyer Negative Pictures</td>
<td>Positive Rating</td>
<td>Neutral Rating</td>
<td>Negative Rating</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>424</td>
<td>n=17 22.4%</td>
<td>n=42 55.3%</td>
<td>n=17 22.4%</td>
<td></td>
</tr>
<tr>
<td>138</td>
<td>n=10 13.2%</td>
<td>n=45 59.2%</td>
<td>n=21 27.6%</td>
<td></td>
</tr>
<tr>
<td>1115</td>
<td>n=18 23.7%</td>
<td>n=36 47.4%</td>
<td>n=22 28.9%</td>
<td></td>
</tr>
<tr>
<td>2037</td>
<td>n=7 9.2%</td>
<td>n=18 23.7%</td>
<td>n=51 67.1%</td>
<td></td>
</tr>
<tr>
<td>1715</td>
<td>n=0 0%</td>
<td>n=18 23.7%</td>
<td>n=58 76.3%</td>
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</table>
Table 3.3 (Continued)

<table>
<thead>
<tr>
<th>Buyer Positive Pictures</th>
<th>Positive Rating</th>
<th>Neutral Rating</th>
<th>Negative Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>918</td>
<td>n=56</td>
<td>n=20</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td>73.7%</td>
<td>26.3%</td>
<td>0%</td>
</tr>
<tr>
<td>1434</td>
<td>n=60</td>
<td>n=13</td>
<td>n=3</td>
</tr>
<tr>
<td></td>
<td>78.9%</td>
<td>17.1%</td>
<td>3.9%</td>
</tr>
<tr>
<td>1231</td>
<td>n=67</td>
<td>n=9</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td>88.2%</td>
<td>11.8%</td>
<td>0%</td>
</tr>
<tr>
<td>1300</td>
<td>n=69</td>
<td>n=7</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td>90.8%</td>
<td>9.2%</td>
<td>0%</td>
</tr>
<tr>
<td>1222</td>
<td>n=75</td>
<td>n=1</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td>98.7%</td>
<td>1.3%</td>
<td>0%</td>
</tr>
<tr>
<td>Sellers Pictures N=70</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>
Table 3.3 (Continued)

<table>
<thead>
<tr>
<th>Picture Number</th>
<th>Seller Neutral Pictures</th>
<th>Positive Rating</th>
<th>Neutral Rating</th>
<th>Negative Rating</th>
</tr>
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<tbody>
<tr>
<td>639</td>
<td><img src="image1.png" alt="Image" /></td>
<td>n=47</td>
<td>67.1%</td>
<td>n=2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>209</td>
<td><img src="image2.png" alt="Image" /></td>
<td>n=7</td>
<td>10%</td>
<td>n=16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>67.1%</td>
<td></td>
</tr>
<tr>
<td>458</td>
<td><img src="image3.png" alt="Image" /></td>
<td>n=7</td>
<td>10%</td>
<td>n=14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>700</td>
<td><img src="image4.png" alt="Image" /></td>
<td>n=0</td>
<td>0%</td>
<td>n=2.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>97.1%</td>
<td></td>
</tr>
<tr>
<td>708</td>
<td><img src="image5.png" alt="Image" /></td>
<td>n=4</td>
<td>5.7%</td>
<td>n=3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>90%</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.3 (Continued)

<table>
<thead>
<tr>
<th>Sellers Negative Pictures</th>
<th>Positive Rating</th>
<th>Neutral Rating</th>
<th>Negative Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>616</td>
<td>n=3</td>
<td>n=48</td>
<td>n=19</td>
</tr>
<tr>
<td></td>
<td>4.3%</td>
<td>68.6%</td>
<td>27.1%</td>
</tr>
<tr>
<td>624</td>
<td>n=3</td>
<td>n=38</td>
<td>n=29</td>
</tr>
<tr>
<td></td>
<td>4.3%</td>
<td>54.3%</td>
<td>41.4%</td>
</tr>
<tr>
<td>853</td>
<td>n=1</td>
<td>n=24</td>
<td>n=45</td>
</tr>
<tr>
<td></td>
<td>1.4%</td>
<td>34.3%</td>
<td>64.3%</td>
</tr>
<tr>
<td>949</td>
<td>n=1</td>
<td>n=23</td>
<td>n=46</td>
</tr>
<tr>
<td></td>
<td>1.4%</td>
<td>32.9%</td>
<td>65.7%</td>
</tr>
<tr>
<td>1007</td>
<td>n=1</td>
<td>n=8</td>
<td>n=87.1</td>
</tr>
<tr>
<td></td>
<td>1.4%</td>
<td>11.4%</td>
<td>87.1%</td>
</tr>
</tbody>
</table>
Table 3.3 (Continued)

<table>
<thead>
<tr>
<th>Picture</th>
<th>Sellers Positive Pictures</th>
<th>Positive Rating</th>
<th>Neutral Rating</th>
<th>Negative Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td><img src="145.png" alt="Picture" /></td>
<td>n=37</td>
<td>n=33</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52.9%</td>
<td>47.1%</td>
<td>0%</td>
</tr>
<tr>
<td>217</td>
<td><img src="217.png" alt="Picture" /></td>
<td>n=51</td>
<td>n=19</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>72.9%</td>
<td>27.1%</td>
<td>0%</td>
</tr>
<tr>
<td>531</td>
<td><img src="531.png" alt="Picture" /></td>
<td>n=60</td>
<td>n=10</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>85.7%</td>
<td>14.3%</td>
<td>0%</td>
</tr>
<tr>
<td>252</td>
<td><img src="252.png" alt="Picture" /></td>
<td>n=66</td>
<td>n=4</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>94.3%</td>
<td>5.7%</td>
<td>0%</td>
</tr>
<tr>
<td>1918</td>
<td><img src="1918.png" alt="Picture" /></td>
<td>n=70</td>
<td>n=0</td>
<td>n=0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Message Content Manipulation

Message content condition consists of an audio dialogue that has either a positive or negative outcome. In this manipulation, subjects are exposed to a recorded dialogue of a buyer/seller interaction that played as an audio track during the video. The only difference between the recordings, as was mentioned in the decision mode section,
is that all background noise from the original street scene is removed from the deliberation condition videos. This created a very clear audio track with no distracting background noise. This is intended to keep the subjects in the deliberation condition focused on the sales interaction and not be distracted by any white noise. In all videos, a bright blue frame appears around the photo indicating which person is speaking. The selling interaction is between a buyer, George a building contractor, and a seller, Chris a building supplies sales rep. The buyer is looking to purchase 150 counter tops for a construction project that is presently underway. The seller worked for a fictional company and believed he has the perfect new and innovative product, Diamondall, which meets the buyer’s needs. The message content condition ended with either a positive or negative outcome statement made by the buyer, depending upon the condition. Much like the emotional perception condition, both the positive and negative message content conditions received the same dialogue until the buyer’s closing statement. Here is an example of a buyer negative closing statement:

“Well, I am not sure that any product that starts out as a liquid can be as good as natural stone. I like natural stone because it’s a well-known and a good selling point. But leave me some information and I’ll get back to you.”

Here is an example of a buyer positive closing statement:

“I want to know more about this product because it sounds like its innovative, saves money, and can meet our deadline. I’ll talk with my client to set up a meeting. In the end, if something is good for my client, it’s right for me. Sounds good!”
These closing statements are intended to provide subjects with information to determine the potential outcome, without specifically stating whether or not the buyer will make the purchase. The negative condition contains statements questioning the product and ends with a sign of disinterest “But leave me some information and I’ll get back to you”. The positive closing statement provides complements about the product and the buyer’s intent of a follow-up meeting with the buyer’s client to check out Diamondall in the field.

All conditions contain the same dialogue leading up to the buyer’s closing statement. This dialogue contained specific information regarding the features and benefits of the product (Diamondall) and details about the construction project (i.e. budget and number of units). Questions regarding this information are used to determine the amount and type of information retained from the video, for both the intuition and deliberation conditions. The specific information that subjects are asked to recall is the total number of units that need counter tops, per-unit budget, total cost of the project (which requires subjects to multiply the number of units by the per-unit budget), and when the counter tops need to be ready for installation. In addition to the specific information, subjects also provide their opinion on whether or not the buyer will make the purchase, attitude towards Diamondall, the tone of the dialogue between the buyer and seller, the emotion of the buyer and seller at the end of the video, and asked to grade how the salesperson performed. Figure 3.3 provides a list of all the questions pertaining to the video.

Following the conclusion of the video, all subjects receive a manipulation check multiple answer question asking “In the instructions before the video clip, what were
you asked to focus on?” If the subjects do not select the correct answer that corresponded to their decision mode condition, they are removed from the study. Once subjects correctly answered the manipulation check question, they received instructions on how to answer the questions regarding the video (these instructions were discussed in the decision mode section). After receiving the instructions, subjects are exposed to two sets of questions. The first, named DEL questions, asked about specific and non-specific information regarding the sales interaction. The second set of questions, named INT questions, asked about the background scene. The order that subjects received these questions was dependent upon the decision mode condition. That is, subjects in the deliberation conditions received the DEL question set first followed by the INT question set, and vice versa for the intuition condition. Each question is displayed on the computer screen one at a time along with a confidence rating for answer (if confidence rating is applied to that question). Embedded within each question, and unknown to the subject, is a page timer indicating how long the subject spent on that page before advancing to the next. Figure 3.3 displays both sets of questions and how they were captured along with indications of which questions have confidence ratings and embedded timers.
<table>
<thead>
<tr>
<th>DEL Questions</th>
<th>Measurement Method</th>
<th>Embedded Timer</th>
<th>Confidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely is it that the buyer purchases the countertops from the seller?</td>
<td>100 point slider with end points will not purchase to will purchase.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Describe your attitude toward Diamondall?</td>
<td>Four 7-point bipolar adjective (very negative-very positive, dislike-like, very displeased-very pleased, positive-negative).</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>From the seller’s perspective, how would you describe the tone of the dialogue between the buyer and seller?</td>
<td>One 7-point bipolar adjective from negative to positive</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Based on how you believe the salesperson performed, what grade would you assign to his performance in this particular case.</td>
<td>Alphabetic grading ranging from A+ to F.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>At the end of the video, how would you describe the buyer’s emotion.</td>
<td>100 point slider with end points positive to negative.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>At the end of the video, how would you describe the seller’s emotion.</td>
<td>100 point slider with end points positive to negative.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Which dollar number is the closest, without going over, to the total cost of the project?</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>What was the total number of units that needed countertops? Select the closest to the actual number.</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>What was the per-unit budget for countertops? Select the closest to the actual number.</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>How long until the building contractor needs the countertops ready for installation?</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INT Questions</th>
<th>Measurement Method</th>
<th>Embedded Timer</th>
<th>Confidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose the closest geographic location to where the sales conversation took place?</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Which number is the closest, without going over, to the number of automobiles that passed by during the video?</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Without going over, which number is the closest to the number of people in the scene?</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>What time of day do you believe this video took place?</td>
<td>Multiple choice.</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Note: *X indicates which questions have the columns option applied.

Figure 3.3 *Items and Measurement Method Regarding Video*
Following each set of questions, subjects are asked to “select the best description of your thought process when answering the previous questions” from: I remembered the answer, I selected the answer that I felt was correct, I relied solely my gut feeling, or I was absent of thought or feeling so I chose at random. After completing both sets of question, subjects then answer the same survey items as in Study 1. Epstein et al.’s (1996) 5-item faith in intuition (with the additional item added), eight of the 12 items from Norris and Epstein’s (2011) rational (deliberation) scale, Kidwell et al. (2011) 15-item Emotional Intelligence in Marketing Exchanges (EIME) scale, Wang and Netemeyer’s (2004) 7-item scale of Salesperson Creative Performance, and both behavior (four items) and outcome (four items) dimension Behrman and Perreault (1982) job performance scale were also asked. Following the scale items, subjects answer job related and demographic questions before completing the survey.

Overall, the experiment is designed to investigate how salespeople make decisions using explicitly or implicitly retained information, while interpreting some combination of positive and negative emotions and dialogue, as shown in Figure 3.1.

The final version of the experiment is pretested using an online panel Mturk. After an exorbitant amount of data cleaning, the pretest resulted in 32 usable responses. The results of this pretest can be seen in Table 3.4.
Table 3.4

Final Pretest of Experiment

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Subjects Per Condition</th>
<th>Purchase Probability (Mean)</th>
<th>Diamondall Attitude (Mean higher better)</th>
<th>Tone of Dialogue (Mean higher better)</th>
<th>Seller Grade (Mean higher better)</th>
<th>Buyer Displaying Positive Emotion (Mean - Low=Disagree)</th>
<th>Seller Displaying Positive Emotion (Mean - Low=Disagree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>95</td>
<td>6</td>
<td>6.67</td>
<td>12</td>
<td>85.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Emotion</td>
<td>3</td>
<td>Con= 96</td>
<td>Con= NA</td>
<td>Con= NA</td>
<td>Con= 89.3</td>
<td>Con= 88</td>
<td>Con= 83.7</td>
</tr>
<tr>
<td>Positive Message</td>
<td></td>
<td>Time= 12.1</td>
<td>Time= NA</td>
<td>Time= 6.6</td>
<td>Time= 14.1</td>
<td>Time= 11.3</td>
<td>Time= 7.4</td>
</tr>
<tr>
<td>Negative Emotion</td>
<td>6</td>
<td>Con= 87.8</td>
<td>Con= NA</td>
<td>Con= NA</td>
<td>Con= 86.5</td>
<td>Con= 87.8</td>
<td>Con= 88.7</td>
</tr>
<tr>
<td>Positive Message</td>
<td></td>
<td>Time= 14.6</td>
<td>Time= NA</td>
<td>Time= 8.2</td>
<td>Time= 14.1</td>
<td>Time= 17.5</td>
<td>Time= 11.7</td>
</tr>
<tr>
<td>Deliberation</td>
<td>4</td>
<td>Con= 57.75</td>
<td>Con= NA</td>
<td>Con= NA</td>
<td>Con= 71</td>
<td>Con= 75.3</td>
<td>Con= 67.5</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td></td>
<td>Time= 59.3</td>
<td>Time= NA</td>
<td>Time= 9.8</td>
<td>Time= 22.8</td>
<td>Time= 34.1</td>
<td>Time= 14.7</td>
</tr>
<tr>
<td>Negative Message</td>
<td></td>
<td>Time= 52</td>
<td>5.56</td>
<td>5.75</td>
<td>10</td>
<td>57.3</td>
<td>75.8</td>
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<tr>
<td>Intuition</td>
<td>3</td>
<td>Con= 21.7</td>
<td>Con= NA</td>
<td>Con= NA</td>
<td>Con= 38.7</td>
<td>Con= 36</td>
<td>Con= 33.3</td>
</tr>
<tr>
<td>Positive Message</td>
<td></td>
<td>Time= 30.9</td>
<td>Time= NA</td>
<td>Time= 12.04</td>
<td>Time= 19.9</td>
<td>Time= 15.4</td>
<td>Time= 20</td>
</tr>
<tr>
<td>Intuition</td>
<td>2</td>
<td>Con= 60.5</td>
<td>4.33</td>
<td>4.33</td>
<td>7</td>
<td>53.3</td>
<td>53.7</td>
</tr>
<tr>
<td>Negative Emotion</td>
<td></td>
<td>Time= 13.5</td>
<td>Time= NA</td>
<td>Time= 12.9</td>
<td>Time= 21.5</td>
<td>Time= 15.7</td>
<td>Time= 15.5</td>
</tr>
<tr>
<td>Positive Message</td>
<td></td>
<td>Time= 39.5</td>
<td>4.94</td>
<td>5.33</td>
<td>9.5</td>
<td>47.5</td>
<td>44.8</td>
</tr>
<tr>
<td>Intuition</td>
<td>6</td>
<td>Con= 50</td>
<td>Con= NA</td>
<td>Con= NA</td>
<td>Con= 58.2</td>
<td>Con= 61.5</td>
<td>Con= 53</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td></td>
<td>Time= 14.2</td>
<td>Time= NA</td>
<td>Time= 12.95</td>
<td>Time= 15.5</td>
<td>Time= 11.8</td>
<td>Time= 10.8</td>
</tr>
<tr>
<td>Negative Message</td>
<td></td>
<td>Time= 36.3</td>
<td>4.33</td>
<td>4.33</td>
<td>7</td>
<td>53.3</td>
<td>53.7</td>
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Table 3.4 (Continued)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number of Subjects Per Condition</th>
<th>Purchase Probability (Mean)</th>
<th>Diamondall Attitude (Mean higher better)</th>
<th>Tone of Dialogue (Mean higher better)</th>
<th>Seller Grade (Mean higher better)</th>
<th>Buyer Displaying Positive Emotion (Mean - Low=Disagree)</th>
<th>Seller Displaying Positive Emotion (Mean - Low=Disagree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intuition</td>
<td>76</td>
<td>3.25</td>
<td>5.25</td>
<td>11</td>
<td>63.5</td>
<td>78.5</td>
<td></td>
</tr>
<tr>
<td>Negative Emotion</td>
<td>4</td>
<td>Con= 74.75</td>
<td>Con= NA</td>
<td>Con= NA</td>
<td>Con= 64.8</td>
<td>Con= 75</td>
<td>Con= 74</td>
</tr>
<tr>
<td>Negative Message</td>
<td></td>
<td>Time= 28.2</td>
<td>Time= NA</td>
<td>Time= 8.56</td>
<td>Time= 12.8</td>
<td>Time= 14.5</td>
<td>Time= 11.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>Deliberation Questions</th>
<th>Intuition Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost ( # of correct answers)</td>
<td>Number of counter tops ( # of correct answers)</td>
<td>Per-unit Budget ( # of correct answers)</td>
</tr>
<tr>
<td>Deliberation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td></td>
<td>Con= 64.3</td>
</tr>
<tr>
<td>Positive Message</td>
<td></td>
<td>Time= 45.8</td>
</tr>
<tr>
<td>Deliberation</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Negative Emotion</td>
<td></td>
<td>Con= 74.3</td>
</tr>
<tr>
<td>Positive Message</td>
<td></td>
<td>Time= 29.9</td>
</tr>
<tr>
<td>Deliberation</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td></td>
<td>Con= 60</td>
</tr>
<tr>
<td>Negative Message</td>
<td></td>
<td>Time= 21.4</td>
</tr>
<tr>
<td>Deliberation</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Negative Emotion</td>
<td></td>
<td>Con= 74.5</td>
</tr>
<tr>
<td>Negative Message</td>
<td></td>
<td>Time= 41</td>
</tr>
</tbody>
</table>
Table 3.4 (Continued)

| Intuition | Positive Emotion | Con | Con | Con | Con | Con | Con | Con | Con | Con | Con | Time | Time | Time | Time | Time | Time | Time | Time |
|-----------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| 2         | 1                | 0   | 2   | 1   | 2   | 1   | 1   | 2   | 1   | 1   | 1   | 1    | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Positive Message | Time = 22.1 | 18.2 | 29.8 | 31.8 | 31.8 | 14.2 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| 0         | 0                | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Negative Emotion | Time = 43 | 34.5 | 42.5 | 31.5 | 31.5 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 |
| Positive Message | Time = 9.0 | 12.8 | 5.7 | 21.2 | 21.2 | 8.4 | 8.4 | 8.4 | 8.4 | 8.4 | 8.4 | 8.4 |
| 2         | 2                | 0   | 3   | 0   | 1   | 2   | 0   | 2   | 0   | 2   | 0   | 2    | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Intuition | Negative Emotion | Con | Con | Con | Con | Con | Con | Con | Con | Con | Con | Con | Time | Time | Time | Time | Time | Time | Time | Time |
| 0         | 1                | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Negative Emotion | Time = 20.4 | 10.2 | 8.5 | 12 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 |
| 0         | 1                | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Negative Message | Time = 54.75 | 58.2 | 63.75 | 60 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 |
| 0         | 1                | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1    | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| Negative Message | Time = 19.8 | 15.3 | 14.2 | 21.9 | 21.9 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 | 58.0 |

Note: Con is average confidence rating on a 100 point scale. Time is the average time spent answering that question and the confidence rating (except for attitude towards Diamondall).
While the sample and cell sizes are too small to draw any statistical findings from the pretest, the results are used to gauge whether or not the manipulations were working. Table 3.4 reveals that subjects in the deliberation condition took an average 19.8 seconds per question while subjects in the intuition condition averaged 16 seconds per question. This provides initial evidence that the subjects are following the post video instructions. In addition, it is determined that the deliberation condition got more correct answers to the DEL question set that had verifiable correct answers (total cost, number of counter tops needed, the per-unit budget, a time to installation) than the subjects in the intuition condition. By comparing the means scores of the “tone of the dialogue” measure for the two deliberative positive dialogue ($\bar{x}=6.17$) verse the two deliberate negative dialogue ($\bar{x}=4.75$) condition, it can be seen that the subjects are detecting a difference between the negative and positive message content condition. The means of the intuition condition were left out of this comparison because their primary instructions were to focus on the background in the video. To gauge whether the subjects detected differences in the emotion being displayed, the means for the deliberate conditions are compared. The emotion of the buyer and seller are captured using two different questions both on a 100 point slider with end points strongly agree to strongly disagree to the statement: “At the end of the video, the buyer (seller) was displaying positive emotions”. The mean for the two buyer positive emotion question is 57, while the buyer’s negative emotion mean is 64. The seller’s positive emotion mean is 66.4 and the negative is 68.9. These results raised questions regarding the emotional perception manipulation. In that, is the manipulation not working or was something else like question wording causing these results. However, there are some signs that the manipulation was working. For example,
the highest emotion ratings are in the deliberation, positive emotion, and positive dialogue condition. Therefore, it is decided to reword the question and end points (see Figure 3.3 for new wording). Thus, it is believed that with the findings from the emotional perception pretest and the newly worded item, the results from the final analysis will better match the theoretical expectations. A copy of the final questionnaire can be found in Appendix 2.

In addition to the findings of Study 1, this experiment is intended to provide greater insight into the research questions. Study 1’s survey took a descriptive research design approach that examined self-reported measures of the constructs while Study 2 added some validation to certain aspects of the self-reported measure through experimentation. I will briefly discuss how Study 2 provided additional insight to Study 1 and the research questions.

Research Question 1 addressed how intuition fits into EI and if there is discriminant validity between emotional perception and intuition? Study 2 specifically examined whether subjects differ in their ability to perceive emotions in both the buyer and seller while using either deliberation or intuition. That is, if there is no difference between the subjects in the intuition and deliberation conditions in subjects’ ability to perceive the emotions displayed by the buyer and seller (along with their ability to answer other questions), then this would provide experimental evidence that there is no discriminant validity. Also, Study 2 provided evidence of use and validity to the faith in intuition scale (Epstein et al., 1996) by examining how well subjects scoring high on the faith in intuition measure performed in the intuition condition. This helped validate any findings from Study 1.
Research Question 2 addressed the relationship between intuition and deliberation. Study 2, provided insight to this question by examining what types of information the subjects are able to recall. That is, subjects in the deliberation condition should be able to determine how well the sales call went; in addition to recalling specific pieces of information from the video, like total price (total number of units X per-unit budget). However, if subjects in the intuition condition are able to reach the same conclusions about how well the sales call went, without being able to provide specific pieces of information, then this provided insight into how the two systems (intuition and deliberation) operate. Also, by examining the subject’s preferences from making decisions, either intuitively or deliberately, and comparing this to their performance within each condition; this provided additional insight into decision style preferences and forced decision style outcomes. Thus, the findings of the two studies yielded a number of insights into how these two systems interact in a sales context.

Study 2 did not specifically address Research Question 3 concerning the antecedents to creative selling. However, Study 2 helped to determine the antecedents conditions by adding experimental findings of the interplay between intuition’s role in emotional perception and deliberation.

Research Question 4 addressed the predictors of salesperson job performance? Study 2 examined this question by comparing subjects’ ability to perform the tasks from the video to their reported job performance. This added to the findings from Study 1 by examining the subject’s actual performance ability. Also, as mentioned previously, the validity that the experiment provides to the survey scales will reinforce the findings of Study 1.
As discussed, the findings from Study 1 and 2 will be used in combination to investigate the research questions in Chapter 2. By taking a multi-methodological approach to this investigation, I believed that the findings have the potential to make a strong theoretical and practical contribution. Chapter 4 will cover the analysis and results of both Study 1 and 2.
CHAPTER 4

RESULTS AND ANALYSES

Study 1: Descriptive Research Survey Study

Methodology, Sample, and Data Collection Procedures

The data were collected using an online panel, administered by Qualtrics. To ensure data quality, all respondents were subjected to screening questions and attention checks. Rigorous screening helped assure that the sample included individuals involved in selling and with the requisite experience. Respondents were screened on the following bases:

1. Those not employed in business to business selling with at least two years of selling experience were directed out of the survey.
2. If the respondent did not have the flexibility on the job to use different selling techniques in their current selling position (i.e. creative selling), he/she was directed out of the survey.
3. If the respondent was using a mobile phone, he/she was directed out of the survey. This step was applied due to this study’s use of the pictures contained in the Kidwell et al. (2011) emotional intelligence scale. The photos may not be clear on a mobile device.
4. The sampling frame itself consisted of panel members identified a priori as involved in sales.
Respondents who failed to meet the requirements were removed from the study. In addition, there were three attention check questions asked of respondents to insure attention. If the designated answer was not selected, that respondent was removed from the survey. The final sample consists of 196 business to business salespeople, 113 (57.7\%) male and 83 (42.3\%) female. Respondents’ tenure with their present firm ranges from one to 40 years (\(\bar{x} = 8.7\), sd = 7.01) and their total selling experience ranges from two to 45 years (\(\bar{x} = 15.8\), sd = 10.83). Respondents’ ages range from 22 to 74 years (\(\bar{x} = 45.1\), sd = 13.29). Thus, the profile appears consistent with individuals actively engaged in selling.

**Evaluation of Measurement Model**

A confirmatory factor analysis using AMOS 21 indicates adequate fit indices: \( \chi^2 = 306.3, df = 220, p < .000 \); Root Mean Square Error of Approximation (RMSEA) = 0.045 CI90\% = 0.032 to 0.056; Comparative Fit Index (CFI) = 0.952. Table 4.1 shows standardized factor loadings for each scale item along with the construct average variance extracted (AVE) and construct reliability (CR) for the measurement model. The model demonstrates good construct reliability with all construct reliabilities over 0.70 as acceptable in the literature (Hair et al., 2010). However, intuition (0.46) and deliberation (0.37) suffer from lower than the recommended 0.50 average variance extracted (AVE). These low AVE’s question the convergent validity for the intuition and deliberation constructs. Table 4.2 shows the correlation matrix and descriptive statistics for all the constructs used in both models.
Table 4.1

*Scale Items and Measurement Properties*

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deliberation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When selling, I don't like to have to do a lot of thinking. R</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During a sales call, reasoning things out carefully is not one of my</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>strong points. R</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When interacting with customers, I am not a very analytical thinker. R</td>
<td>0.64</td>
<td>0.75</td>
<td>0.37</td>
</tr>
<tr>
<td>I try to avoid selling situations that require thinking in-depth about</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>something. R</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowing the answer to a customer's question without understanding the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reasoning behind it is good enough for me. R</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Faith in Intuition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust my initial feelings about customers</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I listen to my hunches during a sales call</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My initial impressions of customers are almost always right.</td>
<td>0.57</td>
<td>0.80</td>
<td>0.46</td>
</tr>
<tr>
<td>When it comes to dealing with customers, I can usually rely on my</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;gut feelings.&quot;</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the sales process, I rely on my intuitions</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Creative Selling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making sales presentations in innovative ways.</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrying out sales tasks in ways that are resourceful.</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coming up with new ideas for satisfying customer needs.</td>
<td>0.75</td>
<td>0.88</td>
<td>0.56</td>
</tr>
<tr>
<td>Generating and evaluating multiple alternatives for novel customer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>problems.</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1 (Continued)

| Having fresh perspectives on old problems. | 0.77 |
| Generating creative selling ideas          | 0.78 |

**Behavioral Performance**

| I am very effective in maintaining good customer relations. | 0.81 |
| I am very effective in providing accurate information to customers and other people in my company. | 0.85 |
| I am very effective in providing accurate and complete paperwork. | 0.71 |
| I am very effective in acquiring the necessary knowledge about my products, competitor’s products and my customer’s needs. | 0.65 |

**Outcome Performance**

| I am very effective in contributing to my firm’s market share. | 0.83 |
| I am very effective in generating a high level of dollar sales. | 0.68 |
| I am very effective in selling to major accounts. | 0.80 |
Table 4.2

*Correlation Matrix and Descriptive Statistics*

<table>
<thead>
<tr>
<th></th>
<th>DEL</th>
<th>FIT</th>
<th>CS</th>
<th>EP</th>
<th>EU</th>
<th>ER</th>
<th>BP</th>
<th>OP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith in Intuition</td>
<td>-0.025</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative Selling</td>
<td>0.271*</td>
<td>0.272*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Perception</td>
<td>0.033</td>
<td>0.033</td>
<td>-0.053</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Understanding</td>
<td>0.227*</td>
<td>0.008</td>
<td>-0.050</td>
<td>0.002</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Regulation</td>
<td>0.493*</td>
<td>-0.103</td>
<td>0.029</td>
<td>0.063</td>
<td>0.324*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Performance</td>
<td>0.271*</td>
<td>0.202*</td>
<td>0.232*</td>
<td>0.015</td>
<td>0.044</td>
<td>0.221*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Outcome Performance</td>
<td>0.227*</td>
<td>0.233*</td>
<td>0.291*</td>
<td>-0.018</td>
<td>-0.061</td>
<td>0.076</td>
<td>0.753*</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean</td>
<td>5.38</td>
<td>5.33</td>
<td>3.96</td>
<td>1.26</td>
<td>2.75</td>
<td>2.56</td>
<td>5.97</td>
<td>6.27</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.08</td>
<td>0.818</td>
<td>0.687</td>
<td>0.441</td>
<td>0.673</td>
<td>0.924</td>
<td>0.845</td>
<td>0.76</td>
</tr>
</tbody>
</table>

*NOTE: *indicates significance at α<0.01*

Discriminate validity was assessed by comparing the average variance extracted (AVE) estimates for each factor with the squared interconstruct correlations (SIC) associated with that factor. As shown in Table 4.3, all average variance extracted (AVE) are greater than the squared interconstruct correlations, except for behavioral and outcome job performance. This is not surprising because both are considered measures of
overall job performance. These issues associated with convergent and discriminant validity will be in the limitation section of Chapter 5.

Table 4.3

*Discriminant Validity*

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>C orrelations</th>
<th>Squared Interconstruct Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>0.37</td>
<td>0.00</td>
<td>0.11</td>
</tr>
<tr>
<td>Fath in Intuition</td>
<td>0.46</td>
<td>0.00</td>
<td>0.10</td>
</tr>
<tr>
<td>Creative Selling</td>
<td>0.56</td>
<td>0.11</td>
<td>0.10</td>
</tr>
<tr>
<td>Behavioral Performance</td>
<td>0.77</td>
<td>0.13</td>
<td>0.05</td>
</tr>
<tr>
<td>Outcome Performance</td>
<td>0.60</td>
<td>0.10</td>
<td>0.07</td>
</tr>
</tbody>
</table>

**Theoretical Model Analysis**

To test the competing models discussed in Chapter 2, two structural models are tested: Model 1 is represented in Figure 2.2 and the second Model 2 is represented in Figure 2.3. The results of structural Model 1 indicate adequate fit indices $\chi^2 = 384.3$, df = 285, $p < .000$; with a Comparative Fit Index (CFI) = 0.948 and a Root Mean Square Error of Approximation (RMSEA) = 0.042 CI90% = 0.031 to 0.053. Model 1’s hypothesized relationships are shown in Figure 4.1 where all non-significant relations are dashed lines and negative relationships are in red. Table 4.4 shows the standard estimates, t-values and p-values.
Figure 4.1 Model 1 Results
## Model 1 Hypotheses and Standardized Paths

<table>
<thead>
<tr>
<th>Hypothesized Relationships</th>
<th>Standardized Estimate</th>
<th>T Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion Perception → Understanding</td>
<td>0.002</td>
<td>0.023</td>
<td>0.981</td>
</tr>
<tr>
<td>Emotion Understanding → Emotion Regulation</td>
<td>0.324</td>
<td>4.775</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation → Deliberation</td>
<td>0.573</td>
<td>6.495</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation → Creative Selling Behavioral</td>
<td>-0.180</td>
<td>-1.951</td>
<td>0.056</td>
</tr>
<tr>
<td>Emotion Regulation → Performance Outcome</td>
<td>0.126</td>
<td>1.307</td>
<td>0.191</td>
</tr>
<tr>
<td>Emotion Regulation → Performance</td>
<td>-0.163</td>
<td>-2.341</td>
<td>0.019</td>
</tr>
<tr>
<td>Deliberation → Creative Selling Behavioral</td>
<td>0.443</td>
<td>3.788</td>
<td>0.001</td>
</tr>
<tr>
<td>Deliberation → Performance Outcome</td>
<td>0.268</td>
<td>2.185</td>
<td>0.029</td>
</tr>
<tr>
<td>Deliberation → Performance</td>
<td>0.055</td>
<td>0.613</td>
<td>0.540</td>
</tr>
<tr>
<td>Intuition → Deliberation</td>
<td>0.034</td>
<td>0.431</td>
<td>0.667</td>
</tr>
<tr>
<td>Intuition → Creative Selling Behavioral</td>
<td>0.315</td>
<td>3.730</td>
<td>0.001</td>
</tr>
<tr>
<td>Intuition → Performance Outcome</td>
<td>0.219</td>
<td>2.492</td>
<td>0.013</td>
</tr>
<tr>
<td>Intuition → Performance Behavioral</td>
<td>0.016</td>
<td>0.249</td>
<td>0.804</td>
</tr>
<tr>
<td>Creative Selling → Performance</td>
<td>0.077</td>
<td>0.825</td>
<td>0.409</td>
</tr>
<tr>
<td>Creative Selling → Performance Outcome</td>
<td>0.101</td>
<td>1.508</td>
<td>0.132</td>
</tr>
<tr>
<td>Behavioral Performance → Performance</td>
<td>0.888</td>
<td>10.41</td>
<td>0.001</td>
</tr>
</tbody>
</table>

*Note: All paths that are significant, at alpha of 0.05 level are in bold.*

Findings from Model 1 show that there are some significant relationships which are in bold in Table 4.4. There was partial support found for Joseph and Newman's cascading model as emotional understanding has a significant positive relationship with emotional regulation ($\beta = 0.324, p = 0.001$). However, the first stage of the cascading model, emotional perception leading to emotional understanding, is not supported ($\beta =$...
0.002, p= 0.981). Emotional regulation has a significant positive relationship with deliberation (β= 0.573, p= 0.001) and a significant negative effect with selling outcome performance (β= -0.163, p= 0.019). Emotional regulation has insignificant relationships with creative selling (β= -0.180, p= 0.056) and selling behavioral performance (β= 0.126, p= 0.191). The findings show salespersons’ deliberation is significantly positively related with creative selling (β= 0.443, p= 0.001) and selling behavioral performance (β= 0.268, p= 0.029). However, no significant, direct relationship between deliberation and selling outcome performance is present in these data (β= -.055, p= 0.540). Salesperson intuition displays a significant, positive relationship with creative selling (β= 0.315, p= 0.001) and with selling behavioral performance (β= 0.219, p= 0.013). However, no significant relationship is found between salesperson intuition and deliberation (β= 0.034, p= 0.667) and selling outcome performance (β= 0.016, p= 0.804). Interestingly, salesperson creative performance is found to have no significant relationship with either selling behavioral performance (β= 0.077, p= 0.409) or selling outcome performance (β= 0.101, p= 0.132). Finally, selling behavioral performance and selling outcome performance (β= 0.888, p= 0.001) are significantly positively related.

In order to test how a salesperson’s intuition works with emotional intelligence, a second model is proposed, testing intuition’s relationship with emotional understanding. The results of structural Model 2 indicates adequate fit indices $\chi^2 = 384.306$, df = 284, p < .000; with a Comparative Fit Index (CFI) = 0.947 and a Root Mean Square Error of Approximation (RMSEA) = 0.043 CI90% = 0.031 to 0.053. Model 2’s hypotheses are shown in Figure 4.2 where all non-significant relations are dashed lines and negative relationships are in red. Table 4.5 shows the standard estimates, t-values, and p-values.
Figure 4.2 Model 2 Results

Table 4.5

Model 2 Hypotheses and Standardized Paths

<table>
<thead>
<tr>
<th>Hypothesized Relationships</th>
<th>Standardized Estimate</th>
<th>T Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion Perception → Emotion Understanding</td>
<td>0.002</td>
<td>0.026</td>
<td>0.980</td>
</tr>
<tr>
<td>Intuition → Emotion Understanding</td>
<td>-0.006</td>
<td>-0.080</td>
<td>0.936</td>
</tr>
<tr>
<td>Emotion Understanding → Emotion Regulation</td>
<td>0.324</td>
<td>4.775</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation → Deliberation</td>
<td>0.573</td>
<td>6.495</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation → Creative Selling</td>
<td>-0.180</td>
<td>-1.913</td>
<td>0.056</td>
</tr>
<tr>
<td>Emotion Regulation → Behavioral Performance</td>
<td>0.126</td>
<td>1.308</td>
<td>0.191</td>
</tr>
<tr>
<td>Emotion Regulation → Outcome Performance</td>
<td>-0.163</td>
<td>-2.34</td>
<td>0.019</td>
</tr>
<tr>
<td>Deliberation → Creative Selling</td>
<td>0.443</td>
<td>3.789</td>
<td>0.001</td>
</tr>
<tr>
<td>Deliberation → Behavioral Performance</td>
<td>0.268</td>
<td>2.185</td>
<td>0.029</td>
</tr>
<tr>
<td>Deliberation → Outcome Performance</td>
<td>0.055</td>
<td>0.613</td>
<td>0.540</td>
</tr>
<tr>
<td>Intuition → Deliberation</td>
<td>0.034</td>
<td>0.430</td>
<td>0.667</td>
</tr>
<tr>
<td>Intuition → Creative Selling</td>
<td>0.315</td>
<td>3.732</td>
<td>0.001</td>
</tr>
<tr>
<td>Intuition → Behavioral Performance</td>
<td>0.219</td>
<td>2.493</td>
<td>0.013</td>
</tr>
<tr>
<td>Intuition → Outcome Performance</td>
<td>0.016</td>
<td>0.250</td>
<td>0.803</td>
</tr>
<tr>
<td>Creative Selling → Behavioral Performance</td>
<td>0.077</td>
<td>0.824</td>
<td>0.410</td>
</tr>
<tr>
<td>Creative Selling → Outcome Performance</td>
<td>0.101</td>
<td>1.507</td>
<td>0.132</td>
</tr>
<tr>
<td>Behavioral Performance → Outcome Performance</td>
<td>0.888</td>
<td>10.409</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note: All paths that are significant, at alpha of 0.05 level, are in bold.
Findings for Model 2 are roughly the same as Model 1 and there is no significant difference between the models (p= 0.938). The additional proposed relationship between intuition and emotional understanding is found to be insignificant (β= -0.006, p= 0.936). Also, there is discriminant validity evident between intuition and emotional perception with the non-significant covariance estimation (0.008, p=0.767) but it has a correlation estimation of 0.023. The findings from Study 1 will be discussed in conjunction with the results of the experimental Study 2 in Chapter 5, where the findings from both studies will address the proposed research questions.

Study 2: Experiment

Study 2 employs a between subjects 2 (intuition versus deliberation decision mode) X 2 (positive versus negative emotional reaction or perception) X 2 (positive versus negative message content) experimental design, as shown in Figure 4.3 (also in Chapter 3). The data were collected using an online panel, administered by Qualtrics. Subjects were business to business salespeople who underwent considerable screening to ensure data quality. Subjects were removed if:

- They failed to select the correct answer for the pre-video instructions.
- They failed to provide the correct animal (dog or bird) that they were given at the end of the video, for survey flow purposes.
- They were not currently employed within the United States in business to business sales and or did not have at least two years of selling experience.
- If their sales position did not provide them the ability to use different selling techniques.
- If they failed the attention check question.
• If they selected that they were not able to watch the entire video.

• An embedded timer in the video page allowed for removing subjects that advanced before the end of the video.

• Any repeated i.p. addresses.

• Subjects were asked to describe the type of products they sold. If the researcher felt that the subjects were not employed in B2B selling, by their product description (i.e. everything, all, can’t say, sports cards, and high-end adult novelty products, lingerie and books) they were removed.

This cleaning process resulted in 173 usable responses that are displayed by condition in Figure 4.3. The sample consists of 82 (47.4 %) males and 91 (52.6%) females. Subjects tenure with their present firm ranged from 0 to 38 years ($\bar{x} = 9.9$, sd= 8.01) and the total selling experience ranged from two to 50 years ($\bar{x} = 18.9$, sd= 12.2). Respondent’s ages ranged from 21 to 78 years ($\bar{x} = 49.9$, sd= 12.9).

<table>
<thead>
<tr>
<th>Deliberation</th>
<th>Deliberation</th>
<th>Deliberation</th>
<th>Deliberation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
</tr>
<tr>
<td>Positive Message</td>
<td>Positive Message</td>
<td>Negative Message</td>
<td>Negative Message</td>
</tr>
<tr>
<td>n= 22</td>
<td>n= 20</td>
<td>n= 23</td>
<td>n= 21</td>
</tr>
<tr>
<td>Intuition</td>
<td>Intuition</td>
<td>Intuition</td>
<td>Intuition</td>
</tr>
<tr>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
<td>Positive Emotion</td>
<td>Negative Emotion</td>
</tr>
<tr>
<td>Positive Message</td>
<td>Positive Message</td>
<td>Negative Message</td>
<td>Negative Message</td>
</tr>
<tr>
<td>n= 20</td>
<td>n= 25</td>
<td>n= 21</td>
<td>n= 21</td>
</tr>
</tbody>
</table>

Figure 4.3 Condition Description with Number of Subjects Per-Condition
A confirmatory factor analysis using AMOS 21 was run to examine construct reliability and validity for the constructs employed in Study 1. The results of the CFA indicate adequate fit indices $\chi^2 = 253.41$, df = 179, $p < .000$; Root Mean Square Error of Approximation (RMSEA) = 0.049 CI90% = 0.034 to 0.063; Comparative Fit Index (CFI) = 0.952. Table 4.6 shows standardized factor loadings for each scale item along with the construct average variance extracted (AVE) and construct reliability (CR) for the measurement model.
## Table 4.6

*Scale Items and Measurement Properties*

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deliberation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When selling, I don’t like to have to do a lot of thinking. R</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During a sales call, reasoning things out carefully is not one of my strong points. R</td>
<td>0.69</td>
<td>0.76</td>
<td>0.44</td>
</tr>
<tr>
<td>When interacting with customers, I am not a very analytical thinker. R</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to avoid selling situations that require thinking in-depth about something. R</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Faith in Intuition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I trust my initial feelings about customers.</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I listen to my hunches during a sales call.</td>
<td>0.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My initial impressions of customers are almost always right.</td>
<td>0.76</td>
<td>0.85</td>
<td>0.52</td>
</tr>
<tr>
<td>When it comes to dealing with customers, I can usually rely on my &quot;gut feelings.&quot;</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the sales process, I rely on my intuitions.</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Creative Selling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making sales presentations in innovative ways.</td>
<td>0.75</td>
<td></td>
<td>0.55</td>
</tr>
<tr>
<td>Carrying out sales tasks in ways that are resourceful.</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coming up with new ideas for satisfying customer needs.</td>
<td>0.81</td>
<td></td>
<td>0.88</td>
</tr>
<tr>
<td>Generating and evaluating multiple alternatives for novel customer problems.</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Having fresh perspectives on old problems.</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generating creative selling ideas.</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.6 (Continued)

<table>
<thead>
<tr>
<th>Behavioral Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am very effective in maintaining good customer relations.</td>
<td>0.69</td>
</tr>
<tr>
<td>I am very effective in providing accurate information to customers and other people in my company.</td>
<td>0.73</td>
</tr>
<tr>
<td>I am very effective in acquiring the necessary knowledge about my products, competitor’s products and my customer’s needs.</td>
<td>0.79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am very effective in contributing to my firm’s market share.</td>
<td>0.83</td>
</tr>
<tr>
<td>I am very effective in generating a high level of dollar sales.</td>
<td>0.78</td>
</tr>
<tr>
<td>I am very effective in exceeding annual sales targets and objectives.</td>
<td>0.77</td>
</tr>
</tbody>
</table>
The model demonstrates good construct reliability with all items over 0.70 as outlined in Hair et al., (2010). However, deliberation (0.44) suffers from lower than recommended 0.50 average variance extracted (AVE). Discriminate validity is assessed by comparing the average variance extracted (AVE) estimates for each factor with the squared interconstruct correlations (SIC) associated with that factor. As shown in Tables 4.7 and 4.8, all average variance extracted (AVE) are greater than the squared interconstruct correlations, except for behavioral and outcome job performance. This is not surprising because both are a measure of overall job performance. The items representing each construct are used to create composite averages for each construct.

Table 4.7

Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>AVE</th>
<th>Squared Interconstruct Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>0.44</td>
<td>0.22</td>
</tr>
<tr>
<td>Faith in Intuition</td>
<td>0.52</td>
<td>0.10</td>
</tr>
<tr>
<td>Creative Selling</td>
<td>0.55</td>
<td>0.24</td>
</tr>
<tr>
<td>Behavioral Performance</td>
<td>0.54</td>
<td>0.24</td>
</tr>
<tr>
<td>Outcome Performance</td>
<td>0.63</td>
<td>0.35</td>
</tr>
</tbody>
</table>
Table 4.8

**Correlation Matrix and Descriptive Statistics**

<table>
<thead>
<tr>
<th></th>
<th>DEL</th>
<th>FIT</th>
<th>CS</th>
<th>EP</th>
<th>EU</th>
<th>ER</th>
<th>BP</th>
<th>OP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliberation</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith in Intuition</td>
<td>-0.068</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative Selling</td>
<td>0.194*</td>
<td>0.238**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Perception</td>
<td>0.035</td>
<td>0.049</td>
<td>-0.009</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Understanding</td>
<td>0.195*</td>
<td>-0.098</td>
<td>0.027</td>
<td>0.071</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Regulation</td>
<td>0.251**</td>
<td>-0.148</td>
<td>0.042</td>
<td>0.085</td>
<td>0.385**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Performance</td>
<td>0.267**</td>
<td>0.267**</td>
<td>0.401**</td>
<td>0.055</td>
<td>0.095</td>
<td>0.077</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Outcome Performance</td>
<td>0.323**</td>
<td>0.230**</td>
<td>0.489**</td>
<td>0.006</td>
<td>-0.059</td>
<td>-0.035</td>
<td>0.623**</td>
<td>1.00</td>
</tr>
<tr>
<td>Mean</td>
<td>5.30</td>
<td>5.41</td>
<td>3.91</td>
<td>1.25</td>
<td>2.72</td>
<td>2.68</td>
<td>6.25</td>
<td>5.69</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.144</td>
<td>0.813</td>
<td>0.739</td>
<td>0.451</td>
<td>0.693</td>
<td>0.768</td>
<td>0.651</td>
<td>0.887</td>
</tr>
</tbody>
</table>

**indicates significance at α < 0.01 ; * indicates significance at α < 0.05**

**Manipulation Check**

To assess whether the decision mode manipulation is working, composite scores were calculated for the number of correct answers out of four questions from the deliberation (DEL) questions set (i.e., total cost, number of units, price per unit, and time until installation) and out of three questions from the intuition (INT) questions set (i.e., number of cars, number of people, and time of day). See Figure 3.3 in Chapter 3 for full questions. To assess the deliberation manipulation of the decision mode condition, a univariate analysis is performed on the summed number of correct DEL answers and the
experimental conditions (decision mode, emotional perception, and message content). The overall univariate analysis is significant with $F_{(df=7, 165, \ R^2=14.6\%)} = 4.03$ ($p< .000$).

Table 4.9 shows that there is one significant main effect of the summed DEL correct answers set and decision mode $F_{(1, 165)}=20.75$ ($p< .000$). One interaction is significant between decision mode and message content with $F_{(1, 165)}= 5.98$ ($p< .015$) on DEL questions (Figure 4.4). The main effect indicates that respondents in the deliberation condition ($\bar{x}=1.7$) answered more DEL questions correctly than those in the intuition condition ($\bar{x}=1.0$). The significant ordinal interaction shows that subjects in the deliberation condition in the negative dialogue condition ($\bar{x}=2.0$) are able to recall more correct answers than subjects a) in the deliberative positive dialogue condition ($\bar{x}=1.5$), b) than subjects in the intuition-positive dialogue condition ($\bar{x}=1.2$) and c) the intuition-negative dialogue condition ($\bar{x}=0.9$).

Table 4.9

*Univariate Analysis of DEL and INT Question Sets by Experimental Condition*

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>df</th>
<th>Number of Correct DEL Questions</th>
<th>Number of Correct INT Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Mode</td>
<td>1</td>
<td>$20.75 (.000)^{***}$</td>
<td>$48.46 (.000)^{***}$</td>
</tr>
<tr>
<td>Emotional Perception</td>
<td>1</td>
<td>$1.17 (.282)$</td>
<td>$0.00 (.975)$</td>
</tr>
<tr>
<td>Message Content</td>
<td>1</td>
<td>$0.14 (.704)$</td>
<td>$2.57 (.111)$</td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMxEP</td>
<td>1</td>
<td>$0.11 (.742)$</td>
<td>$3.71 (.056)^*$</td>
</tr>
<tr>
<td>DMxMC</td>
<td>1</td>
<td>$5.98 (.015)^{**}$</td>
<td>$0.37 (.544)$</td>
</tr>
<tr>
<td>EPxMC</td>
<td>1</td>
<td>$0.22 (.637)$</td>
<td>$0.08 (.776)$</td>
</tr>
<tr>
<td>DMxEPxMC</td>
<td>1</td>
<td>$0.12 (.721)$</td>
<td>$0.61 (.435)$</td>
</tr>
</tbody>
</table>

*** indicates significance at $\alpha< 0.01$; ** indicates significance at $\alpha< 0.05$; * indicates significance at $\alpha< 0.1$. The first figures are $F$ value and $p$ values are provided in parentheses.
Figure 4.4 Decision Mode by Message Content on Correct DEL Questions

Just as in the deliberation condition, a univariate analysis between the sum of correct INT questions and the experimental conditions is significant with $F_{(df=7, 165, R^2=25.2\%)}$ of 4.5 ($p<.000$). There is one significant main effect with sum of correct INT questions and decision mode $F_{(1, 165)}=48.46$ ($p<.000$) and one significant interaction between decision making and emotional perception with $F_{(1, 165)}=3.71$ ($p<.056$) shown in Figure 4.5. The main effect demonstrates that subjects in the intuition condition ($\bar{x}=1.40$) answered more INT questions correctly than those in the deliberation condition ($\bar{x}=0.60$). The interaction shown in Figure 4.5 indicates that subjects in the intuition-negative emotions condition ($\bar{x}=1.5$) are able to recall more correct answers than subjects in the intuition-positive emotion condition ($\bar{x}=1.3$), deliberation-positive emotion condition ($\bar{x}=0.7$), and the deliberation-negative emotion condition ($\bar{x}=0.5$).
These two univariate analyses provide evidence that the decision mode manipulation is successful. Subjects in the deliberation condition are able to recall significantly more correct answers regarding the sales conversation than the subjects in the intuition condition. Also, subjects in the intuition condition are able to recall more correct answers about the background of the video than those in the deliberation condition. Thus, the pre-video instructions worked because the subjects in the two decision mode conditions are focusing and encoding information from different parts of the video.

In order to determine if the post-video decision mode instructions worked, a crosstab analysis is performed. The dependent variable is the subjects thought process when answering the questions for the DEL question set and then INT question set (or vice versa depending on decision mode condition) (See Figure 3.3 in Chapter 3 for full questions). The independent variable is decision mode condition (intuition or deliberation). The first crosstab analysis (shown in Table 4.10) involves the subjects thought process when answering questions in the DEL question set. This results in a
significant chi-square statistic and is associated with the correct pattern of responses ($\chi^2_{(3, 173)} = 33.00$ (p< .000) (see Table 4.10 for break down). More people in the deliberation condition are purposefully trying to recall information about the sales encounter when answering the questions about the sales interaction than those in the intuition condition.

The second crosstab analysis involved the subject’s thought process when answering the questions from the INT question set. This analysis shows a non-significant chi-square statistic ($\chi^2_{(3, 173)} = 3.64$ (p< .303) which can be seen by the lack of diversity in the pattern of responses in Table 4.10. That is, 81% of the intuition condition and 76% of the deliberation condition selected the answers they felt were correct. This is not surprising because subjects in the intuition condition are instructed to select answers they felt were correct. Subjects in the deliberation condition are told to focus on the sales conversation and thus did not pay attention to the background which resulted in them not possessing the relevant information to remember the answer. Additionally, it should be noted that the dependent variable thought process for both DEL and INT questions is a single item measure that was assessed after the subjects had completed that question set. This may have created a situation where a subject remembered some items and not another. This may be why there is so much variation among the answers (see Table 4.10)
Based on the results in Tables 4.9 and 4.10, there is strong evidence indicating that the decision mode manipulation worked. This manipulation caused subjects in the deliberation and intuition conditions to focus their attention on different aspects of the video. This divergence of attention manipulated how (explicitly or implicitly) and what (sale encounter or background) information was encoded and retained. Thus, subjects had to rely on their decision mode condition, the intuitive or deliberative process, when assessing the sales encounter.

**Multivariate Analysis Results**

In order to address the research questions, a multivariate analysis (MANOVA) is performed with six dependent variables (buyers purchase probability, the subjects attitude...
toward Diamondall, the tone of the sales dialogue, a grade of the salesperson's performance, and the perceived emotion being displayed by the buyer and seller at the end of the video) and the three experimental conditions as independent variables (full version of the items can be found in Figure 3.3). The results show that all overall dependent variables are significantly predicted by the full factorial model with the following univariate results: purchase probability $F_{(df=7, 165, R^2=43.7 \%) }$ of 20.1 ($p < .000$), attitude towards Dimnondall $F_{(df=7, 165, R^2=9.4 \%) }$ of 3.6 ($p < .001$), tone of sales dialogue $F_{(df=7, 165, R^2=13.0 \%) }$ of 4.67 ($p < .000$), grade of salespersons performance $F_{(df=7, 165, R^2=5.7 \%) }$ of 4.49 ($p < .019$), buyer facial emotion display $F_{(df=7, 165, R^2=31.7 \%) }$ of 12.39 ($p < .000$), and seller facial emotion display $F_{(df=7, 165, R^2=17.9 \%) }$ of 6.4 ($p < .000$). The MANOVA are in Table 4.11 and the estimated means for the main effects and interactions are in Tables 4.12, 4.13, and 4.14.
Table 4.11

*Main Effects and Interactions with Univariate F-Value Results*

<table>
<thead>
<tr>
<th>MANOVA</th>
<th>df</th>
<th>Purchase Probability</th>
<th>Attitude Towards Diamondall</th>
<th>Tone of Sales Dialogue</th>
<th>Grade of Salespersons Performance</th>
<th>Buyer Emotion Facial Display</th>
<th>Seller Emotion Facial Display</th>
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</thead>
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<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Mode</td>
<td>1</td>
<td>3.26 (.073)*</td>
<td>2.26 (.134)</td>
<td>0.00 (.962)</td>
<td>0.30 (.584)</td>
<td>2.25 (.135)</td>
<td>0.03 (.857)</td>
</tr>
<tr>
<td>Emotional Perception</td>
<td>1</td>
<td>4.20 (.042)**</td>
<td>2.50 (.116)</td>
<td>6.13 (.014)**</td>
<td>4.70 (.032)**</td>
<td>8.34 (.004)**</td>
<td>7.03 (.009)**</td>
</tr>
<tr>
<td>Message Content</td>
<td>1</td>
<td>125.14 (.000)*****</td>
<td>15.19 (.000)*****</td>
<td>12.95 (.000)*****</td>
<td>4.75 (.031)**</td>
<td>65.02 (.000)*****</td>
<td>30.01 (.000)*****</td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMxEP</td>
<td>1</td>
<td>3.42 (.066)*</td>
<td>3.77 (.054)*</td>
<td>11.48 (.001)*****</td>
<td>5.23 (.023)**</td>
<td>5.45 (.021)**</td>
<td>2.06 (.153)</td>
</tr>
<tr>
<td>DMxMC</td>
<td>1</td>
<td>2.76 (.099)*</td>
<td>0.90 (.345)</td>
<td>0.73 (.395)</td>
<td>0.31 (.577)</td>
<td>5.00 (.027)**</td>
<td>3.67 (.057)*</td>
</tr>
<tr>
<td>EPxMC</td>
<td>1</td>
<td>0.15 (.695)</td>
<td>0.21 (.643)</td>
<td>0.45 (.503)</td>
<td>1.90 (.170)</td>
<td>0.42 (.516)</td>
<td>2.08 (.151)</td>
</tr>
<tr>
<td>DMxEPxMC</td>
<td>1</td>
<td>1.98 (.162)</td>
<td>0.03 (.856)</td>
<td>0.51 (.474)</td>
<td>0.12 (.734)</td>
<td>0.55 (.458)</td>
<td>0.07 (.799)</td>
</tr>
</tbody>
</table>

*** indicates significance at α< 0.01; ** indicates significance at α < 0.05; * indicates significance at α< 0.1
Table 4.12

Estimated Means for Emotional Perception and Decision Mode Conditions

<table>
<thead>
<tr>
<th>Emotional Perception Condition</th>
<th>Purchase Probability</th>
<th>Grade of Salespersons Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decision Mode</td>
<td>Decision Mode</td>
</tr>
<tr>
<td></td>
<td>Intuition</td>
<td>Deliberation</td>
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<tr>
<td>Negative</td>
<td>57.9</td>
<td>47.4</td>
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<tr>
<td>Positive</td>
<td>58.8</td>
<td>58.6</td>
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<td>Total</td>
<td>58.2</td>
<td>53.0</td>
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</table>

<table>
<thead>
<tr>
<th>Attitude Towards Diamondall</th>
<th>Decision Mode</th>
<th>Tone of Sales Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decision Mode</td>
<td>Decision Mode</td>
</tr>
<tr>
<td></td>
<td>Intuition</td>
<td>Deliberation</td>
</tr>
<tr>
<td>Negative</td>
<td>4.77</td>
<td>4.69</td>
</tr>
<tr>
<td>Positive</td>
<td>4.71</td>
<td>5.29</td>
</tr>
<tr>
<td>Total</td>
<td>7.74</td>
<td>4.99</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Buyer Emotion Facial Display</th>
<th>Decision Mode</th>
<th>Seller Emotion Facial Display</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Decision Mode</td>
<td>Decision Mode</td>
</tr>
<tr>
<td></td>
<td>Intuition</td>
<td>Deliberation</td>
</tr>
<tr>
<td>Negative</td>
<td>56.92</td>
<td>45.05</td>
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<td>Positive</td>
<td>58.63</td>
<td>61.21</td>
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<td>Total</td>
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<td>53.13</td>
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</table>
Table 4.13

Estimated Means for Decision Mode and Message Content Conditions

<table>
<thead>
<tr>
<th>Message Content</th>
<th>Purchase Probability</th>
<th>Grade of Salespersons Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intuition</td>
<td>Deliberation</td>
</tr>
<tr>
<td>Negative</td>
<td>44.55</td>
<td>34.63</td>
</tr>
<tr>
<td>Positive</td>
<td>71.82</td>
<td>71.41</td>
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<td>Total</td>
<td>58.2</td>
<td>53</td>
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</table>

<table>
<thead>
<tr>
<th>Message Content</th>
<th>Attitude Towards Diamondall</th>
<th>Tone of Sales Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intuition</td>
<td>Deliberation</td>
</tr>
<tr>
<td>Negative</td>
<td>4.49</td>
<td>4.58</td>
</tr>
<tr>
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<tr>
<td>Total</td>
<td>7.74</td>
<td>4.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Message Content</th>
<th>Buyer Emotion Facial Display</th>
<th>Seller Emotion Facial Display</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intuition</td>
<td>Deliberation</td>
</tr>
<tr>
<td>Negative</td>
<td>48.76</td>
<td>37.19</td>
</tr>
<tr>
<td>Positive</td>
<td>66.80</td>
<td>69.08</td>
</tr>
<tr>
<td>Total</td>
<td>57.78</td>
<td>53.13</td>
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</table>
Table 4.14

Estimated Means for Message Content and Emotional Perception Conditions

<table>
<thead>
<tr>
<th>Message Content</th>
<th>Purchase Probability</th>
<th>Grade of Salespersons Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional Perception</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
<td>36.10</td>
<td>43.08</td>
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<tr>
<td>Positive</td>
<td>69.24</td>
<td>73.98</td>
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<tr>
<td>Total</td>
<td>52.67</td>
<td>58.53</td>
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<table>
<thead>
<tr>
<th>Message Content</th>
<th>Attitude Towards Diamondall</th>
<th>Tone of Sales Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional Perception</td>
<td>Emotional Perception</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
<td>4.36</td>
<td>4.71</td>
</tr>
<tr>
<td>Positive</td>
<td>5.10</td>
<td>5.29</td>
</tr>
<tr>
<td>Total</td>
<td>4.73</td>
<td>5.00</td>
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</table>

<table>
<thead>
<tr>
<th>Message Content</th>
<th>Buyer Emotion Facial Display</th>
<th>Seller Emotion Facial Display</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional Perception</td>
<td>Emotional Perception</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
<td>37.50</td>
<td>48.46</td>
</tr>
<tr>
<td>Positive</td>
<td>64.48</td>
<td>71.40</td>
</tr>
<tr>
<td>Total</td>
<td>50.99</td>
<td>59.93</td>
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</table>

Decision Mode Main Effects

The MANOVA results for the decision mode condition reveal one main effect on purchase probability at $\alpha < 0.1$ level, as shown in Table 4.11. Subjects in the intuition condition rated the purchase probability ($\bar{x}=58.2$) higher than those in the deliberation condition ($\bar{x}=53.0$). While this is the only main effect of the intuition/deliberation
distinction, there are many two-way interactions that are significant and will be discussed in the next sections.

**Emotional Perception Main Effects**

The emotional perception condition is significantly related to purchase probability, tone of the sales dialogue, grade of salesperson performance (at $\alpha<0.05$ level), and both the buyer and seller emotion facial display (at $\alpha<0.01$ level). The purchase probability main effect reveals that subjects in the negative emotional perception condition ($\bar{x}=52.7$) rate the purchase probability lower than the subjects in the positive emotional condition ($\bar{x}=58.5$). For the main effect of the tone of the sales dialogue, subjects in the negative emotional perception condition ($\bar{x}=4.4$) rate the tone lower than the positive emotional perception condition ($\bar{x}=4.9$). The main effect for the grade of salesperson performance shows that subjects in the negative emotional perception condition ($\bar{x}=8.7$) rate the salesperson performance lower than the subjects in the positive emotional perception condition ($\bar{x}=9.6$). The main effect for buyer emotion facial display reveals that subjects in the negative emotional perception condition ($\bar{x}=51.0$) rate the buyer's emotion lower than the subjects in the positive emotional perception condition ($\bar{x}=60.0$) measured at the end of the video. The main effect for seller emotion facial display reveals that subjects in the negative emotional perception condition ($\bar{x}=59.0$) rate the salesperson's emotion lower than the subjects in the positive emotional perception condition ($\bar{x}=67.3$) at the end of the video. These main effects provide initial insight into how emotional display not only affects purchase probability but also the tone of the dialogue and how people perceive the seller's performance.
Message Content Main Effects

The message content condition's significant main effects are with purchase probability, attitude toward Diamondall, tone of the sales dialogue, grade of salesperson performance, and both the buyer and seller emotion facial display (all significant at \( \alpha < 0.01 \) level except for attitude toward Diamondall (\( \alpha < 0.05 \) level). The main effect on purchase probability reveals that subjects in the negative dialogue condition (\( \bar{x} = 40.0 \)) rate the purchase probability lower than those in the positive dialogue condition (\( \bar{x} = 71.6 \)). The main effect of attitude toward Diamondall reveals that subjects in the negative dialogue condition (\( \bar{x} = 4.5 \)) have a lower attitude rating than those in the positive dialogue condition (\( \bar{x} = 5.2 \)). The main effect of tone of the sales dialogue shows that subjects in the negative dialogue condition (\( \bar{x} = 4.3 \)) perceive the tone of the sales dialogue to be more negative than those in the positive dialogue condition (\( \bar{x} = 5.0 \)). The main effect of grade of salesperson performance reveals that subjects in the negative dialogue condition (\( \bar{x} = 8.7 \)) give a lower grade than those in the positive dialogue condition (\( \bar{x} = 9.6 \)). The main effect of buyer emotion facial display shows that subjects in the negative dialogue condition (\( \bar{x} = 43.0 \)) rate the buyer's emotion lower than those in the positive dialogue condition (\( \bar{x} = 68.0 \)). The main effect of seller emotion facial display reveals that subjects in the negative dialogue condition (\( \bar{x} = 54.6 \)) rate the seller's emotion lower than those in the positive dialogue condition (\( \bar{x} = 71.7 \)). The fact that all of the message content main effects test as significant shows how what is said can affect different aspects of the sales interaction like emotional perception.
Interaction Effects from MANOVA

A multivariate analysis reveals several significant two way interactions and no significant three way interactions (see Table 4.11). The two-way interaction between decision mode and emotional perception with respect to purchase probability is significant with a $F_{(1,165)}=3.42$ ($p<.066$) as shown in Figure 4.6. The means for this interaction are in Table 4.12 and break down as follows: subjects in the intuition-negative emotional perception condition ($\bar{x}=57.9$) and in the intuition-positive emotional perception condition ($\bar{x}=58.8$) provide similar means on purchase intention, while subjects in the deliberation-negative emotional perception condition ($\bar{x}=47.4$) differ significantly from those in the deliberation-positive emotional perception condition ($\bar{x}=58.6$). To further understand this interaction, an independent sample t-test is performed between the combinations of decision mode (deliberation and intuition) and emotional perception (positive and negative). There is no significant difference ($t=0.17$, $p=NS$) between intuition-positive emotion ($n=41$, $\bar{x}=58.1$, $sd=25.61$) and intuition-negative emotion ($n=46$, $\bar{x}=59.0$, $sd=21.39$) for purchase probability. However, there is a significant difference ($t=-2.02$, $p<.05$) between deliberation-positive emotion ($n=45$, $\bar{x}=58.2$, $sd=25.95$) and deliberation-negative emotion ($n=41$, $\bar{x}=46.9$, $sd=26.02$) for purchase probability.
The two-way interaction between decision mode and emotional perception for attitude toward Diamondall is significant with a $F_{(1, 165)}=3.77$ ($p<.054$) and is displayed in Figure 4.7. The means for this interaction are (Table 4.12) follows; subjects in the intuition-negative emotional perception condition ($\bar{x}=4.8$) and in the intuition-positive emotional perception condition ($\bar{x}=4.7$) display similar means while subjects in the deliberation-negative emotional perception condition ($\bar{x}=4.7$) display lower mean attitude than those in the deliberation-positive emotional perception condition ($\bar{x}=5.3$). To further understand this interaction, an independent sample $t$-test is performed between the combinations of decision mode (deliberation and intuition) and emotional perception (positive and negative). There is no significant difference ($t=0.394$, $p=NS$) between intuition-positive emotion ($n=41$, $\bar{x}=4.7$, $sd=1.2$) and intuition-negative emotion ($n=46$, $\bar{x}=4.8$, $sd=0.98$) on attitude toward Diamondall. However, there is a significant difference
between deliberation-positive emotion (n=45, $\bar{x}=5.3$, sd=1.1) and deliberation-negative emotion (n=41, $\bar{x}=4.7$, sd=1.3) with respect to Diamondall. In addition, a follow-up comparison is made between deliberation positive emotion condition and the other three conditions on attitude towards Diamondall. The results show that there is a significant difference ($t= -2.78$, $p=0.006$) between the deliberation-positive emotion condition (n=45, $\bar{x}=5.3$, sd=1.1) and the other conditions (n=128, $\bar{x}=4.7$, sd=1.1)

![Figure 4.7](image)

**Figure 4.7 Decision Mode by Emotional Perception on Attitude Towards Diamondall**

The two-way interaction between decision mode and emotional perception on tone of sales dialogue is significant with a $F_{(1, 165)}=11.48$ ($p<.01$) as shown in Figure 4.8. The means for this interaction are in Table 4.12 and break down as follows; subjects in the intuition-negative emotional perception condition ($\bar{x}=4.8$) and in the intuition-positive emotional perception condition ($\bar{x}=4.6$) display similar means while those in the
deliberation-negative emotional perception condition ($\bar{x} = 4.1$) display lower means than those in the deliberation-positive emotional perception condition ($\bar{x} = 5.2$). To further understand this interaction, the independent sample t-tests performed between the combinations of decision mode (deliberation and intuition) and emotional perception (positive and negative) shows no significant difference ($t = 0.799$, $p = \text{NS}$) between intuition-positive emotion ($n = 41$, $\bar{x} = 4.6$, $sd = 1.29$) and intuition-negative emotion ($n = 46$, $\bar{x} = 4.8$, $sd = 1.29$) with respect to tone of sales dialogue. However, there is a significant difference ($t = -3.85$, $p < .000$) between deliberation-positive emotion ($n = 45$, $\bar{x} = 5.2$, $sd = 1.38$) and deliberation-negative emotion ($n = 41$, $\bar{x} = 4.1$, $sd = 1.45$) on tone of sales dialogue. Those in the deliberation-negative condition display less favorable emotional perception scores.

![Graph](image-url)

**Figure 4.8 Decision Mode by Emotional Perception on Tone of Sales Dialogue**

The two-way interaction between decision mode and emotional perception on grade of salesperson’s performance is significant with a $F_{(1, 165)} = 5.23$ ($p < .05$) and is displayed in Figure 4.9. The means for this interaction are in Table 4.12 and break down
as follows; subjects in the intuition-negative emotional perception condition ($\bar{x}=9.3$) and in the intuition-positive emotional perception condition ($\bar{x}=9.2$) display similar means while those in the deliberation-negative emotional perception condition ($\bar{x}=8.2$) display lower means than those in the deliberation-positive emotional perception condition ($\bar{x}=9.9$). To further understand this interaction, an independent sample t-test is performed between the combinations of decision mode (deliberation and intuition) and emotional perception (positive and negative). There is no significant difference ($t=0.799, p=NS$) between intuition-positive emotion ($n=41, \bar{x}=9.2, sd=2.57$) and intuition-negative emotion ($n=46, \bar{x}=9.3, sd=2.31$) on grade of salesperson’s performance. However, there is a significant difference ($t=-2.97, p<0.01$) between deliberation-positive emotion ($n=45, \bar{x}=9.9, sd=2.47$) and deliberation-negative emotion ($n=41, \bar{x}=8.1, sd=2.96$) on grade of salespersons performance. Subjects in the deliberation positive condition gave an average grade of B+ compared to an average grade of B- for subjects in the deliberation negative condition.

Figure 4.9 Decision Mode by Emotional Perception on Grade of Salespersons Performance
The two-way interaction between decision mode and emotional perception on buyer emotion facial display is significant with a $F(1, 165) = 5.45$ (p< .05) and as shown in Figure 4.10. The means for this interaction are in Table 4.12 and break down as follows; subjects in the intuition-negative emotional perception condition ($\bar{x}=56.9$) and in the intuition-positive emotional perception condition ($\bar{x}=58.6$) display similar means while those in the deliberation-negative emotional perception condition ($\bar{x}=45.1$) display lower means than those in the deliberation-positive emotional perception condition ($\bar{x}=61.2$).

To further understand this interaction, an independent sample t-test is performed between the combinations of decision mode (deliberation and intuition) and emotional perception (positive and negative). There is no significant difference ($t=0.883$, p=NS) between intuition-positive emotion ($n=41$, $\bar{x}=58.4$, sd=24.1) and intuition-negative emotion ($n=46$, $\bar{x}=57.7$, sd=21.48) on the buyer emotion facial display. However, there is a significant difference ($t=-3.00$, p<.01) between deliberation-positive emotion ($n=45$, $\bar{x}=60.9$, sd=25.51) and deliberation-negative emotion ($n=41$, $\bar{x}=44.6$, sd=24.72) on buyer emotion facial display. A follow-up comparison is made between the deliberation-negative emotion condition and the other three conditions on buyer emotion facial display. The results show that there is a significant difference ($t=3.38$ p=0.001) between the deliberation-negative emotion condition ($n=41$, $\bar{x}=44.6$, sd=24.72) and the rest of the conditions ($n=132$, $\bar{x}=59.0$, sd=23.58). In addition, a comparison is made between intuition-negative emotion and deliberation-negative emotion conditions. The results show that there is a significant difference ($t=-2.642$ p=0.01) between intuition-negative emotion ($n=46$, $\bar{x}=57.7$, sd=21.48) and deliberation-negative emotion ($n=41$, $\bar{x}=44.6$, sd=24.72). Thus, subjects in the deliberation-negative emotion condition rated the
buyer’s facial emotional displays lower than those subjects in the deliberation-positive condition.

![Graph showing decision mode by emotional perception on buyer emotion facial display]

Figure 4.10 Decision Mode by Emotional Perception on Buyer Emotion Facial Display

The two-way interaction between decision mode and message content on purchase probability is significant with a $F(1, 165)=2.76$ (p< .1) and is displayed in Figure 4.11. The means for this interaction are in Table 4.13 and are as follows; subjects in the intuition-negative dialogue condition ($\bar{x}=44.6$) provide a mean purchase probability that is 27 points lower than those in the intuition-positive dialogue condition ($\bar{x}=71.8$) while subjects in the deliberation-negative dialogue condition ($\bar{x}=34.6$) differ from those in the deliberation-positive dialogue condition by 36 points ($\bar{x}=71.4$). To further understand this interaction, independent sample t-tests show there is a significant difference ($t= -8.85$, p<.000) between intuition-positive dialogue (n=45, $\bar{x}=71.6$, sd=16.43) and intuition-negative dialogue (n=42, $\bar{x}=44.6$, sd=21.55) on purchase probability. In addition, there is also a significant difference ($t= -3.00$, p<.01) between deliberation-positive dialogue
(n=42, \( \bar{x}=71.6, \) sd=17.91) and deliberation-negative dialogue (n=44, \( \bar{x}=35.0, \) sd=20.23) on purchase probability. A comparison between intuition-negative dialogue and deliberation-negative dialogue conditions reveals a significant difference (t= -2.119 p=0.037) between intuition-negative dialogue (n=42, \( \bar{x}=44.6, \) sd=21.55) and deliberation-negative dialogue (n=44, \( \bar{x}=35.0, \) sd=20.33) on purchase probability. In addition, there is no significant difference found between intuition-positive dialogue and deliberation-positive dialogue (t= -0.02, p=0.984). Thus, subjects in both decision mode conditions rated the purchase probability lower in the negative dialogue condition than the positive dialogue condition.

![Figure 4.11](image)

**Figure 4.11 Decision Mode by Message Content on Purchase Probability**

The two-way interaction between decision mode and message content on buyer emotion facial display is significant with a \( F_{(1, 165)}=5.00 \) (p< .05) and is shown in Figure 4.12. The means for this interaction are in Table 4.13 and break down as follows; subjects in the intuition-negative dialogue condition (\( \bar{x}=48.8 \)) provide a mean buyer emotion
perceptions score that is 18 points lower than those in the intuition-positive dialogue condition ($\bar{x}=66.8$). Subjects in the deliberation-negative dialogue condition differ by 29 point ($\bar{x}=37.2$) from those in the deliberation-positive dialogue condition by 32 points ($\bar{x}=69.1$). To further understand this interaction, an independent sample t-test is performed between the combinations of decision mode (deliberation and intuition) and message content (positive and negative). There is a significant difference ($t= -4.00, p<.000$) between intuition-positive dialogue ($n=45, \bar{x}=66.7, sd=20.59$) and intuition-negative dialogue ($n=42, \bar{x}=48.8, sd=21.15$) on buyer emotion facial display. There is also a significant difference ($t= -6.98, p<.000$) between deliberation-positive dialogue ($n=42, \bar{x}=69.4, sd=19.96$) and deliberation-negative dialogue ($n=44, \bar{x}=37.7, sd=22.03$) on buyer emotion facial display. Comparison between intuition-negative message content and deliberation-negative message content conditions reveals a significant difference ($t= -2.383, p=0.019$) between intuition-negative message ($n=42, \bar{x}=48.6, sd=21.15$) and deliberation-negative message ($n=44, \bar{x}=37.7, sd=20.03$) on buyers emotion facial display. However, there is no significant difference between intuition and deliberation and positive dialogue ($t= 0.613, p=0.541$) on buyers emotion facial display. As seen in Figure 4.12, intuition and deliberation conditions both react in a similar manner to the message content as it pertains to the rating of the buyer’s emotional displays. To truly understand how the positive/negative dialogue distinction is affecting the subject’s ratings of the buyer’s emotion facial displays, further examination of the effects of the dialogue within intuition and deliberation where the subjects receive the same emotional perception condition is warranted.
Comparison between the deliberation, negative emotion, negative dialogue condition and the deliberation, negative emotion, positive dialogue condition produce a significant difference ($t=-6.893$, $p=0.000$). This shows that subjects in the deliberation, negative emotion, positive dialogue condition ($n=20$, $\bar{x}=63.2$, $sd=16.86$) rate buyer's emotional displays significantly higher than subjects in the deliberation, negative emotion, negative dialogue condition ($n=21$, $\bar{x}=27.0$, $sd=16.76$). Subjects in the deliberation, positive emotion, positive dialogue condition and the deliberation, positive emotion, negative dialogue condition provide scores that differ significantly ($t=4.275$, $p=0.000$). This shows that subjects in the deliberation, positive emotion, positive dialogue condition ($n=22$, $\bar{x}=75.0$, $sd=21.23$) rated buyer's emotional displays significantly higher than subjects in the deliberation, positive emotion, negative dialogue condition ($n=23$, $\bar{x}=47.4$, $sd=21.99$).

Comparison between the intuition, negative emotion, negative dialogue condition and the intuition, negative emotion, positive dialogue condition is significant ($t=3.037$, $p=0.004$). This shows that subjects in the intuition, negative emotion, positive dialogue condition ($n=25$, $\bar{x}=65.8$, $sd=19.67$) rated buyer's emotional displays significantly higher than subjects in the intuition, negative emotion, negative dialogue condition ($n=21$, $\bar{x}=48.1$, $sd=19.84$). Subjects in the intuition, positive emotion, positive dialogue condition and the intuition, positive emotion, negative dialogue condition are a significantly different ($t=2.605$, $p=0.013$). This shows that subjects in the intuition, positive emotion, positive dialogue condition ($n=20$, $\bar{x}=67.8$, $sd=22.14$) rate buyer's emotional displays significantly higher than subjects in the intuition, positive emotion, negative dialogue condition ($n=21$, $\bar{x}=49.5$, $sd=22.85$).
The two-way interaction between decision mode and message content on seller emotion facial display is significant with a $F_{(1, 165)}=3.67$ ($p<.1$) and is displayed in Figure 4.13. The means for this interaction are in Table 4.13 and break down as follows; subjects in the intuition-negative dialogue condition ($\bar{x}=57.9$) differ from those in the positive dialogue condition ($\bar{x}=69.0$) by 11 scale points while subjects in the deliberation-negative dialogue condition ($\bar{x}=51.3$) differ from those in the deliberation-positive dialogue condition ($\bar{x}=74.4$) by 23 scale points. To further understand this interaction, an independent sample t-test is performed between the combinations of decision mode (deliberation and intuition) and message content (positive and negative).
There is a significant difference ($t=-2.6$, $p<.05$) between intuition-positive dialogue ($n=45$, $\bar{x}=69.0$, $sd=18.45$) and intuition-negative dialogue ($n=42$, $\bar{x}=57.9$, $sd=21.49$) on seller emotion facial display. In addition, there is also a significant difference ($t=-4.84$, $p<.000$) between deliberation-positive dialogue ($n=42$, $\bar{x}=74.6$, $sd=19.16$) and deliberation-negative dialogue ($n=44$, $\bar{x}=51.7$, $sd=24.32$) on seller emotion facial display. A closer examination of the interaction reveals that there is no significant relationship between intuition-positive dialogue and deliberation-positive dialogue ($t=1.394$, $p=0.167$) on seller emotion facial display. Also, there is no difference between intuition-negative dialogue and deliberation-negative dialogue ($t=-1.241$, $p=0.218$) on seller emotion facial display as there is for the buyer emotion facial display (see Figure 4.12). From Figure 4.13, intuition and deliberation both react in a similar manner to the message content condition as it pertains to the rating of the seller's emotional displays. To truly understand how the positive/negative dialogue distinction is affecting the
subject's ratings of the seller's emotion facial displays, further examination of the effects of the dialogue within intuition and deliberation where the subjects receive the same emotional perception condition is warranted.

A comparison between the deliberation, negative emotion, negative dialogue condition and the deliberation, negative emotion, positive dialogue condition is a significant (t= -4.170, p=0.000). This shows that subjects in the deliberation, negative emotion, positive dialogue condition (n=20, \( \bar{x}=70.7 \), sd=15.71) rate seller's emotional displays significantly higher than subjects in the deliberation, negative emotion, negative dialogue condition (n=21, \( \bar{x}=42.2 \), sd=15.71). Subjects in the deliberation, positive emotion, positive dialogue condition and the deliberation, positive emotion, negative dialogue condition are a significantly different (t= 2.950, p=0.005). This shows that subjects in the deliberation, positive emotion, positive dialogue condition (n=22, \( \bar{x}=78.2 \), sd=21.57) rate the seller's emotional displays significantly higher than subjects in the deliberation, positive emotion, negative dialogue condition (n=23, \( \bar{x}=60.3 \), sd=18.95).

A comparison between the intuition, negative emotion, negative dialogue condition and the intuition, negative emotion, positive dialogue condition produces a significant difference (t= 2.464, p=0.018). This shows that subjects in the intuition, negative emotion, positive dialogue condition (n=25, \( \bar{x}=69.0 \), sd=18.077) rate seller's emotional displays significantly higher than subjects in the intuition, negative emotion, negative dialogue condition (n=21, \( \bar{x}=54.1 \), sd=22.83). However, there is no significant (t= 1.212, p=0.233) difference between subjects in the intuition, positive emotion, positive dialogue condition (n=20, \( \bar{x}=69.1 \), sd=19.38) and the intuition, positive emotion, negative dialogue condition (n=21, \( \bar{x}=61.6 \), sd=19.86).
Confidence Rating

To determine how confident the subjects are in the answers they provide to the dependent variables (except attitude toward Diamondall) used in the MANOVA analysis (Table 4.11), an independent sample t-test on subject's self-reported confidence in their answer ratings on the buyers purchase probability, the tone of the sales dialogue, a grade of the salespersons performance, and the perceived emotion being displayed by the buyer and seller at the end of the video by decision mode condition was conducted. Over all, the results show that subjects in the deliberation condition are significantly more confident in their answers. The results are displayed in Table 4.15.

Table 4.15

MANOVA Results for Confidence Ratings

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>T-Value</th>
<th>P-Value</th>
<th>Intuition Mean (SD)</th>
<th>Deliberation Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Probability</td>
<td>-2.48</td>
<td>0.014</td>
<td>69.9 (21.8)</td>
<td>77.65 (19.2)</td>
</tr>
<tr>
<td>Tone of Sales Dialogue</td>
<td>-2.36</td>
<td>0.02</td>
<td>74.74 (17.3)</td>
<td>80.97 (17.4)</td>
</tr>
<tr>
<td>Grade of Salespersons Performance</td>
<td>-2.54</td>
<td>0.012</td>
<td>75.01 (16.7)</td>
<td>81.45 (16.7)</td>
</tr>
<tr>
<td>Buyer Emotion Facial Display</td>
<td>-3.09</td>
<td>0.002</td>
<td>76.12 (17.9)</td>
<td>83.90 (17.9)</td>
</tr>
<tr>
<td>Seller Emotion Facial Display</td>
<td>-2.71</td>
<td>0.007</td>
<td>75.63 (16.4)</td>
<td>82.45 (16.7)</td>
</tr>
</tbody>
</table>

*Standard deviation is in parentheses with mean

High/Low Analysis of Intuition and Deliberation

To test whether an individual's preference for using deliberation or intuition is a predictor of their ability, high and low groups were created. The high/low intuition groups were created by removing 43 respondents (roughly 25%) who were in the middle range of respondents as recommended (Hair et al. 2010). The low-intuition group consist of 63 subjects whose faith in intuition score ranged from 2.4 - 5.0 and had a mean of 4.57
and standard deviation of .54. The high-intuition group has 67 subjects whose means are between 5.8 – 7.0 with a mean 6.2 and a standard deviation .37. To determine if individuals who have high faith in intuition scores have better intuitive ability, a MANOVA is performed on buyer’s purchase probability, the subjects attitude toward Diamondall, the tone of the sales dialogue, a grade of the salesperson’s performance, the perceived emotion being displayed by the buyer and seller at the end of the video, and the sum of correct answers for the DEL and INT question sets, for the high/low intuitive groups and decision mode. In addition to those dependent variables, the composite averages for creative selling, behavior job performance, and outcome job performance (see Table 4.6 for items) were included to determine if there are any differences.

A MANOVA is used to examine the effectiveness of high/low intuition on the appropriate decision mode condition. As such, subjects in the intuition decision mode condition would have to rely on their intuition when answering questions regarding the sales interaction and DEL questions. Thus, the interaction between high/low intuition and decision mode condition is needed to determine the effectiveness of their preference for relying on intuition. The results showed that there are two significant models: number of correct DEL questions $F_{(df=3, 130, R^2=12.6\%)}$ of 6.06 ($p<0.01$) and number of correct INT questions $F_{(df=3, 130, R^2=23.7\%)}$ of 13.1 ($p<0.01$). There is one significant main effect, the number of correct DEL questions with an F-value of 3.64 ($p=0.056$). However, the interaction between number of correct DEL questions and decision mode is not significant F value of 0.55 ($p=0.462$). Thus, the significant main effect is due to the experimental condition the subject was assigned and not their preference for intuition. Also, the results show that the models for creative selling $F_{(df=3, 130, R^2=7.9\%)}$ of 4.68 ($p<$
behavior job performance $F_{(df=3, 130, R^2=12.5\%) \text{ of } 7.2 \ (p< 0.01)}$, and outcome job performance $F_{(df=3, 130, R^2=15.5\%) \text{ of } 7.1 \ (p< 0.01)}$ are all significant. The main effect for creative selling performance is significant with an F value of 13.86 (p< 0.01). Subjects in the low intuition group rated their creative selling performance ($\bar{x}=3.6$) lower than those in the high intuition group ($\bar{x}=4.1$). The main effect for behavior job performance is significant with an F-value of 18.8 (p< 0.01). Here, subjects in the low intuition group rate their behavior job performance ($\bar{x}=6.0$) lower than those in the high intuition group ($\bar{x}=6.5$). The main effect for outcome job performance is significant with an F-value of 20.0 (p< 0.01). Subjects in the low intuition group rate their outcome job performance ($\bar{x}=5.4$) lower than those in the high intuition group ($\bar{x}=6.0$). These results demonstrate the salespeople with higher faith in intuition tend perceive themselves as more creative and have behavioral and outcome job performance.

The same procedures were used to create and test high and low preference for deliberation. The high/low deliberation groups were created by removing 28 respondents (roughly 16%) who were in the middle of the range of respondents as recommended (Hair et al. 2010). The low deliberation group consists of 70 subjects with a mean deliberation scores ranging from 1.5 -5.0 and had a mean of 4.2 and standard deviation of .84. The high condition had 75 subjects who ranged between 5.75 – 7.0 with a mean 6.3 and a standard deviation .49. The results again show that there are two significant models 1) number of correct DEL questions $F_{(df=3, 141, R^2=10.7\%) \text{ of } 5.6 \ (p< 0.01)}$ and 2) the number of correct INT questions $F_{(df=3, 141, R^2=25.1\%) \text{ of } 15.7 \ (p< 0.01)}$. However, there is no significant main effects or interactions that pertained to the high/low deliberation groups.
Thus, the significances of the models are for the decision mode condition and not the high/low deliberation groups.

The results also show that the models for creative selling $F_{(df=3, 141, R^2=11.3\%)}$ of 5.99 ($p<0.01$), behavior job performance $F_{(df=3, 141, R^2=26.8\%)}$ of 17.25 ($p<0.01$), and outcome job performance $F_{(df=3, 141, R^2=18.8\%)}$ of 10.86 ($p<0.01$) are all significant. The main effect for creative selling performance is significant with an F-value of 9.4 ($p<0.01$). Subjects in the low deliberation group rated their creative selling performance ($\bar{x}=3.7$) lower than subjects in the high deliberation group ($\bar{x}=4.2$). The main effect for behavior job performance is significant with an F-value of 37.15 ($p<0.01$). Here, subjects in the low deliberation group rated their behavior job performance ($\bar{x}=6.0$) lower than those in the high deliberation group ($\bar{x}=6.6$). The main effect for outcome job performance is significant with an F-value of 26.82 ($p<0.01$). Subjects in the low deliberation group rated their outcome job performance ($\bar{x}=5.4$) lower than those in the high deliberation group ($\bar{x}=6.1$). These results demonstrate the salespeople with higher deliberation tend to perceive themselves as more creative sellers and have higher behavior and outcome job performance.

**Post-Hoc Examination of Study 1**

This dissertation took a competing models approach in Study 1 to examine what role, if any, intuition plays in emotional intelligence. In addition, it is hypothesized that both deliberation and intuition would have a positive effect on the creative selling and that these creative behaviors would have a positive effect on both behavior and outcome job performance. Results from Study 1 reveal that deliberation and intuition both have a positive effect on creative selling and behavior job performance. However, creative
selling did not have a significant effect on either behavior or outcome job performance. This finding is in contrast with past research that has demonstrated a positive relationship between creative selling and job performance (Wang & Netemeyer, 2004, Lassk & Shepherd, 2013, Agnihotri et al., 2013). Therefore, a third model is introduced that does not hypothesize the relationships from intuition and deliberation to both job performances (shown in Figure 4.14). It is believed that the effects of creative selling are being masked by these relationships. Since creative selling is an actual selling behavior (performance), it is reasonable to believe that the two thought processes, deliberation and intuition, are the driving forces behind the creative selling behaviors and that the relationship from deliberation and intuition to both job performances should not be hypothesized. Thus, it is believed that deliberation and intuition will have a positive effect on creative selling and creative selling will have a positive effect on both behavior and outcome job performance.

The results of post-hoc structural model indicated adequate fit indices $\chi^2 = 395.8$, df = 289, $p < .000$; with a Comparative Fit Index (CFI) = 0.944 and a Root Mean Square Error of Approximation (RMSEA) = 0.044 CI90% = 0.032 to 0.054. A chi square test between Model 1 and the Post-Hoc Model reveals no significant difference in fit ($p=0.175$). The model’s hypothesized relationships are shown in Figure 4.14 where all non-significant relations are dashed lines and Table 4.16 shows the standard estimates, t-values, and p-values. The results for the post-hoc analysis will be discussed in Chapter 5.
### Table 4.16

*Post-Hoc Hypotheses and Standardized Paths*

<table>
<thead>
<tr>
<th>Hypothesized Relationships</th>
<th>Standardized Estimate</th>
<th>T Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion Perception $\rightarrow$ Emotion Understanding</td>
<td>0.002</td>
<td>0.023</td>
<td>0.981</td>
</tr>
<tr>
<td>Emotion Understanding $\rightarrow$ Emotion Regulation</td>
<td>0.324</td>
<td>4.775</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation $\rightarrow$ Deliberation</td>
<td>0.574</td>
<td>6.490</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation $\rightarrow$ Creative Selling</td>
<td>-0.185</td>
<td>-1.972</td>
<td>0.049</td>
</tr>
<tr>
<td>Emotion Regulation $\rightarrow$ Behavioral Performance</td>
<td>0.252</td>
<td>3.411</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion Regulation $\rightarrow$ Outcome Performance</td>
<td>-0.137</td>
<td>-2.529</td>
<td>0.011</td>
</tr>
<tr>
<td>Deliberation $\rightarrow$ Creative Selling</td>
<td>0.453</td>
<td>3.864</td>
<td>0.001</td>
</tr>
<tr>
<td>Intuition $\rightarrow$ Deliberation</td>
<td>0.034</td>
<td>0.439</td>
<td>0.660</td>
</tr>
<tr>
<td>Intuition $\rightarrow$ Creative Selling</td>
<td>0.321</td>
<td>3.810</td>
<td>0.001</td>
</tr>
<tr>
<td>Creative Selling $\rightarrow$ Behavioral Performance</td>
<td>0.247</td>
<td>3.111</td>
<td>0.002</td>
</tr>
<tr>
<td>Creative Selling $\rightarrow$ Outcome Performance</td>
<td>0.123</td>
<td>2.136</td>
<td>0.033</td>
</tr>
<tr>
<td>Behavioral Performance $\rightarrow$ Outcome Performance</td>
<td>0.895</td>
<td>10.784</td>
<td>0.001</td>
</tr>
</tbody>
</table>

*Note: All paths that are significant, at alpha of 0.05 level are in bold*
CHAPTER 5

DISCUSSION OF FINDING, LIMITATIONS, AND FUTURE RESEARCH

Introduction

This dissertation takes a multifaceted approach to examining which decision making process (intuition and deliberation) is most effective for salespeople and what role emotional intelligence plays in this process. In addition, it addresses how these processes affect a salesperson’s creativity and job performance within the context of a buyer and seller interaction. To accomplish this, a two study approach (one descriptive and the other experimental) was undertaken to examine two competing models and four research questions:

1) How does emotional intelligence fit into the decision making process and is there a distinction between a salesperson’s intuition and emotional perception?
2) What is the relationship between intuition and deliberation?
3) What are the antecedents to effective creative selling?
4) What are the predictors of job performance in the context of an intuitive decision-making model?

This section will first discuss the results from Study 1’s competing models. Second, there is a discussion of the research questions which incorporate the results of
both Study 1 and Study 2. Following this is a discussion of the study’s contributions and managerial implications. The last section covers the research limitations and future research.

**Study 1 and the Competing Models**

*Intuition and Emotional Intelligence*

In this study, two competing models examine the distinction between emotional intelligence and intuition on the basis of cognitive effort and conscious awareness. According to Joseph and Newman’s (2010) cascading model, EI is an intelligence that requires both cognitive ability and effort. The cascading model specifically prohibits the inclusion of all forms of automatic processes or any relationship that represents an automatic process, due to the requirement that EI is an ability that involves attentive cognitive effort. For example, the relationship between emotional perception and emotional regulation is not included in the cascading model because it represents the automatic regulation of emotion without understanding. Therefore, Model 1 follows Joseph and Newman’s causal structure (see Figure 2.2) and does not hypothesize any relationships between intuition and the three dimensions of emotional intelligence included in the cascading model.

Model 2 challenges the exclusion of all automatic processes from the cascading model by examining whether there is discriminant validity between emotional perception and intuition. Based on Joseph and Newman’s cascading theory of emotional intelligence, EI follows a causal order from perception to understanding to regulation of emotion. This characterizes emotional perception as a trigger to emotional understanding by signaling that there is some change in emotion. Remember that the intuitive process
results in a feeling of knowing (or gut feeling) that acts as a trigger or signal to evoke some conscious cognitive thought process (i.e. emotional intelligence, deliberation, or creative selling). Therefore, emotional perception and intuition maybe acting as triggers or signals to the second stage of the cascading model, emotional understanding. Thus, Model 2 hypothesizes a complete lack of discriminant validity between emotional perception and intuition and that both (or one as the case may be) are antecedents of emotional understanding. The structural model tests these competing theoretical views using covariances taken from actual salesperson responses. The insignificant chi-square difference result between both models (Model 1 and Model 2) and the insignificant correlation (0.033) between intuition and emotional perception suggests that they are two separate and distinct constructs. In addition, both emotional perception and intuition have insignificant relationships with emotional understanding. Thus, there is discriminant validity between emotional perception and intuition and neither are significant antecedents to emotional understanding.

These results show that, intuition and the emotional perception dimension of EI, which may both be theoretically associated with feelings, are not significantly related. One reason for this insignificant finding may be that emotional perception is considered an ability (Brackett et al., 2006; Kidwill et al. 2011) and abilities require conscious attention and effort (Mayer and Salovey, 1997). While intuition also results in a feeling of knowing, this feeling is not considered to be an ability because the production of intuitions requires no conscious cognitive effort and are the result of a nonconscious automatic process (Chapter 2 for discussion). In Chapter 2, the question of "what role, if any, does intuition play in EI?" is answered. Intuition seems to operate differently and
shows no significant relationships with emotional perception and emotional understanding. Salespeople’s faith in their intuition seems to be a separately identifiable construct from emotional intelligence dimensions. The correlation results (Table 4.2) suggest significant positive correlations between intuition and creative selling, behavioral and outcome job performance. In contrast, emotional regulation is positively correlated with emotional understanding and deliberation. Thus, intuition and emotional intelligence seem to be affecting individuals in separate ways – each with its own marginal impact.

In addition, emotional perception is not a significant antecedent to emotional understanding. This finding is in conflict with the theory of emotional intelligence according to Joseph and Newman’s cascading model. Joseph and Newman (2010) postulate that the cascading model begins with emotional perception that causally precedes emotional understanding that precedes emotional regulation. Also, individuals who are better at emotional perception are also better at emotional understanding and emotional regulation (Joseph & Newman 2010). Chapter 2 proposes the question of whether or not emotional perception should be considered a cognitive ability and be included in the cascading model of EI? According to Joseph and Newman (2010), EI is a cognitive ability that requires cognitive resources in order to interpret situations and compare it to one’s emotional knowledge structures. The results of Study 1 show that emotional perception is not significantly related to an individual’s faith in intuition and, considering the Kidwell et al. (2011) EI measure is used, it is reasonable to state that emotional perception is a cognitive ability. This is because the Kidwell et al. (2011) measure requires that respondents gauge how much of particular emotion is being displayed. This requires subjects to specifically focus on a picture and mentally compare
it to their emotional knowledge structure. This mental comparison requires cognitive effort and thus differs from relying on one’s intuition.

However, due to emotional perception’s insignificant relationship with emotional understanding, there is evidence for the removal of emotional perception from the cascading model of EI. These findings give some credence to a new conceptual model (Figure 2.4) where emotional understanding and emotional regulation are the cognitive aspects of emotional intelligence. However, the new conceptual model (Figure 2.4) is not fully supported due to intuition and emotional perception not being significant antecedents to emotional understanding. Thus, Joseph and Newman’s cascading model and the alternative conceptual model (Figure 2.4) fail to provide an explanation for variance in emotional understanding.

Since there is no significant difference between the two models and there is discriminant validity between emotional perception and intuition, the remainder of the Study 1 discussion is based on the findings from Model 1 (Figure 4.1).

Study 1’s findings support the proposed notion that emotional regulation is positively related to deliberation. That is, both of these constructs require conscious cognitive effort to either regulate emotions or process relevant information. Thus, the ability of a salesperson to regulate emotions is a factor in the deliberative process. The hypothesized negative relationship between intuition and deliberation was found to be insignificant which provides evidence that intuition and deliberation are separate constructs. This finding, when taken in conjunction with the insignificant relationship between EI and intuition, indicates that deliberation and EI operate differently than intuition. While intuition and deliberation are measured using respondents perceived use
of either decision making process, it can be *speculated* (based on the theory of emotional intelligence and dual processing theory) that EI and deliberation are occurring in the realm of conscious awareness. That is, both EI and deliberation require individuals to put forth cognitive effort and be cognitively engaged in the task. Since faith in intuition is shown to be a separate construct from both deliberation and EI, and based on the dual processing theory, it can be *speculated* that the intuiting process which creates intuitions operates outside one's conscious awareness. That is, intuiting is the nonconscious automatic process that produces intuitions, which are the gut feelings that just occur within an individual's consciousness. Thus, deliberation and EI are distinct from intuition and operate at different levels of conscious awareness.

Creative selling is defined as the amount of new ideas generated and novel behaviors exhibited by a salesperson in performing his or her job activities (Wang & Netemeyer, 2004). This, in part, requires cognitive effort to analyze the situation and generate novel ideas and behaviors that are relevant to a particular selling situation. These behaviors consist of coming up with creative presentations as well as generating new ideas relevant for solving problems. The results for Study 1 shows that both deliberation and intuition have significant positive effects on creative selling while emotional regulation does not. However, the effects of emotional regulation may be working through the deliberative process to influence creative selling. For salespeople to be effective at generating and implementing creative selling ideas, they need the ability to think through and understand problems as well as trust their intuition. It can be speculated that the deliberative process is used to understand a problem or situation and
intuition provides the creative spark. This supports the theory of dual processing in that both systems are interacting during the creative selling process.

**Effects on Job Performance**

Ultimately, salespeople are judged by their job performance. Following the recommendation of Miao and Evans (2007), job performance consists of two dimensions: a) salesperson behavioral performance and b) salesperson outcome performance. Behavioral performance is activities and strategies (e.g. maintaining good customer relationships) that salespeople engage in during the selling process and outcome performance is the quantitative results of a salesperson’s efforts (e.g. high level of dollar sales) (Baldauf et al., 2005). Previous research, based on the sales control literature, reveals a causal link from behavioral performance to outcome performance (e.g., Cravens et al. 1993; Jaworski & Kohli 1991, Miao & Evans 2007). Study 1 replicates this finding with evidence of a significant positive causal relationship from behavioral job performance to outcome job performance. This finding shows that the activities and strategies (e.g. being dependable and possessing complete product and industry knowledge) which salespeople employ during the selling process and when directly interacting with the customer, have a significant positive effect on their quantitative sales outcomes. Study 1 also hypothesized that emotional regulation, deliberation, intuition, and creative selling would have a positive relationship with both behavior and outcome job performance. Results from Study 1 shows that deliberation and intuition significantly affect behavioral job performance but not outcome performance directly. Based on these results, salespeople rely on both their deliberation and intuition when selling. This again demonstrates that the two systems can function uniquely and potentially present a
cumulative result. One possible reason why the model did not yield significant direct effects of intuition and deliberation on outcome performance is that behavioral job performance may completely mediate any such effect.

Emotional regulation was hypothesized to have a positive effect on both behavioral and outcome performance. These results are quite interesting in that emotional regulation is not significantly affecting behavior performance. However, emotional regulation significantly and negatively affects outcome job performance. This finding is in contrast with previous research that shows emotional regulation as having a positive effect on job performance (Joseph & Newman 2010; Kidwell et al., 2011). Kidwell et al., (2011) found that EI has a positive influence on customer orientation and manifest influence that, in turn, has a positive influence on job performance. However, the results from this study do not support a relationship between emotional regulation and behavior performance (which includes maintaining good customer relations) and finds that emotional regulation has a negative effect on salesperson outcome. One explanation for the non-significant relationship between emotional regulation and behavioral job performance is that emotional regulation could be completely mediated by deliberation; and that behavior performance is completely mediating the relationship between deliberation and outcome performance. While the finding that emotional regulation has a negative effect on outcome performance is contradictory to past research, it may be that having emotion within the sales interaction could help create higher sales volume, but it may be at the cost of customer relations.
Creative Selling

As mentioned previously, deliberation and intuition are significant antecedences to creative selling, while emotional regulation is not. Model 1 hypothesized that creative selling will have a positive effect on both behavioral and outcome performance. The results from Model 1 indicate that creative selling is insignificantly related to behavioral and outcome job performance. This is in contrast with previous research that has shown creative selling to have a positive effect on salesperson job performance (Wang & Netemeyer, 2004, Agnihotri et al., 2013). One potential explanation for this insignificant finding is that deliberation and intuition are mediating the relationships from creative selling to both job performances. Deliberation and intuition both hypothesized relationships between creative selling and both job performances. Thus, the effects of creative selling could be masked by these relationships. To determine if deliberation and intuition are masking the creative selling effects, a post-hoc analysis was performed. The post-hoc analysis reveals that deliberation and intuition are significant positive antecedences to creative selling and that creative selling relates positively to both behavioral and outcome job performance. In addition, the post-hoc analysis reveals that emotional regulation is significantly negatively related to creative selling (the post-hoc analysis will be discussed in more detail in Research Questions 3 and 4). The post-hoc analysis reveals that deliberation and intuition are masking the effects of creative selling, in Model 1. In addition, deliberation and intuition are the driving thought processes of creative selling and creative selling is positively affecting both behavioral and outcome performances.
Research Question Summary

Research Question 1: How Does Emotional Intelligence Fit into the Decision Making Process and Is There a Distinction Between a Salesperson's Intuition and Emotional Perception?

Research Question 1 has two main parts.

- First, how and what decision making system (intuition and/or deliberation) operates with emotional intelligence.
- Second, does intuition differ from emotional perception, and if not, does emotional perception and intuition precede emotional understanding?

Study 1 results suggest discriminant validity between an individual's preference for relying on intuition and emotional perception ability. In addition, Study 1 provides evidence that a person's emotional regulation is at least partially mediated by deliberation. This is based on the post-hoc findings that reveal that emotional regulation displayed a significant negative relationship with creative selling and its significant positive relationship with behavioral job performance, which is not present in Model 1. Study 1 suggests that emotional regulation (intelligence) and deliberation operate differently than intuition. This difference is likely attributable to the amount of cognitive awareness and effort used when information processing. Study 2 was designed to experimentally investigate the interplay of decision-making and emotional perception of others.

The results for Study 2 reveal that the ability to perceive emotions in others is dependent upon what the subject is focusing on. This conclusion is based on GLM findings suggesting two interactions between decision mode and emotional perception on buyer (Figure 4.10) and seller facial displays (no figure because not significant). The
interaction between decision mode and emotional perception on buyer’s emotion reveals that subjects in the deliberation condition are able to distinguish between the buyer’s positive and negative facial displays while there is no significant difference between subjects in the intuition condition. This provides evidence that the ability to perceive emotions in others requires conscious attention, awareness, and effort that is associated with deliberation. What is very interesting, and why emotional perception is dependent upon not only deliberation but also focused attention, is the non-significant interaction between decision mode and emotional perception with respect to the seller’s emotional facial display. As the video stimuli progresses, a blue box that indicates who is speaking rotates back and forth between the buyer and seller and ends on the buyer. Perhaps, that the speakers frame (blue box) rotation caused the subjects in the deliberation condition to focus on the blue box and the person speaking. Since the video ended with the blue box on the buyer, subjects in the deliberation condition were focused on the buyer at the end of the video. This may have created attention blindness for the subjects in the deliberation condition with respect to the seller’s emotional display. This would affect the method (explicit or implicit) and amount of information these subjects retained about the seller’s emotion at the end of the video. Therefore, when subjects were asked about the seller’s emotion, no significant difference between the subjects in the deliberation and intuition conditions is found. Thus, the evidence is consistent with the notion that the ability to perceive emotions is not only dependent upon using the deliberative system, but emotional perception also requires focused attention. The ability to perceive emotions requires that individuals visually focus their attention on the other party within the
encounter. This finding is consistent with Mayer and Salovey (1997) theory of emotional intelligence, which is based on social intelligence, and requires conscious attention and effort.

Mayer and Salovey’s (1997) theory of emotional intelligence consists of the ability to recognize and regulate emotions in people and non-physical entities like art and stories. In addition, Kidwell et al. (2011) advance the theory of emotional intelligence by introducing the notion of domain specificity. Therefore, Study 2 combines these notions by examining the effects of what is said (emotion in non-physical form) within a sales encounter (domain specificity) to examine the changes in people’s perceptions.

The decision mode/message content interaction reveals that the positive/negative dialogue distinction affects the way people perceive emotions in others. There is a significant interaction between decision mode and message content on the buyer and seller’s emotional facial displays. Subjects in the intuition and deliberation conditions rate the emotions being displayed by the seller and buyer significantly lower for the negative dialogue conditions than for the positive dialogue conditions. Also, the only significant difference within these interactions was between deliberation and intuition for the buyer’s emotion facial display in the negative dialogue condition (see Figure 4.12).

To examine how the positive/negative distinction was truly affecting ratings of buyer and seller emotions, comparisons within intuition and deliberation where subjects received the same buyer and seller emotional pictures, shows that how the sales encounter ends (buyers’ positively or negatively closing remarks) effects on the way people perceive other’s emotions. For example, subjects in the deliberation, negative emotion, and positive dialogue condition rated the emotions of the buyer and seller higher than subjects
in the deliberation, negative emotion, and negative dialogue condition. Thus, even though both conditions were exposed to the same buyer and seller emotional displays (pictures), subjects in the positive dialogue condition rate the emotions of the buyer and seller higher than subjects in the negative dialogue condition. This pattern of findings is across all deliberation and intuition conditions except for one insignificant difference in the intuition, positive emotion, positive dialogue and the intuition, positive emotion, negative dialogue conditions on the seller’s emotional display rating. However, the means were in the same direction as the other comparisons. Therefore, people’s perception of other’s emotion is not only dependent upon what emotion is being physically displayed but also the nature of what is being said. Thus, people’s emotional perception of others consists of some combination of the physical emotion being displayed and what is being said, among other potential effects not included here.

In summary, Research Question 1 reveals that intuition and emotional intelligence are two separate constructs and that emotional intelligence requires the deliberative process to function. For example, the post-hoc analysis reveals that emotional regulation is at least partially mediated by deliberation. Emotional regulation has a significant negative relationship with creative selling and a significant positive relationship with behavioral job performance that is not present in Model 1. In addition, these two studies reveal that the ability to perceive emotions in others requires visual focus and attention and that what is being said also affects these perceptions. These findings provide evidence for the theory of emotional intelligence. In that, EI is an ability that requires the deliberative process and that emotional intelligence not only incorporates the physical display of emotions but also other entities like what is being said.
Research Question 2: What is the Relationship Between Intuition and Deliberation?

Study 1 addresses this question by measuring respondent’s preference for relying on their deliberation and intuition when engaged in selling activates. The study reveals that deliberation and intuition are not significantly related and are negatively correlated. This provides quantitative evidence that deliberation and intuition are not two ends of a continuum but are two separate constructs. Both deliberation and intuition have positive effects on creative selling and a direct effect on behavioral job performance. Further evidence of the deliberation and intuition distinction was discussed in Research Question 1. Intuition is a separate entity from emotional intelligence and EI requires cognitive attention and effort, which are two qualities associated with the deliberative processing system. Thus, Study 1 reveals that deliberation and intuition are separate constructs and that both are integral in successful salespeople.

In addition to the findings of Study 1, the second study was designed to investigate the differences between intuition and deliberation. In the GLM, a two-way interaction between decision mode and emotional perception condition proved significant in predicting purchase probability, attitude toward Diamondall, tone of the sales dialogue, and salesperson’s performance grade (see Table 3.3 for full items). Here, when negative emotions were displayed, subjects rated the dependent variables (purchase probability, attitude toward Diamondall, tone of the sales dialogue, and salesperson’s performance grade) less positively than when positive emotions were displayed. This result suggests that nonverbal communication of emotions causes differences in salesperson attitudes and preferences. For example, the audio-recorded treatments describing Diamondall and the seller’s dialogue were consistent across all conditions. Yet, when negative emotions were
portrayed in the photos of the buyer and seller, subjects in the deliberation condition rated both attitude toward Diamondall and the seller’s performance lower than when emotions were positive. With no differences in attitude and performance in the intuition condition, the significant differences were found within the deliberation condition suggest that emotional perception may indeed require cognitive deliberation and directed attention. Thus, the ability to perceive emotions requires deliberation and not intuition.

Emotional perception is not the only experimental condition to have a significant effect across the various decision mode conditions. The message content valence condition’s significant main effects demonstrate that subjects are able to distinguish between the positive and negative conditions. In addition, the manipulation check shows that subjects in the intuition condition are not able to recall as much correct specific information about the sales encounter and are able to recall more correct information about the background distraction task than subjects in the deliberation condition (see Figure 4.9). This demonstrates that subjects in the intuition condition were not explicitly encoding as much information about the sales encounter as those in the deliberation condition.

An examination of the interaction between decision mode and message content reveals three significant interaction effects on purchase probability, buyer emotion facial display, and seller emotion facial display. The decision mode/message content interaction on purchase probability shows that subjects in both intuition and deliberation conditions rate purchase probability lower for the negative dialogue condition than subjects in the positive dialogue condition. Also, subjects in the intuition-negative dialogue condition rate the purchase probability significantly higher than subjects in the deliberation-
negative dialogue condition. However, there is no difference between intuition and deliberation in the positive dialogue condition (see Figure 4.11). Even though subjects in the intuition condition are not able to recall as many specific pieces of information (Figure 4.4) as those subjects in the deliberation condition, it seems that the subjects are still able to absorb information (implicitly) pertaining to the sales encounter. In addition, subjects in the deliberation condition have more confidence in their answers about the sales encounter than those in the intuition condition. However, when forced to provide an answer to the purchase probability question where they did not possess as much specific information as subjects in the deliberation condition, those in the intuition condition were roughly able to provide the same results. These findings show that a subject’s intuition was guiding his/her belief concerning purchase probability, which was based on less bits of specific information.

The interaction between decision mode and message content on buyer and seller emotional facial display was discussed in Research Question 1. The findings reveal that, for both the deliberation and intuition conditions, what is said had a significant effect on how the subjects perceive the buyers and sellers emotional displays. This held even across conditions that were shown the same (positive/negative emotions) sets of pictures. Thus, when only the distinction between two conditions was the positive/negative dialogue condition, subjects rate the emotions being displayed higher for the positive condition than the negative condition. There was one exception in the intuition positive emotion, positive dialogue and the intuition, positive emotion, negative dialogue conditions on the seller’s emotional display rating was found to be insignificant. However, the means were in the same direction as the other comparisons. These findings
show that what is being said has just as much impact on how people perceive emotions in others as do the physical emotional displays.

The results from the two studies provide some interesting insights into the relationship between deliberation and intuition. First, the ability to perceive emotions in others and regulate emotions requires a person's deliberative thought process. Therefore, emotional intelligence appears to be a deliberative act, confirming Mayer and Salovey's (1997) model which proposes conscious attention as a requirement of emotional intelligence. While many researchers have speculated that emotions, emotional intelligence, and intuition are interrelated (Agor, 1989; Barnard, 1938; Burk & Miller 1999; Chen & Chaiken, 1999; Hayashi, 2001; Shapiro & Spence, 1997; Dane & Pratt, 2007; Gigerenzer, 2008; Sadler-Smith, 2008), the results from this dissertation find that emotions, emotional intelligence, and intuition are separate concepts differentiated by a person's participating in the conscious and cognitively effortful task of the deliberation thought process. Second, within the deliberative thought process, emotional displays affect people's perceptions and attitudes. As negative emotional displays negatively affect perceptions of the product, purchase probability, and the tone of the sales encounter. This demonstrates the power that one's emotions have over other people's attitudes and preferences with respect to displays of negative emotions. Thus, it is critical for salespeople to maintain positive emotional displays when selling in order to reduce the negative spill over onto other entities like the company and products.

Third, in the intuition condition, subjects display difficulty in detecting the actual valence of buyer and seller facial displays. The lack of divergence within the intuition condition ability to accurately assess the emotional displays suggests that these subjects
were visually over-loaded and/or distracted. In addition, intuition condition subjects are not able to recall as many specific pieces of information from the audio recording as those in the deliberative condition. Even though subjects in the intuition conditions were visually distracted and not encoding specific information from the audio recording, they were able to provide roughly the same answers to the potential outcome of the sales encounter as subjects in the deliberation condition. However, the subjects in the intuition conditions are less confident in answers. Thus, while not possessing the same amount and type of information, subjects in both conditions were able to determine that positive message content is more probable to lead to a future purchase than the negative message conditions. However, due to the lack of specific information, subjects in the intuition condition may be less confident about the nature of the outcome.

Finally, there is evidence that the two thought processes, deliberation and intuition, work together when engaged in selling. In this study, Model 1 shows deliberation and intuition both affect a salesperson’s creative selling and behavioral job performance. Study 2 assessed what thought process subjects reported employing when answering the DEL and INT questions sets (recall DEL questions focused on buyer seller exchange information and INT questions focused on background information). The statistical analysis and the pattern of answers demonstrate that subjects in the deliberation condition relied on more factual information than the intuition subjects. However, Table 4.10 presents results suggesting subjects often select the answer that they feel is correct. This is not surprising because many of DEL questions have implied answers (i.e. purchase probability and emotional facial displays) and not concrete quantifiable answers. However, the notion that subjects select answers they feel are correct
demonstrates that a person’s intuition and deliberation processes can operate simultaneously and influence one another. In addition, because reading and selecting answers is a very deliberative process, it is reasonable to assume that deliberation is acting as the executive function. Subjects who are able to recall specific information pertaining to a question use only a deliberation process but if they do not have the specific information and/or the question has no specific answer (i.e. purchase probability), subjects deliberately thought about the question and selected the answer they feel is correct. Thus, it seems that deliberation and intuition can operate simultaneously and that intuitions can influence deliberation.

In conclusion, Research Question 2 looks at the relationship between deliberation and intuition. Results suggest that emotional perception and regulation (intelligence) are deliberative processes that require conscious effort and attention. Also, subjects in the intuition condition were distracted and not able to recall as much specific information pertaining to the sales encounter. However, they were able to holistically evaluate the sales encounter similar to subjects in the deliberation condition. Finally, results provide evidence that the two thought processes can operate simultaneously and that intuition influences the deliberative thought process which is acting as the executive function.

Research Question 3: What are the Antecedents to Effective Creative Selling?

Research Question 3 addresses Wang and Netemeyer (2004) call for research on the antecedents and consequences of creative selling. Creative selling behavior is defined as “salesperson creative performance as the amount of new ideas generated and novel behaviors exhibited by the salesperson in performing his or her job activities” (Wang &
For salespeople to use creative selling, they must have the job autonomy to implement new and creative methods. Study 1 takes this into account in its sample selection by removing any respondent who did not have the freedom to implement creative selling. Model 1 of Study 1, examines how the decision-making processes (intuition and deliberation), in conjunction with emotional regulation, affect the creative selling, in turn, leads to better job performance.

The results of Model 1 show that both deliberation and intuition are positive antecedents to creative selling while emotional regulation is not significant. This non-significant relationship is in contrast to previous research that showed a significant positive relationship between emotional intelligence and creative selling (Laask & Shepherd, 2013). However, emotional regulation did have a significant relationship with deliberation. Therefore, emotional regulation indirectly affects creative selling through the deliberative process. This finding is consistent with deliberation as a mediator of the emotional regulation-creativity relationship. Also, as discussed in Research Question 2, intuition and deliberation are not significantly related to each other which indicates that these are two separate processes. The deliberative thought process allows salespeople to analyze and understand the selling situation. This understanding will enable them to better employ novel and relevant creative selling ideas. Intuitive feelings have been characterized as fantasy, creativity, and imagination (Sloman, 2002) which may add in the generation of creative selling ideas. The intuitive process may provide the creative spark for a new idea or give reassurance that the creative idea is the correct solution for the situation. Thus, both the intuitive and deliberative thought processes are interacting within the selling situation to facilitate creative selling behaviors.
Model 1 (of Study 1) suggest that deliberation and intuition were not only positively affecting creative selling but also have a direct effect on behavior job performance and an indirect effect on outcome job performance. However, creative selling behavior is not significantly related to either behavior or outcome job performance. This finding is contrast with previous findings that creative selling has a positive effect on job performance (Wang & Netemeyer, 2004, Lassk & Shepherd, 2013, Agnihotri et al., 2013). After examining the results of Model 1, the relationships from deliberation and intuition thought processes might mask the effects of creative selling. Therefore, a post-hoc analysis was performed (Figure 4.14), where the hypothesized relationships between deliberation and intuition leading to both behavior and outcome job performance is removed. This post-hoc analysis was performed to determine if creative selling has a positive relationship with job performance. Deliberation and intuition are processes that can influence different kinds of selling techniques (i.e. adaptive selling or creative selling) which, in turn, can improve salespersons performance. Therefore, deliberation and intuition are believed to be the driving forces behind the generation and implementation of the creative selling technique.

The post-hoc analysis reveals that deliberation and intuition positively affect creative selling while emotional regulation, which is not significant in Model 1, negatively affects creative selling. Therefore, perhaps salespeople should not regulate emotions when practicing creative selling. In contrast to Model 1, the post-hoc analysis reveals creative selling’s true effect on job performance finding a positive effect on both behavior and outcome job performance. This demonstrates that creative selling not only helps salespeople with customer relationships (behavioral job performance), but also can
increase their quantitative results (outcome job performance). In addition, Study 2 reveals that salespeople who are higher in intuition and/or deliberation are more likely to engage in creative selling behaviors than salespeople who are low in intuition and/or deliberation. Thus, creative selling results from the integration of deliberation and intuition that provides customers with creative solutions leading to better customer relationships and sales productivity.

Research Question 4: What are the Predictors of Job Performance in the Context of an Intuitive Decision-Making Model?

In today’s competitive business environment, the role of salespeople is that of boundary spanners who bridge the gap between the selling company and customers. Salespeople are often required to maintain good customer relationships while meeting or exceeding their sales goals. When assessing a salesperson’s job performance, it is essential to capture both the customer relationship (behavior) and financial (outcome) aspects of the job. A salesperson’s behavioral performance refers to the activities and strategies salespeople carry out in the selling process (i.e. maintaining good customer relationships, providing accurate information, and possessing relevant market and selling knowledge). In contrast, outcome performance represents the quantitative results (i.e. contributing to firm’s market share, exceeding sales targets, generating high dollar sales, and selling to major accounts) (Behmann & Perreault, 1982; Baldauf et al., 2005; Miao & Evans, 2007). Therefore, Study 1 incorporated the two conceptualizations of job performance.

According to the sales control literature (Cravens et al. 1993; Jaworski & Kohli 1991) and past findings (Miao & Evans, 2007), there is a casual relationship from
behavioral to outcome job performance. In this present Study 1, this positive relationship is found in all models (including the post-hoc model). Model 1 (of Study 1) hypothesized positive relationships from deliberation, intuition, emotional regulation, and creative selling to both behavioral and outcome job performance. The results from Model 1 reveal that both deliberation and intuition have a positive direct effect on behavior performance and an indirect effect on outcome job performance. Since intuition and deliberation are shown to be significantly different with a negative correlation, this provides evidence that effective salespeople use both or some combination of rationality and gut feelings during a sales encounter.

The results concerning emotional regulation are the most surprising. No significant relationship between emotional regulation and behavioral job performance emerged and the relationship between emotional regulation and outcome performance is significant but negative. Perhaps the insignificant relationship between emotional regulation and behavioral performance in Model 1 is due to a mediating effect caused by deliberation. This is confirmed in the post-hoc analysis (Model 4.14), where emotional regulation demonstrates a positive effect on behavioral performance after the relationships from deliberation and intuition to both performances is removed. Thus, mediated or not, these findings suggest that a salesperson’s ability to regulate emotions will enable better implementation activities and strategies which promote positive behavioral performances.

Interestingly, emotional regulation has a negative relationship with outcome performance. Emotional regulation has a positive effect on behavioral performance; and behavioral performance has a positive effect on outcome performance. However,
emotional regulation negatively affects outcome performance. This is in contrast with past findings that show emotional regulation (Joseph & Newman, 2010) and emotional intelligence (Kidwell et al., 2011) have a positive effect on job performance. This finding reveals that the regulation of emotion may be hindering a salesperson’s ability to close sales. Therefore, the display or use of emotion when selling may help a salesperson to close deals but at the same time hurt their behavioral (customer oriented) performance. Thus, the way in which emotions are used during a sales encounter may be dependent upon the salesperson’s or company’s selling style (i.e. transactional or customer oriented).

As discussed in Research Question 3, Model 1 finds no significant relationships from creative selling to both job performances. However, the post-hoc analysis demonstrates that creative selling is positively related to behavior and outcome job performance. Study 2 does not specifically address this question. However, analysis of high/low deliberation and intuition groups (see Chapter 4 for grouping procedures) finds that subjects who were high in either intuition or deliberation are more likely to use creative selling and are higher in both behavior and outcome job performance.

The findings from the two studies highlight the importance that deliberation and intuition play in a salesperson’s job performance. Both deliberation and intuition have a positive direct effect on behavioral performance an indirect effect on outcome performance. In addition, deliberation and intuition seem to be the driving thought mechanism behind creative selling and the eventual positive effect on both job performances. However, the way in which emotional regulation affects a salesperson’s
job performance is a little more complicated. Emotional regulation seems to positively affect one aspect of job performance (behavioral) and negatively affect the other (outcome).

Contributions and Managerial Implications

Theoretical Contributions

Dual Processing Theory

By studying personal selling within the theory of dual processing of information, this dissertation integrates key aspects of decision-making, deliberation and intuition, into the marketing and sales literature. In accordance with the dual processing theory, deliberation and intuition are two separate entities with the ability to operate simultaneously and influence one another. Both intuition and deliberation have a direct positive effect on salesperson creativity and behavioral job performance and a positive indirect effect on outcome performance. The theoretical contribution comes from the integration of the intuitive system into decision processes and showing its positive effect on selling behavior and performance. Traditionally, the sales and marketing research literature has predominantly focused on concepts that require cognitive effort (i.e. adaptive selling, active listening) which are incorporated in the deliberation process. Previous findings from the sales literature have led to less than ideal results in their ability to predict salesperson's performance (Evans et al., 2012). Therefore, intuition may be the missing dimension in accurately predict salesperson performance. That is, the total effects of faith in intuition on outcome performance is 0.31, with almost all of that due to the indirect effect (0.29) faith in intuition has on behavioral performance to outcome performance. Deliberation has slightly less diagnosticity with a total effect of 0.21 on
behavioral outcome and indirect effect on outcome of 0.29. Thus, the ideal mix for effective salesperson performance may be a combination of brains and gut feelings.

**Emotional Intelligence**

This dissertation also examines the theory of emotional intelligence and more specifically the Joseph and Newman (2010) cascading model of emotional intelligence. According to Joseph and Newman (2010), the cascading model is a causal chain that starts with emotional perception, leading to emotional understanding and concluding with emotional regulation. However, this dissertation did not find support for the cascading model as emotional perception is not a significant antecedent of emotional understanding. However, there is support for the emotional understanding to emotional regulation relationship.

Therefore, I proposed a new conceptual model (shown in Figure 2.4) with emotional understanding and emotional regulation as the cognitive aspects of the cascading model. However, the new conceptual model is not fully supported because emotional perception and intuition were found to be two separate constructs and are not significant antecedents of emotional understanding. In addition, Study 2 shows that the ability to perceive an emotion requires cognitive effort and attention, which are two attributes associated with the deliberative system. Thus, there is no support for either Joseph and Newman's cascading model or the integration of intuition into emotional intelligence.

In addition, Joseph and Newman (2010) postulate that people who are better at perceiving emotions would be better at regulating them and regulation is the key to better job performance. However, Study 1 shows that emotional perception is not significantly correlated with two dimensions of emotional intelligence, understanding (0.002) and
regulation (0.063). This lack of correlation not only disproves the cascading model of EI but also questions the inclusion of emotional perception in higher order conceptualizations of EI. However, the findings from Study 2 make things even more convoluted. The ability to perceive emotions in others is found to require cognitive effort and focused attention within the deliberative system. This provides evidence to Mayer et al.'s (2008) claim that emotional intelligence should overlap with cognitive ability. Thus, Study 2 findings suggest that emotional perception should remain in the emotional intelligence construct.

Intuition and Emotions

Epstein (2010) points out that there is considerable disagreement among researchers as to the role emotions play in intuition and the need to resolve how emotion and intuition interact. This dissertation makes a theoretical contribution by examining the interplay of perceiving emotions in others and emotional intelligence within the dual processing theory. As such, both the ability to perceive emotions in others and one's ability to regulate emotions seem to be operating in the deliberative system and not in the intuitive system. This is because the ability to recognize emotions in others needs an individual's visually focused attention in order to accurately perceive emotions (Study 2). In addition, the relationship between emotional regulation and behavior job performance is mediated by deliberation (Study 1). While, these studies do not address the full scope of Epstein's (2010) call for research into the interaction of emotion and intuition, they do address the interaction between intuition and emotional intelligence which, in this research, is nonexistent. Thus, intuition and emotional intelligence are two separate constructs that affect individuals and their behaviors in different ways.
Creative Selling

This dissertation also addresses Evans at al. (2010) call for more research on creativity within sales and the antecedents and outcomes of creative selling behavior (Wang & Netemeyer, 2004). In the post-hoc evaluation (Figure 4.14), the creative selling process is affected by three antecedences: emotional regulation, deliberation, and intuition. Emotional regulation has a significant negative effect on creative selling. This reveals that the free flow of emotions should be encouraged in the formation and implementation of creative selling behaviors. In addition, deliberation and intuition both positively affect creative selling. Perhaps a deliberative process is used to analyze the problem or situation but that intuition may be the creative spark or provide a feeling of reassurance that an action is the correct way to proceed. These creative selling behaviors are shown to have a positive direct effect on both behavioral and outcome job performance. This demonstrates the influential power that creative selling has on satisfying customers and increasing sales and profits. Thus, creative selling seems to consist of some combination of emotions, deliberation, and intuition that, when combined, produce creative behaviors.

Research Methods Contributions

Method for Inducing Intuition

Study 1 contributes to the methodology literature by demonstrating the importance of domain specificity because items from Epstein et al.’s (1996) faith in intuition and Norris and Epstein’s (2011) deliberation scales were adapted for a selling context. This adaptation allowed for better assessment of the constructs in the domain specific of sales. In addition, Study 2 put forth a multifaceted approach for manipulating
the use of deliberation or intuition. To accomplish this, subjects received different sets of
pre-video instructions that manipulated the focus/distraction task. After the video,
subjects received another set of instructions asking them to answer questions slowly
using logical reasoning or alternatively to answer quickly relying on gut feelings. In
addition to the instructions, the background noise was removed from all deliberation
condition videos. This made the audio much clearer for the deliberation conditions. The
multifaceted approach used in Study 2 was in accordance with Horstmann et al.'s (2010)
recommendation that, when studying intuition, a single method like a time-constrained
task alone is not enough to insure the use of one's intuition.

Measuring Emotional Intelligence

Originally, this dissertation proposed the development of a context specific self-
reported ability-based measure of emotional intelligence (SPEI). However, after two
pretests failed to produce the desired factor structure or a common theme among factor
structure, the SPEI was dropped from the dissertation (see Chapter 3 for full discussion).
Therefore, it was decided to use Kidwell et al.'s (2011) (EIME) objective ability-based
(performance-based) measure that is designed for a selling context. Ability or
performance based measures like (EIME) have been recommended as the only
appropriate way of measuring ability-based models of emotional intelligence (Joseph &
Newman, 2010). However, this dissertation reveals some interesting findings with regard
to measuring emotional intelligence. First, Study 1 using a performance-based measure
reveals that emotional perception is not correlated to the other two dimensions of EI.
However, Study 2 demonstrates that the ability to perceive emotions in others requires
cognitive effort and focused attention within the deliberative system. In addition to the
physical emotional displays, Study 2 demonstrates that the subjects' perceptions about
the emotion others display is being affected by what is being said. Thus, the questions becomes, are the ability or performance based measures truly capturing emotional intelligence or was the SPEI development demonstrating a different conceptualization of emotional intelligence. Future research should examine different conceptualization and measurement methods of emotional intelligence.

Managerial Contributions

Why has the concept of intuition been, for the most part, ignored by managers and researchers? The answer is quite simple. Society has created a culture that requires logical explanations with supporting facts as to why certain decisions are made. This deliberate way of thinking has been ingrained in us, for the most part, throughout our lives. For example, as business academics, we teach students countless processes (i.e. the selling process, the buyer's process, the product life cycle...) made up of definable and sequential logical steps. However, we do not take into account the other aspect of how humans make decisions, by using intuition. Explaining a decision by relying on a feeling, without the supporting facts, proves difficult in today's business world. Recent research is beginning to show that relying on one's intuition can lead to positive business outcomes. Locander et al. (2014) show the moderating influence of intuition on deliberation and adaptive selling and ultimately job performance. The findings from this dissertation reveal that both deliberation and intuition positively affect customer relationships (behavioral job performance) which have the potential to increase salesperson productivity (outcome job performance). Thus, there is evidence that effective salespeople should be and are relying on both their deliberative and intuitive thought processes when selling.
With the research beginning to show how deliberation and intuition are affecting salesperson’s performance, it is time to start integrating intuition into our rational dominated business model. First, managers should create a work environment that allows their sales force to explore intuitive feelings and allow them the latitude to try new approaches. This working environment would have to be open and supportive where employees feel free to express their ideas without the threat of ridicule and punishment. For example, if an employee truly feels that some decision is correct, but cannot justify it in an analytic way, then it may be wise to let the salesperson utilize personal experiences in the form of gut feelings. This is not to say that managers should encourage undisciplined thinking and behavior, but there needs to be a balance of rational thought and intuition in order to effectively and efficiently use both inputs to the decision making process.

Second, intuition education should be incorporated into sales training programs. Hogarth (2001; 2010) believe that a person’s intuition can be educated because intuition is based on one’s own past experiences and is largely the result of learning. Since intuition is based on past experiences, it is critical to create a learning (training) environment that replaces the present day formula driven training environment in order to benefit from experiential learning. It should be noted that immediate feedback is a critical aspect of educating intuition (Hogarth, 2001; 2010; Schweizer, Plassner, Kahlert, & Brand, 2011) because any incorrect action can be brought to the attention of the trainee. As an example, Schweizer et al. (2011) used a video-based online training-tool where soccer referees had to immediately determine if the video clip contained a foul. Their results show that immediate feedback on the correctness of decisions increased the
referees’ decision accuracy. One way to implement experiential learning in sales training is through simulated selling experiences (role playing). Also, videotaping a simulated selling interaction can serve as a coaching tool in which feedback and suggestions can be given. Another way salespeople can continually develop their selling intuition is by filling out a post sales call sheet that outlines what they did and if they were successful and, if not, queries about what other approaches could have been taken. This form of self-evaluation can help develop a salesperson’s experiential knowledge base. The successful education of one’s intuition is an ongoing process that requires “practice, and practice, and practice” (Hogarth, 2001, p. 215).

Another way to implement experiential learning is through a mentoring program where a one-to-one relationship between an experienced salesperson (mentor) guides the development of a new or less experienced salesperson (protégé). The mentor/protégé relationship can foster a trusting relationship where the less experienced salesperson can learn through observation. For example, a mentor could take the protégé along on a sales call to observe or the mentor can observe that protégé during a sales call and provide feedback. By implementing a mentoring program within a sales force, it can provide the opportunity for the transfer of experientially gained knowledge from mentor to protégé (Lankau & Scandura, 2007; Weinberg & Lankau, 2011; Weinberg & Locander, 2013).

Finally, job candidates could be screened on their intuitive and/or deliberative nature. Companies could have job candidates fill out a questionnaire designed to capture their intuitive and deliberative nature among other constructs. How the job candidate performs on this evaluation may be factored into the candidate selection process. This
could help determine which candidates will be more open for the deliberative and intuitive sales training that would follow.

In today's customer oriented and solution selling environment, being able to solve customer problems is a necessity. Not all customers will be in the same situation or have the same problem, but by allowing one's intuition to work, the salesforce may produce higher behavioral and performance outcomes. Therefore, to meet the needs of the customer, managers need to understand the influence that empowering their sales force and allowing them to implement creative selling behaviors can have on customer relationships and sales productivity. Creative selling was shown to have a positive effect on both behavioral and outcome job performance. In order to implement creative selling techniques, salespeople must have the autonomy from their organization to implement new and novel ideas. Thus, by empowering salespeople to discover new ideas and put them into action, organizations may experience higher customer retention and improved sales.

Past research has found that emotional intelligence (Kidwell et al., 2011) and more specifically, emotional regulation (Joseph & Newman, 2010), has a positive effect on job performance. In accordance with Joseph and Newman's (2010) cascading model, emotional regulation is the managing of emotions that leads to higher job performance. However, the results from the post-hoc analysis reveal some interesting findings regarding the ability to regulate emotions and job performance. The emotional regulation to behavioral job performance relationship was shown to have a positive indirect (Model 1) or direct (post-hoc) effect. However, emotional regulation was shown (in all models) to have a negative effect on salesperson job performance. Therefore, it is speculated that
the importance of regulating emotions may depend on the type of selling in which a salesperson engages. For example, emotional regulation may be very important for salespeople engaging in customer oriented selling. For salespeople engaged in transactional selling, the ability to regulate emotions may inhibit their selling performance. Therefore, the importance of emotional regulation may be dependent upon the selling strategy. Thus, managers should recognize that the amount of emotional regulation in which a salesperson engages depends on selling strategy.

**Limitations and Future Research**

Despite its strengths, both studies suffer from limitations that may limit their generalizability. Study 1’s limitations are as follows. First, Study 1 employs a cross-sectional design and used self-reported measures. A longitudinal and/or the use of objective data may produce different results. Second, the results were interpreted from a model that contains two constructs with lower than recommended average variance extracted (AVE). The AVE for the faith in intuition construct was slightly less than the 0.5 recommended level (Hair et al., 2010), while the deliberation AVE exhibits a slightly larger discrepancy from this recommendation. Due to the error, any interpretation of the findings may not be as accurate as if they demonstrated acceptable AVE levels. Future research should look to replicate the findings using different or newly developed scales that demonstrate acceptable convergent validity. Also, there was an issue of discriminant validity between behavioral and outcome job performance. This could be due to the conceptual overlap between behavioral and outcome performance, which has been shown to have a causal link (Cravens et al. 1993; Jaworski & Kohli 1991, Miao & Evans 2007).
Thus, it makes theoretical sense that two dimensions of job performance from the same scale (Behrman & Perreault, 1982) would suffer from a lack of discriminant validity.

Additional future research is needed to examine the negative effect that emotional regulation has on outcome job performance. The effectiveness of emotional regulation may be dependent on the type of selling being performed. Therefore, future research should explore the moderating effects that a seller’s orientation (selling orientation or customer orientation) has on the relationship between emotional regulation and both behavior and outcome job performance. Study 1 also shows that deliberation and intuition are driving processes to creative selling behaviors. However, what roles intuition and deliberation play in the generation of creative behaviors remains unexplored. Therefore, future research should explore how intuition and deliberation affect the creative selling process. Finally, additional research is needed to better understand how the two processes, deliberation and intuition, affect one another.

The experimental design in Study 2 may suffer from some generalizability limitations. That is, real world conditions had to be removed in order to gain the necessary experimental control. Also, a laboratory setting would have been the ideal place for conducting this experiment, rather than an online platform. A behavioral laboratory would allow for more control over the subjects and create consistency within the experimental environment. However, due to the fact that the sample was drawn from salespeople from across the country, a laboratory experiment was not feasible. Therefore, the online platform was the next best option. In order to keep as much control as possible, precautions were implemented like an embedded timer and manipulation checks were used to gauge the validity of subject responses. Future research could explore to
determine if there are any differences between online video experiments and laboratory studies. Also, future research should investigate if there are any differences in how novices (or non-salespeople) perform in an experiment when compared to a sample of business-to-business salespeople.

Another limitation of Study 2 is that there is no absolute guarantee that the subjects were using their manipulated decision mode (deliberation or intuition). Even though this experiment used a multifaceted approach which included different instructions and distractions following the recommendations for inducing intuition (Horstmann et al., 2010); this does not ensure that subjects were engaged in the correct decision mode process. However, this dissertation has presented evidence suggesting that subjects were, at a minimum, focusing on different aspects of the video. Methodological issues have been identified as one of, if not, the biggest problems hindering research on intuition (Glöckner & Witteman, 2010). While this experiment is not perfect, it is this researcher's belief that the multifaceted methodology used in this experiment is a step in the right direction. Future research should continue to develop multifaceted approaches to inducing intuition and look at other methods like eye tracking and brain imaging to validate these approaches.

The deliberative and intuitive processes are not limited to the domain of sales. Future research should explore how deliberation and intuition affect other aspects of marketing. Some promising areas where these explorations could potentially have a significant impact would be consumer behavior, ethics and morality, pricing, advertising, and marketing education. An approach to the study of deliberation and intuition relying on dual processing theory seems to lend itself quite well to the study of human decision
making in marketing. Intuition should be considered one of the areas of high potential for rich empirical findings yielding many insights into the emotional nature of human performance.

**Future Research Stream**

Figure 5.1 outlines the potential articles from this dissertation and other areas of research interest. The first article (denoted 1) *A Dual Processing Approach to Salespersons’ Emotional Intelligence and Creativity*, builds off Study 1 and 2 of this dissertation. This article will be developed to be submitted to the *Journal of Marketing*. Article 1 will lead to further research within the dual processing theory and specifically intuition. The questions, how does experience (denoted 2) and communication style (denoted 3) affect a person’s use of intuition and how intuition can be developed and trained (denoted 4) will drive future research efforts. Articles from these questions will be targeted to journals like *Journal of Business Research* and *Journal of Personal Selling and Sales Management*. 
Dissertation: Sales Performance and Intuition - The Role of Gut Feelings.

1) A Dual Processing Approach to Salespersons' Emotional Intelligence and Creativity.
2) Do Experts Rely on Intuition More Than Novices.
3) Are Females More Intuitive: The Battle Between Biological Sex and Gender Communication Style.
4) How to Train A Salespeople's Intuition.
5) Demystifying Emotional Intelligence.
6) A New Multifaceted Approach to Measuring Emotional Intelligence.
7) The Effects of Selling vs. Customer Orientation (SOCO) on Emotional Intelligence, Creative Selling and Job Performance.
8) Salespersons Confidence and Showmanship: The Development of Salesperson Swagger.
9) How to Develop Swagger in Salespeople.

Figure 5.1 Prologue for Future Research
The emotional intelligence findings from this dissertation demonstrate the need to revisit the conceptualization of EI and its dimensions. This could lead to the article 5, *Demystifying Emotional Intelligence*. In doing so, it is planned to introduce a multifaceted approach to measuring EI that incorporates visual and audio aspects of the stimuli (denoted six). Depending on the results of these studies, articles five and six (may be combined) are intended to go to top level marketing journals (i.e. *JM, JMR, or JAMS*).

Article seven, *The Effects of Selling vs. Customer Orientation (SOCO) on Emotional Intelligence, Creative Selling and Job Performance* is intended to examine the effects of a sales force design on orientation. This research project is intended to examine the negative effect that emotional regulation has on outcome job performance, a finding of this dissertation. This study will also incorporate creativity to better understand what kinds of salespeople use creative selling techniques. This research endeavor will be targeted at the *Journal of Personal Selling and Sales Management*.

Not specifically addressed in this dissertation, but still in the area of sales will be Article 8 *Salespersons Confidence and Showmanship: The Development of Salesperson Swagger*. This article is intended to introduce and develop the construct “swagger.” I define salesperson swagger as the outward display of confidence in a boastful showmanship manner during an interaction with customers. In addition to the conceptual development of swagger, Article 9 may be combined with article 8, in developing a swagger scale. Depending on the results, this article will be targeted at top level marketing journals (i.e. *JBR, JPSSM, or JAMS*).
REFERENCES


Humphreys, L. G. (1979). The construct of general intelligence. *Intelligence*, 105-120.


APPENDIX A

QUESTIONS USED IN SURVEY STUDY (STUDY 1)
Questions Used In Survey Study (Study 1)

*Note: Skip logic is in italics.*

Section 1: contains IRB statement and filter questions.

Thank you very much for participating in the study! Researchers at Louisiana Tech University are interested in consumers' opinions about service providers.

Participation in this research is strictly voluntary and your participation or refusal to participate in this study will not affect your relationship with Louisiana Tech University in any way. It should take you no more than 25 minutes to complete this survey and there are no risks associated with your participation. You may withdraw at any time or refuse to answer any question without penalty. Upon completion of the study, summary results will be freely available to you upon request. The results of your responses will be confidential, anonymous, and reported in aggregate form only. The results of the survey will be accessible only to the principal researcher, yourself, or a legally appointed representative. If you have any questions regarding this survey, please contact Dr. Mary Livingston (318-257-2292) from the Human Use Committee of Louisiana Tech University. The full Human Use Committee Review form is available by clicking the following link:


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We thank you in advance for your input!
The following survey is being conducted for academic, non-profit purposes. The researcher is a graduate student in business collecting data as partial fulfillment of a dissertation. To achieve this goal, only business to business salespeople can be used. Are you willing to help the graduate student?

- Yes, I am willing to help
- No, I do not have time to help

*If No, is selected then skip to end of survey.*

In your current sales position, do you have the ability to use different selling techniques?

- Yes
- No

*If No, is selected then skip to end of survey.*

Are you using a mobile phone to take this survey?

- Yes
- No

*If Yes, is selected then skip to end of survey.*

Are you currently employed in a business to business sales position?

- Yes
- No

*If No, is selected then skip to end of survey.*

How many total years of sales experience do you have?

[ ]

*If less than 2 then skip to end of survey.*
Section 2: Items for job performance.

Please answer how strongly you disagree or agree with these statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am very effective in generating a high level of dollar sales.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in exceeding annual sales targets and objectives.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in acquiring the necessary knowledge about my products, competitor's products and my customer's needs.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in selling to major accounts.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in providing accurate information to customers and other people in my company.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in providing accurate and complete paperwork.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in maintaining good customer relations.</td>
<td>O O O O O O O</td>
</tr>
<tr>
<td>I am very effective in contributing to my firm's market share.</td>
<td>O O O O O O O</td>
</tr>
</tbody>
</table>
Section 3: Items for emotional intelligence.

In this section, we are interested in emotions expressed in facial expressions and pictures. Please select the answer that corresponds to the emotion(s) expressed in each face or picture.

Indicate how much "sadness" is expressed in the picture:

- Not at all present
- Slightly present
- Moderately present
- Quite present
- Extremely present
Indicate how much "surprise" is expressed in the picture:

- Not at all present
- Slightly present
- Moderately present
- Quite present
- Extremely present
Indicate how much "fear" is expressed in the picture:

- Not at all present
- Slightly present
- Moderately present
- Quite present
- Extremely present
In this section, we would like you to indicate how useful each emotion might be in response to the scenario that is presented. How useful might it be to...

(check column that applies for each question):

<table>
<thead>
<tr>
<th>Feel when interacting with</th>
<th>Not at all Useful</th>
<th>Extremely Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Hostility</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>b) Anxiety</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>c) Guilt</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>d) Frustration</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

In this section, we would like you to select the emotional response that is the most likely to be felt in the situations described below.

Matthew works best when his supervisor lets him do things the way he believes is best. When his supervisor began to micro-manage his activities, Matthew felt _____.

- o Pleased
- o Disappointed
- o Relaxed
- o Frustrated
- o Guilty

A man went into an electronics store feeling rested. Later, he felt anxious. What happened in between?

- o He was approached by an aggressive salesperson.
- o He saw an old friend that he hadn't seen in several years.
- o He was helped by a cashier whom he thought he recognized.
- o He found an alternative product that he liked almost as well.
- o He couldn't find the brand of cell phone he wanted.
A customer was interested and ready to make a purchase. Later, he felt embarrassed. What happened in between?

- The customer received a brief phone call.
- The customer realized he could not afford to make the purchase.
- The customer realized that he should compare prices before making the purchase.
- The customer said that he/she was not interested in making the purchase.
- The customer continued to search for more information about the product.

Happiness is a combination of which group of three emotions listed below:

- Envy, Joy, Pride
- Pleasure, Activeness, Arousal
- Joy, Pleasure, Satisfaction
- Satisfaction, Joy, Excitement

In this section, we would like you to indicate how effective each action might be in response to the scenario that is presented.

Bill never received clear instructions about how to do his job. One day he found out he was reassigned to a supervisor who had a reputation for setting clear goals and objectives. Bill felt relieved and calm for the first time in a long while. How well would the following behaviors help Bill maintain his feelings?

**Behavior:** He could tell his new supervisor how much he didn’t like the previous supervisor.

- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective

A couple has shown some interest in a product that Bill is selling. Bill is presenting the product well, although the couple is starting to look bored and disinterested. How well would the following behavior help Bill keep their interest and close the sale?

**Behavior:** Bill should accept the fact that the couple probably won’t make the purchase.

- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective
A customer agreed to make a large purchase from you. Later, however, you found out that the customer never had enough money to make the purchase. How well would the following behavior help you reduce your disappointment?

**Behavior:** Call back the customer and criticize him for wasting your time.
- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective

**Behavior:** Teach the customer a lesson by not returning any of his phone calls.
- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective
1. Section 4: Items for deliberation and intuition.

In this section, answer how strongly you disagree or agree with the statements below.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy dealing with customers problems that require hard thinking.</td>
<td>O</td>
</tr>
<tr>
<td>I trust my initial feelings about customers.</td>
<td>O</td>
</tr>
<tr>
<td>When interacting with customers, I am not a very analytical thinker. (R)</td>
<td>O</td>
</tr>
<tr>
<td>I am not very good in solving customers problems that require careful logical analysis. (R)</td>
<td>O</td>
</tr>
<tr>
<td>When selling, I don’t like to have to do a lot of thinking. (R)</td>
<td>O</td>
</tr>
<tr>
<td>I prefer vanilla ice cream to chocolate ice cream.</td>
<td>O</td>
</tr>
<tr>
<td>When selling, I prefer complex to simple problems.</td>
<td>O</td>
</tr>
<tr>
<td>Will you please select Agree for administrative purposes.</td>
<td>O</td>
</tr>
<tr>
<td>Knowing the answer to a customer's question without understanding the reasoning behind it is good enough for me. (R)</td>
<td>O</td>
</tr>
<tr>
<td>Using logic usually works best for me in figuring out how to approach customer problems.</td>
<td>O</td>
</tr>
<tr>
<td>When it comes to dealing with customers, I can usually rely on my &quot;gut feelings.&quot;</td>
<td>O</td>
</tr>
<tr>
<td>During a sales call, reasoning things out carefully is not one of my strong points. (R)</td>
<td>O</td>
</tr>
<tr>
<td>I listen to my hunches during a sales call.</td>
<td>O</td>
</tr>
</tbody>
</table>
During the sales process, I rely on my intuition.

My initial impressions of customers are almost always right.

Will you please select Disagree for administrative purposes.

When selling, I enjoy intellectual challenges.

I can usually feel when a customer is positive or negative even if I can't explain how I know.

I am much better at figuring out selling activities logically than most other sales people.

When dealing with customers, I have a logical mind.

I try to avoid selling situations that require thinking in-depth about something. (R)
Section 5: Items for creative selling.

In this section, answer how often you use the statements below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Practically Never</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating and evaluating multiple alternatives for novel customer problems.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Carrying out sales tasks in ways that are resourceful.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Coming up with new ideas for satisfying customer needs.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Making sales presentations in innovative ways.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Having fresh perspectives on old problems.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Generating creative selling ideas.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Improvising methods for solving a problem when an answer is not apparent.</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Section 6: Demographics

What year were you born in?

What is your gender?
- Male
- Female

How many years have you been with your present company?

What percentage of your last year's goal did you achieve? _____% of goal.
Highest education level earned?

- High School
- Some College
- College Graduate
- Graduate Courses

What types of products do you sell?

[ ]

In U.S. dollars, please indicate your average yearly income?

[ ]
APPENDIX B

QUESTIONS USED IN EXPERIMENTAL STUDY (STUDY 2)
Questions Used In Experimental Study (Study 2)

Note: Skip logic is in italics.

Section 1: contains IRB statement and filter questions.

Thank you very much for participating in the study! Researchers at Louisiana Tech University are interested in consumers' opinions about service providers.

Participation in this research is strictly voluntary and your participation or refusal to participate in this study will not affect your relationship with Louisiana Tech University in any way. It should take you no more than 25 minutes to complete this survey and there are no risks associated with your participation. You may withdraw at any time or refuse to answer any question without penalty. Upon completion of the study, summary results will be freely available to you upon request. The results of your responses will be confidential, anonymous, and reported in aggregate form only. The results of the survey will be accessible only to the principal researcher, yourself, or a legally appointed representative. If you have any questions regarding this survey, please contact Dr. Mary Livingston (318-257-2292) from the Human Use Committee of Louisiana Tech University. The full Human Use Committee Review form is available by clicking the following link:


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We thank you in advance for your input!
The following survey is being conducted for academic, non-profit purposes. The researcher is a graduate student in business collecting data as partial fulfillment of a dissertation. To achieve this goal, only business to business salespeople can be used. Are you willing to help this graduate student?

- Yes
- No

*If No, is selected then skip to end of survey.*

Are you currently employed in a business to business sales position?

- Yes
- No

*If No, is selected then skip to end of survey.*

How many total years of sales experience do you have?

☐

*If less than 2 then skip to end of survey.*

In your current sales position, do you have the ability to use different selling techniques?

- Yes
- No

*If No, is selected then skip to end of survey*.

Are you using a mobile phone or tablet to take this survey?

- Yes
- No

*If Yes, is selected then skip to end of survey.*

This study contains both visual and audio components. Therefore, we ask that you be in a quiet location with the volume turned up on your computer.

- Yes, I am in a quiet location with the volume turned up
- No, I am NOT in a quiet location with the volume turned up

*If No, is selected then skip to end of survey.*
Section 2: Pre-video instructions.

Deliberation instructions:
You will be shown a one minute video portraying a sales meeting between a buyer (building contractor) and seller (building supplies sales rep). The buyer and seller have been in contact before the meeting and this video is only a small portion of the sales process. In the video, the buyer and seller’s pictures will be displayed at the bottom of the screen. They are shown in still pictures. A blue frame will highlight the person speaking at any given time.

While watching the video, your task is to watch and listen to the individuals in the conversation. After the video is over, you will be asked to supply information about the sales meeting, as if you were in this selling situation. On the next page, please turn the volume up before pressing play and do not stop or rewind the video. Shortly after the video is over, the page will automatically advance.

Intuition instructions:
This study tests your ability to detect things in a crowded background while being distracted by another person. On the next page, try to detect things in the background! Afterwards we will quiz you on things like how many automobiles go by out the window, among other things about the background scene.

Section 3: Video and animal:
Subjects view one of the eight conditions video.

In a few seconds, you will be asked to recall this word:
- Dog (for subjects in deliberation condition)
- Bird (for subjects in intuition condition)

Section 3: survey flow and attention check questions.
Which of the following matches the last word you saw previous to this question?
- Cat
- Dog
- Bird
- Elephant
- Horse
- Kangaroo

If Dog is selected they will receive Del question set first followed by Int question set.
If Bird is selected they will receive Int question set first followed by Del question set.
If Cat, Elephant, Horse, or Kangaroo is selected skip to end of survey
In the instructions before the video clip, what were you asked to focus on?

- The sales conversation
- The video quality (i.e. screen resolution)
- The background (i.e. automobiles driving by)
- The dancing gorilla in the background
- The audio quality
- Something else ____________________

Section 4: Instructions and question sets.

Post video instructions for subjects in deliberation conditions:

The following questions will be about the video you just watched. Please, take your time and carefully think about each question. Try to recall what was going on and what was said when answering the questions.

Del question set:
Please answer the following statements:

How likely is it that the buyer purchases the countertops from the seller?

- (100 point slider)

Please indicate how confident you are in your answer to the question.

- (100 point slider)

Describe your attitude toward Diamondall using the four pairs of adjectives listed below. For each pair, select the choice that best describes your feelings.

Negative  o  o  o  o  o  o  o  o  Positive
Dislike  o  o  o  o  o  o  o  o  Like
Very Displeased  o  o  o  o  o  o  o  o  Very Pleased
Positive  o  o  o  o  o  o  o  o  Negative

From the seller’s perspective, how would you describe the tone of the dialogue between the buyer and seller?

Negative  o  o  o  o  o  o  o  o  Positive
Please indicate how confident you are in your answer to the above question.
○ (100 point slider)

Based on how you believe the salesperson performed, what grade would you assign to his performance in this particular case.
○ (13 point slider ranging from A+ to F)

[Image of A+]

Please indicate how confident you are in your answer to the above question.
○ (100 point slider)

Use the slider bar to answer the following question:

At the end of the video, how would you describe the buyer’s emotion.
○ (100 point slider)
Please indicate how confident you are in your answer to the above question.
○ (100 point slider)

Use the slider bar to answer the following question:

At the end of the video, how would you describe the seller’s emotion.
○ (100 point slider)
Please indicate how confident you are in your answer to the above question.
○ (100 point slider)

Please select the best answer:

Which dollar number is the closest, without going over, to the total cost of the project?
○ $140,000
○ $900
○ $180,000
○ $1,000,000
○ $260,000

Please indicate how confident you are in your answer to the above question.
○ (100 point slider)
What was the total number of units that needed counter tops? Select the closest to the actual number:
- 50
- 100
- 500
- 150
- 75

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

What was the per-unit budget for counter tops? Select the closest to the actual number:
- $500
- $917
- $1,000
- $719
- $300

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

How long until the building contractor needs the countertops ready for installation:
- Now
- 3 weeks
- 6 months
- Next year
- 5 weeks

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

Post video instructions for subjects in intuition conditions:

The following questions will be about the video you just watched. Please, answer these questions as quickly as you can by selecting the answer you feel is correct.
Choose the closest geographic location to where the sales conversation took place?
- Tampa, Florida, United States of America
- Saint Paul, Minnesota, United States of America
- Rio de Janeiro, Brazil
- New Orleans, Louisiana, United States of America
- Fullerton, California, United States of America

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

Which number is the closest, without going over, to the number of automobiles that passed by during the video?
- 9
- 2
- 19
- 36
- 13

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

Without going over, which number is the closest to the number of people in the scene?
- 55
- 40
- 75
- 21
- 2

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

What time of day do you believe this video took place?
- 12:00 P.M. (Noon)
- 9:30 A.M.
- 2:30 P.M.
- 7:15 P.M.
- 9:00 P.M.

Please indicate how confident you are in your answer to the above question.
- (100 point slider)
What is the next logical number in the following sequence: 8, 17, 26, [__].
- 51
- 43
- 35
- 442
- 9

Please indicate how confident you are in your answer to the above question.
- (100 point slider)

Section 5: Thought process and video check:

Select the best description of your thought process when answering the previous questions:
- I remembered the answer.
- I selected the answer that I felt was correct.
- I relied solely my gut feeling.
- I was absent of thought or feeling so I chose at random.

Watch Where you able to watch the entire video?
- Yes
- No

If No, is selected then skip to end of survey.
Section 6: Survey items

In this section, we are interested in emotions expressed in facial expressions and pictures. Please select the answer that corresponds to the emotion(s) expressed in each face or picture.

Indicate how much "sadness" is expressed in the picture:
- Not at all present
- Slightly present
- Moderately present
- Quite present
- Extremely present
Indicate how much "surprise" is expressed in the above picture:
- Not at all present
- Slightly present
- Moderately present
- Quite present
- Extremely present

Indicate how much "fear" is expressed in the above picture:
- Not at all present
- Slightly present
- Moderately present
- Quite present
- Extremely present
In this section, we would like you to indicate how useful each emotion might be in response to the scenario that is presented. How useful might it be to...
(check column that applies for each question):

<table>
<thead>
<tr>
<th>Emotion Description</th>
<th>Not at all Useful</th>
<th>Useful</th>
<th>Extremely Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>feel &quot;hostility&quot; when interacting with an angry supervisor?</td>
<td>○</td>
<td>○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>feel &quot;anxiety&quot; when determining the needs of a customer?</td>
<td>○</td>
<td>○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>feel &quot;guilt&quot; when attempting to persuade someone to make an expensive purchase?</td>
<td>○</td>
<td>○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>feel &quot;frustration&quot; when negotiating compensation issues with your supervisor?</td>
<td>○</td>
<td>○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>

In this section, we would like you to select the emotional response that is the most likely to be felt in the situations described below.

Matthew works best when his supervisor lets him do things the way he believes is best. When his supervisor began to micro-manage his activities, Matthew felt _____.
○ Pleased
○ Disappointed
○ Relaxed
○ Frustrated
○ Guilty

A man went into an electronics store feeling rested. Later, he felt anxious. What happened in between?
○ He was approached by an aggressive salesperson.
○ He saw an old friend that he hadn't seen in several years.
○ He was helped by a cashier whom he thought he recognized.
○ He found an alternative product that he liked almost as well.
○ He couldn't find the brand of cell phone he wanted.
A customer was interested and ready to make a purchase. Later, he felt embarrassed. What happened in between?

- The customer received a brief phone call.
- The customer realized he could not afford to make the purchase.
- The customer realized that he should compare prices before making the purchase.
- The customer said that he/she was not interested in making the purchase.
- The customer continued to search for more information about the product.

Happiness is a combination of which group of three emotions listed below:

- Envy, Joy, Pride
- Pleasure, Activeness, Arousal
- Joy, Pleasure, Satisfaction
- Satisfaction, Joy, Excitement

In this section, we would like you to indicate how effective each action might be in response to the scenario that is presented.

Bill never received clear instructions about how to do his job. One day he found out he was reassigned to a supervisor who had a reputation for setting clear goals and objectives. Bill felt relieved and calm for the first time in a long while. How well would the following behaviors help Bill maintain his feelings?

**Behavior:** He could tell his new supervisor how much he didn’t like the previous supervisor.

- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective

A couple has shown some interest in a product that Bill is selling. Bill is presenting the product well, although the couple is starting to look bored and disinterested. How well would the following behavior help Bill keep their interest and close the sale?

**Behavior:** Bill should accept the fact that the couple probably won’t make the purchase.

- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective
A customer agreed to make a large purchase from you. Later, however, you found out that the customer never had enough money to make the purchase. How well would the following behavior help you reduce your disappointment?

**Behavior:** Call back the customer and criticize him for wasting your time.
- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective

**Behavior:** Teach the customer a lesson by not returning any of his phone calls.
- Not at all effective
- Slightly effective
- Moderately effective
- Quite effective
- Extremely effective

In this section, answer how often you use the statements below.

<table>
<thead>
<tr>
<th>Generating and evaluating multiple alternatives for novel customer problems.</th>
<th>Practically Never</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrying out sales tasks in ways that are resourceful.</td>
<td>○</td>
<td>○ ○ ○ ○</td>
</tr>
<tr>
<td>Coming up with new ideas for satisfying customer needs.</td>
<td>○</td>
<td>○ ○ ○ ○</td>
</tr>
<tr>
<td>Making sales presentations in innovative ways.</td>
<td>○</td>
<td>○ ○ ○ ○</td>
</tr>
<tr>
<td>Having fresh perspectives on old problems.</td>
<td>○</td>
<td>○ ○ ○ ○</td>
</tr>
<tr>
<td>Generating creative selling ideas.</td>
<td>○</td>
<td>○ ○ ○ ○</td>
</tr>
<tr>
<td>Improvising methods for solving a problem when an answer is not apparent.</td>
<td>○</td>
<td>○ ○ ○ ○</td>
</tr>
</tbody>
</table>
In this section, answer how strongly you disagree or agree with the statements below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not very good in solving customers problems that require careful logical analysis.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>When selling, I enjoy intellectual challenges.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>When selling, I don’t like to have to do a lot of thinking.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>Will you please select Disagree for administrative purposes.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I trust my initial feelings about customers.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I listen to my hunches during a sales call.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I am very effective in maintaining good customer relations.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I am very effective in exceeding annual sales targets and objectives.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I am very effective in providing accurate information to customers and other people in my company.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>During a sales call, reasoning things out carefully is not one of my strong points.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>When interacting with customers, I am not a very analytical thinker.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I try to avoid selling situations that require thinking in-depth about something.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>My initial impressions of customers are almost always right.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>When it comes to dealing with customers, I can usually rely on my &quot;gut feelings.&quot;</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I am very effective in selling to major accounts.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>I am very effective in generating a high level of dollar sales.</td>
<td>○</td>
<td>○ ○ ○ ○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>
I am very effective in providing accurate and complete paperwork.  
When dealing with customers, I have a logical mind.  
Knowing the answer to a customer's question without understanding the reasoning behind it is good enough for me.  
I can usually feel when a customer is positive or negative even if I can't explain how I know.  
During the sales process, I rely on my intuitions.  
I am very effective in acquiring the necessary knowledge about my products, competitor's products and my customer's needs.  
I am very effective in contributing to my firm's market share.

2. **Section 7: Demographics**
Could you determine who the buyer and seller were?
- Yes  
- No

Could you determine who was speaking?
- Yes  
- No

Was there a guy holding a green case on the street corner?
- Yes  
- No  
- Don't know

In years, how old were you on your last birthday?

What is your gender?
- Female  
- Male
What is the highest level of education you have completed?
- Less than High School
- High School / GED
- Some College
- 2-year College Degree
- 4-year College Degree
- Masters Degree
- Doctoral Degree
- Professional Degree (JD, MD)

How many years have you been with your present company?

What percentage of your last year's goal did you achieve? ______% of goal.

What types of products do you sell?

In U.S. dollars, please indicate your average yearly income?

What is the purpose of this study?
APPENDIX C

HUMAN USE APPROVAL LETTER
MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO: Mr. David Locander and Dr. Barry Babin
FROM: Barbara Talbot, University Research
SUBJECT: HUMAN USE COMMITTEE REVIEW
DATE: January 13, 2014

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"Sales Performance and Intuition – The Role of Gut Feelings"
HUC 1160

The proposed study’s revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. This approval was finalized on January 10, 2014 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond January 10, 2015. Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Mary Livingston at 257-2292 or 257-5066.