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The effects of salespersons' behaviors on customers' perceptions of the salespersons and changing these perceptions by nonverbal training

Rivera-Valencia, Jose A., Ph.D.

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U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

THE EFFECTS OF SALESPERSONS' BEHAVIORS ON CUSTOMERS' PERCEPTIONS OF THE SALESPERSONS AND CHANGING THESE PERCEPTIONS BY NONVERBAL TRAINING

by

JOSE A. RIVERA-VALENCIA

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Aug. 24, 1992
Date

Gary F. Soldow
Chair of Examining Committee

8-26-92
Date

Donald Vredenburgh
Executive Officer

Gloria Thomas

David Lichtenthal

Benny Barak
Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

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TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

Table Page

Table Page

LIST OF FIGURES

CHAPTER I

THE RESEARCH PROBLEM

Introduction

It is generally accepted that nonverbal communication is an important aspect of selling interactions (Grikscheit & Crissy, 1973; Shimp & DeLozier, 1986; Soldow & Thomas, 1991; Williams & Spiro, 1985). Pages, and even chapters, have been written about this topic in almost every major textbook (e.g., Cummings, 1987; Soldow & Thomas, 1991; Storholm & Kaufman, 1985). However, it is surprising that when looking for empirical work about nonverbal behavior in personal selling, one will discover that few studies have been published in this area (Grikscheit & Crissy, 1973), although interest in research on nonverbal aspects of personal selling has been growing in recent years (DePaulo & DePaulo, 1988; Englis & Reid, 1989; Heslin, Whittler & Abella, 1988).

It might be argued that there is no need to conduct research or to replicate previous research findings in the nonverbal literature in a marketing context because the same results will be obtained. Although this seems to be a reasonable assumption, some recent evidence in published studies suggests that not all nonverbal findings in other contexts might be generalizable to a marketing context (DePaulo & DePaulo, 1988; Thomas & Soldow, 1987). In a personal selling context, DePaulo and DePaulo (1988) found that judges, in their study, were not able to tell

when the senders (experienced salespersons or experienced customers) were relatively deceptive, despite the fact that some judges were given special attentional instructions, findings which are contrary to the general findings in basic psychological studies. In an advertising context, Thomas & Soldow (1987) found that verbal and nonverbal inconsistency did not affect the credibility of a spokesperson, which is also contrary to previous research in the interpersonal literature.

However, even assuming that what was found in other areas is generalizable to personal selling situations, the original studies might have limitations. For example, Grikscheit and Crissy (1973) found that successful salespersons are more able to decode more nonverbal feedback than less successful salespersons. In fact, the literature in other areas of study about nonverbal behaviors also confirms this conclusion. DiMatteo (1979) found that physicians who learn to recognize and deal with patient anxiety seem to promote faster recoveries. Those physicians who fail to rely on their patients' nonverbal communications were more likely to have patients who die. However, these two studies suffer from the same limitation; they are basically correlational, and there is the possibility that the results might be due to other causes (e.g., dispositional factors) and not necessarily the nonverbal behaviors.

Nonetheless, the Grikscheit and Crissy (1973) study and more recent ones (DePaulo & DePaulo, 1988; Englis & Reid, 1989; Heslin et al., 1988) are very important for the literature on personal selling. They show that personal selling is not only a mere verbal interchange between salesperson and customer, but an active process where cues are transmitted nonverbally, thereby helping to communicate, to understand, to regulate the interaction; thus having an impact on customers' reactions. In addition, there are few empirical studies in personal selling that consider the nonverbal aspects of the selling encounter. Clearly, this topic has not received the attention it merits, and it is the purpose of this dissertation to make a contribution to the discipline by exploring this area. However, before discussing the specifics that were studied, a definition of what nonverbal means is appropriate.

Nonverbal Definition

Defining the term "nonverbal" conceptually is not an easy task. Well-known researchers in this area have difficulties defining what the terms "verbal" and "nonverbal" really mean (Harper, Wiens & Matazzaro, 1978; Mehrabian, 1972). For example, Bull (1983) says that nonverbal is a definition by exclusion. After defining what verbal really means, that is, the actual words used, all the remaining might be classified as nonverbal (e.g., tone of voice). In fact, it is generally considered that verbal behaviors are basically the language or speech while

nonverbal behaviors are those actions distinct from speech (Harper et al., 1972; Shimp & DeLozier, 1986). However, it is very difficult to draw a line between verbal and nonverbal communication. For example, Nine-Curt (1984) has expressed that it is almost impossible to learn a foreign language without learning the paralinguistic aspects of the language. In other words, one can easily categorize behaviors as verbal or nonverbal, but it is difficult to understand nonverbal communication without understanding or at least controlling the verbal channel or vice versa.

In addition, this verbal/nonverbal dichotomy may also be questioned by works in relational communication (Soldow & Thomas, 1984). According to these authors, relational communication refers to the form of a message rather than to its actual content and focuses on message exchanges indicating the right to direct, structure, or dominate the relationship. Although, for theoretical or methodological purposes, this meta-communication (i.e., communication about communication) might be understood independently from the nonverbal aspects of the relationship; in this perspective, a relationship has at least three components. These are content (i.e., actual words or themes used), nonverbal aspects, and the relational communication (e.g., pattern of dominance).

On the other hand, Mehrabian (1972) says that nonverbal communication is a misnomer because there are a lot of subtle aspects of speech that have been included in the

discussion of nonverbal phenomena, mainly paralinguistic cues. He prefers to use the concept of implicit communication, because he thinks the subtlety, and the fact that there are no explicit coding rules, differentiate these behaviors from verbal ones. However, even this definition does not help to define these two areas, because there are nonverbal gestures that can be more explicit and regulated than verbal behaviors. A case in point is a person saying "Good-bye" with their hands. This is a gesture that is highly communicative which even a child seems to learn before fully understanding his/her native language, and is basically less ambiguous than many verbal symbols.

Other authors pay more attention to classifying different nonverbal behaviors. A useful classification is proposed by De Meuse (1987). In his review of the effects of nonverbal cues on the performance appraisal process, De Muse (1987) distinguishes between three categories of nonverbal cues. He uses two dimensions to describe the range of nonverbal cues: individual control and origin. Individual control is defined as the degree to which a nonverbal cue is capable of being controlled by the individual. The second dimension, origin, refers to the behavioral or nonbehavioral aspect of the cue. That is, there are some nonverbal cues that remain constant over a period of time and there are others that are variable over the same period of time. Those nonbehavioral cues

over which the individual does not have control are classified by him as demographic variables such as gender, age, and race. Those variables that are under the individual's control, but are not considered behavioral, are classified as physical appearance variables. Finally, those cues that are behavioral, and that the individual has low to high control over, are classified as nonverbal variables (e.g., eye contact).

Additional differences between verbal and nonverbal behaviors can be derived from the work of Wickens (1984). He proposed three criteria that can be used to distinguish these concepts. First, in verbal perception, the units are directly related to language and linguistic experience. Second, in verbal perception, the units of analysis are symbolic. Third, the perception of verbal units proceeds hierarchically and analytically with the output of features (e.g., vertical lines or angles that form letters) feeding into letters and those into words. Although these can be perceived holistically, they always need to be analyzed in the specific context being used.

To elaborate these criteria more fully, a specific example using the word "salesperson" will be used. In the first place, the verbal perception of the word depends on the language. For example, for many Spanish-speaking people who do not know English, the word salesperson does not have meaning. However, if one talks about a "vendedor", they will quickly know what is being talked about. Second,

the word salesperson is symbolic; there is no relation between the word and the physical representation (e.g., a specific person). It is an arbitrary designation that can be changed. In fact, the name of the job position might be changed from salesperson to another title without affecting the job position. In other words, in verbal perception, the direct stimulus is substituted by another code and the individual reacts to this latter code; while in nonverbal perception, the direct stimulus to which the perceiver reacts is the physical stimulus.

Third, the perception of verbal units proceeds hierarchically and analytically. For example, if we change the "p" to "g", the word will be "salesgerson", and communication will be impaired. Although the letters are basically the same in terms of its constituent features (e.g., a circle and a line), the way these are placed affects our understanding; unless we can give meaning from the context. On the other hand, nonverbal behaviors almost always are perceived holistically; although, this might be more debatable. In fact, Wickens (1984) alerts us not to take these differences between verbal and nonverbal as absolutes, because there might be exceptions. For example, it might be argued that nonverbal perception depends on language acquisition.

Nonetheless, the differences provided by Wickens (1984) are helpful to distinguish between verbal and nonverbal areas of study. According to these criteria, when talking

about the content of the encounter which uses language symbols that do not directly resemble the physical qualities of the stimulus, it will be referred to as the verbal behavior in a personal selling encounter. On the other hand, when talking about nonverbal behavior in a personal selling encounter, it will refer basically to physical aspects and movements directly observable that are not considered language. However, not all nonverbal behaviors that might be included in this definition (e.g., appearance, skin color, age) will be studied, but only those generally considered traditional in the nonverbal literature (Thomas & Soldow, 1987).

At an operational level, many nonverbal communication theorists agree that nonverbal communication occurs through five "channels" or areas of study: paralanguage, kinesics, proxemics, facial expressions, and visual behaviors (Harper et al., 1978). Paralinguistic variables are the "content-free vocalizations and pauses associated with speech" (Druckman, Rozelle, & Baxter, 1982, p. 43). Some of the variables included in this category are such sounds like moans and yells, non-words, such as, "un-huh", vocal qualities of pitch, loudness intensity and amplitude, and categories of stuttering, omissions, repetitions, and so on.

Kinesics, which is popularly known as "body language", refers to all discriminable bodily movements, excluding facial expressions and eye movements (Harper et al., 1978).

It includes gestures, postural shifts, and movements of the hands, head, feet, and legs.

Proxemics is the study of the "manner in which individuals use physical space in their interactions with others and how physical space influences behavior" (Harper et al., 1978, p. 246). Specifically, nonverbal researchers have been interested in how space is used and the distance between the participants of a conversation. However, there are sex, race, cultural, personality, and age factors that moderate the relation or meaning of the use of space by the participants in a dyad (Harper et al., 1978).

Facial expressions and visual behaviors are terms that are self-explanatory. Facial expressions include the facial movements correlated with an emotion (e.g., happiness, anger), and those that occur when attempting to "mask" an emotion or intending to deceive someone. On the other hand, visual behavior includes such acts as eye contact, gaze and pupil dilation (Harper et al., 1978; Druckman et al., 1982).

Finally, a conceptual distinction must be made between nonverbal communication and nonverbal indication (Patterson, 1983). In general, nonverbal communication requires a socially shared signal system, an encoder who uses this system to make some message public, and a decoder who uses the code to interpret the sign (Patterson, 1983). That is, there are some nonverbal behaviors that are used for communication (e.g., raising the hand to ask permission

to speak), that are used with a certain intention, and interpreted in the way intended by the receiving party.

On the other hand, nonverbal indication refers to inferences made by a decoder of nonverbal behaviors emitted by the encoder, independently of the intention of the encoder. For example, fast speech by a salesperson might be received with suspicion if the fast-talking salesperson stereotype is activated or as an indication of expertise if another attribution is made (DePaulo, 1988).

Although this indication/communication distinction is an important one, it is very difficult to isolate in an interaction. Normally, during an interaction, nonverbal behaviors will be used to communicate, but also, inferences will be made, and it will be necessary to study the thoughts or cognitive responses from each party. However, to the extent that it is possible, these two terms are used with the above meanings in this dissertation.

The Research Questions

The scope of this dissertation was limited to the study of two major questions. First, what is the relation between salespersons' nonverbal behaviors and their effects on customers' impressions of the salesperson? Second, can these impressions be modified by changing these nonverbal behaviors?

Why were these topics selected and not others? First, apparently there is a belief that the salesperson's nonverbal behavior is an extremely important factor in

the customer's reaction to the product or outcome of the sale. For example, in a sales-training manual of a multinational corporation to which this author had access, it is concluded that first impressions, especially in a retail setting, are very important to the sale. The manual urges trainees to put a lot of emphasis on a friendly smile and to maintain eye contact to create a good impression.

Some textbooks also confirm these suggestions. Cummings (1987) says that "the handshake should be firm and sincere... and accompanied by direct eye contact and a friendly smile" (p. 213). Implicit in these conclusions is that nonverbal behaviors are important for creating an impression that will affect the sale, and that this is controlled by the salesperson.

Further evidence of the importance of a salesperson's nonverbal behavior comes from a recent study by Englis and Reid (1989). In this study, three groups of salespersons were trained to display different types of nonverbal expressions which included: happiness/joy, irritation/anger, and anxiety/tension. It was found that buyers' feelings were affected by these nonverbally expressed feelings; buyer attitudes toward salespeople and brands were most positive when the salespersons expressed happiness and least positive when they expressed irritation. In addition, there was a lesser intention to buy the brand in the irritated group compared with the happy or anxious salesperson groups.

The above issues are consistent with general findings in the nonverbal research; for example, increased gaze generally increases the effectiveness of a persuasive attempt (Edinger & Patterson, 1983). However, more research is needed, especially in a personal selling context where the relationships between nonverbal variables, impressions, and sales effectiveness needs to be tested further.

Second, it seems that there is something of value in studying common stereotypes or expectations held by many people about salespersons. Many times the researcher has heard the following comment; "I knew he was a salesperson when he began to talk." Did they know it before he disclosed his occupation, or is it just a rationalization? If they knew, it would be interesting to know what cues they used to arrive at this conclusion. Maybe what these people are telling us is that effective/ineffective salespeople might be best identified by focusing on their expressive styles and not necessarily by using personality traits.

Third, writers and teachers sometimes define the "good salesperson" as one that shows "enthusiasm, self-confidence and persuasiveness" (Storholm & Kaufman, 1985), but they are unable to define precisely how this is communicated nonverbally and how it might be modified. A similar situation occurs in other fields. Muehlenhard, Koralewski, Andrews and Burdick (1986) talk about an incident that occurred in a workshop on helping single clients. The leader

suggested that the clients should "flirt" with the opposite sex. A participant asked how to advise clients to flirt, to which the leader said "Flirt! You know! Flirt!" (Muehlenhard et al., 1986, p. 405). The authors said that this was basically what they do not know how to do, and it was one of the justifications for doing their study about verbal and nonverbal cues that convey interest in dating.

The same might happen in personal selling. For example, suppose that people perceived high in confidence will persuade more than those perceived low in confidence. How might a salesperson create this impression? Does he/she have to change in some way his/her facial expressions, talk louder, talk faster or a combination of these changes? In addition, assuming that talking louder is an important determinant of dominance, is he/she going to be perceived in this way by increasing his/her voice 25% with respect to his/her normal way, or is it necessary to approximate a standard? Although previous studies reported in the nonverbal literature can be used as guides, the question of its generalizability to a personal selling context, or even to advertising, is ever present (DePaulo & DePaulo, 1988; Thomas & Soldow, 1987). Hopefully, by identifying these nonverbal behaviors, their relative importance and their relationship with impressions, it would be possible to help students or salespersons that do not have these

skills or are not aware of this situation, to improve or maintain their performance in this area.

Fourth, this knowledge is highly needed in the literature. Wackman (1973), in his review of theories of interpersonal perception in consumer research, called attention to the lack of research on how the consumer selects cues from the environment and assigns meaning to these cues. He suggested that this area of research is even more important than knowing how people process information, but unfortunately, much is known about information processing and little about person perception. Although his emphasis was on person perception in advertising, it is nonetheless also true in the personal selling literature; where few studies have been done in this respect. Evidence that what Wackman (1973) said has not changed too much and occurs in other areas of study comes from Riggio & Friedman (1986) who have said "The relation between the expressive cues emitted by 'actors' and the impressions formed by observer is a key issue overlooked in much previous person perception research" (p. 422). This research will contribute to the literature by providing information in relation to nonverbal behaviors occurring in a persuasive context.

Finally, there is the opportunity to test nonverbal research findings of the North-American culture in another culture. There is some evidence suggesting that many nonverbal behaviors that are interpreted in some way in

the North-American culture have other meanings in other cultures. For example, Graham (1985) found that Japanese negotiators make much less eye contact and employ more frequent periods of silence with their opponents than do Americans. Gaze aversion and periods of silence are considered normal patterns by Japanese bargainers, but American negotiators may mistakenly take these behaviors as signs that their opponents are reacting unfavorably. By doing this research in a country with some differences in culture, nonverbal findings might be generalizable or qualified.

Specifically, the following questions were explored in this dissertation:

1. How do consumers describe the more and the less effective salesperson?

2. Are there specific nonverbal behaviors responsible for or related to the impression of the more and the less effective salesperson? If there are differences, what are they?

3. Can salespersons be trained to control or manipulate nonverbal behaviors in order to create impressions associated with the more effective salesperson?

The first question basically tries to uncover those dimensions used by customers to describe the "more" and "less" effective salespersons. Basically, it is assumed that customers form impressions of salespersons on various dimensions and these dimensions are associated with

perceived sales effectiveness. Specifically, it is expected that those salespersons that generate good impressions on the customer will be perceived as more effective than those salespersons who create poor impressions.

In addition, it is assumed that customers process information in the way the Brunswick's "Lens Model" proposes (Gifford, Fan Ng and Wilkinson, 1985; Ittelson, Rivlin, Proshansky, and Gingel, 1974). Basically, in this model, "the distal environment is seen as scattering its stimuli, while the organism recombines them as a lens captures light rays and focuses them in a single plane." (Ittelson, et al., 1974, p. 110).

In other words, the salesperson is conceptualized as displaying various verbal and nonverbal behaviors that are processed consciously or unconsciously by the customer in some unknown weighted fashion to form an impression of the salesperson. Although it is argued that the customer might not be aware of the specific behaviors enacted by the salesperson, it is believed that the customer might be able to describe with phrases or adjectives his/her total impressions. For example, he/she might say that the less effective salesperson is "insensitive" while the more effective salesperson is "warm". If one questions him/her about how he/she arrived at this impression, he/she might not be able to report how various behaviors, like rate of speech, tone of the voice, head nods, or facial expressions were weighted to form these impressions.

However, by correlating these nonverbal behaviors with the impressions created by a large number of salespersons, nonverbal behaviors associated with particular impressions might be identified.

It should be noted that it is acknowledged that customer feedback probably has an effect on the salesperson's nonverbal behaviors. Consequently, these impressions might change during a sales encounter. However, due to limitations in time, money, and research equipment, the final impressions at the end of a sales presentation, without feedback to the salesperson, were the focus of this dissertation. Future studies should include the effect of feedback and how these impressions form and change through the interaction.

The second question tries to isolate those nonverbal behaviors that are correlated with particular impressions and to determine the weight of each behavior in the global impression. For example, assuming that "dominance" is a relevant dimension underlying salesperson effectiveness, it might be found that rate of speech or head nodding is positively related to perceived dominance.

The third question is designed to extend previous studies in the nonverbal and personal selling literature. As mentioned elsewhere, one study found that effective salespersons are more able to decode nonverbal behaviors than less effective salespersons (Grikscheit & Crissy, 1973). Another study showed that communication styles are

related to the success of a sales interaction (Williams & Spiro, 1985). The problem with these studies is that they are basically correlational in nature, and it is not technically correct to infer causality among the related variables. The effective salesperson might be able to decode nonverbal behaviors because of an innate superior ability, which might suggest an effective salesperson should be selected, or be the result of particular learning experiences, which might suggest that training should be emphasized. Although both points of view have their merits, the researcher was testing the position that the ability to decode and the ability to manage impressions and communication styles can be developed, or improved, by proper training.

This position is based on the following reasons. First, a literature review (Weitz, 1981) has concluded that the relation between individual traits or sales behaviors and salesperson effectiveness has been tested for some time and the results are highly equivocal. Weitz (1981) and Weitz, Sujan, and Sujan (1986) propose that other elements of the sales situation and adaptive selling should be studied. Although the researcher does not agree completely with this conclusion, because some psychological traits have been shown to be related to adaptive selling (Spiro & Weitz, 1990), the fact that theoretical writings (Weitz, 1981; Weitz et al., 1986) and that sales training (Buzzotta, Lefton, & Sherberg 1982; Soldow & Thomas, 1984; Weitz et

al., 1986) are based on the belief that salesperson behavior might be modified, justifies studies in this area.

Second, some research results suggest that nonverbal behaviors might be subject to voluntary control (Masunenov & Rodriguez, 1989), particularly by salespeople (DePaulo & DePaulo, 1988). In fact, there is some evidence from biofeedback that suggests that behavior considered not under the voluntary control of the individual, like blood pressure or brain waves, might be changed by this method (Worchel & Shebilske, 1986).

Finally, there is some evidence that psychiatric patients and people without social skills might be helped by developing appropriate social skills through nonverbal training (Bull, 1983). If these people were able to effect some changes in their behavior, it is reasonable to expect some kind of change in "normal" people like salespersons.

In the second chapter, a review of the nonverbal and the personal selling literature is presented. Those works relevant to the present study are reviewed and used to generate hypotheses to the research questions formulated in this chapter. A methodology using two studies was used to test these hypotheses. Chapter three is devoted to discussing the method of Study I and its results are presented in chapter four. In a similar way, chapter five and six are used to discuss the method and to present the results of Study II. Finally, in chapter seven, a discussion of the findings of both studies is presented.

CHAPTER II

LITERATURE REVIEW

In this chapter, a review of the literature in personal selling, nonverbal literature and related areas of study is presented. First, conceptual and operational definitions of sales effectiveness are reviewed. Second, some of the major theoretical approaches in the nonverbal area are given. One of these approaches is selected and discussed due to its relevance to the understanding of the nonverbal aspects of personal selling. Third, empirical research in nonverbal aspects of personal selling is discussed. Finally, pertinent empirical literature in the behavioral sciences is reviewed to pursue the questions formulated in chapter one. This latter literature formed the basis for the specific hypotheses that are included and that were tested in this dissertation.

Conceptual and Operational Definitions of Effectiveness

Conceptually, there is a certain degree of consensus in defining effectiveness. Basically, major authors will agree that this term refers to how well somebody does something. However, the major apparent controversy is in the use of the term "performance" versus the term "effectiveness". For example, Walker, Churchill and Ford, (1977) and Weitz (1978) talk about performance while other writings (Crosby, Evans, & Cowles, 1990; Soldow & Thomas, 1984; Weitz, 1981) talk about sales effectiveness.

The problem might be with the implications derived from using the terms. For some people, effectiveness might imply a dichotomy (Landy, 1991). A person is effective or ineffective, and there is no room for a third category. On the other hand, performance might imply that behavior is continuous, and that if you have a higher score, you are better than another person in the criterion. In rejecting a dichotomous view of effectiveness, Landy (1991) has affirmed that "There is no magic line that separates successful from unsuccessful performance. Rather, the generally accepted principle is that higher scores imply higher performance." (p. 27). Although what Landy (1991) has stated might be true for some behaviors, it is also possible that for other behaviors or for practical purposes, groupings can be appropriate. For sales effectiveness purposes, arguments can be made for both positions. In this dissertation, and for methodological purposes, the concept in used in both ways.

How well somebody does something will differ for different authors. Weitz (1981) defines salesperson effectiveness from the perspective of the salesperson rather than the dyad, that is, obtaining the purchase of product or services they are selling. In addition, his emphasis is on the effectiveness of salespeople across the entire set of interactions rather than the outcome of a specific interaction. Although the element of satisfaction is not included in his definition, he says that it is implicitly

considered; arguing that in order to be effective across interactions, the customer must be satisfied.

Other authors (e.g., Crosby et al., 1990) argue that sales effectiveness, especially in long-term and complex relationships, depends on customer satisfaction and trust in the salesperson. Consequently, it follows that emphasis should be put on the customer's perceptions and satisfaction. Although both points of view are not necessarily incompatible, the researcher's position is basically that in order to be sales effective, both salesperson and customer needs must be balanced.

At an operational level, the matter is not so simple. There are many ways to operationally define sales effectiveness. Basically, there are three major categories of sales effectiveness measures: 1) selling behaviors, 2) sales measures, and 3) a combination of the two (Casey, 1989). However, the specific measure varies from study to study. For example, some measures included in the selling behaviors are: client contacting, client approaching, greeting, courtesy, closing the sale, smiles toward customers, talking with customers, helping customers, and so on (Casey, 1989).

Some of the sales measures that have been considered are: average monthly sales, average items sold per customer, average sales per hour, total sales per hour, total divisions sales to quota, account penetration, cross-selling, and so on (Casey, 1989; Crosby, et al. 1990;

Weitz, 1978).

In this dissertation, emphasis was placed on selling behaviors, especially on customers' impressions of the salesperson and perceived sales effectiveness. Although there is controversy about the relationship between selling behaviors and sales, quota, or market share (e.g., Weitz, 1981), it is also true that many times these latter measures do not truly reflect the effort or performance of the salesperson (e.g., differences in market potential). Accordingly, it was considered that all factors being equal, impressions and perceived sales effectiveness should be related to reliable and valid measures of sales.

Nonverbal Literature

Various authors who have reviewed the nonverbal literature have taken, what some authors call a channel approach (Druckman et al., 1982; Edinger & Patterson, 1983). Typically, this approach consists of studying each channel or behavior independently. For example, Harper et al. (1978) devotes one chapter to facial expressions, another on proxemics, and so on.

This approach has been criticized for various reasons. First, it is considered that in "real life", nonverbal behaviors do not occur in isolation, but generally each behavioral component (e.g., gaze, touch) is part of a larger response (Edinger & Patterson, 1983). For example, the emotional expression of anger might be communicated by two or more channels using eyes, facial expressions, and/or

paralinguistic cues.

Second, there seems to be a kind of substitutability between behaviors in the services of a particular process. As Edinger & Patterson (1983) said "a comparable reaction might result from a close approach and gentle touch as from a more distant approach with extended gaze" (p. 30).

In addition, it is also possible that the same nonverbal behavior might have a different meaning. For example, in intimate relations, personal space is reduced, but the same might occur in competitive relations where a competitor might invade the other's personal space to "intimidate" the opponent.

Some of these limitations might be reduced by taking a "multi-channel approach" (Druckman et al., 1983). This approach acknowledges the fact that "Emotional expressions, cognitive states, and social interaction involve facial, body, and eye movements as well as vocal behaviors occurring together." (Druckman et al., 1983, p. 84). In using a multi-channel approach, attention must be given to the relative importance of channels, the interactive effects of different channels, and the synergistic effects of multiple cues (Druckman et al., 1983).

However, there are also limitations with this approach. First, some nonverbal behavior patterns are the same but are used with different purposes depending upon the context,

sex, and other variables of the participants. Patterson (1983) gives us a related example:

> "...a close approach, supplemented by putting one's arm around another person's shoulders, might serve to express intimacy on one occasion but establish social control on another. In the former instance, such a sequence might be initiated by a husband toward his wife, whereas the latter instance might be initiated by a boss toward a male or female employee. The former instance might simply be a sign of affection, but the latter could be a part of a coordinated pattern leading to a request to initiate a particular task." (p. 11).

Second, both approaches lack a theory that can be used to make predictions. In fact, one criticism that has been made of the nonverbal studies is the lack of a theory guiding research in this area. Although there are exceptions, the majority of the research on nonverbal social behavior is mainly empirical (Patterson, 1983). As an example, the following comment of an anonymous reviewer of an article in the Psychological Bulletin about gaze and eye contact is very pertinent:

> "The area of 'gaze research' has been plagued by the accumulation of miscellaneous empirical bits and facts, replete with ad hoc (and often post hoc) interpretations of specific outcomes. There have been complaints that the field cannot really go anywhere unless it is attached to the broader domain on non-verbal communication or linked up with relevant theories of interaction and communication." (Kleinke, 1986, p. 78).

Some of these limitations can be overcome by using the Sequential Functional Model presented in Patterson (1982, 1983). Due to the pertinence of this model in the field of nonverbal and personal selling, and for the organization of this review, a detailed discussion of the

model will follow.

Nonverbal Behavior: A Functional Perspective

Patterson (1982, 1983) has developed various constructs and models that jointly form a comprehensive theory that helps in understanding the use of nonverbal behaviors in an interaction. The major elements are a) the nonverbal involvement construct, b) the functional classification and c) the sequential functional model.

Nonverbal Involvement

The nonverbal involvement construct is defined as a set of behaviors operationally defining the degree of involvement manifested between individuals in a social exchange (Patterson, 1982). However, in order to better understand this construct, one has to be aware of the following. First, his discussion consists of suggesting various possible nonverbal cues that signal nonverbal involvement and these are: interpersonal distance, gaze, touch, body orientation, lean, facial expressiveness, talking duration, interruptions, postural openness, relational gestures, head nods, and paralinguistic cues (Patterson, 1982, 1983).

Second, these nonverbal cues might express high or low involvement. High or increased involvement is indicated by decreased distance, increased gaze and touch, more direct body orientation, more forward lean, greater facial expressiveness, longer speech duration, more frequent and/or more intense interruptions, increased postural openness,

more relational gestures, more frequent head nods, and more intense paralinguistic cues (Patterson, 1982, 1983). The opposite would be true for low or decreased nonverbal involvement.

Third, his reference to the degree of involvement manifested between individuals in a social exchange might suggest that the interaction is the unit of analysis, but in reality, the individual is the unit of analysis. In other words, if one of the participants shows the set of behaviors previously mentioned, this person is displaying high or low nonverbal involvement. If the two participants show the set of behaviors previously indicated, each is displaying high or low nonverbal involvement.

This construct of nonverbal involvement is the one most open to criticism. First, the set of behaviors operationally defining the construct should be taken as suggestive, as he concedes (Patterson, 1983). There might be occasions where all the nonverbal cues he listed might be relevant to explain an interaction, but on other occasions, a smaller set of nonverbal behavioral cues might be more appropriate and on some occasions, even different nonverbal cues.

Second, the implicit assumption, that all these behaviors go together, may be erroneous. For example, a particular gaze at a great distance might communicate that the person is highly involved with the other person.

On the positive side, the construct helps to separate behavior from inferences about motives. Patterson (1983) recognizes that these sets of behaviors were usually called "intimacy" behaviors because they typically reflect the degree of intimacy in a relationship. However, it is considered that the same pattern of behaviors may be displayed while trying to persuade another person. The advantage of these construct differences is that by using the term nonverbal involvement, the focus is on the nonverbal behaviors displayed, and a separate and independent analysis might be made about the function behind the nonverbal behaviors (e.g., to express intimacy or as a means to social control).

Functional Classification

There is an increasing recognition that the same nonverbal behaviors might be used for different purposes or functions (Patterson, 1982, 1983). For example, decreased distance may be used to indicate liking, as well as trying to induce compliance to a small request. This has led to the development of a functional classification in order to provide a relatively comprehensive set of functions that can be related to the purpose of involvement behaviors in social exchanges.

Patterson (1982, 1983) has suggested that nonverbal behaviors serve the following five different functions: they a) provide information, b) serve to regulate interaction, c) express intimacy, d) exercise control,

and e) facilitate service or task goals. The first one, to provide information, is considered the most basic function of nonverbal behavior. In this function, the salesperson might use one type of nonverbal behavior to emphasize certain points of his/her sales presentation or as a substitute for a word, a phrase, or even a sentence.

Regulating interaction consists of those behavioral patterns that structure the initiation and development of interaction and facilitate smooth conversational sequences. It is considered the most automatic and the least reflective of the five functions.

The third function, intimacy, focuses on an affectively based reaction toward another person. Generally, when a person likes or loves another person, it will be manifested by high nonverbal involvement, although the opposite might not be true (Patterson, 1983). In general, all other things being equal (e.g., constraints of a place), high involvement should flow spontaneously and without deliberation in intimacy interactions.

Social control, the fourth function, typically occurs when a person tries to exercise influence to change the attitudes or behavior of others, or to manage his/her presentation patterns in order to have others see this person more favorably. It is considered less spontaneous, more self-conscious, and more managed than the other functions.

Finally, the service-task function refers to those nonverbal behaviors necessary to facilitate a service or a task relationship. For example, a salesperson selling a personal computer might have to display high nonverbal involvement and touch while teaching the prospect how to use it. Generally, in these cases, the behavioral exchanges follow a routine, have less interpersonal relevance for the participants, and the nonverbal involvement is basically impersonal.

Although the description of these five functions might suggest that each one is activated independently, that is not the case. First, Patterson (1982, 1983) considers the information and regulation function as independent from the social control, intimacy, and service-task functions. That is, the nonverbal behaviors used to inform and to regulate the interaction are also used in this way in the last three functions.

Second, classifying everyday exchanges is very difficult because many functions might be operating at the same time or at different moments. For example, in a selling interaction, the salesperson and buyer might use nonverbal behaviors to provide information (e.g., facial expressions showing that the buyer likes a particular brand), to regulate interaction (e.g., hand raising to indicate he/she wants to talk), to exercise control (e.g., the use of head nods to communicate similarity in order to increase the likelihood of a sale), to manage service-

task relations (e.g., shaking hands at the beginning of a sales presentation because it is expected in typical buyer-selling situations), or to express intimacy (e.g., expressing happiness through facial cues and shoulder touch as a result of closing the sale).

However, it should be noted that despite this overlapping problem, there are some expectations that constrain the amount and kind of nonverbal behaviors that seem to be appropriate in each situation. For example, too much eye contact might be perceived negatively in a service or selling situation, but it might be perceived positively in an intimate relationship.

Sequential Functional Model

In order to understand any interaction, and in particular a customer-salesperson interaction, it is important to understand the events or variables that shaped the course of the interaction, as well as the events occurring during the interaction itself. Patterson (1982, 1983) distinguishes between a) antecedent influences, b) pre-interaction or mediator factors, and the c) interaction factors.

The antecedent influences are divided in three categories and are ordered in relation to their direct salience to the interaction (Patterson, 1983). They are the 1) personal factors, 2) the experiential factor, and 3) the relational-situational factors. The personal factors are the most remote and include those influences like

culture, gender, personality, social class or age. The experiential factors are those learning experiences from previous interactions acquired through direct or vicarious learning and that influence the course of an exchange. The relational-situational factor refers to the anticipated social and physical constraints structuring the interaction which determine the expectancies or norms of the interaction and that will lead to different levels of involvement.

The antecedent factors are assumed to affect three pre-interaction mediators in a covert way: a) behavioral predispositions, b) potential arousal change, and c) cognitive-affective assessment. For example, a female salesperson will probably use more touch and less distance (behavioral predispositions) as a result of her socialization although she might be unaware of it.

Behavioral predispositions represent habitual, relatively stable tendencies for enacting behavioral involvement. These predispositions set limits on the type and amount of display of nonverbal behaviors.

The additional two pre-interaction mediators are not explicitly defined by Patterson (1982, 1983). However, by focusing on his discussion, they can be defined in the following way. Potential arousal change is the tendency to decrease or increase physiological activation as a result of nonverbal involvement. For example, Patterson (1983) quotes a case where patients who were touched by nurses showed different patterns of physiological arousal. When

the person touched was male, arousal increased, but when the person touched was female, arousal decreased.

Cognitive-affective assessment refers to the initiation of any kind of evaluation from the very simple to the very complex. For example, it might be a dichotomous judgment of good or bad or very complex, such as activating a script.

The above two pre-interaction mediators are assumed to occur in tandem. In other words, arousal change may precipitate the cognitive-affective assessment or vice versa. In addition, these factors might affect the nonverbal involvement in the interaction. For example, an expectation that the salesperson will meet with a cold customer might result in a self-fulfilling prophecy decreasing his or her nonverbal involvement or activating a compensatory pattern (e.g., many smiles and touches) to make the sales interaction more agreeable (Patterson, 1983).

In the interaction phase, it is assumed that the pre-interaction mediators have constrained the level of nonverbal involvement and structured the potential functions of the interaction. If specific functional expectancies are activated (e.g., social control), behavioral involvement will tend to be more structured.

When there are no significant differences between the expected level of involvement or functional expectancies, the exchange can be described as stable. In this situation, patterns should be less variable over time and will require little or no cognitive-affective

evaluation or arousal mediation. This cognitive-affective evaluation will affect nonverbal involvement and consequently will provide feedback in the various components of the model.

When the discrepancy is too great, the exchange can be described as unstable. In this case, further cognitive-affective mediation or arousal will be activated. The individual will attempt to redefine the function (e.g., this is not social control; this is an intimacy function) or leave the interaction. In any case, this experience will also provide feedback to the other components of the model.

In general, the above discussion incorporates the basic constructs and propositions of Patterson's (1982, 1983) theory. Because an extensive review of the theory and research supporting or related to it is beyond this paper, the interested reader is referred to Patterson (1982, 1983), to Edinger and Patterson (1983) for an excellent review of the social control function and to Kleinke (1986) for a review of gaze and eye contact using this theory.

The above discussion showed the major factors that affect the nonverbal aspects of an interaction according to Patterson's (1982, 1983) theory. In the following section, the focus is on reviewing literature that acknowledges and incorporates nonverbal aspects of personal selling. Finally, more relevant literature is reviewed, helping to provide tentative answers to the questions

formulated in chapter one.

Nonverbal Aspects in Personal Selling

Nonverbal aspects have been considered important to sales effectiveness for some time. For example, Hepner (1966) quotes an article published in 1955 about an "experiment" conducted in Macy's store in New York. According to this source, when salespeople greeted their customers with "Good Morning" keeping their voices up on the last syllable, they found a marked warming up of customers and an increase in sales tickets. Although it was not possible to critically evaluate the methodology of this "experiment", because it is not described in the source, it is nonetheless consistent with research that has found a frequent correlation between high pitch and pleasantness and happiness (Frick, 1985).

Pace (1962) studied the relationship between communication and sales effectiveness. In this study, variables like use of voice, eye contact, and body behavior, were not significantly related to a sales effectiveness index (net dollar value of sales by hours devoted to active selling). However, an "overall impression" was significantly related to sales effectiveness.

This study is methodologically weak because it only used one judge (the author of the study) who was blind to the sales effectiveness index before evaluating each salesperson. However, it would be interesting to know what information or cues he used to arrive at this "overall

impression" and the specific weights he used.

A more sophisticated study is reported by Grikscheit and Crissy (1973), where nonverbal behaviors were explicitly studied. In this study, salespeople viewed a series of scenes displaying buyer behaviors on TV. After each scene, the salesperson reported both the verbal and nonverbal information just received and the strategy and tactics they might use next. The salespeople were classified as "low" or "high" effect salespersons in terms of indexes based on three dimensions of sales performance (which are not discussed), as well as their ranking with respect to sales potential. They found that high effect salespersons were able to report more cues, especially nonverbal cues, than low effect salespersons. In addition, high effect salespersons tend to make fewer tactical changes over time.

This study suggests that salespersons are better "decoders" of nonverbal behaviors early in the sales encounter, and that they can quickly adopt an appropriate strategy that will need minor adjustments over time. This finding is consistent with nonverbal behavior research which has found that the more effective physicians, counselors, and teachers are better decoders than those lower in effectiveness (DiMatteo, 1979).

A study that also has some relevance for this discussion was conducted by Williams and Spiro (1985). They were interested in studying how communication styles of salespersons and customers were related to amount of

sales. They defined communication styles as "an individual tendency to communicate via unique patterns or combinations of code, content and communication rules" (Williams & Spiro, 1985, p. 440). Included in each communication style are the nonverbal behaviors displayed by each participant.

The participants were classified as task-oriented, interaction-oriented, or self-oriented. The salesperson (or customer) classified as task-oriented is highly goal-oriented and purposeful, concerned with efficiency and minimizing time, cost, and effort. The interaction-oriented salesperson is more personal and social, even to the extent of ignoring the task at hand. The self-oriented salesperson is more preoccupied with himself in an interaction and more concerned about his own welfare and less empathetic toward the other person.

The results of the study provide some support to the notion that communication styles are related to sales amount, although the results are difficult to interpret. However, by focusing on the significant coefficients of the multiple regression analysis, the following conclusions can be made. When the model includes only the salespersons' communication style, task or interaction orientation is not significantly related to sales amount. However, having a self-oriented communication style is negatively related to sales amount. In other words, a self-oriented salesperson seems to hinder the sale.

When the model includes only the customer, being task- or interaction- oriented is positively related to sales. When the model includes the salesperson and customer communication styles, those customers who are task- or interaction- oriented are related positively to sales. Finally, when the model includes both the salesperson and customer and the interactions between their styles, there is a positive relation to sales only when both participants are interaction-oriented.

This study has some weaknesses that should be noted that affect its internal and external validity. First, the authors used a "weak" measure as the dependent variable. The use of only sales amount as the criterion might have affected the results in any direction. For example, a salesperson that sold a ping-pong ball might be considered less effective than a salesperson that sold a baseball glove only because of the difference in price. A better approach might have been to ask a question about the extent to which the customer already planned to purchase the product before entering the store or the extent to which the salesperson was instrumental in his/her product choice. Another approach they might have used would be to classify each salesperson according to the sales obtained during the previous months divided by the hours worked in those months. This measure might have been more reliable and valid and might have been used to test the relationship between communication styles and sales effectiveness.

Second, the study failed to use controls to test the extent to which each salesperson maintained or changed his/her style. The implied theoretical assumption was that there was variability between salespersons but not within each salesperson. However, are we sure that each salesperson acted in the same way with different customers? For example, it might happen that the salesperson acted in a way that was perceived as self-oriented when the item was not expensive and interaction-oriented when an expensive item was involved. Although a systematic assessment by independent judges of consistency in communication styles might have been difficult, an empirical assessment of salesperson style variability is important due to the current literature in adaptive selling (Weitz, 1981; Weitz et al., 1986), which suggests high intrapersonal variability style according to the customer.

Lastly, the use of all the measures after the sales encounter, as the authors acknowledge, might also have affected the results. It is widely accepted that we try to be consistent with our beliefs, and that the customers or salespersons might have modified their impressions to appear consistent after the interactions.

Various recent studies provide more support for the importance of nonverbal aspects in personal selling. Heslin, Whittler and Abella (1988) report two studies of touching in a salesperson-buyer context. Study 1 consisted of presenting photographs of a salesman with a male client

where three levels of touch were used a) no-touch, b) social-polite touch (handshake) and c) friendly-warm touch (salesman put his hands on the upper back of the client as if to guide him to a chair). These photographs were shown to professional salespeople, and their reactions were studied. Results showed that level of touch affected their rating of assertiveness, where more touch is associated with more assertiveness. However, when free responses were analyzed, it was found that the friendly-warm touch was considered the most negative from the point of view of these salespeople.

Study 2 used actual touch and focused on the reaction of the customer. In this study, role playing was used instead of photographs. The buyers were assigned to the buyer role by using an apparently random selection process, but where the only possibility was the buyer role. Operationally, the social-polite touch was shaking hands before and after a persuasive situation, while in the friendly-warm touch the saleswoman shook hands, guided the customer to a chair by placing a hand on her upper back, touched her arm three times during the presentations, and shook hands before leaving. Because there were no significant differences in awareness between the no-touch and the social-polite touch, these data were collapsed. Results showed that those who were touched felt better, liked the salesperson, felt the salesperson liked them, felt more influenced by the salesperson and would consider

buying something from the salesperson in the future.

One explanation for the apparent contradiction between the studies might be due to the fact that gender moderated the results. In the first study, both salesperson and customer were male, while in the second study, they were female. The participants may have been reacting, not only to the touch level, but also to the sex of the parties in a culture where touching between males is not as common as touch between females (Heslin et al., 1988). Nevertheless, this study shows that even a nonverbal behavior, such as touch, might affect sales effectiveness.

DePaulo and DePaulo (1988) were also interested in nonverbal behavior in personal selling from a detection of deception perspective. They replicated a study where they had found that certain cues were reliable indicators of attempting to deceive. The major variation was the use of retail salespersons who had experience on commission and/or bonus compensation plans, and automobile customers who had each traded in at least three cars for newer ones and had bargained over the price. They made videotaped simulated sales for products they had sold or traded-in and were motivated by the payment a commission based on how persuasive they were. To induce deception, they were asked to make some sales pitches for non-preferred products.

Contrary to previous studies, detection accuracy was no better than chance, even with those judges given special instructions to pay attention to the critical cues. Two

additional analyses were made to confirm or disprove various possible explanations. In the first analysis, two "blind" coders watched the videotapes to measure if the indicators of deception were correlated with attempted deception. None of the differences reached significance, and only a few were in the expected direction. The second analysis found that in those presentations judged more deceptive, there was greater correlation with the indicators of deception than in the less deceptive presentations. In other words, the results show that nonverbal indicators of deception are correlated with the impression of deception independently of the reality (intention). As DePaulo and DePaulo (1988) said:

> "Impression cues are more reliable across studies than deception cues. In other words, certain beliefs that people in our culture have about liars (e.g., that they are 'shifty') are widely held despite the apparent fact that such cues are not highly reliable indicators of actual deception. For salespersons, the implication is that they need to avoid the behaviors (such as fidgeting) that could give the impression of deception even when they are actually being honest." (p. 9).

The authors of the study attribute the above findings to the following reasons: a) prior practice or experience in telling lies, b) confidence in being able to deceive successfully (e.g., they do not become nervous), or c) lack of guilt about lying. It should be noted that the authors report that their self-report data suggests that they were confident that an audience would not be able to discriminate their deceptive presentations from their

truthful ones.

This study is very important for the area of nonverbal behavior and personal selling due to the following reasons. First, it shows the effect of motivation in nonverbal behaviors. Salespeople might have an incentive to control their nonverbal behavior if good consequences are associated with some particular form of behaving. Second, it shows the effect of previous experiences in altering nonverbal behavior. Apparently, these previous experiences develop confidence in the salespeople, and this is manifested nonverbally. Finally, it shows that certain nonverbal behaviors are associated with particular impressions, independently of the reality. Accordingly, impressions are and must be manageable if positive results are desired.

Finally, Englis and Reid (1989) show the effect of salesperson's nonverbal expressions on buyer behavior. In this experiment, salespeople were trained to use one of three emotional expressions during their sales presentations: 1) happy/joyful, 2) irritated/angry, or 3) anxious/tense. Pre- and post- measurements were taken in a role-playing sales presentation trying to sell a particular brand of a portable compact disc player.

The results show that buyers interacting with a happy/joyful salesperson were more likely to choose the brand sold, as did those interacting with an anxious/tense salesperson; however, brand choice in the irritated/angry

group did not differ from chance. In terms of purchase intentions, the brand buyers in the irritated/angry salesperson group were less likely to purchase the brand within one year than those in the happy/joyful or anxious/tense salesperson groups.

With relation to buyer attitudes toward the salesperson, the irritated/angry salesperson group had less positive attitudes than the happy/joyful or anxious/tense salesperson groups. Attitudes toward the brand were more positive among buyers in the happy/joyful salesperson groups than buyers in the irritated/angry salesperson group. Other brands were not affected by the emotional expression.

In general, these results suggest that the nonverbal expression in a sales presentation affects the buyer's brand choice, the attitudes toward the brand, and the salesperson and the intention to buy the product. It also shows that there were major differences between the happy/joyful and irritated/angry salesperson groups, although sometimes the anxious/tense group was more effective than the irritated/angry group. Apparently, the anxious/tense group buyers were motivated to respond sympathetically (e.g., "underdog" effect).

This study supports the notion that nonverbal behaviors affect buyers' reactions and sales effectiveness. In particular, it also shows that nonverbal training might be effective in changing salesperson behaviors. The authors

conclude that "It is plausible to assume that training techniques can be developed to teach salespeople to monitor their nonverbal expressions (especially their facial expressions of emotion) and thus to gain control of another important aspect of their sales presentations." (Englis and Reid, 1989, p. 82). They achieved this manipulation by encouraging the salesperson to recall events which had made them feel the emotions and use their memories in displaying the emotions.

In summary, it is widely believed that nonverbal behaviors have an important role in personal selling interactions. The limited research in this area suggests that being able to decode nonverbal behaviors is an important factor in sales effectiveness. What is not clear is if this is a dispositional factor or an ability that can be developed by proper training. However, there is evidence that it might be modified by proper experiences.

Also, there is need for additional study of nonverbal factors in personal selling. It is suggested that salespeople are able to control their nonverbals to create desired impressions, and, in any event, each customer will form an impression of the salesperson. According to attribution theory, this might lead to the fundamental attribution error; that is, the tendency to overestimate the role of dispositional factors in controlling behavior (Harvey & Weary, 1984). If this is true, it might explain why some people believe that personality factors are

important in sales effectiveness. It might be possible that what these persons consider to be personality is the external manifestation of an impression management process incorrectly attributed to dispositional factors. If this argument is valid, we can expect certain impressions to be related to sales effectiveness.

Finally, a point has to be made in relation to methodology. The studies mentioned in this section used videotaped sales presentations (e.g., DePaulo & DePaulo, 1988; Grikscheit & Crissy, 1973), salesperson photographs (e.g., Heslin et al., 1988), actors or trained salespersons (e.g., Englis & Reid, 1989; Heslin et al., 1988), or real salespersons (e.g., Williams & Spiro, 1985). Each design has its advantages and limitations. Videotaped sales presentations and photographs were strong in controlling the stimulus that was presented to the participant (i.e., internal validity) but weak in the generalization of the results to real personal selling situations (i.e., external validity).

On the other hand, the use of actors or real salespersons increased the similarity of the research situation to the personal selling context at the expense of losing control of the stimulus. Although it might be theoretically possible to maximize both control and generalization up to certain limits, it certainly increases the effort, time, and cost of any research. Consequently, this issue between control of the stimulus and

generalization of the results is a theoretical and practical one that should be considered in the design and interpretation of the results of any research in this area.

Hypotheses Formulation

In this section, various writings and research results in the literature are integrated in an effort to elaborate theoretical rationales to answer the questions formulated in chapter one. In addition, explicit hypotheses are presented at the end of this section. To facilitate understanding, the questions formulated in chapter one are reproduced at the beginning of each discussion.

How do consumers describe the "more" and the "less" effective salesperson?

This question implicitly suggests that there are differences in salesperson behavior that will discriminate between the more and the less effective salespersons in most situations. This might appear to be in conflict with the current academic literature where Weitz (1981) has concluded that there are no universal effective selling behaviors.

One way to reconcile this apparent discrepancy is to argue that this might be true if we talk about "hard" measures of sales effectiveness (e.g., sales volume) where the relationship between performance and results is not always direct. This could be due to other variables intervening, suppressing, or moderating the relationship, such as, sales potential of the market (Weitz et al., 1986). From a selling behavior perspective, that is, creating

a good impression and/or persuading the customer, this might not hold true and it might be worthwhile to talk about effective behaviors.

A second way to reconcile this apparent conflict is to argue that what Weitz (1981) has concluded might be true when personality and verbal factors are considered, but that it might not apply when nonverbal aspects are considered. Because nonverbal aspects have not been considered in detail in the literature, this aspect needs to be explored before arriving at a general conclusion that might prematurely close inquiry in an area where more research is needed (Babbie, 1979).

Buzzotta, Lefton & Sherberg (1982) claim that there is a "preferred" salesperson behavior that will have effective results on most occasions, and that is the basis of their training programs. According to their writings, salesperson and customer behavior might be described using two dimensions: dominance-submission and hostility-warmth. These dimensions are defined as follows. By dominance, they mean control or influence, in other words, using the person's ideas to affect thinking or behaviors of others. Submission, on the contrary, is going along with others without first asserting one's personal ideas. Hostility is self-centeredness and lack of regard for others, in other words, being insensitive and unresponsive to others. Warmth, on the contrary, is regard for others along with trust or at least openmindness. By combining these two

dimensions, they are able to classify salesperson (or customer) behavior as Q1 (dominant-hostile), Q2 (submissive-hostile), Q3 (submissive-warm), or Q4 (dominant-warm).

Buzzotta et al. (1982) report that they conducted a study where people were asked to think of both the best and worst salesperson they have known and to describe their behaviors from a list on a questionnaire. They claim that the best salesperson was described as a person who manifested much more Q4 behavior (48%) than Q1 (19%), Q2 (18.1%) or Q3 (22.3%). On the other hand, the worst salesperson was described as Q1 (34.6%), Q2 (33.4%), and Q3 (31.3%), while only 8.7 percent described the behavior as Q4.

Although the Buzzotta et al. (1982) study suggests that Q4 (dominant-warm) type of behavior is an optimal way of behaving, their results should be considered with a note of caution because the study does not present the methodology used, and it is a training program whose purpose is more commercial than academic.

On the other hand, there is another commercial salesperson training program that seems to suggest that there is not a communication style which is the most effective in all situations (Weitz et al., 1986; Wenschlag, 1987). This sales training program classifies salespersons and customers using two dimensions: assertiveness and responsiveness (Wenschlag, 1987). Assertiveness is defined

as "the degree to which a person is perceived as attempting to influence the thoughts and actions of others (Wenschlag, 1987, p. 22). Responsiveness is defined as the degree to which a person is perceived as expressing feelings when relating to others" (Wenschlag, 1987, p. 26).

By combining assertiveness and responsiveness, a salesperson or a customer can be classified as driver (high assertiveness, low responsiveness), expressive (high assertiveness, high responsiveness), amiable (low assertiveness, high responsiveness), or analytical (low assertiveness, low responsiveness). However, this sales training program instructs the salesperson to vary his/her behavior according to the customer style. In other words, the best sales behavior is altering the salesperson's behavior to adapt to the style of the customer (Weitz et al., 1986; Wenschlag, 1987).

Because the effectiveness of this latter training program has not been reported as Buzzotta et al. (1982) has, it seems to be reasonable to give more weight to the former study, despite the methodological and commercial purposes, and to conclude as a matter of a working hypothesis that being perceived as dominant-warm seems to be associated with higher sales effectiveness.

There is additional literature that tends to support the notion that being dominant-warm might be related to effectiveness at an interpersonal level. As said before, Williams & Spiro (1985) arrived at the conclusion that

communication styles were related to effectiveness. Specifically, they found that having a self-oriented communication style is negatively related to sales. If we consider that hostility is basically self-centeredness and lack of regard for others, and that salespersons described in this way were classified in the worst category, the Buzzotta et al. (1982) claim seems to be consistent with Williams & Spiro (1985). Also, Englis and Reid (1989) found that happy/joyful salespeople were associated with various effective selling behaviors while irritated/ angry salespeople affected these selling behaviors negatively (e.g., brand choice, attitude toward product, intention to buy).

In addition, in the nonverbal literature, there is some evidence that suggests that being warm might be related to effectiveness. DiMatteo (1979) claims that patients' perception of the warmth (and other affiliative constructs) of the physician were positively related to their desire to continue the relationship and tended to comply with physicians' orders. Also, LaCrosse (1975) found that affiliative counselors (considered warm by some authors) were perceived as significantly more attractive and persuasive than unaffiliative counselors.

Based on the limited literature in this area, it seems reasonable to hypothesize that salespeople perceived as dominant-warm will be more effective than salespeople perceived in other ways. These styles will be utilized

further in this paper; therefore, to simplify further discussion, sometimes the researcher will mention Q1, Q2, Q3 or Q4 with the understanding that Q4 means dominant-warm.

It should be noted that the major problem with Buzzotta et al. (1982) is that their focus is on the verbal aspects of an interaction, which might suggest that the verbal component of each style might not be easily separated from the nonverbal aspects of each style. Fortunately, this does not appear to be the case. Perlmutter, Paddock & Duke (1985) suggest that each communication style is transmitted mainly through nonverbal channels. In this study, Perlmutter et al. (1985) were interested in isolating the relative importance played by verbal, vocal, and nonverbal cues in communication styles using the Leary Interpersonal Circle. The Leary Interpersonal Circle is a more elaborate version of the dimensions used by Buzzotta et al. (1982), except that the hostile-warm dimension is labeled as hostile-love. Basically, the study showed that different communication styles are transmitted by different modes of presentation. In terms of modes of presentation, the three communication styles that were presented to the participants were best identified by video only (46%), followed by audiovisual (42%), audio (40%) and transcript (23%). If it is considered that the transcript version is basically the verbal component, it can be concluded that these styles are transmitted largely through nonverbal channels.

In terms of each style, the hostile-submissive was identified best by audio (75%), which suggests paralanguage is an important factor. However, the content of the presentation was not controlled so one has to be careful of this conclusion. Friendly-dominant was identified best by video-only (50%), which might suggest that gestures and facial expressions give important cues in this communication style. Finally, in the friendly-submissive style, there was not a better mode of presentation, yielding almost the same results in each condition but averaging 41% percent identification. This result might be construed to mean that this style contains cues that can be identified by any mode of presentation.

In terms of the above discussion, it can be concluded that communication styles seem to be related to interpersonal effectiveness in selling. The communication style that is highly related to this perception is dominant-warm. It might be expected that dominant-warm salespeople will be more effective than Q1, Q2, or Q3. Furthermore, these communication styles seem to be transmitted to a great extent through nonverbal channels which suggests that the verbal portion of each style mignt be controlled without impairing the nonverbal channels to a great extent.

Are there specific nonverbal behaviors responsible for the impression of the more and the less effective salesperson? If there are differences, what are they?

The problem with the Perlmutter et al. (1985) and Williams and Spiro (1985) studies is that they did not focus on the specific nonverbal behaviors that might be used to perceive the person in each style. Buzzotta et al. (1982) did offer some examples; however, they are not very relevant for this discussion. Englis and Reid (1989) were able to manipulate nonverbal expressions of emotions and assumed this manipulation to be successful on the basis of the overall impressions created in the participants but did not present a nonverbal variable analysis. However, there are some studies that suggest that dominance might be transmitted by specific nonverbal behaviors, specifically eye gaze and facial expressions.

Thayer (1969) found that a male confederate who engaged in extended looking in an unfocused interaction with a male subject was rated as more dominant than a confederate who engaged in only brief looks. Zimmerman (1977) found that when confederates engaged in a normal amount of eye contact, they were judged as being more potent that when they looked to a lesser degree.

Keating, Mazur, & Segall (1977) found that photographs of models were judged more often as dominant when the models had lowered rather than raised eyebrows. On the other hand, poses that featured nonsmiling mouths were judged dominant more often than those with smiling mouths. However, a

comparison of the relative effects indicated that brow positions was a stronger determinant of dominance than that of mouth position.

Also, there are some studies concerning the warmth dimension in the literature. LaCrosse (1975) defined affiliative behaviors (considered warmth for some authors) as smiling, positive head nods, gesticulations (movements of hands not in moving contact with other body parts), 80% eye contact, direct angle of shoulder orientation, and 20% forward body lean. Unaffiliative condition was defined as 40% eye contact, 20% reclining angle, a 30% angle of shoulder orientation, and absence of smiling, positive head nods, and gesticulations. The results showed that counselors utilizing an affiliative manner were rated as significantly more persuasive than those utilizing an unaffiliative manner.

Smith-Hanen (1977) found that arm and leg position were related to warmth perception. Specifically, the arms-crossed position was perceived as the coldest and least empathic position. In terms of leg position, one leg crossed over the other such that the ankle of the crossed leg rests on the knee of the other leg, was judged as the coldest while the other positions were not judged as necessarily cold or warm.

It is interesting to note that consistent with Perlmutter et al. (1985) where video was the best mode of presentation, the studies discussed here focus only

on nonverbal aspects amenable to video analysis (gaze, facial expressions, body movements). Is this a coincidence? Perhaps, but, nonetheless, it gives support to the notion that nonverbal channels are important to the transmission of these communication styles.

However, there is some evidence that paralanguage might be related to effectiveness or serve as a channel for communicating styles. First, the Perlmutter et al. (1985) study found that paralanguage might be relevant for communicating styles. Secondly, in the persuasion area, Mehrabian & Williams (1969) found that judges' perceptions of persuasiveness were correlated significantly with the following variables: speech volume, speech rate, facial activity, gesticulation rate, and eye control with the addressee. Finally, as mentioned elsewhere, there is a frequent correlation between high pitch and pleasantness and happiness (Frick, 1985).

It is difficult to summarize the above literature and to establish hypotheses in an area where many specific findings are reported. However, based on the above literature, a cluster of nonverbal behaviors might be considered relevant for communicating the dominant-warm style in a personal selling context. In the paralinguistic channel, high speech rate and high speech volume is expected to be related to a dominant-warm style and to perceived sales effectiveness. In the facial channel, more positive facial expressions (i.e., facial configurations indicating

happiness, such as smiles), and less negative facial expressions (e.g., frowns, glares, sneers), are expected to be related to a dominant-warm style and to perceived sales effectiveness. In terms of visual behaviors, more eye contact is expected to be positively related to a dominant-warm style and to perceived sales effectiveness. In terms of kinesics or body movement, more object-focused movements (i.e., movements of the hands, arms, or fingers away from the body), more parallel movements (i.e., movements in which both hands move together in symmetry), less hand-to-head contact, less hand-to-hand contact, less body-focused movements (i.e., movements in which any hand comes in contact with any part of the body or clothing), and less hand-to-body contact are expected to be related to dominant-warm and to perceived sales effectiveness.

Basically, these expectations are based on the above mentionated nonverbal literature and the works of Druckman, et al. (1982), Mehrabian (1982), Riggio and Friedman (1986). As in these studies, in this dissertation, the nonverbal variables are being used as the independent variables. However, these hypotheses differ from previous studies in that a two-dimensional dependent variable (i.e., each salesperson receives a rating on two dimensions or is placed in a category such as dominant-warm) is being used. In addition, perceived sales effectiveness is also used as a dependent variable.

Can salespersons be trained to control or manipulate nonverbal behaviors in order to create impressions associated with the more effective salesperson?

There is an explicit belief that salesperson behavior might be changed through appropriate training (Buzzotta et al. 1982; Cummings, 1987; Davis & Silk, 1972); Soldow & Thomas, 1984; Szymanski, 1988). Despite this belief and the fact that many commercial training programs are available, little has been published about the effectiveness of these programs.

Even with those authors who include some training effectiveness studies, the research design seems to be so weak that many alternative hypotheses or explanations are not excluded. For example, Buzzotta et al. (1982) conclude that "From all this (and much similar evidence is available) it's pretty clear that Q4 skills do work and will help to get a bigger payoff from your selling efforts if you put them to use" (p. 282). However, if one goes to the evidence presented, one will quickly notice that almost all the internal and external sources of invalidity seem to be present (e.g., selection bias, history, maturation). This is so because they only present percentages showing some improvement after the training but do not disclose whether control groups, random assignment of the participants or other factors were controlled. Based on the limited information they present, the most plausible inference that can be made is that they used an after-only design without a control group, which

in scientific terms precludes making broad generalizations, such as that the training was the cause of the improvement.

The only study in salesperson effectiveness training that presents the methodology in detail was realized by Meyer & Raich in 1983. In this study, a behavioral modeling training program was given to representatives in fourteen stores in one large metropolitan area. These stores were matched in seven pairs according to size, type of location, market characteristics, and so on. The behavioral training program was introduced in seven experimental stores while in the other seven control stores, the on-going sales training program was used.

The behavioral modeling program was basically the following. First, the program focused on specific aspects of sales situations (e.g., approaching the customer). Second, guidelines or "learning points" for handling each aspect of a sales situation were presented, followed by the presentation of a videotaped situation where a "model" followed the guidelines in carrying out that aspect of a sales interaction. Third, the trainees practiced the same situation in role-playing rehearsals. Finally, their performance was reinforced and shaped by their supervisors who were the instructors.

The results showed that in those stores where behavioral modeling was used, the sales representatives increased their sales by 7% during a six-month period, while the control group showed a 3% decrease in average

sales.

Although it is very dangerous to generalize from only one study, it is, nonetheless, helpful to isolate those factors that probably were critical in this training. First, the use of behavioral modeling was a critical factor that contributed to its "success". Clearly, the learning techniques they used were appropriate and the procedure was consistent with the results of modeling research (Bandura, 1977). Future research should control the procedures used in the training and/or isolate its elements to identify the critical elements (e.g., model feedback).

Second, the content of the behavioral modeling program was highly related to the task. They clearly identified the critical skills and knowledge necessary and used this information as the basis of the training program. The content of the training is a second source of variation that affects the results.

Finally, and this is more speculative, the use of the video was another critical factor. It might be argued that the video implicitly communicated an acceptable way of behaving (both verbally and nonverbally) that was related to good customer relations and that, consciously or unconsciously, reminded each trainee how to behave nonverbally to obtain positive consequences. What might have happened if the content of this program were transmitted by verbal means only (e.g., book)? Although research comparing verbal versus nonverbal has been

explicitly studied, to the best of our knowledge, sales training programs have not controlled this source of variation. However, for the present purposes, it might be hypothesized that adding nonverbal information or cues to verbal material will enhance a sales effectiveness training program.

However, our principal question is whether salespersons can be instructed to manage their nonverbals by training. Again, the implicit belief is that it is possible (e.g., Cummings, 1987), but there is no empirical work done on this aspect in personal selling.

Some studies in nonverbal training have been done using a social skill model (Bull, 1983). Basically, the social skills model postulates that social behavior can be seen as a skill, and by implication, it is possible for people to increase their social effectiveness through appropriate training procedures (Bull, 1983). The usual procedure in this type of training is similar to behavioral modeling; a list of particular social difficulties experienced in social situations is developed, and appropriate techniques for dealing with these situations are presented through demonstrations, use of role-play, and feedback from a videotape recorder.

In 1971, Collect (as reported by Bull, 1983) carried out a study of social skills training with people from different cultures. In this study, a group of Englishmen were instructed in Arab nonverbal behaviors (e.g., look

and smile as much as possible) to see whether this would improve their communication with Arabs. Later, a series of conversations were arranged between Arabs and English male students (trained vs. untrained Englishmen). The results showed that the Arabs had a significant preference for Englishmen who had been trained in Arab nonverbal behaviors.

Druckman et al. (1982) report a series of studies about nonverbal training. In the first study, various participants were assigned the role of a Soviet Ambassador to the United States for a TV interview. The participants were required to act according to one of three intentions that were the experimental conditions: deception, evasion, and honesty. Based on their nonverbal behaviors, the researchers were able to distinguish between nonverbal behaviors related to each intention using statistical techniques.

In a second study, Druckman et al. (1982) used the material developed in the first study to instruct foreign training officers in cross-cultural communication. The officers were told to watch an actor portraying three different intentions (deception, evasion, and honesty) and to rate the actor's intention in each film. In addition, the officers were trained according to one of the following conditions: 1) Global lecture, 2) Technical briefing, 3) Inference training, and 4) Audio Only.

The global lecture was basically an orientation about nonverbal communication. The technical briefing condition was a graphic and statistical analysis presentation of findings obtained in the first study.

The inference training consisted of three parts. First, a briefing, with viewcharts, on expert key experimental results, including the statistical (e.g., discriminant analysis) and expert (i.e., judges) predictions obtained in the first study. Second, these findings were translated into signals and noise based on those nonverbal variables that help to discriminate among the intentions. Finally, a procedure for inferring intentions from nonverbal behavior was demonstrated by using a flowchart which helped to classify people as being honest, evasive, or deceptive.

The audio-only condition consisted of a lecture, comparable to the global lecture condition. After this, the participants were asked to make judgments based only on the audio version of the three conditions.

The results based on the officers ratings were as follows. Where comparisons were made between global lectures versus technical briefing, this latter condition was found to improve judgmental accuracy in the deception and evasion conditions at a statistically significant level. No improvement was found for the honest condition.

When comparisons were made between the technical briefing versus inference conditions, it was found that this latter condition improved the judgmental accuracy

in all conditions at a statistically significant level.

In terms of audio-only, the results are difficult to understand. Nonetheless, Druckman et al. (1982) conclude that having access to the verbal channel only resulted, at best, in about 50 percent correct judgments.

However, there are some problems with this latter study that should be noted. First, the audio-only condition was not completely verbal because the paralanguage aspects were not controlled. What might happen if only verbal transcripts were provided? Less judgmental accuracy? Second, the authors were focusing only on encoding, that is, translating the condition (e.g., honesty) to behavior and no effort was devoted to assess how people perceived the participants. This might have affected the internal and external validity of the experiment, because the behavior might be interpreted in another way. In fact, the authors say that "experts", in detecting these conditions, were less able to discriminate among them than the statistical equations. Although this finding was presented as suggesting that the more "objective" measures were better predictors than "subjective" measures, it, nonetheless, may suggest that the way the "actors" encoded the conditions were not representative of how people usually perceive them. Further research should control this source of variation.

Third, it is important to note that the trainees were aware that only three conditions existed since they were told to consider whether the actor was deceptive, evasive,

or honest. Having some cues about each condition should increase judgmental accuracy. A more difficult test, such as the likelihood that nobody is honest, evasive, or deceptive or using the information to judge other "actors" in a different setting (e.g., a jury trial), brings more credibility to the results.

Fourth, a condition between global lecture and technical training was needed. It might be argued that presenting a model and labeling it as deceptive, evasive, or honest might produce results similar to the technical inference training. To what extent are those improved judgments due to the technical training or to seeing a "model" properly identified? Research on modeling (Bandura, 1977) suggests that seeing a model performing can have a significant improvement on observers even when no detailed information is given. On the other hand, the signal versus noise argument makes sense (Druckman et al., 1982). If more detailed information is given, noise will be reduced and better judgments might be made. According to this, it might be hypothesized that training which increases the specificity of the nonverbal behaviors appropriate to a particular impression will be more helpful than training that identifies the impression but that does not give explicit cues.

Finally, it should be noted that the results of this study only say that it might be possible to improve judgmental accuracy through nonverbal training, but the

study did not consider whether people can learn to control their nonverbals. Although this was not the purpose of their research, it is an issue that needs to be addressed in future research.

Based on the limited literature in this area, the following conclusions can be made. First, the literature suggests that the use of training should be an effective instrument to modify salespersons' verbal and nonverbal behaviors, and consequently, customers' perceptions of salespersons' effectiveness. However, the amount of change will depend on various factors of the training program. Second, it seems that if a model performs the actions rather than explaining verbally how the person should act, this will enhance the effectiveness of the training program. This might occur because the trainee will be exposed to the model's nonverbal behaviors. The literature suggests that it must be more effective because nonverbal stimuli often evoke strong emotions due to their multidimensional nature, and that often these kind of stimuli are highly memorable (Pechmann & Stewart, 1989). Also, research in behavioral modeling (Bandura, 1977) has consistently demonstrated, that seeing a model has an effect in influencing behavior in the way shown at least temporarily.

Finally, the literature also suggests that presenting a detailed analysis or technical briefing of the variables related to an impression will be more effective than

presenting a model only. This might be explained in terms of the sign and noise argument (Druckman et al., 1982), which suggests that if detailed information is being given, noise will be reduced and better judgments will be made. In this case, noise is reduced by knowing the variables associated with perceptions of sales effectiveness and their relative weights, and the salesperson is able to concentrate on nonverbal behaviors associated with a favorable impression.

Also, under Symanski's (1987) framework, this result can be expected. Knowing the relevant variables and their typical values that less and more effective salespersons use will inform salespeople of the current reality, and consequently, fewer errors will be made when adopting a strategy in a sales presentation.

It should be noted that there are some variables that may be related to the nonverbal behaviors or other variables studied here. Although the objective of this dissertation was not to study them, they were included in the study for control purposes. These variables are a salesperson's sex, judge's sex and order of presentation.

Sex is a variable that has been shown to affect ratings in some situations but not always. In some contexts (e.g., selection or promotion), research findings show a pro-male bias (Nieva & Gutek, 1981). In other contexts (e.g., evaluations of products or past performance), no sex differences or even a pro-female-bias (Nieva & Gutek, 1981)

have been shown. The literature on nonverbal behavior (Patterson, 1983) considers sex an antecedent variable that affects nonverbal involvement in an interaction. In addition, Perkins, Kiesler, Anchin, Chirico, Kyle, and Federman (1979) have shown that ratings in interpersonal style are affected systematically but not strongly by sex.

Order of presentation is another variable that might affect the results of this dissertation. Due to the multiple performance ratings in this research, the order in which the salespersons are shown might affect the judges' rating. This might lead to what is known as contrast effect or "tendency for a rater to evaluate a person relative to other individuals" (McCormick & Ilgen, 1985, p. 84). It has been shown that applicant's ratings (in a personnel selection process) are at least partially dependent on the other individuals being rated (Landy, 1985). Consequently, if a salesperson makes an excellent presentation, the second one would be at a disadvantage.

Due to the mixed research results with respect to these variables and to the fact that they are not the main objective of this dissertation, the researcher is not postulating any specific relationships. The objective is to control these possible sources of variation, and interpret the results accordingly. Consequently, these variables were used to analyze and assess all dependent variables, if they affected the results, and no hypotheses are postulated.

Based on the discussion of this chapter, the following hypotheses were formulated and explicitly tested in this research:

Hypothesis 1: Salespersons identified as dominant-warm will be perceived as more effective than other salespersons.

Hypotheses 2a-2m: Salespersons perceived as dominant-warm will exhibit:

2a. higher speech rate
2b. higher speech volume
2c. more positive facial expressions
2d. more smiles
2e. less negative facial expressions
2f. more facial activity
2g. more eye contact
2h. more object-focused movements
2i. more parallel movements
2j. less hand-to-head contact
2k. less hand-to-hand contact
2l. less body-focused movements
2m. less hand-to-body contact

Hypotheses 3a-3m: Salespersons perceived as more effective will exhibit:

3a. higher speech rate
3b. higher speech volume
3c. more positive facial expressions
3d. more smiles
3e. less negative facial expressions
3f. more facial activity
3g. more eye contact
3h. more object-focused movements
3i. more parallel movements
3j. less hand-to-head contact
3k. less hand-to-hand contact
3l. less body-focused movements
3m. less hand-to-body contact

Hypothesis 4: Trained salespersons will be perceived as more effective than untrained salespersons.

Hypothesis 5: Training that instructs salespeople to focus on nonverbal aspects of a sales presentation will be more effective than training that focuses only on verbal aspects.

Hypothesis 6: Training that presents detailed analysis (technical briefing) of the nonverbal behaviors related to perceived salesperson effectiveness will be more effective than training that displays only a model.

Once the specific hypotheses were formulated, the next step was to design a methodology to test these hypotheses. In the following chapters, a detailed discussion of the methodology and results of each study are presented.

CHAPTER III

STUDY I

METHOD

Overview of the Study

In Study I, the relationship between interpersonal style and perceived sales effectiveness was evaluated. In addition, the relationships between speech rate, speech volume, positive facial expressions, smiles, negative facial expressions, facial activity, eye contact, object-focused movements, parallel movements, hand-to-head contact, hand-to-hand contact, body-focused movements, and hand-to-body contact as independent variables, and interpersonal style and perceived sales effectiveness as dependent variables were studied.

A chronological description of what was done follows. First, a reliability study of the Impact Message Inventory, used to measure interpersonal style, was performed to adapt this instrument to a Spanish-speaking culture.

Second, ninety-six (96) students, acting as salespersons were required to memorize a "canned" sales presentation and were videotaped. Third, sixty-four (64) students, acting as judges, selected independently of those acting as salespersons and with no previous knowledge of the videotaped sales presentations, were used to evaluate the salesperson's performance using the Impact Message Inventory (IMI) and a Perceived Sales Effectiveness Scale (PSES). Each salesperson was evaluated by two groups; each

group was composed of one male and one female but were evaluated in a differing order for each group. For example, group one saw the first salesperson of a group of six in first place while group two saw this salesperson in fifth place. In total, each salesperson was rated by four judges and each judge saw six salespersons. To make results comparable among judges, each perceived sales effectiveness raw score was transformed to standardized scores (z-scores) for each judge. After this, the salespersons were classified according to the interpersonal style perceived, and the association between this measure and perceived sales effectiveness was assessed.

Third, the four judges' standardized scores in the perceived sales effectiveness measure were averaged and using these average standardized scores, less and more effective salespersons were identified. An extreme groups approach was used (Hair, Anderson, & Tatham, 1987) eliminating those cases where low consensus existed among the judges. Of ninety-six salespersons, sixty were used where thirty were classified as more effective and the other thirty as less effective.

Finally, a group of trained coders evaluated the occurrence of the nonverbal behaviors studied in these salespersons. With these data, the relationship between these nonverbal behaviors and perceived sales effectiveness and interpersonal style was assessed using a categorical criterion (more or less effective), as well as, the degree

of effectiveness. All data were analyzed using the SPSSX (Statistical Packages for the Social Sciences) program.

Measures

Nonverbal Behaviors. The nonverbal behaviors studied were speech rate, speech volume, positive facial expressions, smiles, negative facial expressions, facial activity, eye contact, object-focused movements, parallel movements, hand-to-head contact, hand-to-hand contact, body-focused movements, and hand-to-body contact. The way these behaviors were measured was adapted from the works of Mehrabian (1972), Druckman et al. (1982), and Riggio and Friedman (1986). Figure 1 shows them organized by the nonverbal channel they are measuring and a description of how they were operationally defined for this study.

Interpersonal Style. The interpersonal style of each salesperson was measured using the Impact Message Inventory (IMI). Following is a description of this instrument and the way it was adapted to this study.

The Impact Message Inventory (IMI) was developed by Donald J. Kiesler and Associates based on Kiesler's Communication Theory of Psychotherapy (Perkins, Kiesler, Anchin, Chirico, Kyle and Federman, 1979). According to this theory, relationship is inevitable and pervasive in human transactions and occurs primarily through nonverbal messages. Two constructs are important to understand a relationship, an "evoking message", which is encoded nonverbally by one participant and the "impact" message,

Paralinguistic Nonverbal Variables

Speech Rate: Consisted of the average of two coders' estimation of the speech rate per 30 seconds using a scale where the following words (in Spanish) and values were used:

0: Very slow
1: Slow
2: Average
3: Fast
4: Very fast

This scale was used by Mehrabian (1972) where a .77 reliability was reported using words per minute. In the present study the inter-coder reliability obtained was .75.

Speech Volume: Consisted of the average of two coders' subjective estimation of speech volume where the following words (in Spanish) and values were used:

0: A whisper, or the lowest volume at which the communicator could have been heard.
1: Soft
2: Average
3: Loud
4: Very loud

This scale was used by Mehrabian (1972) where a .88 reliability was reported. In the present study the inter-coder reliability obtained was .70.

Facial Expression Nonverbal Variables

Positive Facial Expressions: Average of two coders' frequency count of positive expression such as smiles, facial configurations indicating happiness and others in a period of 90 seconds. Continuous expressions were scored only once. The inter-coder reliability obtained in this study was .70.

Smiles: Average of two coders' frequency count of smiles in a period of 90 seconds. The coders only paid attention to the mouth. Continuous expressions were scored only once. The inter-coder reliability obtained in this study was .78.

Figure 1. Nonverbal Behaviors Measured in Study I. Based on Mehrabian (1972), Druckman et al. (1982), and Riggio and Friedman (1986).

Negative Facial Expressions: Average of two coders' frequency count of negative expressions such as frowns, glares, sneers, and so on in a period of 90 seconds. Continuous expressions were scored only once. The inter-coder reliability obtained in this study was .98.

Facial Activity: Sum of positive facial expressions and negative facial expressions.

Visual Behaviors

Eye Contact: Grand average of two coders' average percentage of time the salesperson looked directly forward to the camera per 30 seconds. The inter-coder reliability obtained in this study was .73.

Kinesics Behaviors

Object-focused Movements: Were defined as any movements of the hands, arms, or fingers away from the body. It was measured as the average of two coders' frequency count of movements in a period of 90 seconds. Inter-coder reliability obtained was .99.

Parallel Movements: A special category of object-focused movements, in which both hands moved together in symmetry. It was measured as the average of two coders' frequency count of movements in a 90 seconds period. The inter-coder reliability obtained was .99.

Hand-to-head Contact: Average of two coders' frequency count of times the salesperson's hands come in contact with head, neck or hair in a 90 seconds period. Inter-coder reliability obtained was .99.

Hand-to-hand Contact: Grand average of two coders' average time that subjects' hands were in contact with each other per 30 minutes. Inter-coder reliability obtained was .99.

Body-focused Movements: Movements in which any hand came into contact with any part of the body or clothing. It was measured as the average of two coders' frequency count of movements in a 90 seconds period. The inter-coder reliability obtained was .99.

Hand-to-body Contact: Grand average of two coders' average time that subject's hand or hands were in contact with any part of the body per 30 seconds excluding the head. Inter-coder reliability obtained was .99.

Figure 1. (continued)

which is the one that the participant decodes. In theory, it is assumed that the evoking message imposes a condition or command to which the decoder responds without being aware of the condition. The impact message represents the final end of this communication process, and it reflects the covert cognitive, affective, and behavioral reactions in the decoder as a result of the encoder's evoking message. The inventory is based on the assumption that one person's interpersonal style can be reliably measured by assessing the covert responses produced in other persons (Perkins et al., 1979).

The inventory provides scores on 15 sub-scales of interpersonal styles which might be combined to provide four clusters of scores labeled: Dominant, Hostile, Submissive, and Friendly (Warm). The internal consistency reliability scores for the majority of the 15 sub-scales have coefficients ranging from .80 to .99 with the lowest coefficient being .57 (Kiesler, 1987).

The IMI is composed of 90 items which are rated on a 4-point scale. As an example, one item of the dominance scale states, "When I am with this person, he makes me feel bossed around" to which the person has to answer with one of the following responses: (1) not at all, (2) somewhat, (3) moderately so, or (4) very much.

There are two versions of this scale, one for male targets and another for female targets. However, the only difference in the two IMI versions is in the use of pronouns

in each version (he or she). According to Perkins et al. (1979), sex differences influence the items systematically but not strongly. For example, on the sociable sub-scale, females recorded significantly higher impact scores than did males.

This instrument was developed in the United States for an English-speaking population. Because this research was done in Puerto Rico, it was necessary to translate the instrument into Spanish. However, due to the fact that the instrument contains many colloquial terms, it was considered that a reliability study was needed to verify that the sub-scales and clusters were measuring the same dimensions (i.e., internal consistency) after the translation. This author was given permission by Consulting Psychology Press, Inc., in Palo Alto, California to translate the IMI into Spanish. The process of translating the IMI and the results of the reliability studies were as follows.

First, the official translator of the Graduate School in Translation of the University of Puerto Rico was contracted to translate the IMI from English to Spanish. This translation was discussed with the researcher in order to reach agreements with respect to the meaning of each item and a final version was made.

The final version was administered to undergraduate students from two large universities in Puerto Rico. One hundred sixty-eight students (168) were used in this study.

The general procedure used was to ask the students to rate former President Reagan according to their perception. The average time it took to complete the IMI was fifteen (15) minutes. This data was later analyzed using the SPSSX reliability procedure. The internal consistency of each scale is shown in Table 1.

An inspection of Table 1 shows that some coefficients of the sub-scales are very low. However, the measures used in this study are based on the scores of the clusters with coefficients ranging from .54 to .85. This is consistent with research reported in the manual (Kiesler, 1987) where low reliabilities were found for the sub-scales, and their general recommendation is that clusters should be used to obtain higher reliabilities.

Table 1 reports only reliability coefficients after a corrected score key was received from the publisher. Originally, this author did not receive the correct score key and had to use the manual to obtain scores in the sub-scales and the clusters. Although there was a consistent order in reporting the sub-scales throughout the manual, the items are presented in a different order in the instrument. Due to this incorrect information, this researcher was misled with respect to scoring, and a second study to assess reliability was done.

Another translator from a different university was used to review the test translation. This second translator did not find that the instrument needed changes. Thinking

Table 1

Reliability Coefficients of the Spanish Version of the Impact Message Inventory (IMI) for Sub-scales and Clusters

	Studies		
Measure	Reagan (n=168)	Governor of Puerto Rico (n=152)	Study I (n=384)
Sub-scales			
Dominance	.52	.45	n.a.
Competitive	.58	.59	"
Hostile	.60	.71	"
Mistrustful	.61	.61	"
Detached	.62	.64	"
Inhibited	.43	.44	"
Submissive	.25	.39	"
Succorant	.46	.49	"
Abasive	.47	.52	"
Deferent	.54	.68	"
Agreeable	.66	.59	"
Nurturant	.68	.75	"
Affiliative	.71	.65	"
Sociable	.47	.53	"
Exhibitionistic	.37	.34	"

Table 1 (continued)

	Studies		
Measure	Reagan (n=168)	Governor of Puerto Rico (n=152)	Study I (n=384)
Cluster			
Dominant	.73	.76	.74
Hostile	.83	.85	.90
Submissive	.54	.67	.70
Friendly (Warm)	.85	.89	.93

Note. n.a.= not available for this study because clusters were the measures of interest.

that maybe the low reliabilities obtained were due to the inability of the students to form an impression of former President Reagan, a new study was done using the Governor of Puerto Rico as the target. Column two in Table 1 shows the results of this study using the correct score key. With respect to clusters, it is shown that the coefficients increased, ranging from .67 to .89. In general, it seems that increased familiarization with the target increases reliability in the instrument.

Due to the length of time it took to complete the IMI during the reliability studies and to the fact that three sub-scales are not used for the cluster scores, the items of these sub-scales were deleted from the instrument. To determine if the deleted items in any way affected its reliability, a reliability analysis was performed using data from study I. As can be concluded from column three of Table 1, deleting the sub-scales increased the reliabilities of the clusters, ranging from .70 to .93 levels. These levels are generally accepted by researchers (McCormick & Ilgen, 1985).

Perceived Sales Effectiveness. Perceived sales effectiveness was also used in this study as a dependent variable. A perceived sales effectiveness scale, developed by this author for this study, was used to measure this construct (See Appendix A for the English version and Appendix B for the Spanish version). The measure consists of five items, each measured on a seven-point scale. Table 2 shows the results of the reliability study for this measure. Using the SPSSX reliability procedure, it was found that all items were correlated with an alpha coefficient of .91 (α=.91).

Participants

One hundred sixty-eight (n=168) college students participated in the first reliability study. As mentionated before, due to a different ordering of the sub-scales in the manual and the absence of a score key, low reliabilities

Table 2

Internal Consistency of the Perceived Sales Effectiveness Scale

(n=384)

Correlation Matrix

	Item 1	Item 2	Item 3	Item 4	Item 5
Item 1	1.00				
Item 2	.61	1.00			
Item 3	.82	.61	1.00		
Item 4	.54	.68	.64	1.00	
Item 5	.88	.59	.87	.55	1.00

Alpha Coefficient= .91

Alpha Coefficient if Item 4 was deleted= .88

were obtained for the cluster measures. A second study was performed where one hundred fifty-two (n=152) college students participated. When the correct score key received from the publisher was used both studies supported the reliability of the instrument.

Ninety-six (n=96) college students (48 males, 48 females) who were required to perform sales presentations as a course requirement for some Introduction to Marketing sections. The use of college students was necessary for

the following reasons. First, the participants used in the reliability studies were undergraduate college students, and it was thought proper to use participants similar to those used in the reliability studies. Further, it should be noted that the reliability and validity studies of the original English version of the Impact Message Inventory used college students and has maintained its reliability using other populations (Kiesler, 1987).

Second, the need to control the verbal part of the sales presentation required that each participant memorize a canned sales presentation and give their permission to be videotaped during the performance. The conditions of this design were so demanding that it was thought that even experienced salespersons would not be willing to participate in the study.

Third, because a second study was planned in nonverbal training, it was necessary to use the same type of participants in both studies. If the total of participants in both studies is added, almost two hundred were required, excluding those judges and coders necessary for both studies. By using these participants, the monetary and time costs were kept relatively low as compared to using salespersons in the industry.

Fourth, the product to be sold, a personal computer, was a product that was appropriate for the lifestyles and needs of many college students.

Finally, the researcher's interest was to use the results of this research in future training for college students, making these results meaningful and valid for this population.

Various Introduction to Marketing sections were selected because it is a required course for all Business Administration concentrations (e.g., accounting, finance) and also attracts students from other fields of study. In addition, it was expected that the students had not been exposed to personal selling courses which might affect their behavior.

In this first study, extreme variation in perceived sales performance was desired, and consequently, students from two large universities in Puerto Rico, who differed in intellectual capabilities and lifestyles, were used. In addition, students from day and evening classes were included. This procedure was necessary because in Study I the major objective was to obtain correlations among the variables and to later use the results in Study II.

Originally, the intention was to require a large number of participants to memorize the sales presentation and later to select a random sample. However, this was not possible. Various professors did not want to include the participation in the research as a requirement of the course and many students did not agree to participate. Also, many students did not attend the videotaping session. At the end of the semester, only ninety-six (96) students

did participate, and all were used in this study.

Sixty-four (64) students (32 males and 32 females), selected independently of those acting as salespersons and with no previous knowledge of the videotaped sales presentations were also used to evaluate the salespersons' performances.

Twenty-four (24) additional students were used as trained coders for counting and recording the frequency or amount of time the various nonverbal behaviors were displayed.

Materials

One videotape camera was used. The recording of the sales presentations was done by the researcher. The filming was done with the automatic focus equipment of the camera in order to avoid subjectivity in close-ups, etc. The camera was always focusing on the top part of the body, that is, from the head to the waist of each salesperson. The distance from the camera to the salesperson was approximately six feet.

Two stop watches and two event counters were used to record the frequency or amount of time the various nonverbal behaviors were displayed.

Copies of the written sales presentation (See Appendix C for the English version and Appendix D for the Spanish version) were distributed before videotaping the sales presentations in order to control the verbal part of the sales presentations.

"Cue cards" showing the major points of the sales presentations were available for use by the salespersons while videotaping the sales presentations.

Videotaped sales presentations were shown to the judges. In addition, a videotape of two sales presentations (one male, one female) in two differing orders was shown to the judges for practice and to establish a frame of reference.

An edited version, using time sampling, of less and more effective salespersons was shown to the trained coders to assess frequency or amount of time selected nonverbal behaviors were displayed.

Time Sampling

Each sales presentation lasted more than three (3) minutes. The first three minutes were divided in six (6) periods of 30 seconds, and periods 1, 3, and 5 were selected. These periods of the more and less effective groups were copied on a new videotape for use by the trained coders. A black space was included between each period in order to turn off the VHS machine and fill out the nonverbal behavior forms.

Coders' Training

Two trained coders observed and recorded the nonverbal behaviors in each of the three 30-seconds periods for each salesperson. Each nonverbal variable was measured by different pairs of trained coders in order to eliminate fatigue and boredom with the task which might affect its

reliability.

Training was given to the coders and consisted of the following steps. First, this author defined and explained each nonverbal behavior to be coded and the way it should be recorded. Second, twelve (12) original sales presentations, not used for the study when extremes groups were formed, were presented to the trainees and they were asked to code for nonverbal behavior occurrence as a practice exercise. Each coder did the task independently of the other.

Third, the data generated through this procedure were analyzed for each variable using correlation analysis. If the correlation was below .70, it was considered unreliable, and a new training session was scheduled. In those cases where the first session was considered unreliable, the coders were required to attend a second session and to express verbally when the behavior was occurring during three periods of 30 second segments and to discuss their disagreements. Again, twelve (12) sales presentations, not included in the study, were independently evaluated and their inter-coder reliability obtained. After this second session, all coders were found reliable and no further action was necessary.

After this training, each coder was free to go to an office alone to code the nonverbal behaviors for a total of sixty cases per coder.

Procedure

Each student was required to deliver a sales presentation as a requirement of an Introduction to Marketing course. The students were told that they were going to do a televised sales presentation, a relatively new form of sales in Puerto Rico at the time of this study. Each student received a copy of the sales presentation at least two weeks before videotaping and were instructed to memorize it.

Each student reported to a studio where the researcher was waiting to videotape the sales presentation. The student was instructed to begin the sales presentation and to look at the lens of the camera in order to look directly at the customer.

Due to problems with the length of the canned sales presentation and the many errors committed by the students, the total presentation was filmed in five sections. In addition, cue cards were provided to the students to help them while performing their sales presentations. After all sales presentations were filmed, they were edited in an audiovisual studio to eliminate those parts where errors occurred.

Two (2) sales presentations, used for practice and to establish a frame of reference, and a group of six (6) sales presentations of the total sample were shown independently to each group, each group composed of two judges, with the following instructions.

"We are working on a project concerning the innovation of sales by television. In the following minutes, you will be shown various sales presentations. Please imagine that you are the customer and react mentally as you might do in a real situation.

After you see each salesperson, you will be required to evaluate him/her using two scales. If you know the salesperson, please react to him/her based on his/her performance in this presentation and not on previous knowledge of him/her.

The next two sales presentations are presented to give you an idea of what you are going to see. You are only required to watch the first sales presentation. For the second presentation, you have to watch and later fill out two scales about your impressions of the salesperson. Do you have any questions?"

At the beginning of every session, each group of judges, each composed of one male and one female, saw two sales presentations of one male and one female only for practice and to establish a common frame of reference. These were not included in the data analyses. The order of these two sales presentations was rotated in each group, so as to control order of presentation affecting the results in some way. After these two presentations, the procedure was stopped to determine if there were any questions. If no questions or problems were indicated, six sales presentations were presented and evaluated and

used later in the data analyses.

The six sales presentations were evaluated by four different judges, two males and two females. However, to control order or sex effects, groups of two judges, each composed of one male and one female were used, and each group saw the same six salespersons in a different order. Using a table of random numbers, the following order of showing the sales presentations to the first and second groups of judges was obtained:

First Group	Second Group
1	6
2	2
3	3
4	4
5	1
6	5

In addition, to identify the sales presentations, letters were used instead of numbers. This was done because of the different ordering used for videotaping and introducing the sales presentations to the judges. By presenting letters instead of numbers, the judges were unaware of the original number that was only known to the researcher. Only letters from G to P were used because they are considered almost neutral (Churchill, 1991).

After each sales presentation, each judge individually rated the sales presentations using the IMI and the PSES scales. However, the order of completing the measures was

rotated for the two groups. Judges in the first group used the PSES first and the IMI later. Judges in the second group used the IMI first and the PSES later.

Due to the length of the sales presentations and the time for completing the measurement instruments, this procedure lasted from one hour and forty-five minutes to two hours and fifteen minutes.

In the next chapter, the results of Study I are presented.

CHAPTER IV

STUDY I

RESULTS

In Study I, the relationship between interpersonal style and perceived sales effectiveness was assessed. Also, the relationships among thirteen nonverbal behaviors and interpersonal style and perceived sales effectiveness were studied. However, some variables that might be related to these dependent variables were included to control for potential confounds. Therefore, every time a new dependent variable is included in this chapter, an assessment of the relationship between these potential confounds and the dependent variables is presented.

Relationship Between Order of Presentation, Salesperson's Sex, Judge's Sex, and Perceived Sales Effectiveness.

As suggested by McCormick & Ilgen (1985), all data on perceived sales effectiveness were transformed to standard scores (z-scores) in order to control differences in ratings (e.g., leniency). Each perceived sales effectiveness score was transformed using the following formula: Z= (PSE-JA)/SD where Z= standard score; PSE= perceived sales effectiveness score; JA= judge's average perceived sales effectiveness score and SD= judge's standard deviation.

To determine if the order in which the salespersons were presented to the judges (OD), salesperson's sex (SS), or judge's sex (JS) affected the ratings of perceived sales

effectiveness in some way, an Analysis of Variance (ANOVA) was performed. As can be seen in Table 3, there was no main effect for order of presentation, salesperson's sex, or judge's sex. In addition, there was no interaction between these factors when a two-way or three-way interaction model was used.

Because there were no differences in the above variables, all the data were analyzed without considering these factors when the dependent variable was perceived sales effectiveness.

Hypothesis 1: Salespersons identified as dominant-warm will be perceived as more effective than other salespersons.

Table 4 presents the results of a One-Way Analysis of Variance of interpersonal style and perceived sales effectiveness performed on all the data. In this analysis, four evaluations were made for each salesperson by different judges. However, there are only 356 cases out of the 384 possible evaluations, because, in some cases, a tie was obtained in the opposite extremes of a dimension (e.g., 3.5 on dominance and 3.5 in submission) and the interpersonal style in the dimension was undetermined. Only cases where the interpersonal style was determined in both dimensions are included. As can be seen in Table 4, interpersonal style and perceived sales effectiveness are significantly related.

An additional analysis was performed by collapsing three interpersonal styles into one category and comparing

Table 3

Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

(n=384)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	.917	3	.306	.361	.782
JS	.000	1	.006	.000	1.000
OD	.000	1	.000	.000	1.000
SS	.917	1	.917	1.082	.299
Two-Way Interactions	.519	3	.173	.204	.893
JS, OD	.000	1	.000	.000	1.000
JS, SS	.070	1	.070	.083	.774
OD, SS	.449	1	.449	.530	.467
Three-Way Interactions	.000	1	.000	.000	.988
JS, OD, SS	.000	1	.000	.000	.988
Explained	1.436	7	.205	.242	.974
Residual	318.564	376	.847		
Total	320.001	383	.836		

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 4

One-Way Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable and Interpersonal Style as the Independent Variable

(n=356)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Interpersonal Style					
Main Effects	104.864	3	34.955	61.511	.000
Residual	200.031	352	.568		
Total	304.896	355	.859		

Group Means

Dominant-Warm=	.57 (n=64)
Dominant-Hostile=	-.71 (n=32)
Hostile-Submissive=	-.67 (n=106)
Submissive-Warm=	.24 (n=175)
Total population=	-.02 (n=356)

it with the dominant-warm style. This analysis is presented in Table 5, which also supports the hypothesis that salespersons perceived as dominant-warm are perceived as more effective than other salespersons.

An additional analysis was performed to determine if the degree of interpersonal style was related to perceived sales effectiveness using multiple regression. Table 6 shows that all the dimensions of interpersonal styles are related to perceived sales effectiveness. The order of importance of each dimension is warmth, hostility, submission, and dominance. However, it is important to note that warmth and dominance are positively related to perceived sales effectiveness, while submission and hostility are negatively related, further supporting the first hypothesis.

Relationship Between Order of Presentation, Salesperson's Sex, and Judge's Sex and Dominance, Hostility, Warmth, and Submission

Although there was no relation between salesperson's sex, order of presentation, or judge's sex and perceived sales effectiveness, an analysis was made using these variables as independent variables on the dimensions forming the interpersonal style as dependent variables.

As can be seen in Table 7, 8, 9, and 10, the judge's sex was related to the perception of dominance and hostility but not to submission and warmth. Table 7 and 8 show that

Table 5

One-Way Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable and Interpersonal Style as a Dichotomous Independent Variable

Source of Variation	Sum of Squares	df	Mean Square	F	p
Interpersonal Style					
Main Effects	24.807	1	24.807	31.354	.000
Residual	280.088	354	.791		
Total	304.896	355	.859		

Group Means

Dominant-warm= .57 (n= 64)

Other= -.12 (n= 292)

Table 6

Multiple Regression Results of Perceived Sales Effectiveness as the Criterion Variable and Interpersonal Dimension as the Independent Variable (n=384)

Interpersonal Dimension	B	SE B	Beta	t	p
Warmth	.6123	.0796	.4326	7.692	.0000
Submission	-.4871	.1267	-.2264	-3.846	.0001
Dominance	.2794	.1325	.1196	2.108	.0357
Hostility	-.4893	.1282	-.2933	-3.818	.0002
Constant	.0625	.2136		.293	.7700

Multiple R=	.661
Multiple R-square=	.437
Adjusted R-square=	.431
Standard error of estimate=	.689

Analysis of Variance

Source of Variation	Sum of Squares	df	Mean Square	F	p
Regression	139.88	4	34.97	73.58	.000
Residual	180.12	379	.48		

Table 7

Analysis of Variance of Dominance as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	2.024	3	.675	4.510	.004
JS	1.267	1	1.267	8.465	.004
OD	.306	1	.306	2.042	.154
SS	.452	1	.452	3.021	.083
Two-Way Interactions	.399	3	.133	.888	.447
JS, OD	.358	1	.358	2.391	.123
JS, SS	.029	1	.193	.193	.661
OD, SS	.012	1	.012	.081	.776
Three-Way Interactions	.002	1	.002	.010	.919
JS, OD, SS	.002	1	.002	.010	.919
Explained	2.425	7	.346	2.315	.025
Residual	56.265	376	.150		
Total	58.690	383	.153		

Group Means

Men= 1.91 (n=192); Women= 1.72 (n=192); Total= 1.85 (n=384)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 8

Analysis of Variance of Hostility as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	2.669	3	.890	3.025	.030
JS	1.701	1	1.701	5.782	.017
OD	.023	1	.023	.080	.778
SS	.945	1	.945	3.213	.074
Two-Way Interactions	1.534	3	.511	1.738	.159
JS, OD	1.007	1	1.007	3.424	.065
JS, SS	.009	1	.009	.029	.864
OD, SS	.518	1	.518	1.761	.185
Three-Way Interactions	.116	1	.116	.394	.530
JS, OD, SS	.116	1	.116	.394	.530
Explained	4.319	7	.617	2.098	.043
Residual	110.607	376	.294		
Total	114.926	383	.300		

Group Means

Men= 1.86 (n=192); Women= 1.73 (n=192); Total= 1.79 (n=384)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 9

Analysis of Variance of Submission as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	.599	3	.200	1.115	.343
JS	.074	1	.074	.414	.520
OD	.227	1	.227	1.267	.261
SS	.298	1	.298	1.664	.198
Two-Way Interactions	.689	3	.230	1.283	.280
JS, OD	.354	1	.354	1.980	.160
JS, SS	.000	1	.000	.001	.979
OD, SS	.334	1	.334	1.867	.173
Three-Way Interactions	.558	1	.558	3.115	.078
JS, OD, SS	.558	1	.558	3.115	.078
Explained	1.845	7	.264	1.473	.176
Residual	67.303	376	.179		
Total	69.148	383	.181		

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 10

Analysis of Variance of Warmth as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	2.179	3	.726	1.738	.159
JS	.035	1	.035	.084	.772
OD	1.570	1	1.570	3.756	.053
SS	.574	1	.574	1.373	.242
Two-Way Interactions	.268	3	.089	.214	.887
JS, OD	.016	1	.016	.037	.847
JS, SS	.091	1	.091	.217	.641
OD, SS	.162	1	.163	.387	.534
Three-Way Interactions	.092	1	.092	.220	.639
JS, OD, SS	.092	1	.092	.220	.639
Explained	2.540	7	.363	.868	.532
Residual	157.210	376	.418		
Total	159.750	383	.417		

Group Means

OD 1= 2.05 (n=192); OD 2= 2.18 (n=192); Total= 2.11 (n=384)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

male judges perceived more dominance in the salespersons than women (1.91 versus 1.79), and male judges also perceived more hostility than females (1.86 versus 1.73).

In addition, order of presentation was related, at a statistically significant level, to perceived warmth (p=.053). Table 10 shows that those who saw the first order appeared to perceive less warmth than those who saw the second order (2.05 versus 2.18).

Separate analyses (not shown here) were made to test if the relationship between interpersonal style and perceived sales effectiveness was affected by the previous findings. All results remain valid when judge's sex and order of presentation were controlled. Consequently, this difference is not of practical significance for subsequent analyses.

An overall score of perceived sales effectiveness was obtained by averaging all four judges' standardized scores. The thirty most extreme scores of each group were selected to form the less and more effective groups. Thirty cases were used in each group to take advantage of the Central-Limit Theorem, which means that regardless of the shape of the original population, when n=30 the distribution of means will follow a normal pattern (Churchill, 1991). These groups were used for subsequent analyses.

Hypotheses 2a-2m: Dominant-warm salespersons will exhibit:

- **2a. higher speech rate**
- **2b. higher speech volume**
- **2c. more positive facial expressions**
- **2d. more smiles**
- **2e. less negative facial expressions**
- **2f. more facial activity**
- **2g. more eye contact**
- **2h. more object-focused movements**
- **2i. more parallel movements**
- **2j. less hand-to-head contact**
- **2k. less hand-to-hand contact**
- **2l. less body-focused movements**
- **2m. less hand-to-body contact**

An average interpersonal score in each dimension of interpersonal style was obtained by averaging all judges' ratings. Using these scores, salespersons were assigned to the dominant-warm group or to another group composed of the remaining three interpersonal styles. A series of t-tests were performed using these two groups as the criterion and each nonverbal variable as an independent variable. Table 11 shows the results of these analyses using all the subjects that were able to be classified. In performing these analyses, a separate variance assumption was made and a one-tailed analysis performed.

As can be seen in Table 11, speech volume, positive facial expressions, and facial activity were significantly related to dominance-warm. Speech rate, negative facial expressions, object-focused movements, hand-to-hand contact, and hand-to-body contact are in the expected direction but not significantly related to dominance-warm. Body-focused movements, smiles, eye contact, parallel movements, and hand-to-head contact were not found

Table 11

Nonverbal Behaviors and their Relationship with Dominance-Warm

	Groups					
	Dominant-warm (n=12)		Other (n=46)			
Nonverbal Behaviors	M	SD	M	SD	df	t-value
Paralinguistic						
Speech Rate	2.13	.43	1.92	.77	31	1.19
Speech Volume	1.96	.50	1.47	.68	23	2.80**
Facial Expressions						
Positive FE	8.00	3.29	4.90	2.20	15	3.01**
Smiles	2.75	3.36	2.77	2.29	14	-.02
Negative FE	6.13	4.06	4.84	3.23	15	1.02
Facial Activity	14.13	6.87	9.74	4.30	13	2.11*
Visual Behaviors						
Eye Contact	68.17	25.47	61.32	31.87	21	.78
Kinesics Behaviors						
Object-focused MO	16.17	21.72	8.26	20.77	17	1.13
Parallel MO	4.13	7.32	4.27	9.23	21	-.06
Hand-to-head CT	.08	.29	.17	.54	33	-.79
Hand-to-hand CT	12.55	10.82	16.63	10.65	17	-1.17
Body-focused MO	3.71	4.36	2.36	3.95	16	.97

Table 11 (continued)

Nonverbal Behaviors	Groups: Dominant-warm (n=12) M	SD	Other (n=46) M	SD	df	t-value
Hand-to-body CT	19.49	10.56	22.41	9.69	16	-.87

Note. FE= facial expressions; MO= movements; CT= contact

*p<.05 **p<.005, all one-tailed

significantly related to dominance-warm. In summary, only hypotheses 2b, 2c, and 2f are supported.

Hypotheses 3: Salespersons perceived as more effective will exhibit:

- **3a. higher speech rate**
- **3b. higher speech volume**
- **3c. more positive facial expressions**
- **3d. more smiles**
- **3e. less negative facial expressions**
- **3f. more facial activity**
- **3g. more eye contact**
- **3h. more object-focused movements**
- **3i. more parallel movements**
- **3j. less hand-to-head contact**
- **3k. less hand-to-hand contact**
- **3l. less body-focused movements**
- **3m. less hand-to-body contact**

To test hypotheses 3a through 3m, a series of correlational analyses were performed between nonverbal

variables and perceived sales effectiveness. The results are shown in Table 12.

As can be seen in Table 12, speech volume, positive facial expressions, facial activity, eye contact, and object-focused movements are significantly related to perceived sales effectiveness. Speech rate, parallel movements, hand-to-hand contact, hand-to-body contact, and hand-to-head contact are in the expected direction but not statistically significant. Body-focused movements were significantly related to perceived sales effectiveness but in the inverse direction. Finally, smiles and negative facial expressions were found not significantly related to perceived sales effectiveness.

Summarizing, hypotheses 3b, 3c, 3f, and 3g are supported. Hypothesis 3l, although significantly related at a p equal to .009, was in the opposite direction hypothesized.

Various statistical analyses were performed to isolate the relative contribution of each nonverbal variable to interpersonal style and to perceived sales effectiveness. A correlational matrix for all nonverbal variables was obtained in order to determine if multicollinearity existed in the data (Churchill, 1991). As can be seen in Table 13, only three variables, positive facial expressions, negative facial expressions, and facial activity are highly related (r=.77). Because facial activity is a compound variable using two original variables, it was decided to

Table 12

Correlations between Nonverbal Variables and Perceived Sales Effectiveness

(n=60)

Nonverbal Variables	r	p
Paralinguistic		
Speech Rate	.18	.09
Speech Volume	.34	.004*
Facial Expressions		
Positive Facial Expressions	.41	.001*
Smiles	-.01	.47
Negative Facial Expressions	-.04	.39
Facial Activity	.22	.05*
Visual Behaviors		
Eye Contact	.26	.02*
Kinesics Behaviors		
Object-focused movements	.25	.029*
Parallel movements	.19	.07
Hand-to-head contact	-.11	.19
Hand-to-hand contact	-.20	.07
Body-focused movements	.31	.009*
Hand-to-body contact	-.19	.07

Note. *= statistically significant at the level indicated

Table 13

Correlation Matrix for Nonverbal Variables

	Nonverbal Variables											
	PE	NE	SV	SR	FA	EC	SM	HE	BF	PM	OM	HH
PE	-											
NE	.27*	-										
SV	.34**	-.14	-									
SR	.06	.00	.36**	-								
FA	.77**	.82**	.11	.03	-							
EC	.19	-.21	.11	.21	-.03	-						
SM	.62**	.29*	-.08	-.22	.56**	.05	-					
HE	.13	.34**	.01	-.21	.31*	-.20	.08	-				
BF	.35**	.14	.24	.18	.30*	.20	.24	-.00	-			
PM	.28*	.09	.23	.17	.23	.14	.17	-.03	.81**	-		
OM	.27*	.05	.35**	.35**	.19	.14	.10	-.05	.56*	.54**	-	
HH	-.12	.00	-.10	.07	-.07	-.05	-.20	-.04	-.07	-.03	-.33*	-
HB	.00	.01	-.27*	-.05	.01	.19	-.00	-.06	-.14	-.14	-.28*	.71**

Note. PE= Positive facial expressions; NE= Negative facial expressions; SV= Speech volume; SR= Speech rate; FA= Facial activity; EC= Eye contact; SM= Smiles; HE= Hand-to-head contact; BF= Body-focused movements; PM= Parallel movements; OM= Object-focused movements; HH= Hand-to-Hand contact; HB= Hand-to-body contact.
*p<.05. **p<.01.

drop it from further analysis.

Tables 14 and 15 show the results of a discriminant analysis using the dominant-warm group and the other group as the criterion and the nonverbal behaviors as the independent variables.

As can be seen from Table 14, seven variables entered the discriminant function for a canonical correlation of .63 and a hit ratio of 86.21%. In other words, this discriminant function explains 40.1% of the variance (Hair, et al., 1987), and it permits correctly classifying 86 out of 100 cases as pertaining to the dominant or to the other group.

Also, it should be noted that the variables that are more helpful to these classifications are positive facial expressions and smiles, in this order. Once positive expressions is included in the function, smiles, although not originally related to dominance-warm, enters the discriminant function in a negative way.

Two analyses were made to test the relationship between the set of nonverbal variables and perceived sales effectiveness. First, a discriminant analysis was performed to find which variables were related to the groups ignoring the degree of perceived sales effectiveness. Table 16 and 17 show that five variables entered the discriminant function for a canonical correlation of .62 and a hit ratio of 76.7%. In other words, this discriminant function explains 38.4% of the variance in the data, and using this

Table 14

Discriminant Analysis Results Using Interpersonal Style as the Criterion and Nonverbal Behaviors as the Independent Variables

Variable and step entered	Wilks' Lambda	sig.	Standarized Canonical Discriminant Function Coefficients	Unstandarized Canonical Discriminant Function Coefficients
1. Positive Facial Expressions	.82997	.0013	1.31064	.46452
2. Smiles	.71354	.0001	-1.07174	-.42235
3. Hand-to-hand contact	.68580	.0001	-.35201	-.03295
4. Parallel movements	.66874	.0002	-.76913	-.08652
5. Body-focused movements	.63733	.0002	.58973	.14629
6. Hand-to-head movements	.62033	.0003	-.37718	-.75368
7. Negative Facial Expressions	.59804	.0003	.33812	.09928
(Constant)				-1.29484

Table 14 (Continued)

Eigenvalue:	.67213
Canonical Correlation:	.63400
Wilks' Lambda:	.59804
Chi-squared, 7 df:	26.990 p: .0003
Group Centroids	
Dominant-warm:	1.57723
Other:	-.41145

Table 15

Classification Matrix Results Using Interpersonal Style as the Criterion and Nonverbal Behaviors as the Independent Variables

	Predicted Group			
Actual Group	Dominant-warm	Other	Actual Group Total	Classification Percentage
Dominant-warm	8	4	12	66.7 %
Other	4	42	46	91.3 %

Percent correctly classified (Hit Ratio): 86.21%

Table 16

Discriminant Analysis Results Using Perceived Sales Effectiveness as a Dichotomous Criterion and Nonverbal Behaviors as Independent Variables

Variable and step entered	Wilks' Lambda	sig.	Standarized Canonical Discriminant Function Coefficients	Unstandarized Canonical Discriminant Function Coefficients
1. Positive Facial Expressions	.84477	.0018	1.28929	.4592035
2. Smiles	.69140	.0000	-.98596	-.3937289
3. Hand-to-body contact	.66096	.0000	-.42843	-.0418277
4. Hand-to-hand contact	.62668	.0000	-.31453	.6392427
5. Eye contact	.60777	.0000	.29238	-.0096086
(Constant)				-1.077005

Table 16 (Continued)

Eigenvalue:	.64536
Canonical Correlation:	.62628
Wilks' Lambda:	.6078
Chi-squared, 5 df:	27.64 p: .0000
Group Centroids	
Effective:	.78984
Less Effective:	-.78984

Table 17

Classification Matrix Results Using Perceived Sales Effectiveness as a Dichotomous Criterion and Nonverbal Behaviors as Independent Variables

	Predicted Group			
Actual Group	More Effective	Less Effective	Actual Group Total	Classification Percentage
More Effective	22	8	30	73.3 %
Less Effective	6	24	30	80.0 %

Percent correctly classified (Hit Ratio): 76.7 %

function permits an accuracy of 76.7 out of 100 in assigning participants to each group. As in the previous finding, positive facial expressions and smiles were the best predictors of group membership.

Table 18 presents the same analysis but using the degree of perceived sales effectiveness as the criterion. Although the variance explained is lower (25%), positive facial expressions and smiles are the only variables that entered the equation. In addition, the negative coefficient of smiles remains unchanged.

Table 18

Multiple Regression Results of Perceived Sales Effectiveness as the Criterion Variable and Nonverbal Behaviors as the Independent Variables

Variable and step entered	B	SE B	Beta	t-value	p
1. Positive Facial Expressions	.1985	.0422	.6729	4.705	.0000
2. Smiles	-.1531	.0514	-.4262	-2.980	.0042
(Constant)	-.6325	.2098			

Multiple R=	.529
Multiple R-square=	.280
Adjusted R-square=	.255
Standard error of estimate=	.771

Analysis of Variance

Source of Variation	Sum of Squares	df	Mean Square	F	p
Regression	139.88	4	34.97	73.58	.000
Residual	180.12	379	.48		

CHAPTER V

STUDY II

METHOD

Overview of the Study

A salesperson training program was conducted to evaluate the remaining hypotheses. The research design consisted of three experimental treatments and included a control group.

Three groups received a videotaped training program that lasted one-and-a-half hours in the longest treatment condition. The first experimental group received a filmed lecture on the sales process (i.e., initial contact to close) and the basic theory of interpersonal styles of Buzzotta et al. (1982). The second experimental group received the same treatment of the first experimental group plus an opportunity to observe a videotape showing an effective and an ineffective salesperson and their perceived interpersonal styles, as determined in Study I. Finally, the third experimental group received, in addition to what was received by the first and second experimental groups, a technical briefing of nonverbal findings from Study I. The control group did not receive any training.

Before coming to the workshop, each participant was required to read and memorize the same sales presentation that was used in Study I. Once in the workshop, they were shown the videotaped training program. After this, they were videotaped, or an appointment was made to videotape

them on another day. In the recording session, they were first requested to practice the sales presentation, applying what they had learned in the training program to the sales presentation, and then videotaped.

Measures

Independent variables. The different training programs were the major experimental conditions hypothesized to affect the dependent variables. These experimental conditions are described elsewhere in this chapter. In addition, salesperson's sex, judge's sex, and order of presentation were used as independent variables for analyses purposes.

Dependent variables. Perceived sales effectiveness and interpersonal style were used as dependent variables in this study. These variables were measured using the Perceived Sales Effectiveness Scale (PSES) and the Impact Message Inventory (IMI), respectively. These measures were described in chapter three of this dissertation.

Participants

Eighty-one (n=81) college students participated as salespersons. Each treatment condition was composed of twenty (20) students, except the nonverbal treatment where twenty-one (21) participants were included due to human error.

Sixty-four (64) students acting as judges (32 males and 32 females), selected independently of those acting as salespersons and with no previous knowledge of the

videoptaped sales presentations or experimental conditions were used to evaluate the salespersons' performances.

Materials

A videotaped training program was developed in the audiovisual department of a university in Puerto Rico consisting of three parts. Part one was a lecture on the stages of the personal selling process, interpersonal styles, and how each type of salesperson works in the personal sales process according to Buzzotta et al. (1982). A black space was left between this part and the second part of the training to alert the training operator that the first experimental condition had ended.

Part two consisted of showing a less and more effective salesperson performing their sales presentations. In addition, information was given in the tape about the interpersonal style of the salesperson as perceived by the customers. After this, another black space was incorporated signifying that the second experimental condition had ended.

Part three consisted of an explanation and presentation of the statistical results of Study I and information about nonverbal differences between less and more effective salespeople.

To avoid giving visual information that might confound the results, and at the same time to avoid boredom from hearing too much, special visual background effects like those used by television channels as background while

identifying the stations were used. For example, background rain or lines of different colors were used in different sections of the videotaped training program. These special effects were considered unrelated to the information and skills presented in the videotaped training program by the researcher and the audiovisual experts that worked on the production of the training program.

One videotape camera was used. The recording of the sales presentations was made by the researcher. The filming was done with the automatic focus equipment of the camera. The camera was always focusing on the top part of the body and at a distance of approximately six feet from the participant as in Study I.

Copies of the written sales presentation were distributed before videotaping the sales presentations in order to control the verbal part of the sales presentation.

"Cue cards" from Study I were given to help salespeople recall the main points of their sales presentations.

Videotaped sales presentations were shown to the judges. In addition, a videotape of two sales presentations (one male, one female) in two differing orders were presented to the judges for practice and to establish a frame of reference.

Sampling Procedure

Students acting as salespersons were selected each semester and assigned to the experimental treatments

according to the following steps. First, a large number of students were randomly selected and assigned to the control group. Second, those that did not come were contacted. They were asked to come to the studio along with a new pool of randomly selected students and assigned to the next available experimental condition.

The same steps were repeated until participants were assigned to all the experimental groups. The goal was to have at least ten salespersons in each group and to allow two weeks for videotaping each condition. When the quota was achieved, or the number of trainees was more than the amount needed, they were assigned to the next experimental condition. The same procedure was repeated the following semester using new groups to cancel out possible history or selection bias effects.

Although the above sampling procedure was not totally random, it was a systematic procedure created because it was feared that information might be circulated among participants. Cook & Campbell (1976) acknowledge that in informational programs, or when the experimental and control groups can communicate with each other, there is the possibility that the controls may learn the information. If this happens, the experiment becomes invalid because there are no functional differences between the groups since all groups experienced the treatments.

Using the above procedure, trainees could only talk about what others had experienced but not about the next

experimental condition. However, because this sampling procedure was not totally random, it should be considered as a limitation of the study.

Procedure

Various professors were contacted who agreed to have their students participate in the study as a requirement for their courses.

Students in the control group were taken, one-by-one, to the studio, told to practice the first two paragraphs of the sales presentation and to begin the videotape session when she or he was ready. The same procedure used in Study I was used here, except that editing was done at the same time the sales presentations were videotaped.

Trainees assigned to experimental groups were shown the respective experimental portions of the tape. They were videotaped later or on another day. Before videotaping, they were allowed to practice the sales presentation. Trainees from the first experimental condition were told to perform the sales presentation in a dominant-warm way. Trainees in the second experimental condition were told to practice and do their presentation as the most effective salesperson. Finally, trainees from the third experimental condition were asked to do their presentation using those nonverbal behaviors that were related to perceived sales effectiveness in Study I. In order to activate this knowledge, posters used in the training programs (e.g., statistical analyses) were displayed in the audiovisual

studio.

The videotaped sales presentations were evaluated by thirty-two (32) groups of judges using the same procedure of Study I. After the instructions were given, each group, composed of a male and a female, saw the same two sales presentations used for practice and to establish a frame of reference. Again, these sales presentations were rotated for each group. The researcher asked for questions, and after this, sales presentations were assigned to the group. Due to the researcher's impression from Study I, that six evaluations for each group were too many, only five salespersons were evaluated by each group. Consequently, a new order of presentation was randomly selected with the following results:

First Group	Second Group
1	3
2	2
3	4
4	1
5	5

However, one group had to evaluate six sales presentations in order to finish all the presentations, because one experimental group had an extra salesperson.

As in Study I, the videotaped sales presentations were identified only by letters. Each group rated the required number of sales presentations using the PSES and the IMI, and the order of completing these measures was

also rotated by groups. In total, each sales presentation was rated by four judges.

After the above procedure, all data were analyzed. In the next chapter, the results of this study are presented.

CHAPTER VI

STUDY II

RESULTS

In Study II, an experimental study of the four conditions on perceived sales effectiveness and interpersonal style was performed. As in Study I, some variables that might be related to the dependent variables were included to control for potential confounds. Therefore, every time a new dependent variable is included in this section, an assessment of the relationship between these potential confounds and the dependent variables is presented.

Relationship Between Order of Presentation, Salesperson's Sex, Judge's Sex, and Perceived Sales Effectiveness.

All data on perceived sales effectiveness was transformed to standard scores (z-scores) in order to control differences in ratings as in Study I. However, in this study, only five salespersons were presented to the judges in order to prevent fatigue; although, in one group six salespersons were used to avoid having a new group of judges rating only one salesperson. To assess if the order in which the salespersons were presented to the judges (OD), salesperson's sex (SS), or judge's sex (JS) affected the ratings of perceived sales effectiveness in some way, an Analysis of Variance (ANOVA) was performed. As can be seen in Table 19, there was no main effect for order of presentation or judge's sex. However, a salesperson's sex affected perceived sales effectiveness,

Table 19

Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex (n=324)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	15.669	3	5.223	6.773	.000
JS	.005	1	.005	.006	.937
OD	.001	1	.002	.002	.965
SS	15.663	1	15.663	20.310	.000
Two-Way Interactions	.663	3	.211	.274	.844
JS, OD	.000	1	.000	.000	.994
JS, SS	.112	1	.112	.146	.703
OD, SS	.521	1	.521	.676	.412
Three-Way Interactions	.072	1	.072	.094	.759
JS, OD, SS	.072	1	.072	.094	.759
Explained	16.375	7	2.339	3.033	.004
Residual	243.702	316	.771		
Total	260.077	323	.805		

Group means: Men= -.22; Women= .22; Total= .22

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

although there was no interaction between these factors when a two-way or three-way interaction model was used. Women were perceived as more sales effective than men (.22 vs. -.22, respectively).

Because there were no differences in the above variables and salesperson's sex is the same for all the ratings of the same salesperson, data was averaged and analyzed without considering these factors when the dependent variable was perceived sales effectiveness.

Hypothesis 4: Trained salespersons will be perceived as more effective than untrained salespersons.

To test this hypothesis, all three treatment levels were collapsed into one category and compared to the control group. Table 20 presents the results of a Two-Way Analysis of Variance of treatment and salesperson's sex as the independent variables and perceived sales effectiveness as the dependent variable.

The results show that those who received training had a higher rating (-.10 versus .03), although the results were not statistically significant. On the other hand, salesperson's sex affected ratings of perceived sales effectiveness in a significant way. Women had higher ratings on sales effectiveness than men (.22 versus -.22, respectively). Consequently, Hypothesis 4 is rejected.

Table 20

Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable by Treatment (control versus training) and Salesperson's Sex

(n=81)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	4.165	2	2.082	4.062	.021
Treatment	.249	1	.249	.486	.488
SS	3.901	1	3.901	7.609	.007
Two-Way Interactions	.277	1	.277	.541	.464
Treatment, SS	.277	1	.277	.541	.464
Explained	4.442	3	1.481	2.888	.041
Residual	39.479	77	.513		
Total	43.920	80	.549		

Group Means

Treatment: Control= -.10; Training= .03; Total= .00

SS: Men= -.22; Women= .22; Total= .00

Note. SS= Salesperson's sex

Hypothesis 5: Training that instructs salespeople to focus on nonverbal aspects of a sales presentation will be more effective than training that focuses only on verbal aspects.

Table 21 presents the results of a two-way Analysis of Variance (ANOVA) comparing the verbal versus the nonverbal conditions. Although those who received the nonverbal training were perceived as more sales effective than those who received only the verbal training, the results are not statistically significant. On the other hand, salesperson's sex did affect the ratings of perceived sales effectiveness. Women were rated as more sales effective than men (.33 versus -.27, respectively). Consequently, hypothesis 5 is rejected.

Hypothesis 6: Training that presents detailed analysis (technical briefing) of the nonverbal behaviors related to perceived salesperson effectiveness will be more effective than training that displays only a model.

Table 22 presents the results of a Two-way Analysis of variance (ANOVA) comparing the nonverbal versus the technical briefing conditions. Contrary to expectations, the nonverbal group performed better than the technical briefing group, although the results are not statistically significant. In addition, women performed better than men (.21 versus -.09, respectively), although these results are also not statistically significant.

Table 23 presents the results of a Two-way Analysis of Variance with all the conditions. It confirms the lack of statistical significance of treatments effects and the general superiority in perceived sales effectiveness of

Table 21

Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable by Treatment (verbal versus nonverbal) and Salesperson's Sex

(n=41)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	3.885	2	1.943	3.885	.029
Treatment	.167	1	.167	.334	.567
SS	3.679	1	3.679	7.358	.010
Two-Way Interactions	.968	1	.968	1.937	.172
Treatment, SS	.968	1	.968	1.937	.172
Explained	4.854	3	1.618	3.236	.033
Residual	18.501	37	.500		
Total	23.355	40	.584		

Group Means

Treatment: Verbal= -.04; Nonverbal= .10; Total= .03

SS: Men= -.27; Women= .33; Total= .03

Note. SS= Salesperson's sex

Table 22

Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable by Treatment (nonverbal versus technical briefing) and Salesperson's Sex

(n=41)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	1.007	2	.503	.740	.484
Treatment	.053	1	.053	.077	.782
SS	.943	1	.943	1.336	.247
Two-Way Interactions	.000	1	.000	.000	.986
Treatment, SS	.000	1	.000	.541	.986
Explained	1.007	3	.336	.493	.689
Residual	25.167	37	.680		
Total	26.174	40	.654		

Group Means

Treatment: Nonverbal= .10; Technical briefing= .03;
Total= .00

SS: Men= -.09; Women= .21; Total= .00

Note. SS= Salesperson's sex

Table 23

Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable by Treatment (all conditions) and Salesperson's Sex

(n=81)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	4.342	4	1.086	2.083	.092
Treatment	.426	3	.142	.273	.842
SS	3.871	1	3.871	7.427	.008
Two-Way Interactions	1.526	3	.509	.976	.409
Treatment, SS	1.526	3	.509	.976	.409
Explained	5.869	7	.838	1.608	.147
Residual	35.052	73	.521		
Total	43.920	80	.549		

Group Means

Treatment: Control= -.10; Verbal= -.04; Nonverbal= .10; Technical briefing= .02; Total= .00

SS: Men= -.22; Women= .22; Total= .00

Note. SS= Salesperson's sex

women in general.

Interpersonal Style and its Relationship to Other Variables included in the Studies.

Although the hypotheses in Study II were about the relationships between the experimental conditions and perceived sales effectiveness, some analyses were made to test the relationships found in Study I and to find if the treatments affected the perceptions of interpersonal styles. Below is a summary of the results of these analyses.

Tables 24 and 25 show the relationship between interpersonal styles and perceived sales effectiveness without considering the treatment to which the salesperson was exposed. The results show that those salespersons perceived as dominant-warm tend to be perceived as more sales effective than salespersons with other interpersonal styles. These results confirm the findings of Study I in this respect.

Tables 26, 27, 28, and 29 show the relationship of judge's sex, order of presentation, and salesperson's sex to each dimension of interpersonal style. The results are, in some ways, different than the results of Study I. In this study, order of presentation interacted with judge's sex for dominance, hostility and submission and salesperson's sex affected the perception of warmth, women being perceived as warmer than men (2.24 versus 1.98, respectively).

Table 24

One-Way Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable and Interpersonal Style as the Independent Variable (n=314)

Source of Variation	Sum of Squares	df	Mean Square	F	p
Interpersonal Style					
Main Effects	96.056	3	32.019	63.980	.000
Residual	155.040	310	.500		
Total	251.197	313	.803		

Group Means

Dominant-Warm=	.70	(n=61)
Dominant-Hostile=	-.27	(n=35)
Hostile-Submissive=	-.74	(n=97)
Submissive-Warm=	.30	(n=121)
Total population=	-.01	(n=314)

Table 25

One-Way Analysis of Variance of Perceived Sales Effectiveness as the Criterion Variable and Interpersonal Style as a Dichotomous Independent Variable

Source of Variation	Sum of Squares	df	Mean Square	F	p
Interpersonal Style					
Main Effects	38.161	1	38.161	55.889	.000
Residual	213.035	312	.683		
Total	251.197	313	.803		

Group Means

Dominant-warm= .70 (n= 61)

Other= -.18 (n= 253)

Table 26

Analysis of Variance of Dominance as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	1.103	3	.368	2.480	.061
JS	.687	1	.687	4.635	.032
OD	.059	1	.059	.396	.529
SS	.357	1	.357	2.409	.122
Two-Way Interactions	3.150	3	1.050	7.081	.000
JS, OD	2.576	1	2.576	17.371	.000
JS, SS	.212	1	.212	1.432	.232
OD, SS	.362	1	.362	2.442	.119
Three-Way Interactions	.112	1	.112	.754	.386
JS, OD, SS	.112	1	.112	.754	.386
Explained	4.366	7	.624	4.206	.000
Residual	46.862	316	.148		
Total	51.228	323	.159		

Group Means:

		JUDGE'S SEX	
		Men	Women
ORDER	First	1.85 (n=81)	1.93 (n=81)
	Second	2.05 (n=81)	1.78 (n=81)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 27

Analysis of Variance of Hostility as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	3.284	3	1.095	3.328	.020
JS	.330	1	.330	1.004	.317
OD	.128	1	.128	.388	.534
SS	2.826	1	2.826	8.590	.004
Two-Way Interactions	4.639	3	1.546	4.700	.003
JS, OD	4.505	1	4.505	13.694	.000
JS, SS	.040	1	.040	.123	.726
OD, SS	.094	1	.094	.285	.594
Three-Way Interactions	.022	1	.022	.068	.794
JS, OD, SS	.022	1	.022	.068	.794
Explained	7.946	7	1.135	3.450	.001
Residual	103.968	316	.329		
Total	111.914	323	.346		

Group Means:

		JUDGE'S SEX	
		Men	Women
ORDER	First	1.81 (n=81)	1.98 (n=81)
	Second	2.01 (n=81)	1.71 (n=81)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 28

Analysis of Variance of Submission as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	.487	3	.162	.664	.574
JS	.073	1	.073	.297	.586
OD	.001	1	.001	.002	.964
SS	.414	1	.414	1.664	.194
Two-Way Interactions	2.042	3	.681	2.785	.041
JS, OD	1.013	1	1.013	4.143	.043
JS, SS	.367	1	.367	1.502	.221
OD, SS	.662	1	.662	2.709	.101
Three-Way Interactions	.114	1	.114	.466	.495
JS, OD, SS	.114	1	.114	.466	.495
Explained	2.643	7	.378	1.545	.151
Residual	77.234	316	.244		
Total	79.877	323	.247		

Group Means:

		JUDGE'S SEX	
		Men	Women
ORDER	First	2.11 (n=81)	2.19 (n=81)
	Second	2.23 (n=81)	2.08 (n=81)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Table 29

Analysis of Variance of Warmth as the Criterion Variable by Judge's Sex, Order, and Salesperson's Sex

Source of Variation	Sum of Squares	df	Mean Square	F	p
Main Effects	6.106	3	2.035	5.213	.002
JS	.014	1	.014	.036	.849
OD	.881	1	.881	2.257	.134
SS	5.211	1	5.211	13.346	.000
Two-Way Interactions	.471	3	.157	.402	.751
JS, OD	.141	1	.141	.360	.549
JS, SS	.330	1	.330	.845	.359
OD, SS	.001	1	.001	.002	.963
Three-Way Interactions	.007	1	.007	.018	.892
JS, OD, SS	.007	1	.007	.018	.892
Explained	6.585	7	.941	2.409	.020
Residual	123.375	316	.390		
Total	129.959	323	.402		

Group Means

Men= 1.98 (n=160); Women= 2.24 (n=164); Total= 2.11 (n=324)

Note. JS= Judge's sex; OD= Order; SS= Salesperson's sex

Due to the interactions found, it was not possible to develop contingency tables to test the relationship between treatment levels and interpersonal styles, because more than 20% of the cells had expected frequencies below five (Kinnear & Taylor, 1987). The solution to this was to average the judge's scores for each salesperson, canceling out the interactions among the control variables (Churchill, 1991). However, even with this procedure and collapsing the categories in a 2 x 2 table, the above requirement was not improved. This problem was due mainly to the fact that for some treatment levels, there were no interpersonal style cases. Consequently, no results are reported here for the relationship between interpersonal style and treatment levels.

In the next chapter, a discussion of the results of both studies is presented along with the limitations and implications of the dissertation.

CHAPTER VII

DISCUSSION

This research was done to provide answers to three basic questions. First, how do consumers describe the more and the less effective salesperson? Second, what, if any, nonverbal behaviors are responsible for or related to the impressions of the more and the less effective salesperson? Third, can salespersons be trained to control or manipulate nonverbal behaviors in order to create impressions associated with the more effective salesperson?

By looking at the literature, it was hypothesized that dominant-warm salespersons will be perceived as more sales effective than salespersons exhibiting a different interpersonal style. In addition, selected nonverbal behaviors presented in the literature were hypothesized to be related to perceived sales effectiveness and to a dominant-warm style. Finally, it was hypothesized that different training experiences should achieve differential changes in nonverbal behaviors resulting in changes in perceived sales effectiveness.

These hypotheses were tested using a methodology involving two studies. Study I tested hypotheses related to the first two questions, while study II tested the hypotheses related to the third question. Ninety-six (96) undergraduate students acted as salespersons in the first study and eighty-one (81) undergraduate students in the second study. Sales presentations were videotaped and judged

by sixty-four (64) students acting as consumers in both studies, although both studies used different judges. Trained coders were also used in the first study to measure the occurrence of those nonverbal behaviors studied.

The results of study I showed that dominant-warm salespersons were perceived as more sales effective than salespersons displaying other interpersonal styles. Study II replicated the same finding. These two studies provide strong support for the Buzzotta et al. (1982) study. However, these results tend to raise doubts about the hypothesis that the best sales behavior is adapting to the style of the customer (Wenschlag, 1987). This does not necessarily apply to the Weitz, Sujan and Sujan (1987) framework. This is so because that framework postulates a series of contingency variables that relate adaptive selling to perceived sales effectiveness. In other words, there are other variables that moderate the relationship between adaptive selling and sales effectiveness that are not incorporated in the Wenschlag framework.

It could be argued that this conclusion is not supported by this data, because no control was used in selecting different types of customers. Although this argument has its merits, it should be considered that before averaging the interpersonal style scores of the salespersons, an individual analysis of 356 ratings in the first study, plus 314 in the second study, was done. In these studies, individual analyses supported the relation

between being dominant-warm and perceived sales effectiveness. With such a large number of ratings, it is very likely that many types of customers were included in these studies.

Another interesting result was that male judges tended to perceive more dominance and hostility in the salespersons than female judges in the first study. Although it was expected that some differences might appear between males and females, due to the fact that sex differences systematically influence the items of the Impact Message Inventory (Perkins et al. 1979), it is surprising that the same targets were perceived differently by judges of a different sex. One explanation is in terms of socialization theory (Wilkie, 1990). In general terms, males are socialized (i.e., learn from social forces) to be more dominant and hostile, and consequently, are able to decode cues related to these dimensions or to interpret some cues as being dominant or hostile when, in fact, they are not. On the other hand, females, thru their socialization process, tend not to pay attention to these cues or consider these cues as not being dominant or hostile. Although this was an interesting finding, these differences were of no practical significance, because each cancels out the other, and the average represented the best estimate of the real value in the variable (Churchill, 1991).

Salesperson's sex affected the ratings of warmth in the second study. This was expected because women tend to be perceived as more sociable than men (Perkins et al. 1979). However, the interaction between a judge's sex and order of presentation in dominance, hostility, and submission in Study II was unexpected. The researcher's reaction to this finding is that possibly changing the number of salespersons rated from six to five was not methodologically appropriate. Apparently, the greater the number of salespersons rated, the less these control variables affected the results. The major implication of these results is that future studies in these areas should include or control for the influence of these variables (i.e., sex, order).

In terms of nonverbal channels, dominant-warm salespersons tend to exhibit nonverbal variables through the paralinguistic channel, facial expressions, and kinesic behaviors, but do not differ from other salespersons with different interpersonal styles with respect to visual behavior. Specifically, dominant-warm salespersons tend to display higher speech rate, higher speech volume, more positive facial expressions, more negative facial expressions, more facial activity, more object-focused movements, less hand-to-hand contact, more body-focused movements, and less hand-to-hand contact. However, from these variables, only speech volume, positive facial expressions, and facial activity were statistically

significant.

In addition, it was found that various nonverbal behaviors were associated with the perception of dominance-warm. As revealed from a discriminant analysis, more positive facial expressions, fewer smiles, less hand-to-hand contact, less parallel movements, more body-focused movements, less hand-to-head movements, and high negative facial expressions tend to be associated with dominance-warm.

Although the above results seem to be contrary to our expectations (e.g., high negative facial expressions), it should be noted that because sixty cases were used, two groups were formed: the dominant-warm group, and the other interpersonal styles group. This latter group was composed of the three remaining interpersonal styles (i.e., dominant-hostile, submissive-hostile, and submissive-warm) and consequently, differences among these three groups might cancel out or increase the effect of some variables.

In terms of perceived sales effectiveness, more effective salespersons tend to communicate through all four channels studied in this dissertation. Specifically, more effective salespersons tend to display high speech rate, high speech volume, more positive facial expressions, more facial activity, more eye contact, more object-focused movements, more parallel movements, less hand-to-head contact, less hand-to-hand contact, more body-focused movements, and less hand-to-body contact. However, only

speech volume, positive facial expressions, facial activity, eye contact, object-focused movements, and body-focused movements were statistically related to perceived sales effectiveness.

The results also showed that several nonverbal behaviors are more useful in predicting perceived sales effectiveness scores than only one nonverbal variable. When the task is to predict group membership, more positive facial expressions, fewer smiles, less hand-to-body contact, more hand-to-hand contact, and less eye contact help to discriminate between the more and the less effective groups. When the task is to predict degree of perceived sales effectiveness, more positive facial expressions and fewer smiles explain the variation in the data.

Although the finding that the number of smiles is negatively related to perceived sales effectiveness is contrary to our expectations, a reconsideration of the data is appropriate. Number of smiles was not significantly related to perceived sales effectiveness in a correlational analysis. However, when a multivariate analysis was used, it entered the discriminant and regression equations in a negative way. Apparently, variance in number of smiles is composed of positively and negatively perceived smiles. When variance is removed by the positive facial expressions, the remaining variance can be explained in terms of negatively perceived smiles. In other words, smiles at some moments are perceived positively, because they are

associated with friendliness or warmth, while at other moments, they are perceived negatively (e.g., after a mistake or correlated with nervousness). These effects cancel out in a correlational analysis, but when the positive variance is removed, the remaining negative variance helps to increase prediction.

The results of this first study are encouraging. Using nonverbal behaviors helps to correctly classify salespersons in different interpersonal styles, different perceived sales effectiveness groups, and the degree of sales effectiveness. The classification accuracy varied from 76.7% to 86.21% according to the criterion, although this number can be inflated because the discriminant functions were not cross-validated (Hair et al., 1990). The multiple regression equation helps to explain more than 25% of the variance in sales effectiveness. If one considers the multiple factors that affect sales effectiveness (Churchill, Ford, Hartley & Walker, 1985), and compares the results with other areas of human behavior research (e.g., personality, testing), the results are encouraging.

Study II was concerned with examining the question of changing customers' impressions of the salesperson by changing the nonverbal behaviors of the salesperson thru training experiences. Although the results of training were basically in the expected direction, they were not statistically significant.

It is the researcher's belief that these training hypotheses should be tested again in future studies. On an ex-post facto analysis of the procedure, it is apparent that a knowledge approach to changing nonverbal behaviors was relied on. Although nonverbal knowledge is a necessary component of nonverbal training, it is not sufficient to change nonverbal behaviors. More time, more practice and feedback, and more incentive is necessary to change behavior (Bandura, 1977).

In this study, due to the complexity of the methodology, the training did not exceed two hours. Upon reflection, more time was necessary to change habitual nonverbal behavior. In addition, in order to control for other confounding variables, practice and feedback was minimized. Mills and Pace (1989) report that practice and feedback have a marked influence on the acquisition of interpersonal communication skills. Practice initially heightens the potential to learn what to do with information, while feedback increases performance scores.

Finally, in order to control confounding variables, no incentive was offered for learning or display of the nonverbal behaviors. Bandura (1977) has shown that even if one learns some behavior, some incentive is necessary to manifest it in behavior. In this study, the incentive was only to perform the sales presentation to obtain extra points in their courses. Students were reassured that their degree of performance was not related to the number of

points, and that even their professors would not know the quality of their performance. This was done in order to obtain their participation in the study. No incentive was provided for them to excel in their performance; this should be included in future studies to motivate learning or to assess if learning occurred.

An unexpected finding was that those who saw the technical briefing were considered less effective than those who saw the nonverbal condition, although the results were not statistically significant. An explanation for this finding may be that the large amount of information and statistical analyses presented in the technical briefing condition was excessive for undergraduate students in their first years of study. Another explanation may be that the technical information interfered with their ability to be spontaneous because they gave too much thought to what they were doing.

Another interesting finding was that salesperson's sex affected perceived sales effectiveness. In general, women outperformed men in each condition related to sales effectiveness. This is consistent with some studies that have found this relationship (e.g., Caballero and Pride, 1984) and that women tend to be better decoders and encoders than men (Bull, 1983; Graham, Unruh, & Jennings, 1991). Apparently, they were able to abstract more information from the training and to display it better.

In addition, it should be recalled that in study I the best predictor of perceived sales effectiveness was the warmth dimension. Women, generally encode nonverbally a more receptive, affiliative attitude toward others (Bull, 1983). Apparently, this sex difference in the affiliative dimension had a constant effect throughout the experimental conditions and the control group, indirectly increasing their perceived effectiveness scores. This finding highlights the importance of including sex as a control variable in future studies of this nature.

Limitations of the Study

As in all types of research, some limitations occur, because decisions have to be made so that research design is manageable. Below, references will be made to some of these limitations which should be considered in evaluating the results of this dissertation.

First, a decision was made to videotape the sales presentations and later to present them to the judges. This decision increased the similarity of the studies to a mass communication context by eliminating the interaction that normally occurs in a personal selling context and consequently, affecting the external validity of the studies. This is an important but difficult to overcome limitation. Apparently, the major way to overcome this limitation would be to videotape sales encounters where both parties interact.

Second, the use of undergraduate students acting as salespersons and customers might also have affected the external validity of the studies. Real salespersons with work pressures and customers with real needs for the product and budget limitations might have acted in a different way than the participants of this research.

Third, the use of a random sampling procedure was not strictly followed due to problems of possible communication among groups, lack of cooperation of some participants, and the practical difficulty of using this procedure when less used research techniques (e.g., videotape instead of questionnaires) are used.

Fourth, the use of extreme groups for some statistical analyses has to be considered. No inferences might be made to the intermediate groups (e.g., "average salespersons") because they were not included due to the reasons discussed elsewhere. In addition, normally, cross-validation of the discriminant or multiple regression equations should be used because these equations are developed maximizing the fit to the data (Hair et al., 1990). Due to the complexity of the methodology, this was not feasible.

Finally, cultural elements should be taken into consideration. This research was done in Puerto Rico where affiliation is more important than individualism (Nine-Curt, 1984). This might explain why dominance-warm and positive facial expressions were very important in this research. Nonetheless, it should be noted that the results seem to

be consistent with Buzzotta et al. (1982) and nonverbal literature from North-America and England.

Implications

The results of this research provide further support for the importance of nonverbal factors in the personal selling process. It is surprising that almost all models in personal selling do not incorporate nonverbal factors. Theories or models should be developed to explain how verbal and nonverbal factors affect or interact to produce different results in personal selling encounters. Patterson's model (1982) might be used in this task.

In terms of personnel selection, it seems that nonverbal behaviors should be used to select better salespersons. Although the procedure used here is very time-consuming and complicated, a shorter and simpler version might be used. For example, candidates might perform a standard sales presentation, and evaluators, using time sampling and selected discriminating nonverbal variables, could give scores to each candidate. Later, these scores could be combined with other predictors to estimate the likelihood of superior sales performance.

With relation to training, the results of this research do not clearly provide support for nonverbal behavior-change training. However, the fact that some improvement was found suggests that more research is needed. Laboratory or field experiments should be developed using time, practice, feedback, and incentive in future training where

nonverbal behavior change is desired, and its effectiveness should be assessed.

Finally, in terms of performance evaluation, the methodology is of importance. Salespersons should be compared using standardized values to eliminate performance evaluation errors (e.g., leniency). In addition, as in personnel selection, the order in which candidates or salespersons are rated should be randomly selected, and control measures should be taken to eliminate rating bias related to judge's sex or salesperson's sex.

APPENDIX A

PERCEIVED SALES EFFECTIVENESS SCALE

ENGLISH VERSION

Instructions

Please make a mark (X) in the place that best expresses your opinion about the sales presentation you have watched.

1. Assuming you were interested in the product mentioned in the sales presentation, how likely is it that you would buy it from the salesperson you have just watched?

Very unlikely : : : : : : : : Very likely
1 2 3 4 5 6 7

2. If a friend needed to buy this product, would you recommend your friend contact this salesperson?

Definitively yes : : : : : : : : Definitively not
7 6 5 4 3 2 1

3. To what extent do you think this salesperson helped to enhance the attributes of this product?

Not helpful at all : : : : : : : : Very helpful
1 2 3 4 5 6 7

4. To what extent do you think this salesperson helped to enhance the benefits of this product?

Very helpful : : : : : : : : Not helpful at all
7 6 5 4 3 2 1

5. Overall, how effective do you consider this sales presentation?

Poor : : : : : : : : Excellent
1 2 3 4 5 6 7

APPENDIX B

PERCEIVED SALES EFFECTIVENESS SCALE

SPANISH VERSION

Instrucciones

Favor de colocar una marca (X) en aquel lugar que mejor exprese tu opinión sobre la presentación que acabas de ver.

1. Asumiendo que estuvieras interesado en el producto mencionado en la presentación de ventas, ¿Cuán probable es que le compraras al vendedor que acabas de ver?

Bastante improbable	: 1	: 2	: 3	: 4	: 5	: 6	: 7	: Bastante probable

2. Si un amigo tuyo necesitara comprar este producto, ¿Le recomendarías que hiciera contacto con este vendedor?

Definitivamente sí	: 7	: 6	: 5	: 4	: 3	: 2	: 1	:Definitivamente no

3. ¿En que medida tu entiendes que este vendedor ayudó a resaltar los atributos de este producto?

No ayudó en nada	: 1	: 2	: 3	: 4	: 5	: 6	: 7	: Ayudó grandemente

4. ¿En qué medida tu entiendes que este vendedor ayudó a resaltar los beneficios de este producto?

Ayudó grandemente	: 7	: 6	: 5	: 4	: 3	: 2	: 1	: No ayudó en nada

5. En términos generales, ¿Cuán buena consideras esta presentación de ventas?

Pobre	: 1	: 2	: 3	: 4	: 5	: 6	: 7	: Excelente

APPENDIX C

"CANNED" SALES PRESENTATION

ENGLISH VERSION

"CANNED" SALES PRESENTATION

Good evening ladies and gentlemen. Tonight as well as every week we bring you the best sales program on television. Before proceeding to the first offer, please let me ask you some questions.

Have you ever finished writing a paper one or two days before a deadline and have found it difficult to find somebody who can type it? Have you ever tried to type a paper and then found that you have made so many mistakes that will ruin your presentation? Have you ever needed to analyze a series of data using statistical techniques or tc maintain the balance of your checking account? If you have answered yes to any of these questions, you definitely need our evening offer.

Yes, my friend, you need a personal computer. This evening we bring you the IBM personal computer. This computer has the following characteristics: it has a 640K memory, a monographic card for high resolution texts, two disk drives, and an independent keyboard from the central processing unit. In addition, the printer is of high quality, letter type.

Besides these extraordinary product characteristics, this TV offer gives you a series of advantages, difficult to find in other places. First, our offer is a complete system. We offer you a central processing unit, a monitor, a keyboard, an operations program and various instruction manuals.

Second, our IBM personal computer is currently the best one available on the market. Our competitors acknowledge that the IBM personal computer is the best because they try to equate their models with ours. Why take risks with imitations, when you can have the original?

Finally, the IBM personal computer assures you that you will have the best programs available for computers. There are many people that have bought other brands of computers and are now limited by the few programs available. When you buy the IBM personal computer, the best in computer programs will be available immediately.

How much is the market price of this system? Normally, this system sells for about $5,000 dollars. During this limited time on our television offer, we are selling it at the very low price of $3,000 dollars. But this is not all. Our competitors offer a three month warranty in parts and services. We will extend this warranty to one year. In addition, we have our own service department here in Puerto Rico with high quality technicians to give you quick and efficient service.

In addition, if you take this TV offer, you can take advantage of a payment plan with a down payment of $1,000 dollars and the remaining balance to be paid in easy payments with a low finance charge.

And if you think this is all, for the first thirty persons calling our studio, we will give them a computer program to be selected from a list that our telephone

operators have.

What are you waiting for? Call immediately to the telephone number 765-1989.

Before going to our second evening offer, we will hear various messages from our sponsors.

APPENDIX D

"CANNED" SALES PRESENTATION

SPANISH VERSION

PRESENTACION DE VENTAS "ENLATADA"

Muy buenas noches damas y caballeros. Hoy como todas las semanas les traemos el mejor programa de ventas por televisión. Antes de proceder a la primera oferta de esta noche, permítanme hacerles algunas preguntas.

¿Alguna vez has terminado de escribir un trabajo uno o dos días antes de una fecha límite y te ha sido difícil conseguir alguien que lo pase a maquinilla? Alguna vez has tratado de pasar un trabajo a maquinilla y has cometido una gran cantidad de errores que dejan mucho que desear de tu trabajo? Alguna vez has necesitado analizar una serie de datos por medio de técnicas estadísticas o mantener al día tu cuenta de cheques? Si has contestado que sí a alguna de estas preguntas, definitivamente necesitas nuestra oferta de esta noche.

Efectivamente mi amigo, tu necesitas una computadora personal. En esta noche te traemos la computadora personal IBM. Esta computadora posee las siguientes características: tiene una memoria de 640K, posee una tarjeta monográfica para textos de alta resolución, dos "disk drives" y un teclado independiente de la unidad de procesamiento central. Además, la impresora es de alta calidad, tipo carta.

Aparte de estas extraordinarias características del producto, esta oferta de televisión te ofrece una serie de ventajas difíciles de encontrar en otro lugar. Primero, nuestra oferta es un sistema completo. Te ofrecemos una unidad de procesamiento central, un "monitor", un teclado,

la impresora, un programa de operación y varios manuales de instrucciones.

En segundo lugar, nuestra computadora IBM es lo mejor que existe en el mercado actualmente. Nuestros competidores reconocen que la computadora personal IBM es la mejor pues tratan de igualar sus modelos a los nuestros. ¿Para que correr riesgos con imitaciones si tienes a tu alcance la original?

Por último, la computadora personal IBM te asegura que tendrás los mejores programas disponibles para computadoras. Hay muchas personas que compraron otras marcas de computadoras y ahora están limitados por la poca disponibilidad de programas. Al comprar la computadora IBM, lo mejor en computadoras estará disponible inmediatamente.

¿Cuánto es el precio en el mercado de este sistema? Normalmente, este paquete se vende en alrededor de $5,000 dólares. En esta oferta de tiempo limitado por televisión la tenemos al bajísimo precio de $3,000 dólares. Pero esto no es todo. Nuestra competencia te ofrece una garantía de tres meses en piezas y servicios. Nosotros te extenderemos esta garantía por un año. Además, tenemos nuestro propio taller de reparaciones con técnicos de la mejor calidad aquí en Puerto Rico para un servicio rápido y eficiente.

En adición, si aprovechas esta oferta televisiva podrás acogerte a un plan de pagos con un pronto inicial de $1,000

dólares y los restantes $2,0000 dólares los podrás pagar en cómodos plazos con un bajísimo cargo por financiamiento.

Y como si esto fuera poco, a las primeras treinta personas que llamen a nuestros estudios les obsequiaremos con un programa de computadoras de un listado que tienen nuestras operadoras de teléfono.

¿Qué esperas? Llama inmediatamente al teléfono 765-1989.

Antes de pasar a nuestra segunda oferta de la noche, escucharemos varios mensajes de nuestros auspiciadores.

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