12-2012

Behavior Based Sales: A Study of Behavioral Techniques for Sales Performance Improvement

Peder Henrik Seglund
Western Michigan University, pederhenrik91@aol.com

BEHAVIOR BASED SALES: A STUDY OF BEHAVIORAL TECHNIQUES FOR SALES PERFORMANCE IMPROVEMENT

by
Peder Henrik Seglund

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Philosophy
Department of Psychology
Advisor: Ron Van Houten, Ph.D.

Western Michigan University
Kalamazoo, Michigan
December 2012

BEHAVIOR BASED SALES: A STUDY OF BEHAVIORAL TECHNIQUES FOR SALES PERFORMANCE IMPROVEMENT

Peder Henrik Seglund, Ph.D.

Western Michigan University, 2012

The purpose of the present study was to evaluate the impact of a behavior-based sales training package on sales performance for the sales divisions of two different organizations located in separate cities in the Midwestern United States. The independent variable was a package that included: behavior-based sales training; feedback; and reinforcement. The primary dependent variable was sales performance results, which is a measure of the participants' closing percentage. Secondary dependent variables included income, participant attendance at sales meetings, participant satisfaction, and changes in knowledge (at site 2 only).

The intervention package was implemented at each site over a course of four weeks employing a non-concurrent multiple baseline design. Visual and statistical analysis suggests the training package was effective at increasing the closing percentage at each site, but the effects were not maintained after the training package was removed. In addition, the attendance at sales meetings increased, knowledge increased as it related to behavior and sales, and participant and organization income increased. The post-training survey suggests a favorable evaluation of the training package by participants.

The goal of the study was to examine behavioral techniques that could be generalized to any organization's sales division for performance improvement. Few studies have applied behavioral techniques to improve sales performance. The current study fills a gap in the research literature, demonstrating the impact of a behavioral approach on sales performance and its effect on participant behavior in a sales organization.

ACKNOWLEDGMENTS

I would like to thank my dissertation committee, Dr. John Austin, Dr. Ron Van Houten, Dr. Richard Malott, and Dr. Douglas Johnson for taking time to review my work.

Peder Henrik Seglund

TABLE OF CONTENTS

ACKNOWLEDGMENTS………………………………………………………… ii

LIST OF TABLES………………………………………………………….... v

LIST OF FIGURES…………………………………………………………. vi

INTRODUCTION…………………………………………………………… 1

METHOD……………………………………………………………………. 17

Participants and Settings…………………………………………… 17

Data Collection…………………………………………………… 18

Dependent Variable and Interobserver Agreement…………………... 19

Experimental Design and Procedure………………………………. 19

Baseline………………………………………………………… 20

Treatment Package……………………………………………. 20

RESULTS…………………………………………………………………….. 26

Closing Percentage………………………………………………… 26

Income vs. Expenditure…………………………………………….... 28

Knowledge Survey………………………………………………….. 30

Satisfaction Survey…………………………………………………. 31

Attendance………………………………………………………….. 39

DISCUSSION………………………………………………………………. 40

APPENDICES

A. Survey of Satisfaction Study 1………………………………………. 49

B. Survey of Satisfaction Study 2……………………………………… 51

C. Knowledge Survey………………………………………………….. 54

Table of Contents – continued

APPENDICES

D. HSIRB Approval Letter…………………………………………..……. 57

REFERENCES………………………………………………………………. 59

LIST OF TABLES

1. Site 1 Satisfaction Survey……………………………………………… 31

2. Site 2 Satisfaction Survey……………………………………………..... 34

LIST OF FIGURES

1. Averaged results of group closing performance……………………….. 27

INTRODUCTION

Sales are clearly an important factor driving the health and well-being of the U.S. economy. Retail and food sales in the United States in 2011 alone topped $4,500,000,000,000 (http://retailsails.com/us-retail/annual/). The sales division of an organization is the financial base through which the company thrives, survives, and pays all the other employees and vendors of the organization. Because competition in most industries is fierce, any competitive edge that can be gained by increasing an organization's sales performance can lead to increased market share, financial stability, competitive advantage, revenue for research and development, marketing, and continued success.

Although sales are a critical factor in macro- and microeconomic success, and much has been written on sales, few studies have tried to experimentally evaluate methods of improving sales. There are a number of reasons why researchers typically fail to focus on sales. Several reasons are listed below.

- The difficulty in identifying critical behaviors that influence sales.
- Unknown antecedents that may influence critical behavior
- Lack of client information
- Client history with respect to purchasing products
- Participant history with respect to selling

There are also variables that are not under control of the seller. Some of those may be:

- Competitive products emerging
- Seasonal variations
- Technological improvements
- Other environmental changes that can influence demand for a product

Traditional ways of managing a sales organization includes paying salary/hourly pay, commission, bonus, profit sharing, benefits, and use of technology (i.e. cell phone, computer etc.), company vehicle, or other tangible items that can be used for both work and personal use, or some combination of these items. From a behavioral science perspective, each of these practices is of questionable utility. First and foremost, none of these approaches actually delivers reinforcement for specific sales behavior. Instead, reinforcement is typically delivered based on results, and in some cases it is delivered non-contingently. Below is a brief review of some of these methods, starting with perhaps the most obvious choice to improve motivation; paying commissions to reinforce sales behavior.

Commissions are the most common approach to motivating salespeople because ideally, they encourage people to engage in more selling behaviors (such as closing deals) that will result in more commissions. The more sales a salesperson makes the greater the income they earn, and this income could serve as a generalized conditioned reinforcer.

Despite its common use, even paying commission for sales is not likely to prove effective unless the commissions are clearly tied to critical sales behaviors and they are provided immediately after the behavior occurs. For example, in a study by Crawley, Adler, O'Brien, and Duffy (1982) commissions were paid three months after sales were completed. The authors contend that the delay in commissions negated any reinforcing benefit because the critical sales behaviors were exhibited much earlier (i.e., months) in time. During this delay, sales associates engaged in many (potentially competing) behaviors. It is possible that commissions could cause the seller to self-monitor and provide self-feedback by tracking their own results. Even if sellers track their own sales, it may not increase critical behaviors if these behaviors are not subject to contingent reinforcement.

The behavior analysis literature is not wholly aligned with Crawley and colleagues (1982) claim that the delay in reinforcer delivery negated their effects. Indeed, more recent writing suggests that indirect acting consequences (such as the delayed commission payments described above) can be delayed and function as a reinforcer through rule mediation. For example, Malott and Trojan (2008, p. 366) states "this delayed outcome still affects the future frequency of the target behavior, but it affects it indirectly instead of directly." If Malott et al. are correct, then the commissions in the Crawley et al. (1982) study did function as a reinforcer even though they were delayed. What is lacking in the normal work environment is the connection of performance to reward. The closer in time a reward is presented for performance the more effective it may be. However, delayed reinforcers may still affect performance through rule mediation.

Dickinson and Poling (1996) reviewed eight articles from 1972 to 1982 that examined incentive pay. The same articles were previously reviewed by Latham and Huber (1992). The results of Dickinson and Poling's (1996) further analysis were in contrast to the evaluation done initially by Latham and Huber (1992). Latham and Huber (1992) suggested that operant principles of reinforcement developed through basic research can be utilized in an applied setting to evoke behaviors that are desired from employees. Dickinson and Poling (1996) suggest that their review of the articles do not support that contention, and in effect, contend that the results of applied research are at most superficially related to basic research. Latham and Huber (1992) stress the value of basic research to applied settings but do acknowledge that it is difficult to generalize such research to applied settings. These reviews suggest more research is needed in the area of incentive pay, rewards, and reinforcement.

Bonuses are also utilized as reinforcers for a sales representative. Most companies pay bonuses on a monthly, quarterly, or annual basis. Bonuses are similar to commissions as these are variable rewards based on sales performance. Bonuses typically require the salesperson to self-monitor their performance on a continual basis, so they know how performance compares to the bonus standard. Once the required performance level is achieved, the bonus is not necessarily paid out at that time. It is often delayed, based on a pre-determined payment schedule. Furthermore, these contingencies only relate sales results to reinforcement; they do not relate actual selling behaviors to reinforcement. Observations by the researcher suggest that typically these contingencies reinforce the behavior of those who already have an excellent selling repertoire but do nothing for those who lack an effective selling repertoire.

Profit sharing is also used as a reinforcer for sales results, but is “diluted” by the number of personnel in the organization. The sales force may exceed results targets, but receive no profit sharing because other issues drive profits such as manufacturing costs, lawsuits, competition, and fuel costs. Profit sharing is usually delivered at fiscal year’s end, is not always clearly linked to sales results, and it is even further removed from sales behavior. Because of these factors, profit sharing is limited in motivating a salesperson’s performance. The sales critical behaviors that a company is attempting to increase are not directly tied to a salesperson’s performance and thus may not achieve the desired effect.

Benefits may be perceived as entitlements (i.e., delivered as a condition of employment, instead of being contingent on specific behaviors or results) and are unlikely to increase sales in any manner. Because benefits are not tied in any manner to sales performance they are of little value in motivating sales performance.

Uses of computers, cell phones, company vehicles, and other tangible items that can be used for work and personal use are a benefit or a bonus tied to being employed by some organizations. Sometimes use of these items is tied to performance. This type of reward can be similar to a bonus and doled out to the employee based on sales performance rather than sales behavior, or can be a benefit of working for an organization.

Training is also utilized in many sales organizations to increase sales performance. Below is a brief review of some of these methods.

Training methods common across many companies include:

- Training on competitor’s product compared to an organization’s product.
- Training on pricing benefits of an organization’s product
- Training on quality of an organization’s product
- Training on product knowledge of the organization’s product

These training methods may be effective in increasing a salesperson’s performance if the person fails to engage in behaviors in any of these areas. There are many approaches to sales training. One article by Attia and Honycutt (2012) analyzed sales training and effectiveness by evaluating reaction and learning. Mache (2007) listed what he feels are the steps to sales training success:

- Determine and evaluate the makeup of your organization's sales team.
- Identify what makes a superstar salesperson.
- Evaluate each salesperson's skills and behaviors against the best, identified practices.
- Customize the path to breakthrough achievement.

- Get a commitment to change.

One difficulty in implementing the steps Mache (2007) listed is defining exactly what they mean in practice. For example, how does one go about getting “commitment to change”? The current study followed a more objective approach that included delivering behavior-based sales training and employing behavioral techniques such as feedback and reinforcement to achieve changes in behavior during training and when sales presentations were completed.

Feedback is utilized in many organizations to increase sales performance. In a typical sales organization the sales per representative (feedback on performance) is listed on a sales results board in the back room or other area that is visible to the representatives but not the potential clients. Both organizations in the current study employed this practice. The current study had both organizations discontinue this procedure during the study. Sales performance feedback was delivered privately to individuals and averaged across the sales force for group results which were presented publicly during training seminars.

Alvero, Bucklin, and Austin (2001) evaluated the effectiveness and characteristics of feedback in organizational settings. The purpose of their review was to update a review by Balcazar, Hopkins, and Suarez (1985). The Alvero et al. (2001) article suggests there is no agreement about the function of feedback or the exact definition of feedback among researchers in organizational behavior management. Despite this ambiguity, feedback is utilized in many behavioral studies. An article by Nolan, Jarema, and Austin (1999) found that 71% of the articles they reviewed over the previous 10 years included feedback as one independent variable.

The current study utilized a combination of feedback and reinforcement as two of the components of the training package. A study by Austin, Kessler, Riccobono, and Bailey (1996) also evaluated the effects of feedback and reinforcement on a roofing crew. They conducted two studies on the same roofing crew. The combination of feedback and reinforcement reduced labor costs by 64% compared to baseline. Safe behaviors increased from 51% at baseline to 90% on the ground and from 55% at baseline to 95% on the roof. Alvero et al. (2001) suggest that feedback is most effective when used in combination with other behavioral techniques (i.e. reinforcement or rewards). The Austin et al. (1996) study provides an example of the effectiveness of such combinations.

The current study also employed a rewards program as part of the intervention. Contests that reward the top performer or "salesperson of the month" may be part of normal business practices to increase sales at many organizations. Zingheim and Schuster (2004) suggest organizations review their base pay and incentive programs to determine if they are offering the right combination of both. This relates to the current study as the participants had rewards that were in addition to their regular pay schedule available during the study that were contingent on increased performance. The current study employed a reward program at both organizations involved in the study that gave every individual an opportunity to reach maximum rewards instead on just one “winner” of a sales contest.

A study by Ludwig, Biggs, Wagner, and Geller (2002) utilized rewards to increase safe driving behaviors of pizza delivery drivers. Usage of turn signals and coming to a complete stop at intersections were evaluated. The driver with the highest average increase in the target behaviors was rewarded with a coupon for free vehicle maintenance. Turn signal use increased 22% from baseline and stopping at intersections increased 17% from baseline. The Ludwig et al. (2002) study provides an example of the effectiveness of rewards to increase performance.

An article by Crowell (2004) discusses how rewards or positive reinforcement are an ethical and “humanizing” approach in management practices. He then lists 10 different ways in which Organizational Behavior Management is “positive” in and of itself. The goal of the current study was to increase performance by utilizing positive rewards as one element of the training package.

Sales volume of an organization’s products is critical to its financial success. Improving sales by any small percentage can have a great effect on a company’s profitability. Sales are part of the equation for a business when they perform a break-even analysis (when expenses and revenues are equal). Miller (1977) studied how to improve sales forecast accuracy. The author found that by improving sales forecast accuracy, businesses could manage other cost factors of the organization linked to sales performance such as inventory and personnel. Forecasting sales is an integral part of an organizations break even analysis.

Behavioral studies on sales performance are limited. Crawley et al. (1982) evaluated sales performance improvement in a furniture store chain. By observing the behaviors of the best salespeople on staff, they were able to train and prompt the other salespeople to emulate those behaviors, which was associated with an increase in sales. Once the authors identified what behaviors the best salespeople were exhibiting, they then verbally prompted the salespeople who were the participants in the study (no more than three prompts were given before a sales presentation) to emulate those behaviors (behaviors such as eye contact, handshake, and greeting). The sales manager then reinforced the behavior with a “thumbs up” to indicate the salesperson was exhibiting the targeted behavior.

Due to seasonal fluctuations in this industry, sales were compared to the same month of the previous year. There were 100 retail stores in the study. Group average sales increased 30% with a range from 18% to 63%. The authors point out one store as an example of how the intervention was successful. At this one location it was suggested that sales increased 40% due to the program. The sales manager went on vacation and the program ceased at that time. The sales results then returned to baseline. Once the sales manager returned and promoted the program again, the sales increased 60% compared to previous year’s results. Sales dollar volume increase or return on investment (ROI) was not calculated in the study.

Luthans, Paul, and Baker (1981) evaluated the impact of contingent rewards on retail service workers by conducting an experiment in a large department store. Eighty-two employees from sixteen departments served as participants in the study. The behaviors analyzed were sales, stocking inventory, time idle, and time not present at the work station. The behaviors were observed randomly. The participants were split into an experimental and a control group. There were 41 participants in each group. All participants had at least six months of employment. All participants had completed the organization’s standard training and were trained on the behaviors listed previously, but they were given no additional training for the study. Both groups were informed of the measured standards, but just the experimental group was informed of the contingent rewards for improved performance. The rewards consisted of paid time off, equivalent cash in lieu of time off, and a chance for a paid vacation. The rewards were contingent on the time the participants spent exhibiting the target behaviors. The results suggest that the experimental group improved target behaviors while the control group remained at baseline. The authors combined selling and stocking inventory as one behavioral measure and idle time and not present at work area as another measure for ease of analysis. The mean number of behaviors observed for the experimental group (selling and stocking) was 433.2 and the mean number for the control was 362.2. The difference was significant with a p-value <.001. The mean number for the control group (idle time and time not present at work area) was 293.8 and the mean for the experimental group was 225.4. The difference was significant with a p-value <.001. Sales dollar volume increase or ROI was not calculated in the study. The authors suggest that if rewards are contingent on performance, then the behaviors of the participants will be directly related to achieving those rewards.

Business studies and reviews rarely examine the behavioral aspects of sales performance. One theoretical paper examined leveraging intelligence, managing interfaces, and integration of processes to improve sales performance (Lane & Piercy, 2004). The authors evaluated the implications of reducing costs related to sales and increased effectiveness regarding the process of completing a sale. By reducing costs related to the sale, profit per sale may be increased.

Other business studies have been conducted to examine the effects of other organizational factors on sales performance. For example, one correlational study examined the effects of an ethical work climate on a salesperson's organizational identification, supervisory trust, organizational commitment, turnover intentions, and actual turnover (DeConinck, 2011). The authors found that salespersons who believe in the integrity of their organization tend to have improved sales performance relative to their peers. In other words, the more a salesperson believes the product they are selling is going to be a benefit to their targeted consumer, the more likely they are to do a better presentation in content and/or delivery, which leads to making the sale or making a larger sale. Making more sales relates directly to a salesperson's turnover intentions. If they sell, they make more money, which makes it less likely they will look for a position elsewhere.

Another business-literature review examined change-management practices and the impact on perceived organizational outcomes such as changes in sales volume, financial results of the organization, operational productivity, and employee performance (Raineri, 2011). The author reviewed how change-management practices increased sales performance. Change-management assesses a strategy, makes a plan and implements it, and then analyzes data to take corrective action.

Consumer behavior is another factor that influences sales performance. Although the current study does not examine consumer behavior per se, given the influence of consumer behavior in the sales process, it makes sense to briefly review some work in this area. Salespersons assist consumers with purchases by evaluating the consumer’s behavior and modifying sales techniques to fit the consumer’s behavior. Hantula and Wells (2010) conducted a study on consumer behavior. The authors found that conditioning, choice, and marketing all affect consumer behavior which in turn affects sales performance.

Another study on sales behaviors examined the effects of a sales force’s behavior on an organizations inventory and production system (Chen, 2000). The author suggests that the sales compensation package affects how salespeople exert their effort. As an example, if a salesperson is compensated by commissions only for closing a sale, then all efforts go towards that goal. This affects forecasted sales, which in turn affects production and inventory. This study is relevant as “just in time” inventory systems are based on having nearly the exact quantity of product available as is sold. Any variation of sales behaviors can affect the amount of inventory needed.

Another study examined the interaction between the salesperson and the client and evaluated the “secret signals” a salesperson displays. According to the author, secret signals are primitive, non-linguistic communication (Buchanan, 2009). Buchanan suggests that it isn’t what the salesperson says, but the intonation, pace, and amplitude the salesperson uses that is of importance. These are the prosodic features of verbal behavior. What the author identifies as a “secret signal” is actually the salesperson’s verbal behavior. In effect, the salesperson’s verbal behavior is a crucial element of making the sale. The Buchanan (2009) study is not a behavior-based sales approach and it is not empirical in nature. This notion is conceptual perhaps in part because secret signals are not easily observable. The current study sought to operationalize some of these sales behaviors and improve them through a training session dedicated to verbal and non-verbal behavior and how verbal and non-verbal behavior (both client and representative) can affect sales performance. In addition, the current study attempted to train participants to recognize the “secret signals” of the client and engage in appropriate verbal and motor behavior in the presence of such signals.

There are numerous examples of the applications of behavioral science to increase production and safety, to name a few areas of research where data are more abundant than in behavior-based sales. Behavioral sales studies can be challenging to conduct as sales behaviors are many, varied, and difficult to observe. Sales may be seasonal. Turnover is high in many sales organizations (especially those that pay commission only). Studies can be difficult to replicate as organizations differ in product, personnel, and management. This makes it problematic to generalize across the sales force of different organizations. However, it does not follow that researchers should not attempt to expand behavioral science into areas that are relatively unexplored. It just means that researchers have to take into consideration the difficulties of doing so.

The current study fills a gap in the research literature regarding the impact of behavioral approaches on sales performance. It evaluates the implementation of a behavior-based sales training package at two organizations located in the Midwestern United States and its effect on participant behaviors related to performance improvement. This study contributes to the literature on behavior as it relates to performance by examining the effects of behavioral training, feedback, evaluation, and reinforcement on increasing sales performance. The difference between previous business review papers and correlational studies and the current study is the evaluation of the impact of behavior change strategies on sales results as opposed to evaluating theories or relationships between variables. The difference between the current study and the previous behavioral studies is that sales critical behaviors were addressed by training participants on the behaviors to engage in, rewarding and giving feedback on performance, and measuring the *results* as a proxy for behavior change as compared to measuring *individual behaviors*.

The primary dependent variable was the percentage of sales meetings between participant and client which resulted in completed sales (measured by closing percentage). Secondary dependent variables were: satisfaction with the training package (measured by assessments), a pre and post-knowledge evaluation at site 2 (measured by assessments), attendance at sales meetings (visually measured), and increases in income from rate of completed sales (measured by converting closing percentage increases to real income).

METHOD

Participants and Settings

The participants at site 1 were nine sales representatives of a manufacturing/sales organization located in the Midwestern United States. The participants worked full time (Monday through Saturday). The age range of the participants was 23 – 64. The sales experience range was 2-35 years. The participants were all male. Only one participant was employed by the organization for more than a year at the time of the study. All other participants had experience in the organization's sales force ranging from a few weeks to several months. The participants' pay structure consisted of commission only pay, medical benefits with copay, and a draw against future commissions if no sales were made in any given week (if the participant requested a draw, and at the organization's discretion). The participants had to provide their own vehicle and cost of travel to engage in sales. The participants at site 1 met the potential clients at the client's home to present the organization's product.

The participants at site 2 were nine sales representatives of a resort sales organization. The participants worked full time (Tuesday through Saturday). The age range of the participants was 21-62. The sales experience range was 1-32 years. There were three female participants and six male participants. Only two of the participants were employed by the organization for more than a year. All other participants had experience in the organization's sales force ranging from a few weeks to several months. The participants' pay structure consisted of commission only pay, medical benefits with copay, and a draw against future commissions if no sales were made in any given week (if the participant requested a draw, and at the organization's discretion). The participant met potential clients in their own offices at the organization's headquarters. The participants were responsible for their own transportation to and from work.

Data Collection

Baseline data on sales closing percentage for site 1 were obtained for each individual participant from company records for four weeks before the training package began. Once the training package began, data were collected for the four weeks of intervention in order to evaluate the effects of the training package on sales performance. Four weeks of post-intervention data were also collected and evaluated.

Baseline data on sales closing percentage for site 2 were obtained for each individual participant from company records for eight weeks before the training package began. Once the training package began, data were collected for the four weeks of intervention in order to properly evaluate the effects of the training package on sales performance. Eight weeks of post-intervention data were also collected and evaluated.

Although not part of the main dependent variable measured, data on change in revenue were also collected for the same time frame for both organizations. These data were used to compare the cost of the incentives utilized during the study to the additional income received by the organization during the study. This was to calculate ROI for the organizations.

Dependent Variable and Interobserver Agreement

The primary dependent variable for both organizations was the weekly sales closing percentage across the participant group. Dollar value of each sale is also important to sales organizations. Dollar value of a sale depends on the purchasing ability of the potential client. Because purchasing ability was not a variable that could be controlled by the participant, it was not measured in the current study. Closing percentage was the most important indicator of success for the organizations targeted by the study.

Secondary dependent variables included an eleven question satisfaction survey (Appendix A) that was administered at the first site. The first site's satisfaction survey was modified and extended to twenty questions for the second site (Appendix B). Site 2 also had a pre-intervention and post-intervention knowledge survey (Appendix C) to assess increases in behavioral knowledge as it relates to sales. The same knowledge survey was given prior to intervention and after the intervention was complete to assess any gains by comparing number correct on last attempt to first attempt. Only correct answers were considered as improvement in the final assessment. Increases in sales volume and attendance at sales meetings were also measured at both sites.

Experimental Design and Procedure

The design of the study was a non-concurrent multiple baseline across two sites.

Baseline

Baseline data were collected in each of the organizations prior to starting the intervention.

Treatment Package

Participants at both sites were required by the organizations to attend the training sessions; these are part of normal sales training as conducted by the organization. However, the organization and participants were given an informed consent form to request that they allow use of their sales and training data as research.

The training consisted of four training seminars ranging in time (averaging approximately 4 hours each; 3 hours minimum to 5 hours maximum each seminar). There were nine participants in the training sessions for each organization. The training seminar material was presented to the participants in a conference room at each organization's headquarters.

Training consisted of the following four weekly training sessions:

Week 1: Antecedents, behaviors, and consequences as they relate to sales performance.

The first week covered the antecedents (advertising, referrals, interaction with marketing personnel, possible other pre-sale influences) the potential client had encountered prior to the sales meeting with the participant. The seminar also covered the behaviors of the client that sales representatives are trying to elicit (pay attention to presentation, purchase product). The final part of training in the first seminar covered consequences to consumers (fear of loss, consequences of taking advantage/not taking advantage of the company's product).

Week 2: PIC/NIC analysis (registered trademark, Aubrey Daniels International, Inc.) as it relates to sales performance.

The second seminar covered the Positive, Immediate, and Certain (PIC) consequences of taking advantage of the company's product. It also covered the Negative, Immediate, and Certain (NIC) consequences of not taking advantage of the company's product. The PIC/NIC analysis and discussion also covered delayed and uncertain consequences of the potential client taking advantage of or not taking advantage of the participant's product. The participants were taught what a PIC/NIC analysis was, how to identify if a consequence is positive or negative, immediate or delayed, certain or uncertain, and apply it to the sales presentation.

Week 3: SD/S delta as it relates to looking for indicators of when to ask for the sale and identifying/overcoming objections.

The third seminar covered two areas; the first part of the seminar covered the concept of discriminative stimulus (SD). A discriminative stimulus is "a stimulus in the presence of which a particular response will be reinforced" (Malott et al., 2008, p. 202). The participant was by trained to recognize/identify when the client was exhibiting behavior that indicated it was time to move on to the next part of the presentation (SD). It was described as a “green light” to the participant. If the green light was on, the participant could move on to the next part of the presentation. If the green light was not on (S-delta), then the participant was trained to stay on that portion of the presentation until the participant felt the green light was on and could move to the next part of the presentation. A sales presentation has several distinct steps, which must be followed in order (i.e. warm up, credibility, product advantages, pre-close, close). As an example, if the representative went from warm up to close, the green light would not be on to move to that part of the presentation and it would be unlikely to result in a sale.

The second part of the third seminar trained the participant in identifying buying questions from the potential client as compared to the client eliciting an objection. A buying question is similar in nature to an objection; the representative was trained on how to identify each and how to turn an objection into a buying question. As an example, the client may ask if the product can come in green (a buying question). Or the client may state they don’t want the product if it doesn’t come in green (an objection). This is simplified, but the verbal behavior the client is exhibiting is different, and the response from the participant needs to address each response from the client differently. This led into the fourth seminar on verbal behavior.

Week 4: Verbal Behavior (client and representative), non-verbal behavior (client and representative), and closing/pre-closing behaviors.

The fourth (final) seminar covered the intonation, cadence, accentuation, terms, and verbiage of both the client and participant. The seminar also covered body language, mannerisms, eye contact, distance (between client and participant), handshake, and other non-verbal behavior. The closing and pre-closing behaviors relate to the verbal and non-verbal behavior training. Role-playing (participants acting as the client with other participants in a simulated presentation) was also part of the training. During role playing, the behaviors the participants were trained on included:

- Greeting the client
- Handshake
- Eye contact
- Distance from client when directing to office (site 2)
- Response to buying questions
- Response to objections
- Pre-closing questions
- Asking for the sale
- Other behaviors the participants had questions about

Feedback was also part of the training package. Individual graphic feedback was shown to each individual in a private office prior to each training session and the group feedback was shown to the group publicly prior to each training session. The feedback indicated closing percentage performance. During the presentation of feedback, the participants were asked if they had any questions regarding the information, if they thought the information was accurate, and what behaviors they may attempt to modify in future sales presentations to increase performance.

Rewards were also part of the training package. Participants at site 1 received $10 in lottery tickets (five $2.00 scratch off tickets) for attending each training session. In addition, the incentive structure rewarded the participants with $10 in lottery tickets for every incremental increase (determined by the organization, up to 100% closing performance) above baseline. For example, baseline was at 58% group closing percentage, the participant received an additional $10 in lottery tickets for every 10% increase in individual closing percentage with the first incentive starting at 60%. The participant also received $20 in gas cards for every 10% increase in individual closing percentage starting at 60%. The maximum payout for 100% closing percentage was $50 in lottery tickets per week (plus $10 for attending training session) and $100 in gas cards. In order to qualify for incentives, the participant had to have a minimum of 3 opportunities to sell in the week and had to be present at training sessions (when incentives were presented).

Participants at site 2 received $10 in lottery tickets (five $2.00 scratch off tickets) for attending each training session. In addition, the incentive structure rewarded the participants with $10 in lottery tickets for every incremental increase (determined by the organization, up to 100% closing performance) above baseline. For example, baseline was at 20.5% group closing percentage, the participant received an additional $10 in lottery tickets for every 10% increase in individual closing percentage with the first incentive starting at 21%. The maximum payout for 100% closing percentage was $80 in lottery tickets per week (plus $10 for attending training session). In order to qualify for incentives, the participant had to have a minimum of 3 opportunities to sell in the week and had to be present at training sessions (when incentives were presented).

RESULTS

Closing Percentage

During the project, data were evaluated to determine effectiveness of the training package using visual and statistical analysis to compare differences in level, trend, and variability from baseline to treatment phases for the primary dependent variable.

For site 1, the mean closing percentage group-wide during baseline was 59% (range, 57% to 62%; SD = 2.16%). During intervention, the mean closing percentage was 63% (range, 60% to 68%; SD = 3.56%). During post-intervention, the mean closing percentage was 60.75% (range, 59% to 62%; SD 1.258%).

For site 2, the mean closing percentage group-wide during baseline was 20.51% (range, 18.1% to 23.1%; SD = 1.61%). During intervention, the mean closing percentage was 21.7% (range, 21.3 to 22%; SD .316%). During post-intervention, the mean closing percentage was 20.975% (range, 19.2% to 22.8%; SD = 1.176%).

Graphic results for both sites follow:

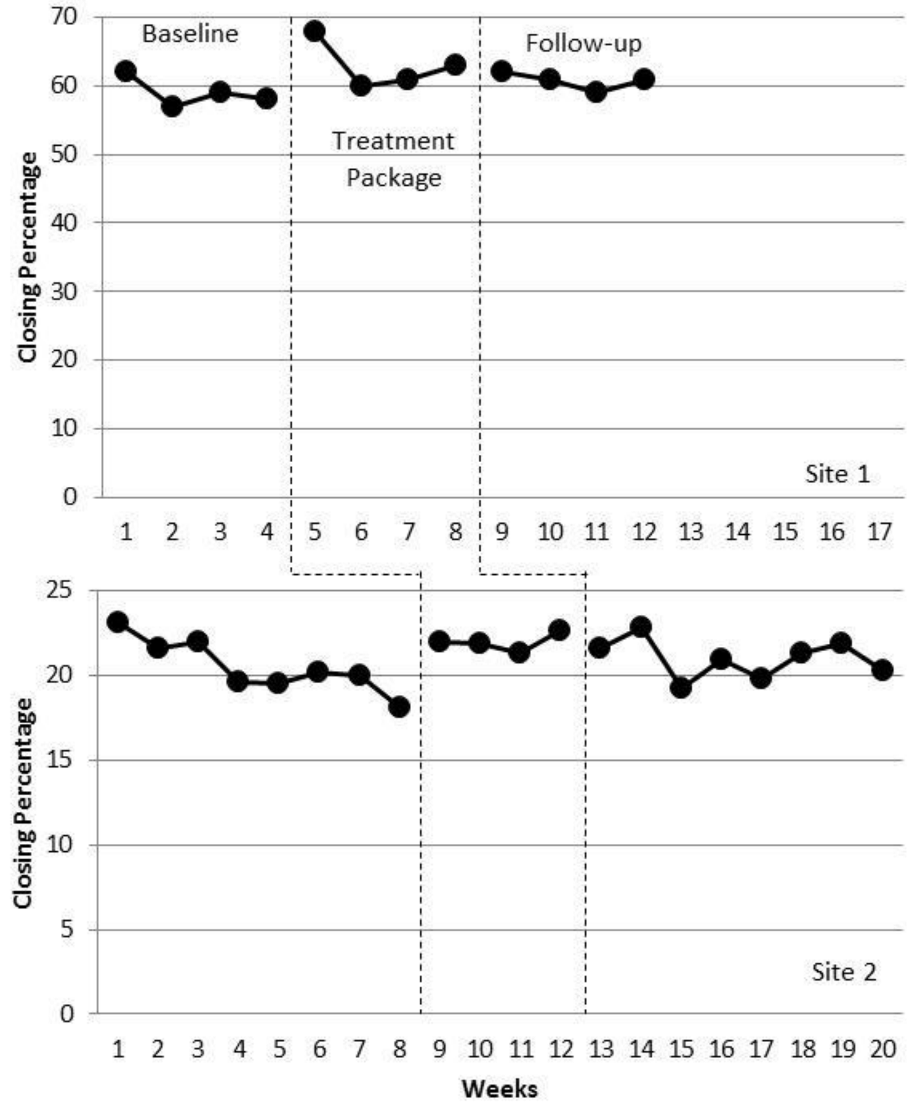

Figure 1. *Averaged results of group closing performance.*

The graph indicates performance at each site (baseline, intervention, and post-intervention). Using a correlated samples t-test of the four weeks of group averaged baseline data and the four weeks of group averaged intervention data the results were found to be statistically significant (p- value = 0.022) at site 1. Baseline data were also compared to four weeks of post-intervention data (when no training, incentives, or feedback was implemented). The p-value was not statistically significant (p-value = 0.188). This suggests that the training package was successful in increasing closing percentage during the time intervention was occurring but when the intervention ceased the results returned to baseline levels.

Using a correlated samples t-test of the four weeks prior to intervention of group averaged baseline data and the four weeks of group averaged intervention data the results were found to be statistically significant (p-value = 0.039) at site 2. Eight weeks of baseline data were also compared to eight weeks of post-intervention data (when no training, incentives, or feedback was implemented). The p-value was not statistically significant (p-value = .477). This suggests that the training package was successful in increasing closing percentage during the time intervention was occurring but when the intervention ceased the results returned to baseline levels.

Income vs. Expenditure

An additional measure was added to estimate income compared to the cost of the incentives. Both organizations were similar in weekly volume and average deal size.

At site 1, the average weekly group income was stated by the organization's sales manager to be approximately $100,000 gross average per week. The researcher did not have access to these records so the information is a personal communication between the researcher and the sales manager. The yearly average closing percentage was approximately 58%. Every 1% increase in group closing percentage over baseline equals approximately $1000 in gross income for the organization (this is averaged/estimated as deal size varies). The closing percentages during intervention were 69%, 60%, 61% and 63%. These percentages were compared to the yearly average closing percentage of 58%. Using these figures, the estimated total change in gross income was approximately $17,000 during the four weeks of intervention. The estimated total cost of the incentives was approximately $1950.

At site 2, the average weekly group income was stated by the organization's sales manager to be approximately $100,000 gross average per week. Coincidentally, both organizations had similar average income per week. Site 2 had more presentations per week/per participant but had a lower closing percentage. The researcher did not have access to these records so the information is a personal communication between the researcher and the sales manager. The yearly average closing percentage was approximately 20.5%. Every 1% increase in group closing percentage over baseline equals approximately $1000 in income for the organization (this is averaged/estimated as deal size varies). The closing percentages during intervention were 22%, 21.9%, 21.3%, and 22.6%. The estimated change in income was approximately $6200 during the four weeks of intervention. The estimated total cost of the incentives was approximately $720.

Knowledge Survey

Before training, the participants averaged 7.44 correct answers out of 19. The post-training test was administered four weeks after the pre-training test. On the post-training test participants averaged 17.44 correct out of 19. The pre-training test was administered before any training took place prior to the first training seminar. The post-training test was administered after the completion of the last training seminar. All participants took the pre and post-test. The answers had a choice of true, false, or uncertain. Only the answers marked correctly were counted (uncertain counted as incorrect but was placed in the assessment to lessen the aversive nature of a knowledge assessment). Feedback on the first assessment was not given until after the second assessment.

The researcher observed that in the initial pre-training assessment many of the terms were unfamiliar to the participants even though three of the nine participants indicated they had been exposed to behavioral science principles previously (see question 1, knowledge assessment Appendix C; not counted in scoring of correct answers). The assessment was designed with the intention of teaching the participants new material related to sales and behavior. It was expected by the researcher that most of the behavioral terms (i.e. antecedents, discriminative stimulus, etc.) would be unfamiliar to the participants. During the administration of the pre-training knowledge assessment, the participants were overheard questioning what some of the behavioral terms meant. After training was initiated, the participants were attempting to utilize the behavioral terms in discussions with the researcher. The results of the knowledge assessment suggest the participants gained new knowledge of the usage and definitions of most of the behavioral terms utilized in the training.

Satisfaction Survey

The scoring was on a Likert scale from 1-5 gauging agreement or disagreement with each question. Site1 had an eleven question survey; the survey was modified and extended to twenty questions at site 2. The results for both follow:

Table 1. *Site 1 Satisfaction Survey*

SITE 1 SATISFACTION SURVEY	**AVERAGE RESPONSE SCORE**
I learned information about behavioral science that I did not know previously.	**5.0**
I feel the principles of behavior that were taught in the course have application in a sales organization.	**4.33**
The training I received was *as* effective as previous sales training that was not behavior-based.	**4.33**
The training I received was *more* effective than previous sales training that was not behavior-based.	**3.44**

Table 1 – continued

I feel that the behavior-based sales training assisted me with *maintaining* my closing percentage.	**3.88**
I feel that the behavior-based sales training assisted me with *increasing* my closing percentage.	**3.88**
I would recommend behavior based training to salespeople that have not been exposed to behavioral sales training.	**3.88**
I *felt* like attending sales meetings more than I did previously due to the rewards I received.	**5.0**
I *attended* sales meetings more than I did previously due to the rewards I received.	**4.11**
I prefer a reward system over a "contest" that rewards only one top performer.	**4.0**
I feel I would reduce my sales effort in a sales contest if winning was not achievable.	**2.88**

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

1. **I learned information about behavioral science that I did not know previously.** Nine of the participants answered strongly agree (5).

2. **I feel the principles of behavior that were taught in the course have application in a sales organization.** Six of the participants answered agree (4) and three participants answered strongly agree (5).
3. **The training I received was *as* effective as previous sales training that was not behavior-based.** Six of the participants answered agree (4) and three participants answered strongly agree (5).
4. **The training I received was *more* effective than previous sales training that was not behavior-based.** One participant answered disagree (2), two of the participants answered neutral (3), and six participants answered agree (4).
5. **I feel that the behavior-based sales training assisted me with *maintaining* my closing percentage.** One participant answered neutral (3) and eight participants answered agree (4).
6. **I feel that the behavior-based sales training assisted me with *increasing* my closing percentage.** One participant answered neutral (3) and eight participants answered agree (4).
7. **I would recommend behavior based training to salespeople that have not been exposed to behavioral sales training.** One participant answered neutral (3) and eight participants answered agree (4).
8. **I *felt* like attending sales meetings more than I did previously due to the rewards I received.** Nine of the participants answered strongly agree (5).

9. **I *attended* sales meetings more than I did previously due to the rewards I received.** Three of the participants answered agree (4) and five participants answered strongly agree (5).
10. **I prefer a reward system over a "contest" that rewards only one top performer.** One participant answered disagree (2), one participant answered neutral (3), four participants answered agree (4), and three participants answered strongly agree (5).
11. **I feel I would reduce my sales effort in a sales contest if winning was not achievable.** Three participants answered disagree (2), four participants answered neutral (3), and two participants answered agree (4).

Table 2. *Site 2 Satisfaction Survey*

SITE 2 SATISFACTION SURVEY	**AVERAGE RESPONSE SCORE**
I learned information about behavioral science that I did not know previously.	**4.22**
I feel that behavioral science is not applicable in a sales organization.	**2.88**
The training I received was *as* effective as previous sales training that was not behavior-based.	**4.0**

Table 2 – continued

The training I received was *less* effective as previous sales training that was not behavior-based.	**2.66**
The training I received was *more* effective than previous sales training that was not behavior based.	**3.44**
I feel that the behavior-based sales training assisted me with *maintaining* my closing percentage	**3.55**
I feel that the behavior-based sales training assisted me with increasing my closing percentage.	**3.44**
I feel that behavior-based sales training harmed my closing percentage.	**2.33**
I would recommend behavior-based sales training.	**3.55**
I would not recommend behavior-based sales training.	**2.44**
I "felt like" attending sales meetings more than I did previously. **I attended sales meetings more than I did previously due to the rewards I received.**	**4.11** **4.22**
The rewards for attending sales meetings had no effect on my attendance.	**1.88**
I prefer a reward system over a contest that rewards only the top performer.	**3.33**

Table 2 – continued

I prefer a contest that rewards the top performer over a reward system.	**2.66**
I would reduce my sales effort if winning a contest was not achievable.	**2.0**
I would not reduce my sales effort if winning a contest not achievable.	**4.0**
My sales effort would not be affected if winning a contest is not achievable.	**4.0**
I intend to continue using the principles of behavior I learned in the training.	**3.77**
The training would not be as effective without the rewards.	**3.66**

1. **I learned information about behavioral science that I did not know previously.** Seven of the participants answered agree (4) and two participants answered strongly agree (5).
2. **I feel that behavioral science is not applicable in a sales organization.** Two of the participants answered disagree (2), six of the participants answered neutral (3), and one participant answered agree (4).
3. **The training I received was *as* effective as previous sales training that was not behavior-based.** One participant answered neutral (3), seven participants answered agree (4), and one participant answered strongly agree (5).

4. **The training I received was *less* effective than previous sales training that was not behavior-based.** Four participants answered disagree (2), four participants answered neutral (3), and one participant answered agree (4).
5. **The training I received was *more* effective than previous sales training that was not behavior based.** One participant answered disagree (2), three participants answered neutral (3), and five participants answered agree (4).
6. **I feel that the behavior-based sales training assisted me with *maintaining* my closing percentage**. One participant answered disagree, (2), two participants answered neutral (3), and six participants answered agree (4).
7. **I feel that the behavior-based sales training assisted me with *increasing* my closing percentage.** One participant answered disagree (2), four participants answered neutral (3), three participants answered agree (4), and one participant answered strongly agree (5).
8. **I feel that behavior-based sales training *harmed* my closing percentage**. Three participants answered neutral (3), and six participants answered disagree (2).
9. **I would recommend behavior-based sales training.** One participant answered disagree (2), two participants answered neutral (3), and six participants answered agree (4).
10. **I would *not* recommend behavior-based sales training.** One participant answered agree (4), two participants answered neutral (3), and six participants answered disagree (2).

11. **I *"felt like"* attending sales meetings more than I did previously due to the rewards I received.** One participant answered neutral (3), six participants answered agree (4), and two participants answered strongly agree (5).
12. **I *attended* sales meetings more than I did previously due to the rewards I received.** Seven participants answered agree (4), and two participants answered strongly agree (5).
13. **The rewards for attending sales meetings had no effect on my attendance**. Two of the participants answered strongly disagree (1), six of the participants answered disagree (2), and one participant answered neutral (3).
14. **I prefer a reward system over a contest that rewards only the top performer**. One participant answered disagree (2), four of the participants answered neutral (3), and four of the participants answered agree (4).
15. **I prefer a contest that rewards the top performer over a reward system**. Four participants answered disagree (2), four of the participants answered neutral (3), and one participant answered agree (4).
16. **I would reduce my sales effort if winning a contest was not achievable**. One participant answered strongly disagree (1). Eight participants answered disagree (2).
17. **I would not reduce my sales effort if winning a contest not achievable.** Nine of the participants answered agree (4).
18. **My sales effort would not be affected if winning a contest is not achievable.** Nine of the participants answered agree (4).

19. I intend to continue using the principles of behavior I learned in the training. One participant answered disagree (2) eight of the participants answered agree (4).

20. The training would not be as effective without the rewards. Three participants answered neutral (3) and six participants answered agree (4).

The tables for both site 1 and 2 indicate the group average response to each question. The questions that follow each table indicate the exact responses of the participants. The results suggest that overall the participants were satisfied with the training package.

Attendance

Attendance at weekly sales training meetings prior to intervention was estimated to be approximately 60-70% by the sales manager of site 1 and estimated to be 80-90% by the sales manager of site 2 (estimated data are not reliable so these are not actual results but a subjective report from each sales manager). There are no records kept on meeting attendance for either organization prior to intervention so the attendance is estimated. The attendance at both organizations was measured for the time of intervention and was 100% participant attendance at all sales meetings for both organizations. This suggests that the incentives (lottery tickets and gas cards study 1; lottery tickets study 2) were successful in increasing attendance at sales meetings. The participant did not receive any incentives earned if they did not attend the meetings.

DISCUSSION

The results suggest the training package increased closing percentage, may have increased attendance at the training meetings, increased knowledge of behavioral science and its practical applications (measured by post-intervention survey), augmented income, and was a satisfactory training package (based on the satisfaction survey).

Training could be added or subtracted to/from the seminars to increase effect size based on product, size of participant population, location, demographics, competition, or other factors that future replications by other researchers may encounter. Future replications could also probe actual selling behavior measures through direct observation techniques.

The intent of the training in the current study was to introduce new training techniques as compared to translating standard sales training into behavioral terminology. Observations by the researcher suggest the information and training was new to the participants and not just re-hashed material they had been exposed to previously.

Behavioral studies of sales divisions in organizations are a complex task. There is traditionally high turnover in sales organizations. One of the participants was fired, one of the participants quit, and the sales manager left for another position shortly after site 1 was completed. At site 2, one of the participants had a stroke previously and was not in attendance or included in results after week 3 of post-intervention due to complications associated with the illness. Attrition is a factor all future studies in an applied setting will have to anticipate and account for.

Future replications should consider an organization’s culture, history, goals, participants, setting, pay structure, and product. The trainer should also have experience in presenting, as salespeople can be a “tough crowd”. Keeping control of the participants, maintaining progress, maintaining focus, making the study a priority, and keeping it interesting is of great importance to the success of the training.

Future replications may want to consider implementing a self-monitoring checklist. The presence of an observer during the sales presentation may be intrusive (as in the current study) on the process. To examine if the participant utilized the behavioral techniques trained on, a checklist of critical sales behaviors could be implemented. The participant would check off behaviors prompted by the researcher, or other person trained by the researcher, to indicate they demonstrated critical sales behaviors during the presentation.

There were observations by the researcher that were mildly interesting during the study. One of the observations that was of great value to the organizations was attendance at sales meetings. Attendance increased to 100% and was maintained throughout the study at both sites. In an organization that pays commission only for sales performance (such as both sites in the current study), attending sales meetings was perceived to be of limited utility to the participants. For example, the participants have to pay for their own transportation to the organization’s headquarters for a weekly meeting and they have to take time out of prospecting or selling new clients. They are not compensated financially for attending and in effect, it costs them money and time to attend.

Although attendance at previous sales meetings was “mandatory” a good excuse would allow an exemption from attendance. In one of the organizations, a relative of one of the stakeholders of the organization was a participant. Prior to instituting a reward program in the current study for attending, their appearance at sales meetings was non-existent (personal communication from the sales manager). When rewards were contingent on attendance at the meetings, this participant attended every meeting suggesting that the rewards were effective at increasing their attendance. The participants would receive a reward just for attending the meeting in the current study, and would not receive any performance rewards earned if they did not attend.

Discussions of amount of winnings from lotto led to discussions of how participants’ overcame objections that resulted in accomplishing the sale. The rewards were handed out at the beginning of every meeting. This created enthusiasm for attending but also was a distraction as some of the participants would scratch off their lotto tickets during the training session that followed even thought they were instructed to wait till the end of training. During one training session a participant exclaimed “I just won sixty bucks!” This was disruptive and positive at the same time.

Another participant who recently started with one of the organizations approached the researcher stating, “you are going to owe me huge this week”. They only needed one more sale out of their final opportunity for the week to receive the maximum reward available. This suggests that because the reward system did not have a “ceiling” the representative exerted greater effort in presenting the product to receive maximum reward. The participant did make the sale and was singled out and given feedback for great performance during the next training session.

Previous sales meetings effectiveness was not measured prior to the current study. Training took place every week but no direct measure of training to performance was measured. By measuring the current study’s effectiveness, it created accountability for the meetings.

The knowledge survey was not received well in the initial assessment. Many of the terms utilized in the knowledge survey were not understood by the participants initially. Great care had to be taken to not derail the training package as assessments or testing of any sort is substantially different than any other sales training given previously and was considered aversive. However, once the training was completed, the participants had a greater knowledge of the new terms and were able to utilize and understand behavioral terms as indicated by the post-training assessment. In effect, the current study turned into an introductory course on behavior analysis.

A cautionary point in utilizing the tools of behavior analysis is that in a sales organization ethics can be compromised for increased productivity. This was observed during the mortgage and economic meltdown that resulted in government bailouts of several organizations that sold questionable products to consumers who were unaware of the consequences of purchasing those products in and around the year 2008. Although no questionable ethical behaviors were observed in the current studies, it is the researcher's suggestion to add an ethics component to the training if future replications of this study are attempted.

One of the biggest strengths of the current study may be the attempt to evaluate an area that has to this point had limited evaluation behaviorally. By attempting to address an area such as sales performance that has great value to organizations, it is possible that new approaches to sales training and performance may be accomplished.

Another strength of the current study was that the results suggest the training package was successful. Initially, the goal of the study was to attempt to increase closing percentage only. The other measures and assessments were added to increase the value and effectiveness of the training package.

The study was designed to evaluate the effectiveness of a behavior-based sales performance package. The intention was to possibly find performance improvement methods that could be generalized across different organizations. The two sites in the study varied in many ways. At the first site the participants went to the client's location to present their product, at the second site the clients came to the organization's headquarters to be presented the product. The first site presented a tangible construction product; the second site presented a travel product that was service related. The first site's product was presented as a non-luxury item that would enhance value and energy savings in a home. The second site's product was presented as a luxury purchase that would enhance a client's leisure expenditures. The variances in the type of organizations did not seem to be a factor in the results. This suggests that the training package may be generalized across different organizations.

Limitations of the current study are first and foremost that the training was a package and no single independent variable was measured for effectiveness. Behavior-based safety interventions are similar in the fact that the intervention is a package and combinations of behavioral techniques seem to be more effective than individual techniques themselves (i.e., feedback combined with rewards).

Another limitation was that many behaviors could occur between training and measures of performance. It may simply be that the participants were aware they were being observed and measured in a different manner than they were used to and the observation effect alone was responsible for increases in performance. It is also possible that the results obtained would have been obtained regardless of the training package. Sales in all organizations fluctuate and this may have just been an uptick in performance. The baseline, intervention, and post-intervention measures suggest this was not the case, but it is possible the performance would have been the same without the intervention.

Another consideration is that individual behaviors were not measured (i.e., handshake, greeting, eye contact, etc.). It is possible one behavior that the participant exhibited was responsible more than another for increased performance. The results of the training package were utilized as a proxy for behavior change.

Feedbacks itself was not measured individually nor were the rewards. Individually, either may have had equal or greater effect without the other. Training in and of itself may not have been perceived as well without feedback and/or rewards. However, observations by the researcher suggest both feedback and rewards were integral in eliciting the participants' attention and attendance during training sessions.

It is possible that the participants were selling "as much as possible" during baseline so there may have been little room for improvement. The additional incentives over the commission only pay structure reduced some of the out of pocket expenses the participants regularly incurred attempting to make sales. This may have prolonged possible departures that could have occurred if the additional rewards were not present. Because no participants left during the time incentives were provided it suggests the rewards may have been a factor in retaining the participants as employees during the intervention.

A problem that is relevant with a commission only salesperson is "getting out of bed and on the road" as they spend their own money on travel attempting to make the sale. If a prolonged period without closing a deal occurs the participant is likely to move on to another position.

The researcher had an extensive sales management history. This assisted in understanding what the participants encountered during the sales process. Much of the development of the study was drawn from the researcher's experience.

Only sales contracts that had verifiable minimum down payments or more were considered in the data. This was to ensure that sales contracts that were not valid were not considered in the results.

The companies did not continue the training package. The ROI was profitable for both organizations to do so (personal communication between both sales managers and the researcher). However, permanently changing a long history of how the organizations operated prior to intervention may have to include culture change, stakeholder buy-in, and possibly a new "vision" for the organizations involved. More value placed on retaining and investing in the current staff as compared to a "no one is irreplaceable" mentality is a difficult task and was not the purpose of the current study.

Additional research will be required to adequately assess whether the behaviors of sales personnel can be generalized across organizations. Additional research will also be required to assess the external validity of results across different settings, variants of the independent variables, and variants of the dependent variables. If behavior-based sales training can increase sales productivity and identify and measure sales critical behaviors, then behavioral science can be utilized in an area that has to this point had limited study and application.

APPENDIX A

Survey of Satisfaction Study 1

Please answer the following questions in regard to the behavior based training you received.

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

1. I learned information about behavioral science that I did not know previously.

   1 2 3 4 5

2. I feel the principles of behavior that were taught in the course have application in a sales organization.
   1 2 3 4 5
3. The training I received was *as* effective as previous sales training that was not behavior-based.
   1 2 3 4 5
4. The training I received was *more* effective than previous sales training that was not behavior-based.
   1 2 3 4 5
5. I feel that the behavior-based sales training assisted me with *maintaining* my closing percentage.
   1 2 3 4 5
6. I feel that the behavior-based sales training assisted me with *increasing* my closing percentage
   1 2 3 4 5
7. I would recommend behavior based training to salespeople that have not been exposed to behavioral sales training.
   1 2 3 4 5
8. I *felt* like attending sales meetings more than I did previously due to the rewards I received.
   1 2 3 4 5
9. I *attended* sales meetings more than I did previously due to the rewards I received.
   1 2 3 4 5
10. I prefer a reward system over a "contest" that rewards only one top performer.

    1 2 3 4 5

11. I feel I would reduce my sales effort in a sales contest if winning was not achievable.
    1 2 3 4 5

APPENDIX B

Survey of Satisfaction Study 2

Please answer the following questions in regard to the behavior based training you received.

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

1. I learned information about behavioral science that I did not know previously
   1 2 3 4 5
2. I feel that behavioral science is not applicable in a sales organization
   1 2 3 4 5
3. The training I received was *as* effective as previous sales training that was not behavior-based.
   1 2 3 4 5
4. The training I received was *less* effective than previous sales training that was not behavior-based
   1 2 3 4 5
5. The training I received was *more* effective than previous sales training that was not behavior based.
   1 2 3 4 5
6. I feel that the behavior-based sales training assisted me with *maintaining* my closing percentage.
   1 2 3 4 5
7. I feel that the behavior-based sales training assisted me with *increasing* my closing percentage.
   1 2 3 4 5
8. I feel that behavior-based sales training *harmed* my closing percentage
   1 2 3 4 5
9. I would recommend behavior-based sales training
   1 2 3 4 5
10. I would *not* recommend behavior-based sales training.
    1 2 3 4 5
11. I *felt* like attending sales meetings more than I did previously due to the rewards I received for attending.
    1 2 3 4 5
12. I *attended* sales meetings more than I did previously due to the rewards I received.
    1 2 3 4 5

13. The rewards for attending sales meetings had no effect on my attendance
    1 2 3 4 5
14. I prefer a reward system over a contest that rewards only the top performer
    1 2 3 4 5
15. I prefer a contest that rewards the top performer over a reward system
    1 2 3 4 5
16. I would reduce my sales effort if winning a contest was not achievable
    1 2 3 4 5
17. I would not reduce my sales effort if winning a contest not achievable
    1 2 3 4 5
18. My sales effort would not be affected if winning a contest is not achievable
    1 2 3 4 5
19. I intend to continue using the principles of behavior I learned in the training
    1 2 3 4 5
20. The training would not be as effective without the rewards
    1 2 3 4 5

APPENDIX C

Knowledge Survey

T=True, F=False, U=Uncertain

1) I have been exposed to behavioral science principles previously
   T F U

2) An antecedent is what happens after an event
   T F U

3) Behavior is the study of cognitive disorders
   T F U

4) Consequences are the result of a behavior
   T F U

5) An Sd is an acronym for discriminative stimulus
   T F U

6) S-delta means a response will not result in a reward
   T F U

7) A PIC/NIC analysis is an analysis of outcomes
   T F U

8) PIC/NIC stands for Positive Immediate Certain/Negative Immediate Certain
   T F U

9) Verbal Behavior is just behavior subject to same principles as any behavior
   T F U

10) An objection is the same as a buying question
    T F U

11) Advertising is an antecedent
    T F U

12) Client referrals are an antecedent
    T F U

13) Client referrals are a consequence
    T F U

14) Client Interaction with marketing is a consequence
    T F U

15) The "NIC" of PIC/NIC evaluates uncertain and delayed consequences
T F U

16) Verbal Behavior of the client is unimportant to the sale
T F U

17) Verbal Behavior of the representative is unimportant to the sale
T F U

18) Asking if the product can be financed is a discriminative stimulus
T F U

19) Objecting to a selling point is a discriminative stimulus
T F U

20) Asking for the sale prior to covering all benefits occurs during S-Delta
T F U

APPENDIX D

HSIRB Approval Letter

WESTERN MICHIGAN UNIVERSITY
Human Subjects Institutional Review Board

Date: February 1, 2012

To: Ron Van Houten, Principal Investigator
Peder Seglund, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair Amy Naugle

Re: HSIRB Project Number 12-02-02

This letter will serve as confirmation that your research project titled "Behavior-Based Sales: A Study of Behavioral Techniques for Sales Performance Improvement" has been **approved** under the **exempt** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may **only** conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: February 1, 2013

Walwood Hall, Kalamazoo, MI 49008-5456
PHONE: (269) 387-8293 FAX: (269) 387-8276

REFERENCES

Alvero, A. M., Bucklin, B. R. & Austin, J. (2001). An objective review of the effectiveness and essential characteristics of performance feedback in organizational Settings (1985-1998), *Journal of Organizational Behavior Management, 21*(1), 3-29.

Austin, J., Kessler, M. L., Riccobono, J. E., & Bailey, J. S. (1996). Using feedback and reinforcement to improve the performance and safety of a roofing crew. *Journal of Organizational Behavior Management, 16*, 49-75.

Attia, A. M. & Honeycutt, E. D. (2012). Measuring sales training effectiveness at the behavior and results levels using self and supervisor evaluations, *Marketing Intelligence & Planning, 30*(3), 324 – 338.

Balcazar, F., Hopkins, B. L., & Suarez, Y. (1985). A critical, objective review of performance feedback. *Journal of Organizational Behavior Management*, 7, 65-89.

Buchanan, M. (2009). Behavioral science: Secret signals. *Nature, 457*: 528-530.

Chen, F. (2000). Sales-force incentives and inventory management. *Manufacturing & Service Operations Management, 2*, 186-202.

Crawley, W. J., Adler, B. S., O'Brien, R.M., & Duffy, E. M. (1982). Making salesman: Behavioral assessment and intervention. In R.M. Obrien, A.M. Dickinson, & M.P. Rosow (Eds.), *Industrial Behavior Modification: A management handbook* (pp. 184-199). New York: Pergamon Press.

Crowell, C. R. (2004). Beyond positive reinforcement. *Journal of Organizational Behavior Management, 24*(1-2), 195-202.

DeConinck, J.B. (2011). The effects of ethical climate on organizational identification, supervisory trust, and turnover among salespeople. *Journal of Business Research, 64*(6), 617-624.

Dickinson, A. M., & Poling, A. D. (1996). Schedules of monetary reinforcement in organizational behavior management: Latham and Huber (1992) revisited. *Journalof Organizational Behavior Management, 16*(1), 71-71.

Hantula, D., & Wells V. K. (2010). Outside the organization: An analysis of consumer behavior. *Journal of Organizational Behavior Management. 30*(2), 87-91.

Lane, N., & Piercy, N. (2004). Strategic customer management: Designing a profitable future for your sales organization. *European Management Journal, 22*(6), 659-668.

Latham, G. P., & Huber, V. L. (1992). Schedules of reinforcement: Lessons from the past and issues from the future. *Journal of Organizational Behavior Management, 12,* 125-149.

Ludwig, T.D., Biggs, J., Wagner, S., & Geller, E.S. (2002). Using public feedback and competitive rewards to increase the safe driving behaviors of pizza deliverers. *Journal of Organizational Behavior Management, 21*(4), 75-104.

Luthans, F., Paul, R., & Baker, D. (1981). An experimental analysis of the impact of contingent reinforcement on salesperson's performance behavior. *Journal of Applied Psychology, 66,* 314 – 323.

Mache, C. (2007). Sales training that sticks. *Agency Sales, 37*(2), 58-60

Malott, R.W., & Trojan, E.A. (2008). *Principles of behavior* (6th ed.). Englewood Cliffs, NJ: Prentice Hall.

Miller, L. M. (1977). Improving sales and forecast accuracy in a nationwide sales organization. *Journal of Organizational Behavior Management, 1,* 39-51.

Nolan, T., Jarema, K., & Austin, J. (1999). An objective review of *Journal of Organizational Behavior Management*: 1986-1997. *Journal of Organizational BehaviorManagement*, *19*, 83-114.

Raineri, A. B. (2011). Change management practices: Impact on perceived change results. *Journal of Business Research*, *64*(3) 266-272.

U.S. Department of Commerce (2011). Annual U.S. retail sales. *Retailsails.* Retrieved from http://retailsails.com/us-retail/annual/.

Zingheim, P. K., & Schuster, J. R. (2004). Sales reward solutions. *Compensation and Benefits Review*, *36*(5), 21-26.