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Applying Andragogical Principles

To Corporate Medical Sales Training

by

Benjamin C. Washington, II

A Dissertation submitted to the Education Faculty of Lindenwood University in partial fulfillment of the requirements for the

degree of

Doctor of Education

School of Education

Applying Andragogical Principles

To Corporate Medical Sales Training

by

Benjamin C. Washington, II

This dissertation has been approved in partial fulfillment of the requirements for the

degree of

Doctor of Education

at Lindenwood University by the School of Education

Dr. Susan Isenberg, Dissertation Chair

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon

my own scholarly work here at Lindenwood University and that I have not submitted it

for any other college or university course or degree here or elsewhere.

Full Legal Name: Benjamin C. Washington, II

Signature: Benjame C Washingto, I Date: 4/29/16

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I would first like to thank my Lord and Savior, Jesus Christ, for the ability and capacity to create this work. I would also like to thank my committee chair, Dr. Susan Isenberg, and members Dr. John Henschke and Dr. Yvonne Gibbs, for their tireless work and commitment in helping me progress with this project. I would like to thank the study participants for their cooperation, time, thoughts, and insights. For without them, this study would not have been possible. Encouragement and check-in for status updates on progress by friends also went a long way in cultivating a positive spirit to tackle the hurdles this project presented and mandated.

Last and most importantly, I would like to thank my wife for her endurance and patience with the time commitments this project demanded of me.

Abstract

This qualitative action research study investigated how to apply andragogical principles to corporate medical sales training. The study stemmed from a practitioner's concern that instructional methodologies may be insufficient for the learning needs of medical sales representatives in the post-2008 recession climate, which was requiring greater return on investment and performance accountability. The phenomenon of sales representatives being in the field one day and the next day being deemed 'trainers' exposed several gaps in sales training programs primarily originating from instructor deficiencies in curriculum development, instructional design, and weakness in application of adult learning methodologies. Andragogy, a learning theory on how to help adults learn, was explored due to its perceived application synergies within a business setting. Several vice presidents, directors, and managers of leading multi-billion dollar international sales training departments were interviewed to add comprehensive and relevant thought to the research data to promote answers to the research questions: (a) How do corporate medical sales training models current at the time of this writing align with the principles of andragogy? (b) Can a corporate medical sales training program be designed that applies and ragogical principles? and (c) How does and ragogy inform medical sales training?

From the interview answers several themes emerged to strengthen design of a new medical sales training program equipped with program and learner objectives that identify the needs of medical sales trainers who historically were experiencing trial by fire. This prototype sales training model demonstrated an alignment with the six assumptions and eight process elements contained within the andragogy theoretical

framework, research data, interview answers, and personal experiences. This model helped inform my leadership decisions at a regional sales meeting of a multi-billion dollar biotechnology medical sales organization, specializing in rare disease and orphan drug infusion therapies. Feedback from the sales training workshop was formally collected and well received; which spearheaded a paradigm shift and re-vamp in instructional platforms and methodologies for the organization. Promising results from beta testing of applied andragogy to medical sales training may lead to broader testing within corporate medical sales training environments.

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Chapter One: Introduction

Prologue

I have been involved in medical sales in some capacity for over ten years. I am also one of the first classes in what has been described as Generation 'Y', or the 'Millennial' cohort. I fit the description of many of the stereotypes commonly described with this generation, and several other stereotypes and actions associated with this group I am staunchly opposed to. For added context, I am an African-American male, a former multiple-time NCAA champion in track and field, a junior Olympic gold medalist, a strong type 'A' personality, and possess several national accolades as a pianist. This background afforded me the opportunity to see various objectives from different vantage points and try to create successful solutions for the benefit of multiple stakeholders. High achievement and performance are internal motivators, as well as family expectations; which is how I found my path crossing with the pursuit of creating scholarly work that may add to the body of knowledge and meaningfully contribute to my chosen profession.

In a professional capacity I started in pharmaceutical sales directly after undergraduate business school. I earned a MBA degree while working full time as a medical device sales professional. I also did consulting work as a medical sales trainer, and managed multiple states in the diagnostic and biotechnology field. Every result, quota achievement, or sales ranking to date was in the top 1% nationally or regionally, and all of my significant work experience were for international, multi-billion dollar, industry leading, and highly recognizable corporations. Within these same 'Fortune 500' type corporations, I noticed a recurring theme of several highly decorated sales professionals not being able to immediately identify why they produced good results,

with many professionals who won their company's coveted 'President's Club' award describing this phenomenon as merely 'cyclical.' Moreover, several representatives did not know what sales process or model they were using or why; or, they could not recall or remember virtually anything from whatever 'sales' training they received, if they received any training at all. This theme continued to surface with more frequency and detail as I gained increasing levels of responsibility for helping other sales representatives in their field territories; which was a typical first step of any of these organizations' 'management development' process. As I continued hearing of the 'best practices' on how to elicit specific actions and motivate adults, my practitioner's concern grew as I was continuously seeing a gross under preparedness and lack of skill and efficacy in the training models presented by internal and third party company 'cheesy' videos. These videos and other anecdotal modules were mostly irrelevant to the day-to-day sales call I experienced, as well as to others I would specifically ask. The evidence that these programs were not working was evident when I would ask a colleague how their training went, the answers that surfaced were, "It is what it is", "You're joking right?", or most alarming, "You just have to learn how to play the game." There seemed to be a need for improvement among then-current standard medical sales training practices that focused on results versus mere activities and status quo.

Background

Corporate medical sales training will be defined for this study as any attempt to disseminate information and/or transfer knowledge to newly-hired and/or tenured medical sales representatives. Also, this training was designed to supplement existing medical sales representative training for new product launches or re-train for relevant

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information related to departmental transfers or employees demonstrating special needs. Historically, this traditional training model mandated all new hires go to the company headquarter city and attend classroom-style training Monday through Friday, lasting all day long, for up to 4 to 6 continuous weeks, without the opportunity to travel home or take care of personal affairs. These trainings typically incorporated an arduous amount of role play sessions, often highlighted by video tape recording or the need to be 'certified' by a member of the management team who signed off that the role play was deemed satisfactory by company standards. Moreover, a test was usually taken at the completion of training, where typically 90% was the minimum score allowed in order to maintain employment status or otherwise be deemed as effective to disseminate marketing messages in the field. The tests and role-plays always caused several individuals severe anxiety and stress, which could be described as counterproductive to ideal learning environments.

Corporate medical sales training began to migrate and take on several forms, from didactic training administered at corporate training facilities, to peer training conducted in the field from appointed mentors, to home-based computer or technology-led individualized platform training, or any combination thereof. This increasingly popular hybrid style of training attempted to provide necessary sales process training while simultaneously reducing administrative costs of sales representative travel, lodging, and meal expenses, in addition to perceived or realized revenue losses from sales representatives not engaging customers or conducting selling activities during training time. This approach was consistent across all major platforms of medical sales, which included pharmaceutical, medical device, biotech, and diagnostic sales.

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As context, the term medical sales in general, for the purposes of this study, will be defined as sales of healthcare related products to healthcare related customers. More specifically for the purposes of this study, pharmaceutical sales will be defined as a sale of a drug, usually a small molecule, of whose features and benefits as a concept were sold to physicians, who then weighed the risks and benefits of the product for their appropriate patient populations and then recommended or prescribed the product for their patients, who were also the end user. Pharmaceutical sales, in the context of sales overall, could be considered a softer sale in that the main success factors were attempts at influencing behavior and changing habits, rather than signing on the proverbial dotted line and leaving the sales call with a purchase order or signed contract in hand.

Biotech sales have a similar definition as pharmaceutical sales; however, instead of a small molecule, and for the purposes of this study, will be defined as a recombinant biologic dispensed through an injection or infusion into the body. These products' features and benefits were also prescribed by physicians, where a recommendation or written prescription was the first step for the patient to gain access to the medication. A component of direct selling could be relevant to portions of this category known as 'buy and bill;' where the physician purchased product from the sales representatives' organization and then in turn sold the product to patients, often at a higher price point. Typically, sales in this category were more in-depth, as sales representatives possibly needed to work more closely with case manager, or personnel specifically designated to help patients fill out paperwork, such as a statement of medical necessity or aid verification of the insurance coverage benefits of the patients and adjudication processes of the patients' insurance company, if applicable. Moreover, there may be more

coordination with pharmacy benefit manager organizations, specialty pharmacies and their particular field sales force, the monitoring of patients coming onto or discontinuing therapy, and locating and developing centers of care of infusion sites for patients.

Typically these products were most costly to the patient and healthcare system with many products designated with 'orphan status,' which were medications that met certain criteria of ultra-rare disorders and could cost upwards of \$500,000.00 per year, per patient.

Medical device sales, for the purposes of this study, will be classified as capital equipment, implantable devices, or medical disposables, most often used for surgical procedures; however, not needing to be utilized in surgical procedures only. These products could be evaluated and recommended by surgeons or physician non-surgeons and were usually sold through a purchase order or contractual agreement, and the decision makers possibly involved multiple layers of the hospital staff, including the C-level suites. C-levels suite personnel, for the purposes of this study shall include the top executive of a particular department or the Chief Executive Officer, Chief Financial Officer, Chief Marketing Officer, Chief Technology Officer, or Head of Clinical Services of a hospital system.

Diagnostic sales, for the purposes of this study, will be defined as the sale of laboratory tests, genetic tests, and their related services or equipment to physicians and used to help aid in the recognition of particular ailments and as precursory adjuncts to treatment plans or therapy decisions by those same physicians.

Post-Global Recession Environment

In the post-2008 global recession corporate environment, efficiency, effectiveness, and accountability were more important to a corporation's bottom line than

prior to 2008. The period post-2008 was significant, as several large healthcare companies, classified as manufacturers of healthcare products and services with over 50,000 employees, made numerous adjustments by laying off workers by the thousands, and some organizations by the tens of thousands. As a medical sales professional during this time, I can intimately state that the atmosphere virtually felt like a competition to see who could lay off the most workers. In an already heavily-regulated environment, it may be difficult to understand how the remaining workers would be able to subsidize the work of their departed peers, as well as satisfactorily perform their own work responsibilities.

In 2009 alone, over 60,000 workers were laid off from just six of the top-ten pharmaceutical companies at that time (Top 10 Layoffs, 2009). Table 1 illustrates the carnage attributable to 'restructuring efforts' of some the largest pharmaceutical companies at that time. Figure 1 graphically depicts the U.S. pharmaceutical jobs cut for the 10-year period from 2001 to 2010, to easily highlight that the higher job cutting trend began to elevate in 2007 and drastically spiked in 2009 and beyond.

Pharmaceutical Company Layoffs Attributable to Restructuring Efforts

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Company	Years					
Names						
	2007	2008	2009	2010	2011	2012
Pfizer	10,000*		19, 500*	*		
Merck		8, 400*	16,000*	*		
J & J	5, 000*		8,000*	*		
AZ	7, 600*	1, 400*	7, 400*	*	*	*
GSK	5, 000*		6, 000*	*		
Lilly			5, 500*	*	*	
Totals**	27, 600**	9,800	62, 400**			

^{*}Duration of restructuring

Table 1

Note. From Fierce Pharma (2009).

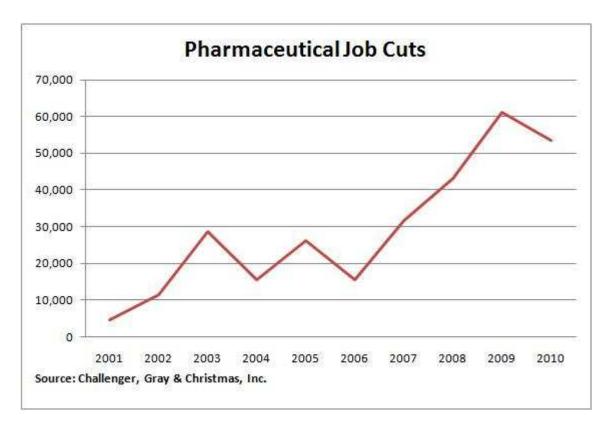


Figure 1. Pharmaceutical job cuts from 2001-2010. (Alazraki, 2011).

The continuously evolving healthcare environment no doubt created major shifts in sales strategies and what it took to achieve optimal sales force effectiveness (Bye & Limones, 2010, p. 34). Moving forward into the next decade, this only created increased competition for remaining jobs and increased pressure to remain within then-current positions. Combined with the task of bringing in revenue to the organization, which was already a tall order, the medical sales representative position became more scrutinized, monitored, measured, and risky with less support from a training perspective to produce on the goals set forth by organizations' thirsty and often times desperate need for sales revenue to stay solvent.

As added pressure, customers within this field (a) insisted on more value exchanged for their time and dollars, and (b) demanded more knowledgeable medical

sales personnel to help supplement information needed to run their businesses successfully. These customers included: physician specialists (medical doctors who were highly educated and had advanced training in a particular subset of healthcare or disease-state knowledge), surgeons (medical doctors who performed surgical procedures on patients), hospital C-suite administrators (heads of departments responsible for the fiscal and operational excellence of the unit), and private and public insurance payers (companies or government agencies that provided funds to pay for prescriptions, medical procedures, hospital visits, laboratory work, and other healthcare related costs of the patients who paid premiums to have access to their network of services).

Untimely, inaccurate, or misleading information presented by a medical sales representative was not tolerated by unforgiving customers and may have actually led to sanctions and/or fines imposed on the corporation. "Sales representatives are getting less time with physicians, yet they are expected to provide more in-depth, targeted information" (Rosenbeck, 2010, p. 44). Rules and strategies to make navigation easier and more efficient for healthcare decision makers were instituted at the hospital and private practice level in an effort to (a) keep healthcare providers, such as physicians, nurses, and office staff members on task; and to (b) give caregivers more time with patients—caregivers such as the patient's relatives, friends, and workers charged with their well-being. It is also essential to note that customers in this space were not the end users of the products or services sold, which also presented an alternate set of inherent challenges for the medical sales representative.

Accurate information disseminated by medical sales representatives was also critically important, as many products and services directly correlated to the health, well-

being, and quality of life of patients. Medical sales organizations recognized the observable fact that the medical sales representative's worth was then more than it previously was, directly linked to the value of the information their medical sales representatives provided to physician customers; and was the catalyst driving the relationship-building process and ultimately sales-revenue generation. As a result, healthcare organizations imposed pressures on training departments to deliver superior training geared towards increasing revenue, but with less face time with the sales representatives, due to fewer dollars in the budgets to conduct their function and roles.

Current Training Environment

As a medical sales professional with top 1% sales performance results, experience in pharmaceutical, biotech, medical device, and diagnostic sales, my observation was that the implementation and execution of medical sales training was a large problem healthcare organizations faced. Understanding how to train individuals to add value to their highly educated and sophisticated customers became an increasingly difficult task for medical sales training personnel. This possibly was in large part due to the fact that many sales training departments were not viewed as revenue generators from executive leadership, but rather a significant financial expense to the organization (Nilson, 1991). This phenomenon of enduring pressure created competing goals for the organization and inherently confusing priorities.

To further complicate matters, it was difficult to conclude that many corporate medical sales training departments were even clear as to what function they were charged to administer. Very rarely were actual sales training theories, models, and processes discussed. Since only one mandated sales process was usually discussed and

implemented with very little deviation permissible, there was not much variation in company-formed ideology between different medical sales representatives within the same organization. This mandated sales 'process' usually consisted of a healthy dose of product learning and background information about that product's specific disease-state information. Disease-state information or 'training' was the education about the science and symptoms of a particular condition, what area of the body it affected and how, and the response the body had to a specific introduction of an adjunct therapy or manipulative external stimulus.

The rest of the little time left in the 'training' would be the organization defining what a 'best practice' was to the field sales force that led to the perceived success from several individuals who used to be in the field conducting the work; or, then-current field representatives using the platform to display their perceived best practice ideas in order to position themselves politically for future promotion or other purposeful strategies. The majority of medical sales training departments conceded the "key objective in their sales training process was not so much to convey to sales reps how to sell, but rather to clarify exactly what they were selling – and to whom" (Keirns, 2011, p. 49). This framework of explaining to sales representatives what they were selling, however, does not go a step further to explain to sales representatives how to explain to an actual customer what they are selling as a model for sales. In other words, one potential model for medical sales training from this ideology could be helping adults learn how to help other adults learn, because customers will buy when they understand why they should buy.

A better classification may be to actually label the exchange that takes place in most medical sales training departments as product training or disease-state training to

understand the nature of the medical condition for which the product would be prescribed or administered. This mislabeling of function became more confusing when one predetermined selling strategy was replicated and rehearsed over and over to many representatives from different regions and was comprised of significantly different dynamics and make-up. The quicksand effect continued due to the fact that the predetermined sales strategy was implemented by individuals with goals that were not aligned with the organizations' goals. Effectively, 86% of corporate medical sales training programs outsourced their training design to 3rd party vendors (Benchmark Study, 2010d).

This content driven versus process driven ideology makes high-ranking medical sales performer results harder to be duplicated regionally and nationally. I sought to explore the application of andragogy learning theory, the art and science of how adults learn (Knowles, 1980, p. 40), to medical sales training process because currently "sales training is often not aligned around a proven sales process" (Sales Performance International, 2011, part 1, p. 3). A learning theory like andragogy may help to form and shape the goals of the training department to realize outcomes that are measurable and sustainable. This would also help in finding a deeper understanding of communicating to adult learners and hopefully eliminate the practice of elongated and mundane training sessions currently offered as status quo.

Statement of the Problem

To counteract many pressures faced on healthcare corporations today to perform for their stakeholders or risk overwhelming scrutiny and potential insolvency, many organizations have taken simple, seemingly justifiable, budget-conscious, and noncreative approaches to training their medical sales representatives. Virtually all corporate medical sales organizations take internal "high performer" candidates or tenured representatives with decent sales results and promote them to a sales training role shortly after a highly visible perceived success they have sustained within the organization.

The assumption is that these top performers may exhibit certain best-in-class behaviors that make them more successful. It is also assumed that it may be possible to shift the bell curve and enable new hired and average performers to get to a higher performance level by directly observing top performers in action and emulating their behaviors. These behaviors are then incorporated into training curricula for improving performance development and are used as the basis for manager assessments (Vitello, Shaw, & Kessler, 2008, p.72).

There is an underlining theme that a sales representative who has performed well should easily transition to training others to perform well and produce results similar to the grand results for which they have been credited. However, this individual almost never has any instructional design, curriculum development, or adult learning theory in his or her background for this training role on which they are about to embark.

In fact, "only 7% of medical sales training staff has a background in instructional design" (Benchmark Study, 2010d). This instructional design background was also undefined according to the data to know if 'instructional design background' denoted that one instructional design course was taken in the college tenure, if the individual had some type of instructional design recognized certification, or if the individual simply worked some instructional design type projects at a previous company. Furthermore, this zealot individual, usually without leadership experience or past responsibility for activities of

direct reports, may have managed a sales territory between \$3 and \$7 million dollars in recent past, and then currently he or she would have major influence and impact on the entire region, or the entire nation in many cases, catapulting his or her potential influence or impact onto dozens, hundreds, or even thousands of medical sales representatives with a potential value of millions to hundreds of millions of dollars. "The average pharmaceutical sales representative is responsible for a territory that generates \$4,098,717.11 in gross revenues and the average medical device and diagnostic sales representative is responsible for a territory that generates \$2,213,227.51 in gross revenues" (Benchmark Study, 2010c). In this more recent sales training role, this professional would be in position to influence the individuals responsible for hundreds of millions to even billions of potential revenue dollars, again with "93% of individuals performing this function having no background in training" (Benchmark Study, 2010d).

Another point to consider was that medical sales organizations used the medical sales training role as a feeder role to sales management or product marketing responsibility with the expectation that the recently promoted would be in the role one-to-two years at the most. This time frame was understood up front by both parties and often stated as such within the job description and requisition summary. Moreover, the role was traditionally housed at the headquarter city or site location with job preference given to individuals who then-currently resided in the area or in close proximity to it (Job Descriptions, Appendices D-I). Quality internal candidates with potential were possibly not even considered if they were not willing to move to the headquarter location. Based on my experience as a medical sales representative, many quality individuals with potential may not even apply because they did not want to subject themselves to a

decrease in pay and benefits from the sales representative role. As a medical sales representative for many years, I am aware that there were more tangible benefits, such as commission and a company car than intangible benefits, such as career progression and professional development.

Moreover, sales training departments had trainer-to-learner ratios that would make the worst high schools appear to be stellar institutions. "The learner-to-corporate headquarter sales trainer ratio is 69:1 for initial sales training for primary care/office-based sales representatives" (Benchmark Study, 2010b). One trainer often was responsible for the entire nation of sales representatives. Individualized training and support was non-existent, so many underprepared trainers acted as if they were competent in medical disease-state knowledge, when they were not.

With all of these dynamics at play, a case could be made that medical sales trainers in general were ill-equipped to perform their duties due to lack of education and professional development experience. Furthermore, the medical sales trainer role may have inherently suffered in functionality and utility because incentives were not in place to provide lasting or sustainable change, due to the fact that the medical sales trainer role was only viewed as a stepping stone to transition to another role of greater responsibility, such as First Line Sales Manager or Marketing Manager. Many times a shift in quality of life from decreased pay, less flexible schedule, and decreased benefits were calculated risks taken by the hired individual to gain visibility within the organization to obtain another functional role in a relative short period of time, with greater long-term career progression possibilities. "With revenue growth as job number one, and billions already spent on sales training and improvement initiatives annually, it's critical to identify core

reasons as to why companies aren't attaining a higher return on their educational investments in sales" (Sales Performance International, 2011, Part 1, p. 3).

A recognition that a shift occurred was the first step in solving the problem, and the answers ultimately lay in understanding exactly what skill sets were needed to be developed in medical sales trainers. Varying corporate medical sales training implementation methods across the industry failed to keep pace with the sales environment; thus, underscoring an escalating problem with a real impact.

Purpose of the Study

The purpose of this study was to address a practitioner's concern that corporate sales training platforms current at the time of this writing may not be operating at maximum capacity due to lack of employee development in then-current medical sales training curriculum design, adult learning models, program delivery methods, trainer readiness, and/or individual skill development proactivity. Even if never evaluated before, the then-current climate merited a glance into standard operating procedures for sales training programs to ensure employee field launch readiness, high aptitude for product or service knowledge, and a deep consideration into the process of understanding how and why adults learn and retain information. According to the Society of Pharmaceutical and Biotech Trainers (2011),

In today's dynamic environment, the investment and approach required to create a highly effective sales organization is continually changing. The past few years in particular have brought substantial challenges, and it seems more important than ever to get a pulse on the current industry practices of leading pharmaceutical, biotech, medical device, and medical diagnostic companies. (p. 1)

Based on my experience, it seemed credible to correlate a medical sales representative's field readiness and product knowledge to the sales training received in a corporate setting; especially in instances where the representative had not operated in the then-current selling space. Consequently, if the sales training was of poor quality, the medical sales representative may have lacked confidence, had subpar presentations to key customers, and ultimately may have presented a risk to the corporation's credibility, or worse, may have created a litigious liability for the organization. By conceding that corporate medical sales training was vitally important to the medical sales representatives' and corporation's longevity, it may be important to explore fundamental advances and theories in instructional design, and the art and science of helping adults learn.

Systematically applying these research findings to the practices current at the time in corporate medical sales training may ensure that proceeding forward, corporate medical sales training would be moving at or faster than the speed of change that medical sales representatives were encountering in the field. Furthermore, andragogy also has the potential of serving as a unifying framework for adult education if definitional problems could be worked out, and if old and new assumptions were rigorously tested before possible incorporation into a larger theory (Davenport, 1987).

The infusion of andragogy into the medical sales training process would transform the content-driven design to a process-driven design, which could ensure implementation accountability and promote more sustained and consistent results throughout the organization. The andragogical learning theory

is an education process for problem finding and problem solving in the present, it is oriented to the discovery of an improvable situation, a desired goal, a corrective experience, or a developmental possibility in relation to the reality of the present circumstance. (Ingalls, 1976, p. 151)

Furthermore, if representatives could grasp and appreciate how to apply adult learning principles to the education of their adult customers, this could possibly lead to greater employee engagement which could be another pre-cursor to higher sales revenues.

The measure of return on investment in applying andragogical principles to corporate medical sales training was virtually limitless since the sales force was charged with bringing in revenue for the corporation. For example, if a medical sales representative was more skilled, knowledgeable, and confident, this not only becomes a value, but a sustainable competitive advantage. As previously stated, the average pharmaceutical sales representative was responsible for a territory that generated \$4,098,717.11 (Benchmark Study, 2010c). Based on my previous sales reports, metrics, and quota goals, this average often represented between 15%-33% of the particular territory's potential market cap due to competitor products and services offered.

Quantifiably, if average territory revenue increased just 1% per territory due to better educated representatives, this could lead to an increase of \$40,000.00 per territory. Multiply this by 1000 representatives nationally, all subjected to better training based on researched principles, and the organization just increased its gross revenues by a minimum of \$40 million. Continue this with another modest 1% increase per territory or

by stealing market share from a competitor because of distinct advantages of the sales force training, and sales would have increased by \$80 million plus, in theory.

Cost-cutting will always be the fastest way to increase revenues in the short term; but obtaining a greater return on current assets (like human capital) should be the clear strategy for sustainable growth and profits. Since "andragogy is rooted in a fundamental set of values that are grounded in adult development processes, at the very core the interests of the learner are always at its center" (Johnson, 2000, p. 2).

Research Questions

- 1) How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?
- 2) Can a corporate medical sales training program be designed that applies andragogical principles?
- 3) How does andragogy inform medical sales training?

Significance of the Study

The significance of this study is that it could address perceived or actual gaps in medical sales training operating procedures, best practices, cost and technology concerns, talent and bench strength indicators, and provide assessment and evaluation of individual contributor readiness to transition to people and process managers. This study also addresses an adult education practitioner's concern that corporate medical sales training may not be meeting the needs of the adult learner and thus, not as efficient, effective, transparent, or accountable as it could be if the adult learners' essential needs were met. Furthermore, results from this research study and macro-industry dynamics could determine new paradigm shifts in medical sales training budget allocations, philosophy,

return on invested time, return on invested capital dollars, required credentials or prerequisite courses, regional and national sales training logistics, and establishment of inrole management by objectives.

Gaps in Current Curriculum

The andragogy learning theory facilitates learning from experience precisely because it purposely directs learning toward its application in such a way that actual experience can be compared directly with intention. At that moment all four functions of consciousness—clarity of thought, emotional involvement, intuitive insight, and sensory awareness—may be brought into more or less full view of the learners. (Ingalls, 1976, p. 150)

As perceived by this researcher, a gap does exist in the research because andragogical principles have not previously been specifically applied to corporate medical sales environments with specific measurable outcomes. There were several sales training manager requisitions (Appendices D-I) that list preferred requirements as having an understanding of adult principles and other verbiage mirroring curriculum development experience desired; however, the interpretation of what curriculum development actually is gets lost in translation and definition from individuals who have not been formally educated in curriculum development, instructional design, or adult learning theory. The alternative version becomes placing ideas of perceived best practices on paper and referring to that finished product as a curriculum. Many times 'successful' sales representatives were brought into headquarters of organizations to help write the 'curriculum' from their insights. This process created a sustainable gap in practice knowledge and literature review because it violated the andragogical definition

of the role of the teacher of adults, which was to "openly share knowledge and experience insofar as it relates to the concerns and needs expressed by the learners. In addition, the teacher must never impose his or her ideas and values on others as the only solutions to a problem" (Ingalls, 1976, p. 146). If the training design did not fit the needs of the learner it should not be expected to accomplish the objectives of the training program (Milano & Ullius, 1998, p. 6).

Whether in a season of expansion, revenue maintenance, or alleviating customer attrition, the sales organization was the go-to function within the corporation to be the face of the company to external markets. The sales force also ensured the company products and services were purchased at levels that earned profits and allowed for the mission and vision of the organization to be sustained. Since the execution of sales was indispensably important to the overall success of the company, extensive training and development programs were established to promote learning in efforts to duplicate successes and eliminate failures from one sales representative to the next, in hopes of consistently replicating best practices on an area, regional, national, and sometimes international basis.

Institutional Accountability

In response to the new post-2008 recession corporate environment, many systemic adjustments and special programs were inaugurated by large and small organizations alike to specifically promote increased efficiency, employee effectiveness, and overall institutional accountability. In attempting to eradicate ineffectiveness and permanently damage non-successful ideas and practices I have offered a content and process design within the scope of this project based on the research literature and my

study findings to specifically address how to introduce, outline, and manage the knowledge of the new medical sales trainer that experiences trial by fire and then instantly responsible for dozens of individuals' learning, and indirectly, potentially millions of dollars' worth of customer accounts from their influence through scores of medical sales representatives.

This project was worth accomplishing because it explored if the principles of andragogy could be adequately implemented into a corporate medical sales training environment and also examined the potential resources it would take to implement the medical sales training changes and what impact it would have to a corporation's bottom line revenue. This project could potentially change the then-current landscape and offer a major paradigm shift in what was traditionally referred to as train-the-trainer programs.

In relating directly to professional value, further significance of this study is shedding light and offering thought to a seemingly continuous discussion, according to the literary review, of what type of individual should be in the position of medical sales trainer, what skill sets should they bring to the table, and how they would obtain whatever skill sets deemed necessary.

There is a perpetual debate within training circles about whether it is better to train experienced people from within your own company or to hire people with the potential to become professional trainers and train them in your company products and policies. (National Society of Sales Training Executives, 1977, p. 94)

Most organizations opt for the first option, as the then-current status quo was to select

an outstanding salesperson who is nearing retirement or tired of traveling (and is flexible and open-minded) [and] may find a new challenge in sharing his or her experience as a trainer [or] a bright young salesperson who has been successful in the field, but who really wants to move up, might jump at the opportunity to become a sales trainer. (National Society of Sales Training Executives, 1977, p. 94)

It should be noted that these findings and suggestions first published in 1975 appeared to still be at the forefront of aggregate corporate medical sales training program philosophy at the time of this writing, approximately 40 years later. Moreover, within the post-2008 recession environment, companies may have felt further justified in selecting trainers from the overall sales force of internal candidates who were currently successful sales representatives but did not offer training background to primarily save on costs or to promote from within to a fault.

This phenomenon may have existed primarily to reduce or appease a financial or operational risk by placing a seemingly compatible candidate into a position for which they may already have familiarity with the products or relationships with the management. Furthermore, it could also be reasonably ascertained that a manager who hired an individual who was already well known may also want to reduce or mitigate their career or personal risk. If the individual selected did not work out, the manager could at least make a case that others within the organization supported the decision based on the facts known at the time, and the blunder could be positioned as a team miscalculation versus the individual manager's miscarriage of judgment. In any event,

these risks may not be as severe or outweigh the execution, or strategic risk the illequipped hire may have as a repercussion on the entire organization.

Paradigm Shift Needed

On the surface, these previous statements may not merit any outlandish reaction or seem impractical or unreasonable to any regular analyst conducting an audit on operations. However, this sales trainer selection criterion philosophy, first noted by the 1977 National Society of Sales Training Executives, failed to identify the fundamental aspect of the position, which is *training* adult sales talent. By seemingly not having a single criterion in the selection of talent that addressed proficiency in curriculum development, instructional design, adult learning principles, education philosophy, understanding of various sales models, or comprehension of people management strategies, was a gross remediation of the sales training role collectively agreed upon to be deemed a critically important support function of the overall corporate foundation and structure.

When a sales representative became a sales trainer because of subjective 'successful' sales results and perceived platform skills only and consistently, the problems in corporate medical sales training were introduced at the onset of the process and became a systemic, predictable, and enduring long-term problem. This problem further spirals downward when this shallow and un-researched process is not spoken about or given any credence. Lastly, when light is finally shown on the topic after multiple miss-steps, then there is a mad scramble to Band-Aid certain process steps or completely overhaul, 're-organize,' or 're-align' the department or organization because of an unaddressed dysfunction.

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I will assert and argue that this hiring practice may need to be completely overhauled or specific indicators of future success in actual training performance should be added into a program assessment to maintain a consistent goal of effectiveness and accountability moving forward in the post-2008 global recession climate. Additionally, then-current corporate medical sales training programs offered little accountability, due to the fact that traceability to trainer performance was not reliably identified, and by instituting a program that had clear goals, measures, and prerequisites healthcare organizations would have earned the right to expect success versus hoping for success in the training department from the 'good sales rep' ranked in the top 25% of sales who was then an instant trainer. If anything, the post 2008 recession climate may prove to be an opportunity to demand more from potential sales trainers, due to the clear facts that more talent was available to select from within the larger landscape.

Within healthcare organizations, these types of roles usually incorporated some variation of the title National Sales Trainer or Sales Training Manager (Job Descriptions, Appendices D-I). This title denoted that the trainer would inherently be responsible for training an entire division and certainly be responsible for the development of adult trainees. The obvious risk that arose was that more often than not these individuals were not trained on how to facilitate a learning process, develop talent in a researched way, or set up a measurable or duplicable curriculum. In an industry where several companies each generated tens of billions of dollars in sales revenues, it may be long overdue to have professionally trained people leading the 'professionally trained' staff.

Assumption

This study assumed the medical sales training role would continue to exist and be relevant in the future. One may argue the possibility of future buyers of pharmaceuticals and medical equipment simply going online to learn about the products and purchasing them directly from the manufacturers. However, even in this scenario, there would always be a need for an expert, even if only on the phone, to answer questions and help the buyer learn and solve their own problems around purchasing high stakes medical products.

Limitations

This study had many noble intentions; however the humbling reality is that it also determines validity and makes inferences, evaluations, and recommendations based on finite data that discernibly cannot represent the entire population of medical sales training practitioners. This limitation is inherent and non-controllable in nature, which should be taken into consideration in the broader context of generalizing the study results to any corporate setting.

The study participants were limited to the individuals who were willing to spend the time to reflect on their sales training experiences and document them within this research study. This fact eliminated several people who had the proper experience but were not willing to invest their time or were under the impression or perception that their then-current employer's corporate policy would not allow them to partake in the study. Participants were, at the time of the study, current corporate medical sales trainers or those who had been corporate medical trainers previously in their careers, and accessible within my referral network. I solicited from business friends, associates, co-workers,

colleagues, acquaintances, and industry professionals the contacts of known medical sales trainers, after describing the scope and purpose of the study. Respondents who met the parameters were included in the study.

Although the interviewees included medical sales trainers from medical device, diagnostic, pharmaceutical, and biotech sales, this study did not fully represent that particular industry's thought because of the relatively small sample size. This study did not interview every medical sales trainer in the industry nor representatives from every company representing the industry, only those available at that particular time representing random companies.

Delimitations

Medical sales representatives were not the study population. Their readiness and education level was not explored, to remain focused on the sales training practitioners who were charged with and took responsibility for facilitating learning and effective learning environments.

Definition of Terms

Andragogy – The art and science of helping adults learn (Knowles, 1980, p. 40).

Pharmaceutical sales – for the purposes of this study, involved the promotion or marketing of small molecule drugs to physicians, who in turn recommended or prescribed those drugs to their patients.

Medical device sales – for the purposes of this study involved the sales, promotion, or marketing of capital equipment, implantable devices, and disposable supplies most often dealing with tangible product purchase orders and negotiation of

financial terms and conditions with surgeons and/or hospital personnel up to and including the C-level suites.

Diagnostic sales – for the purposes of this study, involved the sales, promotion, and marketing of laboratory-based tests or panels, diagnostic screening capital equipment, or blood assay markers to physicians to aid them in determining a treatment algorithm for a patient.

Biotechnology sales – for the purposes of this study, involved the promotion or marketing of biologic drugs delivered via injection or infusion into the body available by prescription from a physician.

C-suite administration – for the purposes of this study, were titles of executive leadership within an organization; most often comprising of the Chief Executive Officer, Chief Financial Officer, Chief Marketing Officer, Chief Medical Officer, Chief Technology Officer, or Chief Operations Officer.

Summary

This study investigated the background, context, and evolution of what traditionally was referred to as corporate medical sales training. Moreover, insights were provided as to what merits then-current corporate medical sales training effectiveness and validity as it pertains to the sub-categories of pharmaceutical, biotech, medical device, and diagnostic sales. A call to action was submitted to re-evaluate the efficacy of corporate medical sales training to accommodate the paradigm shift corporations realized in the wake of the post-2008 global recession environment, pained with massive layoffs, and petitioning for more transparency and accountability from all of the organization's resources, human or otherwise.

Andragogy was introduced as a learning theory that may offer solutions to the problem of corporations needing more valuable contributions from all stakeholders, and to provide a research-based structure to the medical sales training departments charged with helping the sales organization sell in order to bring revenue into the organization. Moreover, andragogy was offered as an avenue to explore how to better equip the sales force to help highly trained physician and healthcare customers to learn about the products they sell and make a decision to buy in less time than the then-current sales cycle. Researching the application of this learning theory was a natural progression in the idea generation phase to address a practitioner's concern that learning needs had drastically changed in the corporate medical sales training space, but the needs assessment from these organizations was not evolved to support these changes.

Some thought was offered as to why medical sales training stagnated. This primarily centered on the idea of executive leadership positioning the vocational medical sales training role as a feeder role for entry into other mainstay job functions of the organization and not supporting the goals of the department with the adequate financial and human resources to promote the outcomes advertised as critically important. This line of thought migrated into a discussion about the rigidity of the role from skill set requirements posted in the job requisition, the pool of talent generated from limited populations and geographical subsets, and also the outsourcing of some of the key components of the content produced from the functional corporate medical sales training role. Ultimately, a central point was discussed that correlated a key indicator of what starts the systemic organizational problem with untoward financial repercussions. This point was that the functional corporate medical sales training role was habitually staffed

with individuals with very little to no experience in instructional design, curriculum development, or adult learning theory, and who were instantly endowed with influence over a critical function of the organization without proper credentialing or meaningful experiences.

With the reality of this particular role serving as one of the chief influencers to the field sales team, which in aggregate could easily represent more than \$1 billion in annual gross sales, examples were demonstrated to convey the impact of a misstep of talent development or selection. A causal link was discussed as to the potential gross revenue increases with slight market share gains as a result of enhanced training from an effective medical sales training department. This study also recognized this topic becomes highly significant when evaluated in the context of understanding perceived and actual gaps in corporate medical sales training. With a better understanding of these issues, improvements in the areas of technology and costs, operating procedures, assessment and evaluation metrics, individual contributor readiness, and management by objectives could all be enhanced.

Chapter Two: The Literature Review

The purpose of the study was to address a practitioner's concern that current corporate medical sales training platforms may not be operating at maximum capacity due to lack of employee development in current medical sales training curriculum design, adult learning models, program delivery methods, trainer readiness, and/or individual skill development proactivity. Even if never evaluated before, the current climate should merit a glance into standard operating procedures for sales training programs to ensure employee field launch readiness, high aptitude for product or service knowledge, and a deep consideration into the process of understanding how and why adults learn and retain information.

In order to bridge the gap in research, an exploration of current sales training processes must be understood, and a concession must be made that allows the notion that training in business settings is a linkage to and derivative from educational learning in traditional classroom and institutional settings. Finally, specific to this research, a basic comprehension of sales is needed in order to thoughtfully progress to what a medical sales mindset may be. This same thought progression is then needed to transition from the definition of what training is to what training looks like in a medical sales environment. Once this is understood, a thorough examination can be made as to what theories, concepts, and/or principles may improve the current situation.

Andragogy is a learning theory that lends itself to the idea of improving learning environments, and the reason why its application to corporate medical sales was explored. There is little research on the integration of the two topics of medical sales training and andragogy to bring about improvement and change. Therefore, a literature

review of the following topics is provided in sequential order moving from general to specific in complexity: overview of sales history and medical sales categories; sales training; andragogy learning theory, andragogy debunking current accepted training practices; and summary.

Sales History, Mindset, and Acumen

Sales personnel are of tremendous value to any organization's sustainability and growth. "Salespeople are much more than a passive medium. They are active representatives of the company and can influence people's perception of it through their ability to interact, to customize, and to build relationships with customers. Thinking of the sales force as anything less than that is a big mistake" (Stewart & Champion, 2007, p. 128). These skills and talents often come at a premium when evaluated in the context of how sales recruiters, or headhunters, often target a top influencing sales representative when looking to staff for sales positions at competing organizations. These headhunters and internal recruiters often are simply wanting to purchase established and well-heeled relationships with their physician customers that the top sales people can provide. Any other metric on the job requisition for several organizations may simply be construed as a pretext.

Also because sales personnel are often some of the top compensated individuals within the organization with major influence to the customer "most companies expect sales reps to go from new employees to fully productive sales professionals during their first months on the job, as they learn more about the product, the customers, the market, and the competition" (Leslie & Holloway, 2007, p. 145). Obviously different sales representatives enter the organization with varying degrees of knowledge and experience

so it is also "important not to confuse the organization's sales learning curve with a salesperson's individual curve" (Leslie & Holloway, 2007, p. 145). It may be important to allow ample opportunity to allow for intense questioning from the sales staff so they may be comfortable, fully engaged, and fully aware of the deliverables they are being asked to accomplish.

Once sales people fully understand their value they also may be inclined to leverage that value for additional benefits for their personal well-being. "Salesperson behavior is not always strictly aimed at fulfilling the objectives assigned by their firm – they pursue more personal objectives. Sometimes, they behave opportunistically. In other words, they sometimes take actions that, from their own perspectives, are the most satisfying to them" (Darmon, 2007, p. 88). This statement is generally consistent with what I have witnessed within the sales force. Many sales representatives in pharmaceutical organizations I have spoken with prefer to stay "in the middle of pack" when it comes to sales performance metrics. The belief is that being at the bottom will produce a lot of accountability questions that may lead to the management team drafting "performance improvement plans" most often designed as a first steps in an untoward separation from the company. While conversely, being at the top of performance metrics will undoubtedly raise quotas in the following period to unrealistic levels and inevitably subject the representative to poor performance attainment within the future measuring period. This notion of self-serving behavior seems natural when you consider by nature the role is entrepreneurial in scope with direct influence to the end customer. The environment by design is set up for the sales representative to operate as a micro version of the CEO for the specific accounts or customers they may be assigned to or gain from

their own efforts. This transaction makes sales representatives incredibly valuable to their respective organizations and sales representatives that may feel their value is not fully recognized or compensated fairly may perform at the level they feel is commensurate with the opportunities provided and not at the optimal level of their personal potential.

The sales person value and cultural behaviors have been used to launch countless successful businesses and fuel an era of unprecedented economic growth. "The intense effort to standardize salesmanship distinguished the growth of capitalism in America from that in other countries" (Friedman, 2004, p. 4). "By focusing immediately on restoring sales force performance, a CEO can deliver a rapid turnaround in the number. which helps bankroll other essential changes while buying time for longer-term initiatives" (Leslie & Holloway, 2007, p. 125). The other changes could include stockpiling funds to pour back into research and development to discover a new product where the need for sales representatives may present itself again. Coupling and converting the goals of the sales representative to the medical sales environment becomes significantly more complex since "these novices need to be able to communicate at an expert level with healthcare providers with years of education in a highly specialized field" (Low, 2009, p. 42). There will intuitively always be a gap in knowledge and expertise because the physician customers are some of the most highly trained individuals on the planet. Attach this fact with subpar training and development on any level and there is a potential recipe for disaster.

"While selling features and benefits [of a product] to a physician is an important first step in any sales plan, it will not secure a purchase order from today's cost-conscious

facility administrator" (Barry, 2010, p. 28). When selling to C-suite hospital leaders, a sales rep must have the talent to engage C-suite hospital decision-makers in conversation about potential value propositions beyond specific product lines, and shift the conversation towards overall time savings, costs of streamlining with one vendor, or speaking to executional risks (Ott & Numerof, 2009, p. 58). If speaking about detailed clinical data to a physician is not already daunting enough of a task, the hospital administrator may delve into complex financial or high level cost data that may require an entirely different approach and skill set in trying to close a sale. In both scenarios lack of relevant training could leave a medical sales representative looking and feeling pretty exposed or overwhelmed. These points further illustrate the need to have processes in place that gives the sales representative the most confidence and highest yield towards communicating with healthcare customers.

In most medical sales forces today "you may find it difficult to find someone who can tell you their current style of selling and how they are analyzing it for improvement" (Hopkins, 1995, p. 313). "Progress along the sales learning curve is measured in an analogous way: The more a company learns about the sales process, the more efficient it becomes at selling, and the higher the sales yield" (Leslie & Holloway, 2007, p. 144). Much of the data in this area around sales acumen speaks to the transitions in selling methods, (organizational, strategic, and ideological) and also references it's importance overall to the growth of the U.S. economy (Friedman, 2004, p. 7).

Medical sales categories. "In planning for the future, pharmaceutical, biotech, medical device and diagnostic companies must reassess sales force objectives to create and manage a customer-facing organization that is prepared to meet the stakeholder's

evolving information and service needs" (Gasper, 2010, p. 30). "Selling within the biopharma industry is a different kind of 'sell' from other business-to-business or customer-based selling" (Low, 2009, p. 42). This sell could be considered long term as it is focused on changing physician prescriber habits with ongoing visits to constantly try to persuade the customer to see the merits of the value proposition presented. Many medical sales organizations have settled upon a version of Spin Selling to try to navigate this continuing sales continuum climate.

Spin selling is a precisely defined sequence of four question types that enables the salesperson to move the conversation logically from exploring the customers' needs to designing solutions, or to uncover implied needs and develop them into explicit needs that you, the salesperson, can resolve. (Spin Selling, 2011, p. 1)

The major differences between pharmaceutical and biotech sales is that pharmaceutical sales typically are sales of small molecule pills most often sold to primary care physicians with ability for crossover into physician specialty categories. Biotech sales typically involved an infusion or injectable biologic product most often heavily geared toward specialty physicians as call points. The sales representative may also need to interact with specialty pharmacies, distribution partners of pharmacy benefit manager organizations, case managers that may help end customers navigate insurance and payment options to obtain the product, and medical liaisons to provide additional clinical information on specific topics if deemed necessary by the physician client. The research also several times presented pharmaceutical sales and biotech sales definitional terms being used interchangeably and notably in job requisitions where the job requirements call for "biopharmaceutical" sales experience, fusing the two terminologies together.

Medical device sales tends to involve sales of more tangible product items where a purchase order is received, price, terms, and conditions are often negotiated based on hospital budgets or larger contracts that impact multiple hospitals in a region. The call point could include surgeons utilizing product for an operating or emergency room setting, a catheterization lab, materials management, purchasing coordinators, and C-suite level executives. The final category of sales researched for this project was diagnostic sales. "Diagnostic sales could be considered uniquely difficult because there are (a) multiple points of care for a patient which leads to selling to multiple stakeholders, (b) challenges in measuring whether or not a diagnostic test actually impacts the final patient outcome, and (c) a complex reimbursement environment" (Young, 2011, p. 50).

All of the inherent challenges may help to explain why the compensation model may be higher than the average salary range compared to other sales industries within the United States. According to Medreps Medical Sales Salaries (2011), a medical sales job and information board, the average base salary for medical device sales representative jobs was \$79,000 and the average total compensation including bonuses was \$146,000. I have personally seen many medical device high performing sales representatives within this field be compensated north of \$300,000 to \$400,000 in one year. The highest I have personally seen is over \$800,000.00 in compensation for one year at a medical device company that I worked for. The average base salary for pharmaceutical sales representatives was \$89,000 with a total compensation of \$116,000. The average base salary for biotech sales representatives was \$92,000 with an average total compensation of \$152,000 (Medreps Medical Sales Salaries, 2011, p.1). With all of the dynamics of being impactful to customers, the various compliance barriers in existence, and the level

of income the organization commits to sales representatives, there should be a clear case of how important it is to provide effective training to this impactful group.

Sales Training

"Since 'time in territory' is often a sacred precept for sales organizations, exposure to training is often forced into an intensive classroom experience, where the goal is to infuse as much 'learning' as possible into a limited time frame' (Sales Performance International, 2011, p. 3). The literature is consistent with my observation as a medical sales representative in that several organizations indeed treat training as an occurrence and sales representatives in turn respond in kind by "performing" at the training event to get by with little to no demerits. "The goal of training is to create authentic learning environments, not to cover content. It therefore becomes essential to know your audience and make training relevant and reusable" (Martin, 2011, p. 33). Several topics within the research differed with the point that training is not for content dissemination, and several sources argued the point that if the primary reason for training is not content dissemination then there would be no point in even meeting. "It is virtually impossible for sales professionals to learn, retain, and apply more than a small percentage of what is typically offered in intensive, multi-day [or single day] training events – unless there is a systematic reinforcement approach across an extended period of time" (Sales Performance International, 2011, p. 3).

Many sales training organizations would concede that they "inculcate the culture and philosophy through our sales training programs" (Stewart & Champion, 2007, p. 129). This notion becomes critical because "most of the adult educators [in this space] have had little to no formal instruction to prepare them to help adults learn" (Henschke,

1998, p. 11). It would be reasonable to question this current adoption of watered down training to see if it even marginally reaches basic elements and guidance that training is thought to provide. Several themes of data in the literature reinforce the notion of a significant gap existing with current training practitioners having no formal preparation in facilitating adult learning activities among adult learners. According to Weldon (2010), there are four critical elements of training that include: (a) Motivation – if the participant does not recognize the need for the information, the instructor's efforts to assist the participant to learn will be in vain, (b) Reinforcement – instructors are attempting to change behavior with the trainings, (c) Retention – participants need to see a purpose for the training and then the retention will be directly affected by the degree of original learning and the amount of practice during learning, and (d) Transference – will likely occur when the participants can associate the new information with something they already know. (Weldon, 2010, p. 1)

By having an entire staff of trainers that are not versed in the four critical elements of training a disservice is being engaged in with every training event. The literature also is adamant in painting the picture that some of the problems will continue to perpetuate themselves unless a hard break occurs with someone that has knowledge in the vocation encounters the scene. Also the persistence of the trouble lasts and as a result doing the best with what is available has become the normal operating procedure.

Perceived best practices. There are a series of critical steps for gathering knowledge for use in developing learning that accelerates the path to top performance, including:

(a) uncover the implicit thought processes that top reps use to make sales, make them explicit and incorporate them into the learning activities, (b) put the top sales reps, product managers and training developers into the same room to work out the content together, (c) use a systematic process of identifying and categorizing the types of sales situations that reps encounter, and (d) work through prototypical sales situations together to uncover how the sales rep think about it, and identify what product knowledge is needed at each point in the sales call. (Rosenbeck, 2010, p.41)

I have noticed in business meetings where the audience members looked to grab any mobile device they could get their hands on to engage in a more interesting activity. When I have facilitated workshops on sales learning I immediately noticed the yield and engagement was significantly greater when coupling any workshops with developmental tasks, or dividing any didactic lecturing needed into different sections to maintain audience interest level. "Traditional, passive learning methods alone . . . participants generally are not actively engaged in learning, and the amount of knowledge successfully transferred is relatively low . . . knowledge transfer within a serious game-based environment is four times greater than through traditional learning methods (Low, 2009, p. 38).

There seems to be an idea of getting people to do something physical is always a great idea. "Ask for a show of hands, ask participants to vote on the answer to a question you pose, or post different ideas on the wall . . . and ask participants to move on to the flipchart that best describes their opinion" (Meloche & Sterns, 2005, p. 37). I have noticed as a medical sales representative that assigning flip chart activities have also been

used as past times when lesser knowledgeable training members are present. The pretext is to look busy even if the quality is lacking and then be able to show others (almost always in higher authority) that the leader of the group was able to get the audience members to do something. Generally speaking there seems to be a basic idea that staying within the guidelines of four strategies will yield the desired results. These categories include "(A) learning by doing, (B) deliberate practice, (C) feedback and coaching at the teachable moment, and (D) learning in a community of practice" (Rosenbeck, 2010, p. 42). Also, "using previously established sales councils (collection of top sales reps) to offer guidance is most helpful" (Adamson, 2011, p. 41).

The sales process, 'see one, do one, teach one' is traditional in medical sales. "By giving . . . professionals the opportunity to observe their product in action . . . you teach them not only about their product, but also how to effectively sell it to their customers. (McLean, 2011, p. 38). The research into best sales training practices also surfaced several data and program advice on general confidence in speaking with authority offered under the guise that conviction and authority of presentation would strongly aid detouring any suspicion that competence may be lacking. Several themes followed the notion of "it does not matter if you think you can run a great sales training program, what matters is if the sales force thinks you run a great sales training program" (Adamson, 2011, p. 41).

Organizational structure and content design. Since the American Association of Higher Education (AAHE) published the 'Seven Principles of Good Practice in Education' in 1987,

Teaching institutions have established this resource as the cornerstone of learning.

Corporations also began to integrate these principles into their learning strategies

for employees – until the emergence of new communication and information technologies. (Haghighat, 2008, p. 52)

"Leading edge companies are moving away from presentational instructional methods to more active and learner-centered methods" (Rosenbeck, 2010, p. 41). I have observed instruction at several companies noted for accolades in employee engagement have employed great training strategy where the medical sales representatives let there others business colleagues know about the training they had received.

At Astellas [a pharmaceutical company], even in the classroom, there is minimal lecturing. Teams work through scenarios together so they are learning from each other in a structured environment to share best practices. The instructor becomes more of a guide, answering questions as needed. (Rosenbeck, 2010, p. 42)

"When sales training departments within pharmaceutical and biotech organizations begin to revamp their curriculum to enhance sales effectiveness, they often borrow best practices from their top-producing sales representatives, in terms of sales targets and volume" (Vitello et al., 2008, p. 63). "From a training perspective, the establishment of a cross-functional work team with a clear and unmistakable charter is one of the most important factors in flawless launch execution" (Riggle, 2007, p. 58). "[Training] team members should include management-level representation (with decision-making authority) from departments such as training, sales (includes home-office senior leadership, as well as field-based managers), brand management, managed care, and legal. Vendors (e.g., meeting planners, advertising agencies, public relations agencies) and ad hoc members can be added as needed throughout the launch planning process" (Riggle, 2007, p. 58). When launching a product there is significantly more

dynamics and unknowns at play and it becomes uniquely more difficult than traditional training due to the added pressure of immediate relevance with no precedent to use as a model.

From a data collection and implementation perspective different organizations have surfaced in attempt to provide feedback in content design, and help disseminate training ratios and other general information to industry professionals in hopes of producing better training results. One such organization is the National Society of Sales Training Executives. This organization was founded in Cleveland, Ohio in November 1940 and its purpose is to concentrate in depth in the field of sales training and thereby create a medium for better training results from training efforts and budget (National Society of Sales Training Executives, 1977, p. iii). "The Society of Pharmaceutical and Biotech Trainers (SPBT) was established in 1971 and is a worldwide nonprofit organization aimed at supporting trainers at pharmaceutical, biotech, medical device, and diagnostic companies (Society of Pharmaceutical and Biotech Trainers [SPBT], 2010). "Results from the 2010 benchmark study conducted by the Society of Pharmaceutical and Biotech Trainers (SPBT) surveyed 47 companies representing 1,000 full-time training employees, 44,000 medical salespeople, representing more than \$180 billion in 2009 revenue" (Gasper, 2010, p. 30).

Delivery formats and technology in training. "The ways in which sales training managers synchronize the delivery of instruction make all the difference in the world in how easily, how thoroughly, and how effectively employees learn" (Nilson, 1991). Good training begins with several days or weeks of investigation aimed at identifying precisely what needs to be taught. This period of investigation is known as

needs assessment, and it is absolutely critical to designing and delivery training" (Nilson, 1991). "Large pharmaceutical companies focused 73% of their training delivery methods on product knowledge training and 27% on sales skills training" (Benchmark Study, 2010a) with "the initial training phase being conducted over about a four-month period and incorporating many of the standard techniques of sales training: virtual training via demos; competitive workshops; and pre- and post-workshop knowledge assessments" (Keirns, 2011, p. 49). The literary review of data concerning the heavy weighting on product training versus selling skill training was consistent across all the major medical sales spectrums. I have also viewed an extremely high percentage of training be geared towards product knowledge versus sales skills training. Also as added reference I have taken part in sales training where 100% of the discussion could be classified as product training; which is then in turn confusing if the course is entitled sales training. This framework makes the research question in this particular instance harder to answer as looking to find how andragogy informs sales training would also need to expand in definition to include product training of which varying practitioners use the terms interchangeably; of which they are clearly not. This ideology would also then need to also expand to other training platforms including web based and non-web based elearning training. With much of research data lumping all of the various types of delivery into one category of sales training also makes it harder to segment how to improve upon one isolated model without attempting to address the other aspects of the other delivery platforms.

Web based e-learning has brought even greater administrative efficiencies.

"Learning Management Systems now have automated assessments, tracking, and record

keeping which has eradicated physical distribution, and made modifications easier and less time consuming. But the 'page turner' approach has remained' (Gram, Pereira, & Caldwell, 2008, p. 73). Multi-year industry studies show that improvements that have not been sustainable (Sales Performance International, 2011).

Budgets, costs, and outsourcing in training. Employers spend \$210 billion for annual training (Billington, 2000), and the U.S government spends an additional \$5 billion (Sales Performance International, 2011). American companies spent nearly twothirds of their training budget on such things as salaries during training (American Society for Training & Development, 2010). According to SPBT (2007), the average corporate medical sales training budget was \$11,791,234 (Benchmark Study, 2010a). As the economy softened in the post 2008 era and moving forward, real efforts have been made to rein in costs, with unfortunately a notable portion of the budget trim coming from the training and development department. As a result, "the average corporate medical sales training budget in 2009 was reduced to \$6,270,610" (Benchmark Study, 2010a). To help defray some of the cost concerns, most pharmaceutical training groups are moving away from a major focus on instructor-led training and inserting more technology where appropriate. For example, "Baxter Healthcare uses e-learning for basic knowledge, but they still conduct live training, whether by webinar or in the classroom, for competitive information and selling skills practice" (Rosenbeck, 2010, p. 44).

"Large pharmaceutical companies outsourced \$5.5 million worth of training per company on average and \$2.3 million for biotech companies, with a range from \$300,000 to \$9,000,000. This works out to be approximately \$2,050.00 outsourced dollars per learner for pharmaceutical companies and \$5,096 for biotech companies" (Benchmark

Study, 2010a). Medical companies are spending billions of dollars on sales training with limited and unsustainable results (Sales Performance International, 2011). With the industry research not being convinced that return on investment in the area of sales training and development is pleasing, further research should be conducted that would yield more favorable outcomes or provide for a process or framework from which to build towards a more compelling and sustainable model.

Measuring training effectiveness. In territory sales, there is evidence that rigorous targeting of prospects can pay huge dividends, but many sales training initiatives never include any formal education and tools for quantitative targeting methods. Strategic and complex sales can involve a very different skills emphasis than more transactional selling situations. Medical sales companies need training models that work (Sales Performance International, 2011). Very few organizations assess for the value of their training investment (Sales Performance International, 2011). The research data indicated that without systematic, ongoing learning and reinforcement, approximately 50% of the learning is lost within five weeks. Further data found that "employees will usually retain only about 4 percent of what they have learned after about six weeks with traditional learning techniques" (Low, 2009, p. 42). Most individuals are able to comprehend that what their corporation measures will get the proper attention. Measuring performance will provide a benchmark in order to improve upon, so if there is inadequate or inaccurate measurement it may be safe to assume the improvement will be difficult to come by.

Medical sales organizations assess training using such methods as tests, assessment center reports, surveys of trainees' customers, and sales reports (Benchmark

Study, 2010a). Some type of post-testing in needed to determine what was learned during the training (Kirkpatrick's Four Level Training Evaluation Model, 2011). "Field managers should be utilized to conduct a formal verbal assessment of a rep's selling skills including their ability to use the selling model to deliver a presentation" (Riggle, 2007, p. 84).

Different evaluation tools are available to compile information to then be organized, evaluated, and acted upon to improve performance. However there is seemingly an underutilization of the capabilities of some of these learning management and other systems, with much research data noting the dismal acceptance rates of resources already in hand that could provide metrics for measurement. Medical companies use a learning management system 17% of the time to assess return on investment in training, but 100% of the time to assess compliance (Benchmark Study, 2010a). Not using available training assessment resources puts medical corporations at a disadvantage.

Donald Kirkpatrick's Four Level Evaluation Model is used for assessing training and was first published in 1959 (Kirkpatrick's Four Level Training Evaluation Model). The four levels of evaluation first measures how learners respond to the learning process, then the extent to which the learners gain knowledge and skills. Next it evaluates the learner's behavior or competency to perform the learned skills while on the job, and then finally it measures the impact or results.

Performance indicators. "The interest, attention, and motivation of the participants are often critical to the success of any training process" (Kirkpatrick's Four Level Training Evaluation Model, 2011, p. 1). "Empowered learners will require and

demand very different mixes of content and context" (Kruse, 2011, p. 50). An argument can be made that the post-2008 recession that affected the U.S. economy did not cause all of the erosion of medical sales profits or attrition of medical sales training departments, but rather it simply was a revelation of non-sustainable structure and process that was being masked by large numbers in gross revenues. "The percentage of sales reps attaining quota in 2009 dropped to 51.8%" (Sales Performance International, 2011). "A decade of poor sales performance was highlighted by the 2009 drop (Sales Performance International, 2011).

Several researchers hastily sought out answers that could provide some insight into the phenomenon that all organizations were now forced to recognize and contend with moving forward. One could argue that thirst for answers led to a scramble within medical sales training programs to understand how to become more effective, positioning the opportunity for change management discussions. The research data surfaced a retrospective analysis that was performed of both quantitative and qualitative data from more than 350,000 direct doctor assessments of sales representatives' sales calls over a five-year period (2002-2007). "The analysis documented that doctors consistently rate representatives much differently than sales managers when using the same set of behavioral criteria – selling skills and knowledge. In many cases, what is rated higher by managers is rated lower by doctors" (Vitello et al., 2008, p. 64). "Many top performers may rely more on relationship selling rather than the application of skills and knowledge, as evidenced by their scoring in the lower percentage range" (Vitello et al., 2008, p. 68). "Traditional use of experienced and top performers' best-in-class behaviors as models for

future success may need re-examination and modification by companies to increase sales force effectiveness in the overall sales force" (Vitello et al., 2008, p. 69).

Career path and future outlook. Medical sales representatives are entry-level positions into the healthcare industry. However, entry level for this particular space may be deemed to be the upper echelons of career paths considered alongside several other industries. Many job requisitions state a preferred consideration for several years and demonstrated competencies from other job fields, making healthcare sales one of the most sought after and competitive fields in the sales representative world with salaries and benefits that may not be deemed entry level when compared to average salary and benefits within the United States from any industry.

Average base salaries for medical sales are as follows: pharmaceutical sales representatives is \$89,000, biotech sales representatives is \$92,000, and medical device sales representative jobs is \$79,000 (Medreps Medical Sales Salaries, 2011).

Demonstrated proficiency and success within these types of roles are almost always the prerequisite for obtaining a role within the medical sales training department in most current corporate structures and systems. Sales readiness is determined by performance review rating, years of experience, and manager feedback (Benchmark Study, 2010a). The fact that nationally on average 7% of current medical sales training personnel have any measure of instructional design, curriculum development, or adult learning theory in their background poses a direct threat to the validity of the current model. If manager feedback or weighting from performance reviews from that same manager, without training experience statistically speaking, has become the standard or model, there is an ineptitude at play since the manager without training experience has no correlation or

relevance with the determination of an individual's readiness to be a sales training manager.

Influences driving changes in corporate medical sales training include: (a) response to the complex marketplace, (b) more regulation, (c) more external partnerships, (d) new product launches, (e) more responsibilities, and (f) generational differences (Benchmark Study, 2010a). To address the expected decrease in medical sales departments, possible strategies to meet the changing needs of include: (a) continuous quality improvement, (b) anticipating needs, (c) more distance learning, (d) outsourcing, (e) reassessing internal competencies, (f) and blended learning (Benchmark Study, 2010a). However, research also recommended increasing headcount and operational overhead to manage the changes (Benchmark Study, 2010a). Clearly there is disconnect between what the research data is showing as the trends to consider and address and what the industry has chosen to respond to.

The changes have evolved in corporate medical sales training to now start with more reliance on technology/online training, keeping pace with multiple sales forces and products, and increased spotlight on stakeholders beyond the provider (Benchmark Study, 2010a). "The younger generations (known as generation X, the digital adaptives, and generation Y, the digital natives or 'millennials') differ from older generations in their perceptions about the world and their attitudes toward learning" (Haghighat, 2008, p. 52). Haghighat (2008) characterizes millennials: progressive, internet savvy, resistant to busy work and memorization, desire personalization and tailoring, desire work/life balance and flexibility, prefer action over observation, have shorter attention spans, results-focused collaboration, multi-tasking, confident, goal oriented, want instant feedback/gratification,

and want to understand the big picture (Haghighat, 2008, p. 54). "Digital-age employees prefer training that is flexible, self-directed, and high quality" (Haghighat, 2008, p. 56). Any future outlook on medical sales training should strongly consider focusing on teaching models that unite ideologies that allow for these emerging characteristics of the learning audience as the research data is showing a tendency towards understanding the generational variances within the workplace.

Andragogy

Andragogy is "the art and science of helping adults learn" (Knowles, 1980, p. 40). The following areas were reviewed in the literature: andragogy history and macroideology, andragogy assumptions and process elements, andragogy's universal impact, and andragogy implementation guidelines.

Andragogy History and Macro-Ideology

Andragogy promotes "problem solving . . . it is oriented to the discovery of an improvable situation, a desired goal, a corrective experience, or a developmental possibility in relation to the reality of the present circumstance" (Ingalls, 1976, p. 144) and popularized by Knowles in the 1970s and 80s (Bullen, 1995). Andragogy is a process design instead of a content design, with assumptions and processes (Cooper & Henschke, 2001). At first Knowles presented andragogy as the dichotomous opposite of pedagogy. Andragogy was the model for the education of adults and pedagogy was appropriate only for the education of children (Bullen, 1995, p. 2). "[Knowles] later conceded that concept may not always be appropriate; that pedagogy may be relevant to adult education and andragogy to the education of children" (Bullen, 1995, p. 2).

Andragogy's original introduction into this country was in 1926 by Lindeman, however, "the term was first authored by Alexander Kapp (1833) nearly a century earlier in a German publication" (Cooper & Henschke, 2004, p. 4).

Lindeman ascribed to adult education the necessity of furthering the discovery of the meaning of experience, assisting in the critical evaluation of such experience, and attempting to understand the preconceptions underlying such conduct, all of which find a ready echo in the writing of current critical theorists of adult education. (Brookfield, 1984, p.188)

"The best known statement of Lindeman [about andragogy was] . . . adult education is held to be a lifelong activity, to be non-vocational, to concern itself with situations not subjects in teaching, and to place primary emphasis on the learner's experience" (Brookfield, 1984, p. 49). Brookfield said the following about the contribution of Lindeman to adult education theory.

[He] outlined a critical theory of adult learning, introduced the concept of andragogy into the American literature, argued constantly for the social relevance of adult education, identified what he regarded as the distinctive method of adult education, and defined what he felt to be the proper curricular domain of adult education. (Brookfield, 1984, p. 186)

"A clear connection is established from the research to practice of andragogy, with andragogy . . . to learn and the study of human resource development and adult education theory, processes, and technology" (Cooper & Henschke, 2004, p. 2). With the foundation laid, Knowles served as the conduit to bringing andragogy concepts to the forefront of education and learning thought. "From the mid-thirties onward, [Malcolm

Knowles] had had a career in adult education that was unparalleled in its scope, variety, and influence" (Knox, 1996, p. 26).

Education focuses historical and theoretical knowledge while training focuses using knowledge, skills, or attitudes to perform a job (Milano & Ullius, 1998). "The contextualist paradigm assumes that what people think and how they think emerges from people's transactions or interactions with their social and historical contexts" (Allman, 1983, p. 110). "In the andragogical approach to education, the experience of adults is valued as a rich resource for learning" (Ingalls, 1976, p. 151). Henschke (1998) understood the importance of congruency, "Students learn more from our actions than our words. They want to see if our actions match our words" (Henschke, 1998, p. 12). Adults "resent being treated with a lack of respect, being talked down to, being judged, and otherwise treated like children" (Ingalls, 1976, p.140). This has become the expectation for many learners because of past traditional educational experiences.

"To be effective, an adult educator needs to have trust in the ability and potential of learners (emerging adult educators) to understand the learning process and make the right choices" (Henschke, 1998, p. 12). Adult educators tend to succeed when they are genuine, allow mistakes, and are open to the educational contributions of the learners without judging. "It is not important for teachers of adults to appear as if they have all the answers, but it is helpful if they attempt to respond to all the questions and look to the learners for help in discovering some of the answers that they don't know" (Ingalls, 1976, p. 146).

Andragogy assumptions and process. The adult learner's experience is the best resource for learning (Draper, 1998). [The] differences in experience between children

and adults have at least three consequences for learning: (a) Adults have more to contribute to the learning of others; for most kinds of learning, they are themselves a rich resource for learning, (b) Adults have a richer foundation of experience to which to relate new experiences (and new learnings tend to take on meaning as we are able to relate them to our past experience) and, (c) Adults have acquired a larger number of fixed habits and patterns of thought, and therefore tend to be less open minded. (Gehring, 2000, p. 158) Knowles' theory as to how adults learn embraces six assumptions (1973).

- Concept of the learner As adults, we have a deep psychological need to be self-directing – to be perceived by others and treated by others as able to take responsibility for ourselves.
- 2) Role of the learner's experience Adults possess a greater volume and a different quality of experience than youths. It means that adults are themselves the richest learning resource for one another for many kinds of learning.
- 3) Readiness to learn when adults experience a need to know or be able to do something to perform more effectively in some aspect of their lives marriage, the birth of children, the loss of a job, divorce, the death of a friend or relative, or a change of residence.
- 4) Orientation to learning adults enter an educational activity with a life, task, or problem-centered orientation to learning. Hence, their learning is for immediate, not postponed, application.
- 5) Motivation to learn in adults much more internally oriented (self-esteem, confidence, recognition by others) than externally oriented (chance for promotion, change of technology)

6) Why learn something – adults have a need to know a reason that makes sense to them, as to why they should learn some particular thing, rather than because the teacher said so. (p. 119)

Knowles (1973, 1995) provided insights into specific process steps he claimed as theory into how adults learn. "Sequentially, they are preparing the learner, establishing a physical and psychological environment, having a mechanism for mutual planning, involving the learners in diagnosing their own learning needs, formulating their own program objectives, designing their own learning plans, helping the learners carry out their own learning plans, and involving the learners in evaluating their learning" (Knowles, 1973, 1995). A deeper dive into some more detailed examples of Knowles' eight process steps is as follows:

- Preparing the learners for the program learners become informed on the contents of this experience, generally how it will be conducted, and the general process of each segment building upon the previous element.
- 2) Setting the climate a climate to learning is a prerequisite for effective learning. Two aspects of climate are important: physical and psychological. Physical climate needs to be comfortable bright, colorful, and exciting. The psychological climate for learning needs to be infused very deeply with support, mutual respect, pleasure/fun, humanness, openness, authenticity, mutual trust, collaboration, and critical thinking.
- 3) Involving learners in mutual planning learners sharing the responsibility for planning learning activities with the facilitator. Research indicates that

- learners will be committed to a decision or activity to the extent they have had a say in planning and designing what is to be done in the learning activity.
- 4) Diagnosing their own learning needs learners can share in small groups what they perceive their needs and interests to be regarding the acquisition of knowledge, understanding, skill, attitude, value, and interest (KUSAVI) in this learning experience. The needs include such things as growth, like movement toward: wholeness, perfection, completion, justice, aliveness, richness, etc.
- 5) Translating the learning needs into objectives KUSAVI principles regarding expanding their horizons in things like autonomy activity, objectivity, enlightenment, large abilities, many responsibilities, broad interests, altruism, self-acceptance, integrated self-identity, focus on principles, deep concerns, originality, tolerance for ambiguity, and rationality.
- 6) Designing a pattern of learning experiences this plan (mutually designed by the leaders and the participants) will include identifying the resources most relevant to addressing each objective and the most effective strategies for utilizing these resources.
- 7) Helping adult learners manage and carry out their learning plans learning contracts are among the most effective ways to help learners structure and conduct their learning.
- 8) Evaluating the extent to which the learners have achieved their objectives finding out what is really happening inside the learners and how differently they are performing in life. (Knowles, 1973, 1995)

Andragogy universal impact. "Most of what is known about learning has been derived from studies of learning in children and animals" (Gehring, 2000, p. 156). Due to this fact "Knowles (1972) and Ingalls (1976) declared that there is a growing interest of many corporations in the andragogical education process, with managers functioning as teachers" (Cooper & Henschke, 2004, p. 5). Andragogy has been used to "designate different strategies and methods that are used in helping adults learn. . . . [or] suggest a theory that guides the scope of both research and practice on how adults learn, how they need to be taught" (Cooper & Henschke, 2004, p. 5). Some think of andragogy as "techniques for teaching adults . . . some think of it as a scientific discipline that . . . [can] bring people to their full degree of humaneness" (Cooper & Henschke, 2004, p. 5).

"In the current global economic downturn, people and societies are in crisis. A series of economic, political, and social crises have resulted in personal loss and makes past thinking about critical competencies (knowledge, understanding, skills, attitudes, values, and interests required to adapt) obsolete" (Isenberg & Glancy, 2011). Due to this fact training platforms and methodologies are being completely re-evaluated in order to produce more effective strategies and desired results. Effective training provides a foundation that enables participants to perform the behaviors designated in the objectives for the training, which in turn should directly correlate to the desired result on the job or in life" (Milano & Ullius, 1998). In efficient training the content and learning activities are as straightforward and uncomplicated as possible, so the learner's energy will not be drained unnecessarily (Milano & Ullius, 1998). "Engaging training grabs the learners and brings them directly into the learning process" (Milano & Ullius, 1998).

Andragogy implementation guidelines. It is important to attend to the needs of the adult learner when guiding the practice of teachers of adults (Henschke, 2011b). "By being flexible and willing to adapt to the needs of the adult learners, the instructor can be a motivating force in the classroom, rather than a hindrance and demotivator" (Patterson-Mills, Chavaus-Turnbull, & Helvey, 2011, p. 1). "If the learner sees no connection between the job/course and the activities, that person will very likely lose interest and not succeed in the class" (Patterson-Mills et al., 2011, p. 1). It is unlikely that learning will take place when repetition without purpose is used with adult learners (Patterson-Mills et al., 2011). "Some people exposed to an andragogical educational experience for the first time are uncomfortable with the relative reduction of formal structure and the increase of personal choices" (Ingalls, 1976, p. 151). These thoughts triangulate with other research data that concedes most adults go into training believing they will be treating like a child in a subservient position. The seven key factors found in learning programs that stimulated adult development are as follows:

- An environment where students feel safe and supported, where individual needs and uniqueness are honored, where abilities and life achievements are acknowledged and respected.
- An environment that fosters intellectual freedom and encourages experimentation and creativity.
- 3) An environment where faculty treat adult students as peers, accepted and respected as intelligent experienced adults whose opinions are listened to, honored, and appreciated. Such faculty members often comment that they learn as much from their students as the students learn from them.

- 4) Self-directed learning, where students take responsibility for their own learning. They work with faculty to design individual learning programs which address what each person needs and wants to learn in order to function optimally in their profession.
- 5) Pacing, or intellectual challenge. Optimal pacing is challenging people just beyond their present level of ability.
- 6) Active involvement in learning, as opposed to passively listening to lectures. Where students and instructors interact and dialogue, where students try out new ideas in the workplace, where exercises and experiences are used to bolster facts and theory, adults grow more.
- 7) Regular feedback mechanisms for students to tell faculty what works best for them and what they want and need to learn, and faculty who hear and make changes based on student input. (Billington, 2000, p. 2)

Andragogy Debunking Current Accepted Training Practices

As sequence approach to education and training is very helpful for adults. Ingalls (1976) described it as a "sequencing of learning activities into developmental tasks so that the learner is presented with opportunities for learning certain topics or activities when he is ready to assimilate them, but not before" (p. 142). "There is also some evidence in education that straight factual, descriptive, or explanatory material may be learned by direct absorption through the lecture, whereas principles and concepts may be best learned by group-participation learning/teaching techniques" (Henschke, 1975, p. 3). Lectures can be a good way to present much new information in a short time, but "the results have been questionable as to how much of that information is retained and

internalized by the audience. It has been continually cussed or discussed; perceived as dull, boring, and a waste of time" (Henschke, 2011a, p. 1). "Thus time has made it so hallowed that many people have confused the lecture and learning/teaching as being synonymous" (Henschke, 1975, p. 1). The lecture can be used to great advantage in some situations when the learners are unfamiliar with the new information, but criteria for using a lecture should include the following:

(a) the more the instructor knows about the subject at hand and the less the participants know about it, the more appropriate the lecture would be, (b) the more knowledge and experience the group has with the subject, the more a group participation technique should be considered in place of the lecture, (c) if the size of the group is over twenty persons for any one activity and no smaller groupings can be used, the lecture should be considered, and (d) the lecture can deal with more facts in a shorter time than any other technique. (Henschke, 1975, p. 3)

According to Henschke (2011a) there are four distinct living lecture techniques called "listening teams" which can be established to engage the audience. These listening teams include: a clarification team, a rebuttal team, the elaboration team, the application team (Henschke, 2011a, p. 1). Henschke (2011b) describes five major building blocks in getting adult educators ready to facilitate adult learning. The building blocks include: "(a) beliefs and notions about adult learners, (b) perceptions concerning qualities of effective teachers, (c) phases and sequences of the learning process, (d) teaching tips and learning techniques, and (e) implementing the prepared plan" (Henschke, 2011b, p. 1). While each unique approach to adult education may be well founded, sound, reasonable, rational, logical, justifiable, or defensible, Henschke (1998) explained through his

observation in almost a quarter of a century of preparing adult educators to help adults learn, that "the validity of teaching ultimately derives from a single element: modeling" (Henschke, 1998, p. 14).

Andragogy implications in sales. "Organizations that value employee's learning can expect to be more competitive in the marketplace" (Vatcharasirisook & Henschke, 2011, p. 2).

When supervisors have a high level of empathy, a high level of trust, or a low level of insensitivity toward subordinates, they inspire their subordinates to take time to explore and learn new materials and they also increase employee's job satisfaction and intention to continue working with the company. (Vatcharasirisook & Henschke, 2011, p. 2)

"In contrast, in learning programs where students feel unsafe and threatened, where they are viewed as underlings or life achievements not honored, those students tend to regress developmentally, especially in self-esteem and self-confidence" (Billington, 2000, p. 2). These findings seem to indicate the "lack of value in many 'canned' or packaged learning programs. With an andragogical approach, each learner inevitably becomes his or her own curriculum designer" (Ingalls, 1976, p. 151).

By moving away from the pedagogical or traditional approaches to conducting learning, employers may be actively participating indirectly in other aspects of learning that could influence employee morale and employee engagement allowing for additional tangible benefits within their respective organization. Adults already know how to read, write, do arithmetic, and speak to groups. Their "developmental tasks are increasingly

related to the social roles that form their immediate concerns: working, living, raising a family, and enjoying art, music, recreational activities, and so on" (Ingalls, 1976, p. 151).

Table 2 (Knowles, 1973, p. 119) depicts the assumptions of the adult learner and the disparate nature between youth learners and adult learners regarding the suppositions and designs of education programs.

Appendix K provides an updated perspective cited by Knowles (1995), which provides an expansion of the material contained in Table 2. Table K21 has the added assumption of motivation and a deeper discussion of the process elements.

Summary

In this chapter, several topics were discussed that relate to a study that investigates the application of andragogical principles to corporate medical sales training. To properly explore this topic some preliminary and baseline understanding needed to be understood. Several foundational concepts were discussed and systematically moved in thought from general to specific in nature, building upon the previous section's thoughts.

Contained within these sections was a theoretical snapshot of how the majority of current corporate medical sales training structure is composed and highlighted the reasons why some of the formatting choices are made. Assessments noting the external pressures influencing the current structure such as government regulations, industry standards, and learner proximity to teachers were explained, which in turn mapped some key concepts that are used as predictors of success, whether rightly or wrongly.

Table 2

A Comparison of the Assumptions and Designs of Pedagogy and Andragogy

	Assumptions			Design Elements	
	Pedagogy	Andragogy		Pedagogy	Andragogy
Self-Concept	Dependency	Increasing self- directedness	Climate	Authority-oriented Formal, competitive	Mutuality, respectful, collaborative, informal
Experience	Of little Worth	Learners are a rich resource for learning	Planning	By teacher	Mechanism for mutual planning
Readiness	Biological Development Social Pressure	Developmental Tasks of social roles	Diagnosis of needs	By teacher	Mutual Self- diagnosis
Time Perspective	Postponed Application	Immediacy of application	Formulation of objectives	By teacher	Mutual Negotiation
Orientation to Learning	Subject Centered	Problem centered	Design	Logic of the subject matter Content units	Sequenced in terms of readiness Problem Units
			Activities	Transmittal Techniques	Experiential techniques (inquiry)
			Evaluation	By teacher	Mutual re-diagnosis of needs Mutual measurement of program

Note. From Knowles (1973, p. 119).

The second set of topics within the chapter introduced the concept of andragogy, its biggest supporters and detractors, and the main ideas of the framework of thought. The andragogical ideas were presented in the context of one learning model of several models that aims to yield desired results in learning. By positioning andragogical concepts in this factual context made it easier to measure if the current practices and ideologies described in the previous section were already a mirror image of the andragogical concepts and framework, closely aligned only on certain points, or completely in contrast to the principles of andragogy.

By understanding both main topics, corporate medical sales training and andragogy theory, a better understanding of how to infuse the two topics together to ultimately help the learner in this space is possible. From this understanding several paths such as protocols, design prototypes, or application guidelines could be introduced. In the following chapter a methodology for determining how do corporate medical sales training models align with the principles of andragogy is introduced.

Chapter Three: Methodology

Within this chapter, I provide a discussion of what type of research was utilized, and the major components of the specific design of the research. Moreover, I describe what type of organizations the interview candidates were selected from, in terms of scope and size, as well as some insight into some precautionary measures introduced within the study design to mitigate potential litigious risks. Lastly. I show the procedural steps for a similar study design duplication, and for general transparency, accountability, and validity.

As corporate demand for effective training increased there was a growing concern that medical sales representatives were not receiving an adequate amount of training to be equipped to sell their products and services after partaking in the sales training process. From this concern the research question emerged, 'How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?' Sub-questions include:

- 1) Can a corporate medical sales training program be designed that applies andragogical principles?
- 2) How does andragogy inform medical sales training?

Action Research

The research methodology that seemed, to this researcher, most appropriate for this study was action research. Action research, or collaborative inquiry, pursues both the practical concerns of people in an immediate problematic situation and intends to further the goals of social science simultaneously, and therefore tends to be cyclical in its sequence, participative in its research approach, qualitative in its language, and reflective

in its outcomes (Dick, 2000, p. 2). A qualitative design and action research approach was utilized to search for indicators of principles of andragogy in then-current corporate medical sales training models and to design a prototype corporate medical sales training program that conceivably aligned with andragogical principles. Action research was most useful for this study, because it allowed me to generate an organized approach to evaluate and conceptualize then-current medical sales training practices, while allowing for flexibility to envision and create a prototype medical sales training model for the advancement of knowledge in the field and to help solve perceived problems with tangible effects. With its non-constricting approach, this methodology allowed me to be proactively responsive to the emerging needs presented in the study findings. It seemed to this researcher, that moving from a content design to a process design would be beneficial in learning how to duplicate and sustain best practices for medical sales training practitioners.

Research data was very light at best on providing a linkage between how to actually apply or integrate andragogical principles into corporate medical sales training environments. Since little research data was known about implementation protocol or process steps of converting theory to practice, I felt it was especially necessary for me to provide a vantage point consistent with allowing others to evaluate the data and determine conclusions, based on what would make the most sense for their particular situations, business needs, and/or corporate missions.

Promoting a systematic process for evaluation was critically important in determining the best way to answer the research questions, while holding fast to the

corporate business sales style of receiving information in an organized and structured format.

The research employed stratified purposive sampling, which illustrated characteristics of particular subgroups of interest and facilitates comparisons between them (Stratified Purposive Sampling, 2001, p. 1). This method seemed to be the best fit for this particular research study, since the sought after participants were corporate medical sales trainers, which was a subset of sales trainers; which was a subset under the larger population of trainers in general. Also, the snowball sampling technique was undertaken to develop a research sample where existing study subjects recruited future subjects from among their acquaintances (Inglis, 1997).

An open-coding design was utilized to analyze the data, which was the process of breaking down, examining, comparing, conceptualizing, and categorizing raw data. In open coding, incidents or events are labeled and assembled together through constant comparison, to form categories and properties (Moghaddam, 2006, p. 5). From there, axial coding was used to inductively and deductively think about the categories appropriate for the grouping of the data. The main categories of data collection were loosely grouped into concepts of (a) Fit – how closely did the concepts fit together; (b) Relevance – dealing with real concerns; (c) Workability – explaining the problems being solved; and (d) Modifiability – alterations commenced when new relevant data became available.

Interpretative Inquiry

Interpretative inquiry could have been chosen as a qualitative methodology to answer the research question, 'How do corporate medical sales training models current at

the time of this writing align with the principles of andragogy?' This methodology did not simply stop with describing the then-current topic of interest; but also supported evaluating how the topic came into being and how various individuals felt about the then-current topic, whether they were in agreement with the status quo related to the topic of interest, and what it all meant in the broader context. Ultimately, this research methodology was not chosen because by definition action research fit better with the goals and strategies in the broader context of the research goals and mission, as it related to the impact on the medical sales training industry.

Participants

All participants interviewed must have had medical sales training experience at a leadership level at some point within their career as a pre-requisite to partake in the study. All of the participants in the study held one of the following titles: National Sales Trainer, Manager of Sales Training, Associate Director of Sales Training, Vice President of Sales Training. Some participants held responsibilities, such as Field Sales Managers or Product or Marketing Managers, before obtaining responsibility in training. Other participants were regional field trainers before stepping into their training role.

Location

Twelve interview participants collectively represented and performed work for mid-sized and large Fortune 500 pharmaceutical, medical device, biotechnology, and diagnostic organizations with multi-billion dollar annual revenues, domestic and international presence, and tens of thousands of employees. The largest organizations had over 100,000 total employees apiece and the mid-sized organizations had

approximately 10,000 total employees apiece. Locations are not provided in this report, in order to maintain anonymity for the companies involved.

Each organization had several departments, or business units, categorized by product segment. Each organization was actively involved in launching new products to market then-currently and in the near term future; and all of the organizations were actively involved in research and development activities to sustain the organization over the long term. Moreover, several of the organizations received national industry awards in the year or previous three years of this research project for being recognized as a best organization to work for, or providing superior growth potential relative to their peer organizations. The corporations represented in this study had headquarter locations spanning the entire nation. The majority of the corporations represented were located in the upper east coast region, with some residing within the Midwest region, and the remaining located in the Western region of the United States.

The majority of the organizations offered publicly traded stock and were subject to all of the rules and governing bodies associated with filing legitimate disclosures, financial obligations, and business dealings to then-current and potential stakeholders. Many of the study participants were also involved as members or officers in networking organizations or non-profit skill building organizations geared towards providing mentor/mentee relationships or general collaboration workshops.

Data Collection and Analysis

In order to collect the research data, I employed individual interview techniques and then-current and past field sales and training observations. Answers to the interview questions were coded into four main categories and by position title, with identifiable

information removed and outlier responses acknowledged. These categories included (a) forward looking and general information, (b) demographic and foundational information, (c) sales training environment information, and (d) identifying adult learning principles. I then sifted and extracted interviewee recognized and unrecognized andragogical principles in then-current or desired sales training platforms, from the answers given and utilized the responses to answer the research study questions. Areas of concern from the interviewees were also identified, in order to add to the general body of knowledge, present vital findings as recommendations in a receptive fashion for future audiences, and to develop a prototype corporate medical sales training model curriculum design.

A qualitative deductive content analysis was performed to catalog emerging themes from the data and interview answers. "Content analysis is used to determine the presence of certain words, concepts, themes, phrases, characters, or sentences within texts or sets of texts and to quantify this presence in an objective manner" (Palmquist, 1980, p. 1). A perception was deemed to be a theme if at least 50% of the interviewees responded in similar fashion to any particular question or section of questions. Content analysis was also used to determine the big picture of the verbal, behavioral, and latent data collected, to evaluate what may have been inferred or implied, in order to ascertain the important messages presented or to make sense of the findings.

Procedure

I developed open-ended, informal, structured interview questions as the primary means of collecting new data (Appendix A). Interview participants were invited to participate in a research study via email or regular U.S. mail with an information letter included (Appendix B), and then were asked to provide a consent letter (Appendix C) to

confirm their willingness to participate in the study. Some interview participants were engaged through a phone call to gauge interest in participating in the research study. A verbal declaration was also provided explaining how a consent letter would follow via their choice of email or regular U.S. mail, should they indeed decide to participate in the study.

One-on-one interviews were scheduled with each participant. All participants received the same set of interview questions. Interviewees were informed that the interview was designed to last approximately 45 minutes, and that ultimately the length of the interview would depend on the length of the answers provided. Several interviews lasted over 60 minutes due to the robust answers provided by the study participants, and one interview did not last the projected 45 minutes, due to the succinct nature of the answers provided. Each participant consented to be audio-recorded. A digital audio recorder device was used to audio record the interviews.

To describe their lived experiences as a facilitator of learning, participants were encouraged to relax and concentrate on any memories, field notes, emails, reports, presentations, training manuals, curriculum, and/or public information they read, wrote, developed, collaborated, or revised as resources, to help guide their thoughts in answering the research questions. Recorded answers were transcribed. Participants were sent their transcribed interview responses to verify and confirm the answers provided. The interviewees were provided an opportunity to add, subtract, or modify in any way their interview. This step was intended to provide transparency, accountability, and objectivity by allowing the opportunity to correct any real or perceived errors, or provide greater context to the subject matter the participant may have felt was lacking. The

interview participants were also reminded of their opportunity to withdraw any or all of the answers provided without reprisal. None of the participants were provided compensation or any other benefits for their time or knowledge exchange. No future compensation by any means was promised to any participant.

I explained to the participants that there was a chance that providing opinions on corporate strategies could be a potential violation of non-compete and/or non-disclosure corporate policy. Even though any litigious action was doubtful, participants were encouraged to review any or all corporate policies relevant to this topic and only proceed forward as a participant in the study if a reasonable amount of comfort existed; as I would not be responsible for any action arising from real or perceived violations of corporate policies unknown to me. After attempting to gain clarification of an internal policy regarding providing corporate information to third parties, one respondent was not clear that the scope of my research project was in line with what was acceptable to the employer's policy. Therefore, unsatisfied with the answers provided from the employer as to the risk level encountered by being affiliated with my study, the respondent decided to withdraw after initially deciding to be interviewed and providing answers to the openended survey questions.

Another participant withdrew information after conducting a full interview, and cited not wanting to have exposure to consequences from disclosing personal thoughts that contradicted the group thought of the organization represented. Along this topic I expressed that the interview questions were structured to access participant general knowledge from experience; and not an attempt to ascertain detailed confidential intellectual property, competitive intelligence, or corporate strategy. The only goal of the

research was to create a reservoir of knowledge from experienced professionals in the corporate medical sales training field and (a) identify andragogical principles from the research question answers, if any, (b) identify areas of concern from the interviewees, and (c) add to the general body of knowledge by presenting findings and recommendations from the research in a receptive fashion to the identified audience.

The following statement appeared on the participant consent forms: "All information obtained in the interview will remain confidential. You will not be identified by name, nor will the date be presented in a manner that will allow for the identification of any participating individuals. The results of this evaluation may be presented at scientific meetings and in published reports for educational, policy, and scientific purposes."

There were 29 interview questions with one open ended follow up statement at the end of the 29 questions. Interview questions were sub-divided into similar categories and outlier responses were identified. Answers were analyzed, coded, cross-referenced, and compared to andragogical principles. Evaluations, re-evaluations, and reflections were performed with each recorded interview, to allow the researcher to become acquainted with the research data and adequately prepare to disseminate the information in the appropriate fashion for this project.

Summary

This chapter set up the structure and guidance to best answer the question, 'How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?' Also, this chapter aimed to set up the structure and guidance to best answer the sub-questions:

- 1) Can a corporate medical sales training program be designed that applies andragogical principles?
- 2) How does andragogy inform medical sales training?

The definition of action research within the qualitative design process was explored and shown how it provided the best solution and was most useful for illustrating the purpose of the study. An exploration and assessment through interpretive inquiry research design was evaluated for potential use as a research methodology strategy. This research design proved to have merit for this type of study, because it demonstrated it could provide context to the research topic by giving some history to the topic, allowing for a human appraisal of current processes, and leaving room for commentary and suggestion for improvement techniques leading to substantive and sustainable change moving forward. Ultimately however, interpretive inquiry as a research design was not chosen because action research better fit the overarching goals and mission of the study's broader context, and hopeful meaning, to the entire medical sales training space and general body of knowledge in the education vertical. Next, the background of the study participants and the types of organizations they represented was uncovered. Finally, the detailed procedural steps of the research design were revealed to give insight as to how the data were collected and under what terms.

Chapter Four: Presentation of Data

Introduction

In this chapter, I present the research data. To determine answers to the main research question, 29 interview questions plus one elaboration statement were posed to 12 qualified individuals, with responses to be analyzed, evaluated, correlated, and compared. Sub-categories were formulated to organize the data in a systematic way. The method used for placing each of the interview questions under four sub-sections was process-driven and non-scientific. I thoughtfully and purposefully looked for similarities between each research question and each interview question, based on the literature and my own experience and intuition. Out of the main research question come the two research sub-questions. All of the research data was then categorized into emerging themes based on similar interview answers to similar interview questions.

Research Questions

- 1) How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?
- 2) Can a corporate medical sales training program be designed that applies andragogical principles?
- 3) How does andragogy inform medical sales training?

Interview Results

Each interview took on its' own life. All of the participants stated before the interview that they had never been a part of a research study or any formalized review, as it related to their knowledge or position within medical sales training and were delighted to know the topic was being studied in a formalized, organized, and methodical approach

that would hopefully help several others in years to come. Several noted they appreciated my persistent nature, and unique approach in gaining access to them and other busy individuals within the industry. I got the general sense that everyone was truthful, and even the most reserved personalities were open in thought with the reassurance that their personal identifiable information would be withheld in the reporting of study results.

The general theme of the collective interviews was surprisingly one of frustration, vexation, and at times derision of the corporate medical sales training process; but also ironically and simultaneously a genuine sense of purpose in the attempt to help others achieve. Even though every interview was conducted one-on-one, after reading and interpreting the answers one may have thought that all of the respondents worked for the same company, in viewing how similar the answers were in describing the unspoken about internally, but known, deficiencies within their respective organizations. If one word could be used to describe their aggregate corporate medical sales training processes, platforms, and personnel, based on the research data from the interview, questions it would be 'lacking'. Several themes emerged that I defined to describe this general 'lack' in a more categorical and specific way; with supporting quotations from the interview answers and research data uncovered within the literature review on the sales training and andragogy topics, respectively. These nine emerging themes outlined could be used to encapsulate the collective thought of the group, where several stronger opinionated respondent answers were shared to add conviction to, generally, the same answers among the group thought.

Due to the nature of qualitative studies being extremely content and data rich, and taking into consideration the potential audience of business-minded individuals who may

view this data, several tables were created to condense the information to allow it to be viewed at a glance, for what would otherwise amount to dozens of pages of content depicting answers to the interview questions. Table 3 illustrates the demographic and foundational information gathered from the study participants to be able to allow the researcher to compare and contrast objective and strictly factual data, in order to determine context from respondent answers provided and based on characteristics, such as experience level and job title, etc. The hope in this was that the reader would be able to determine instantly if they, for example, only wanted to consider answers from respondents with 25+ years of experience, they would not have to sift through pages of data to know they should only entertain the answers from candidates 1, 7, 8, and 9. Table 4 depicts answers provided to interview questions related to the respondents' sales training environment. Information relevant to determining context was presented to add framework and perspective to the answers provided. For instance, by knowing that Candidate #1 reported training 500 people per year may provide insight into the reasons why Candidate #1 also reported 'survey feedback' as the answer to the interview question, 'How does your company measure success of the training group?' Making answers easily accessible, hopefully, would provide better entrance into which answers were most relevant to the reader deciphering the research data.

Table 3
Demographic and Foundational Information

Demographic Demographic Data	Years of Business Experience	Years Sales Training Experience	Immediate Preceding Job Title before Sales Training	Sales Training Job Title	Job Title of Supervisor	Achievement of Top 25% of Sales Results before Sales Training?	Any adult learning strategy, curriculum development, or instructional design experience before sales training role?
Candidate 1	25+	7	Sales representative	Director Sales Training	Executive Director Client Development	Yes	No
Candidate 2	21	6	District Sales Manager	Associate Director Hospital Sales Training	National Sr. Director, Sales and Marketing	Yes	No
Candidate 3	10	3	Sales representative	Sr. National Sales Trainer, Managed Care	Associate Director of Training	Yes	No
Candidate 4	20	8	District Sales Manager	Associate Director Sales Training	Director, Customer Development	Yes	No
Candidate 5	12	3	Sales Representative	Associate Director Field Sales Training	Sr. Director, Field Sales Training	Yes	Yes, was previously a high school teacher
Candidate 6	7	2	Manager, Technical Services	Manager Education and Development	Director Human Resources	N/A – never was a sales representative	No
Candidate 7	30	5	Sales representative	National Sales Training Manager	Director Sales Training and Development	Yes	No
Candidate 8	27	11	Sales representative	National Senior Director	Sr. VP, Sales and Marketing	Yes	No
Candidate 9	25	5	Sales representative	Sr. Director Biotech Sales training	VP, Sales and Marketing	Yes	No
Candidate 10	10	5	Sales representative	Sr. Manager, Training and Development	Director of Sales	Yes	No
Candidate 11	20+	8	Sales representative	Associate Director Sales Training	Director, Sales Training	Yes	No
Candidate 12	20+	8	Sales representative	Regional Sales Trainer	Regional Sales Director	Yes	No

Table 4

Sales Training Environment Information

Sales Training Data	Goal of Corporate Sales Training	Competencies and Characteristics of your organizations sales trainers	Number of individuals you train per year	How does your company measure success of the training group	Describe current sales model taught.	Cumulative revenue generated by sales reps you train
Candidate 1	Improve professional skills	In depth experience in the topic area	500 people	Survey feedback	Don't have a particular sales model	unknown
Candidate 2	Get the sales people to execute and sell	Ability to deal with ambiguity due to frequent business shifting.	300 people	By manager observation of field reps handle of objections and product knowledge	We technically have a model but don't use it because it was so ineffective.	\$550 million which is the sales forecast.
Candidate 3	To develop people from the moment they join the organization.	A sales rep with 2-6 years; good platform skills.	Somewhere between 200 and 300.	10 competencies we are evaluated on; which is an internal list.	I'm not sure I could describe that.	I have no clue. I am not sure how to answer that question.
Candidate 4	To train sales reps on product knowledge and business acumen	Sales rep who are highly competent around product disease state as well as business.	800 – 1000 people.	Evaluations and feedback after each program.	Attention getting openers. Probing questions to uncover obstacles. Deliver a message. Check in and probe. Close and ask for the business.	More than they pay me.
Candidate 5	Increase the capabilities of the sales reps.	A person who can coach, develop, inspire, and motivate people.	1500 people easy.	Baseline market share, and then how did that increase post-training to determine a ROI.	Business Acumen, creating customer engagement, adaptable approach, then closing the call.	We touch every aspect of the company and last year we generated \$3.5 billion, and I'm going to claim all of that.

Continued

Candidate 6	Grow total sales revenue.	We like actual sales experience	Approx. 50 people.	Increased gross sales.	We emphasize on finding the need of	I don't know.
		and a directive and fun personality.			the customer.	
Candidate 7	To prepare new hires to be successful in the field.	Successful sales reps from the field, who have built relationships within the corporate environment.	250 people.	Through surveys, evaluations, and the numbers.	Value centric selling.	The number is grand because of the amount of people we train. But, I wouldn't be able to answer that question.
Candidate 8	Increase the clinical and disease state knowledge of the field force.	Prior sales reps who are typically top producers.	300 people.	Through internal surveys and increased growth and sales.	Consultative sales and customer engagement.	\$3 billion annually because we spend so much time on clinical and disease state knowledge.
Candidate 9	Align the sales and marketing strategy from a design, delivery, execution, and people development to deliver business results.	Great communication skills and clinical expertise.	750 people.	Measured by opinions of marketing, sales, compliance, and regulatory and if their business needs are being met.	Sales reps need to have great business acumen and technical expertise.	The average territory of each of the 750 people generates about \$3 million dollars in sales.
Candidate 10	To grow the talent of the people working for us.	Extremely autonomous individuals who are creative and multi-task oriented.	305 people.	Sales performance at the individual level to see if they meet the annual operating plan.	Solution sales approach.	I don't know what that figure would be. I could take our annual sale and divide it, but that really wouldn't be fair. So I'm not sure, but a substantial amount.
Candidate 11	Increase the business effects by educating the sales reps on scientific and business acumen initiatives.	Excellent command and platform skills. Project management skills, and understanding curriculum design.	200+ people.	In risk reductions and compliance infractions with regards to delivering misinformation that comes back and becomes recorded.	Focused on reach and frequency against our targets.	\$500 million.

Continued

Table 4. Continued

Candidate 12	Make sure the employees have the understanding of product knowledge and how to reach their quotas.	Outstanding sales experience, product knowledge, and a desire to help others achieve their goals.	40 people.	Success is measured based on achieving quotas.	The sales model would be integrity, respect, and loyalty to the company.	\$30 million dollars.
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Table 5 portrays respondent answers to interview questions aimed at identifying andragogical and adult learning principles.

The goal was to demonstrate to the reader the answers from the interview questions in a logical and systematic approach, so they may also determine through their own analysis if the feedback was in line with expectations. All of the tables are designed to be utilized separately, as well as in conjunction with each other, to be able to quickly draw inferences, not only from the respondent answers, but also deeper context and meaning after re-considering the respondent answers through the filter of their experience levels, type of organizations, job titles, and previous sales experience, etc. By allowing the presentation of results to flow in this manner, the readers should be able to succinctly extract relevant data for their specific needs and timing.

Table 5

Identifying Adult Learning Principles

Identifying Andragogical Principles	How do you know when an individual you have trained actually understands?	How do you understand the trainee's motivation or readiness for learning?	How do you engage your trainees in the learning process?	Who plans your training agenda and what materials will be covered?	What activities are used to "practice" other than role playing.	Do you use role- playing?
Candidate 1	Mostly feedback from their supervisor.	We don't really assess that	Sales people tend to be more outgoing, more gregarious so there is less of any issue.	We typically have third parties do that for us.	Not applicable.	Yes
Candidate 2	Assessments, role-plays, and exams.	You can just tell. Once they pick up their blackberry you know they're not engaged.	You have to set up expectations first.	The trainers. They know what they need.	Assessments and audience response.	Yes. Role plays are painful, but are necessary.
Candidate 3	When I hear the person put the concepts into their own words	By their background. Whether they are a new hire, or recently promoted.	I think a lot of times we are providing them a lot of data and not necessarily translating that into what this means for you in your day to day life.	I do.	We do teachbacks. They teach it back to the room.	Yes.
Candidate 4	When they actually implement it.	They have been with the company for a year then they go to the next level of training. It's not necessarily built on their readiness for the next level. So, I would probably say that is a gap that we would need to probably assess better.	Making it a two way dialogue.	The trainers do.	We have the representatives create a business plan around what customers they should target and why.	Yes.

Continued

Table 5. Continued

Table 5. Continued			7.5	*** 1		••
Candidate 5	When they can recite the information.	I always check knowledge, skill, and motivation	It's totally the sales rep responsibility. They have to define success. They have to tell me the goal and why it is important.	We have an in house training department that builds the training and the trainers execute the training.	District Business Manager of field sales trainer pull though.	Yes
Candidate 6	We do assessments.	As we train, we stop and try to gauge if the reps are learning it.	We get them to understand why we do what we do first. The how we do it is probably not as important.	Our trainers bounce ideas off of each other.	Mock presentations.	Yes.
Candidate 7	Verbal Confirmation. Learning checks, success in the field, and role-plays.	Observation.	Question and answer sessions. Flipchart exercises.	Marketing. Sales VP's and directors, and the director of training.	Exercises and games.	Yes.
Candidate 8	Through testing and role-playing.	Through sales simulations and testing.	Through interactive role-play and simulation.	Collaborative effort between sales, marketing, medical, and sales training.	Through testing, individual learning projects where they write up a report back to their manager pertaining around that particular area.	Yes.
Candidate 9	We certify them at almost every training venue possible.	We always provide them with pre- work, so when they come to training they have a foundation.	With presenting and making sure they feel like they have a place to have open dialogue.	The individual trainers for that specific therapeutic area.	The training is only as good as the district manager that is going to pull it through in the field.	Yes.

Continued

Table 5. Continued

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Candidate 10	How they perform on their exams and asking good questions during classroom time.	In our interview process we screen for accountability, effective communicator, multi-task oriented, organized, and competitive. If they rank high, then that is an indicator they will perform well in training.	Class incentives, and point systems where winners received prizes.	I do.	They have to go in a pull reports and input data into their own system to demonstrate learning.	Role playing is arduous but it is the best way at getting comfortable with any subject.
Candidate 11	When they are able to teach it.	By understanding their command skills and the way they own the information.	Allowing the learners to break down a case study and give the information back.	Cross functional teams made up of sales leaders, compliance, trainers, and 3rd party consultants.	Gaming situations and case study scenarios.	Yes.
Candidate 12	Inspect what you expect through field activity rides.	Body language.	Show them this is the way we do it by role playing.	Corporate training department.	Field rides with employees.	Yes.

Emerging Theme: Deficiency of Education Acumen

As it related to education acumen, the research consistently demonstrated a significant gap between practitioner's skill sets and the job function, as described in the requisition for the role (Appendixes D-I), or identified in the duties of the job. The majority of interviewees answered, "no," to the research question, 'Did you have any adult learning strategy, curriculum development, or instructional design experience previous to your medical sales training position?' However, when asked the interview question, 'Who plans your training agenda and what materials will be covered?' the majority of interviewees answered, "I do as the trainer."

Candidate #2 answered, "My trainers come up with that. They know what they need." Candidate #6 added,

It's a group of three trainers. We sit down and try to go through together our goals for each training session, and then we work backwards from those goals to how we are going to get it. We kind of bounce stuff off of each other, as far as ideas and that sort of thing.

Moreover, a few interviewees stated that their organization outsourced the development of training to third-party developers. This fact may conceded that on some level the organization realized the trainers were not fully equipped in some capacity to handle the training for their organization. After describing that the trainers planned the agenda for their organization, one interviewee expressed sentiments around the notion of third-party vendors handling training content for the organization. Candidate #4 expressed,

You have to have a level of commitment to it as opposed to the way it used to work when someone behind the scenes would create what you are going to be delivering

and then you go deliver it. Now, the trainers are usually involved from the inception of the project and that's when you heard me talking earlier about national responsibilities around innovation. So, they have a level of responsibility and the trainers are a big part of developing the content now, which is good in my opinion.

After identifying these answers to the questions, it would be reasonable to ask how the trainers were given authority and autonomy to develop curriculum and instructional design content for multi-million and multi-billion dollar organizations, without any training in how to actually develop curriculum and instructional designs for adult learners. Deficiency in education acumen may be an understatement upon examining the particulars.

Emerging Theme: Dearth of Competent Trainers

Through my experience in medical sales, I have perceived a drought in competence for several organizations for the role of medical sales trainer. This ignorance was not a defamatory statement, rather a practitioner's concern over the level of impact this produced collectively. When asked the interview question, 'What are the competencies and characteristics of your organization's sales trainers?' not one interviewee listed synonyms or described anything correlating to adult learning principles, except the individual interviewee who had been a teacher in a previous role. Literally, the actual words training, development, learning, teaching, coaching, and leadership, or similar words, did not surface among this qualitative research, from the field practitioners' interviewees, except from the sole person with a teaching background. This may seem surprising to those in the field of education or another field, until realizing that the answers to the interview question, 'What was your job title and duties

immediately previous to your sales training responsibilities?' produced a consistent answer of "sales representative" solely. Candidate #3 described his experience immediately previous to becoming a sales trainer by stating, "I was an account manager and called on managed care organizations, government, and public and integrated health accounts for the vaccines division." This individual was from the pharmaceutical space.

Candidate #7 described his experience before becoming a sales trainer by stating, "I was in sales. I was an account manager, and my responsibility was to bring on new business and take care of an existing book of business." This individual was from the diagnostic space.

Candidate #10 described his experience before becoming a national sales trainer as "a field representative, selling medical devices to physicians."

As it related to training adult learners, anyone not taking interest in the vocation may be considered novice. Instead of describing competencies that at least may be found on a job requisition, the interviewees began to describe their perceptions of the overall background they routinely observed to step into a sales training role within medical sales. Additionally, the interviewee answers started to look similar, irrespective of whether the interviewee was from the field of pharmaceutical, biotech, medical device, or diagnostic sales.

Candidate #3 answered the interview question by stating,

Typical characteristics are people who have been reps from anywhere from two to six years, and maybe even more. I think that a lot of people were successful in the sales role. From a competency/characteristic piece, they come in with good

platform skills and are very good presenters in front of the room and are very, very clinically strong.

This individual was from the pharmaceutical space.

Candidate #4 described the competencies of sales trainers as "highly competent around product disease state as well as business. Most of them aren't boring people. I wouldn't call them flowery, but they like to be on stage." This individual was from the pharmaceutical space.

Candidate #6 answered, "We like for them to have some actual sales experience, and look for a directive or outgoing personality." This individual was from the medical diagnostic space.

Candidate #7 answered, "Successful sales reps from the field. They need to be able to write programs. They need to have built relationships within the corporate environment and have communication skills." This individual was from the medical diagnostic space.

Candidate #8 answered, "They need to have been prior sales representatives that were typically top producers within the sales organization. Their backgrounds are pretty much varied between medical and business." This individual was from the pharmaceutical space.

Candidate #9 stated, "Some of the critical must have competencies are that they have to have great communication skills, clinical expertise, refined technology skills, and [must have] very high influencing, probing, and asking skills." This individual was from the biotechnology space.

Candidate #10 stated,

They need to be multi-task oriented and adaptive since many things come on the fly. Also they need to be strategic and resourceful. Because we are a large company, many times we have resources across function and people need to figure out how to obtain those resources as opposed to recreating the wheel.

This individual was from the medical device space.

Candidate #12 answered, "They need to have outstanding sales experience, product knowledge, and a desire to help others achieve their goals." This individual was from the medical device space.

Candidate #2 answered,

First, you would absolutely have to have a flexibility and ability to deal with ambiguity because the business changes and shifts so quickly. So the trainer would need to be able to change on a dime. It is possible to be analytical, but you are going to have to just let certain aspects of that go.

This individual was from the pharmaceutical space.

The model collectively used in corporate medical sales training was consistent with the answers provided from the interviews, and represented a glaring gap in the overall perception and efficacy of training, as a whole. Without an understanding of adult learning principles the inherent problem may not have seemed obvious to then-current practitioners.

Candidate #5, with the teaching background, may have provided insight into this notion when answering the question, 'If you could change anything you wanted about your corporate medical sales training environment, what would it be, and why?'

Candidate #5 proclaimed,

I think that people don't really understand the significance of training because you typically take someone who was in sales on yesterday and put them in training on the next day. And, the only training that they have to do their job is what somebody else told them. So, very rarely do we have training experts in the training department. But they are considered expert because maybe they have done a certain sales job for ten years. But, they have not done any outside research on training or adult learning. They have never been in education before. So, yesterday they were a sales person knocking on doors and today they are a trainer. So how can we get people who have both backgrounds is the ultimate question?

This statement becomes even more profound and impactful when considering the reach and influence of the trainers, as a whole. Candidate #8 mentioned,

I'm responsible for the training and development of the entire United States field sales force, leadership, marketing, and managed market account teams and support Canada and Latin America in terms of sales force development as well.

Straightforwardly, Candidate #8 had influence over the training and development of sales representatives for an entire continent, without the experience of curriculum development, instructional design, or adult learning theory.

Emerging Theme: Privation of Outcome Measures

According to the collective interviewees, measuring training results was relegated to being described as a soft skill, without the ability to produce meaningful tangible data results. "Training by far is one the most difficult functions to accurately measure,"

explained Candidate #9. However I would submit that difficult was not synonymous with impossible and did not mean that accountability should be abandoned.

In describing how the interviewee's organization measured success, the answers that continued to surface could fit with one of the four following answer statements:

- Any form of survey feedback from the medical sales representatives that took part in the training,
- 2) Manager benchmarking and assessments on representative performance, objection handling and product knowledge within the field,
- 3) Baseline verbalization or role-playing assessments and monitoring improvement on top of that baseline, and
- 4) Evaluation of the sales numbers in relation to the sales goals.

Emerging Theme: Sparse Technology Training Efficacy

Technology in training surfaced most often in the area of measuring training outcomes, as it was a modality that was easy to record, track, and measure with regard to performance. It was easier to show a test score or that a learning management system produced and generated a training result on a certain date and time. This process also made it easier to disseminate results quickly to a multitude of people or departments and show results to senior leadership or other stakeholders, as it related to trying to figure out if there was any return on the invested time or invested resources the training department utilized. As a medical sales professional, I witnessed sophisticated learning management technology systems and platforms with the capabilities of monitoring and tracking training results across the organization. These systems did a great job in providing data to show completion of training from a compliance standpoint and to help the organization

produce documentable results that would have notable value in defending against litigious scenarios or producing document holds for similar matters. It is hard to classify this technology as a meaningful tool for learning; however, just at face value, as many answers may be manipulated to produce the desired result, which may not be proof that subject matter learning occurred, but rather an understanding of how to modify business systems to produce desired results to save time or move one to higher perceived priorities.

For example, in a 20-question multiple choice test scenario where 90% was the stated passing requirement, 18-out-of-20 questions were needed to pass. The test may continue to be taken until passed an unlimited number of times. If a sales representative received 11 questions right on the first try for a score of 55%, he could receive that score, review all of the incorrect and correct answers provided by the learning management system shortly thereafter, and immediately take the exact same test and pass with a 100% score and continue to move forward onto the next test. It was widely known, and therefore accepted, as standard practice of how to manipulate this 'learning' tool. An argument could be made that what was learned was how to save time in technology systems to move on to other priorities, rather than actually being able to readily recall the content presented for a future appropriate scenario. Moreover, some systems have mechanisms that allow the learner to fast forward through significant content and advance to the test taking or assessment page promptly. The sales representative then could simply fail the test intentionally, be endowed with the correct test answers from the system, and magically submit the correct answers to satisfy the requirements of the learning management system, and save significant time in the process to yield back to

more highly designated priority items. These potentially false markers could provide an improper baseline for assessments, since it is most often used for home-study training within several medical sales sectors and verticals.

When asked, 'How do you understand the trainee's motivation or readiness for learning?' as one of the questions in the interview study, Candidate #9, a Vice President of Sales Training, provided the answer,

We always provide [the sales representatives] with pre-work, so when they come to training they have a foundation. We are not going to spend time in any kind of live training event re-teaching content that they should get a baseline with in a home-study format. So, we do built in assessments and knowledge checks, and they have to complete those previous to coming to the live training. It helps us get a gauge based on how they perform on those assessments, before the live training.

This approach is noble as an adjunct to live training and should be evaluated if it should merit as much weight as assessing comprehension when the technology can be manipulated, so easily.

Emerging Theme: Sales Model Ineffectiveness

Simply put, several interviewees could not vocalize or describe what sales model they were incorporating into their everyday training plans. This topic posed a significant disconnect and challenge to this research, as no assessment of a sales model could be employed or deployed, due to unawareness of the sales model or the non-existence of a sales model. These facts, in and of themselves, produced data and may have uncovered another gap in education acumen of the corporate medical sales trainers. The most hopeful attempts at describing a sales model the medical sales trainers were employing

was represented by an interviewee describing to the best of his ability how he trained individuals. I would then, through my knowledge as a medical sales representative and medical sales training researcher, classify if the model being described to me mostly mirrored solution, strategic, consultative, or spin selling models, etc. For example, Candidate #4, when asked their organization's sales model, offered,

I think it's probably the same as what most people use. It's the attention getting openers, the ability to ask probing questions to uncover obstacles, deliver a message, check in and probe to make sure that the customer actually bought what you said, and then close and ask for the business.

Through research, literature review, and experience in the field of medical sales I was able to determine the model described to me was most similar in scope to the Spin Selling Model popularized by British research psychologist Rackman, whose company Huthwaite, Inc., taught the method to hundreds of corporations worldwide and originally published the *Spin Selling* book on May 22, 1988 (Spin Selling, 2011, p. 1).

Spin selling is a precisely defined sequence of four question types that enables the salesperson to move the conversation logically from exploring the customers' needs to designing solutions, or to uncover implied needs and develop them into explicit needs that you, the salesperson, can resolve. (Spin Selling, 2011, p. 1)

It is hard to classify or categorize the effectiveness of any model if the model is non-existent in the minds of the individuals providing the instruction. Candidate #2, when asked to describe the organization's sales model, answered,

We used to have something called 'ASK', and I can't even remember it because I never actually saw it taught. By the time that I got into the role they had stopped using it entirely because it was so ineffective.

Candidate #3 simply expressed, "I'm not sure I could describe that" when asked to describe the sales model the organization incorporated. Candidate #7 plainly stated, "value selling," and did not elaborate or clarify what that meant. Candidate #9 stated, Our sales model is a very integrated model where sales reps report to sales managers, who report to regional business directors, and essentially work in a biotech field with a 'buy and bill' product. Our sales representatives need to have acquired a broad set of skill requirements. They need to have great business acumen as well as technical expertise.

It was unclear how this answer would provide insight into a selling model, as it seemed more relevant in explaining the organization's employee organizational chart and hierarchy versus a description of a selling model.

Candidate #12 articulated his organization's selling model as "accountability for each and every employee as well as integrity, respect, and loyalty to the company."

Again, these attributes lent themselves to an organization mission statement or core values, but did little to depict the organization's selling model. One possible and reasonable conclusion to consider could be that medical sales trainers were not familiar with their organization's sales model or the organization had no defined sales model as a foundation upon which to build the accountability, measurement, and effectiveness. In either event, it is alarming to not be laser point focused on a unifying and consistent goal. Candidate #12 seems to at least have awareness of this phenomenon by acknowledging,

This is an area in which I struggle because we do not have a traditional sales model. It's engaging the physician and uncovering needs, but there is no terminology for it. Believe me, I have asked the question, and we either don't have one or have not decided on one sales model yet.

Candidate #2 stated, "If you have got something that is not working, then you just have to change it."

Emerging Theme: Paucity of Training Goals

A goal can be described as a desired result or the object of a person's ambition or effort. Many tenured professionals agree that the best goals are often specific, measurable, achievable, results-oriented, and time specific. More serious professionals may suggest that unwritten goals are simply hopeful desires and not goals at all. The following presentation of data should be evaluated through this lens to analyze current practitioner interview responses.

The interview question 'Can you describe the goal of your corporate medical training program?' was posed to several research participants. Candidate #3 responded, I guess it's just really to provide a broad approach to training that is persistent and develops people from the moment they join the company and as they progress on. It is a multi-faceted, multi-layered approach to all different types of tenure.

Candidate #2 answered,

The goal is for sales people to be able to execute. And by execute I mean, be able to sell. Not just sell, but in order to effectively sell you have to know your product. We want people to be able to leave our training program and go out and sell this drug effectively enough to affect the bottom line. That's the goal.

Candidate #8 answered, "I would probably say that it is the ability to train on product knowledge as well as business acumen to equip the field force to have a competitive advantage in the changing marketplace." Candidate #11 answered, "The goal of our corporate sales training program is to increase the capabilities of the field sales managers and field sales." Candidate #6 answered,

For our specific program it is to grow total sales revenue. I guess I would consider that foundation sales training, and then ultimately what we hope to do is grow for the more experienced sales people some training that might benefit them at higher levels.

Candidate #7 answered, "To prepare new hires to be successful in the field and continue to educate our existing sales team on new products, and refresh them on skill." Another respondent answered, "To increase the clinical and disease state knowledge along with the business acumen knowledge of the field force." Another respondent answered, "To grow the talent of the people we have working for us."

As it related to having goals from a training department that were specific and measurable, it was difficult to equate the aforementioned responses into any category where any level of detail was understood, so it could be measured with good results duplicated and subpar results eliminated from practice. One interview response was more in line with a more robust and vigorous approach to sales training. This more comprehensive answer came from Candidate #9, who stated,

Our goals overall align the sales and marketing strategy from a design, delivery, execution, and people development approach to deliver business results.

Everything needs to be tied into delivering business results. We do that through

the alignment of training to sales competencies, to maximizing the technology avenues, to integrating with our brand and internal partners, to elevate the training to competitive advanced levels. Those are some of the ways we are conquering that.

From this response it was easier to predict a path to success, due to a holistic and systemic infusion and mention of various avenues where the training may leave a footprint.

Emerging Theme: Insufficient Resources and Time Allotment

Some general training questions were posed to the interviewees of the study before specific demographic, foundational, and environmental questions were asked. This was on purpose and designed to elicit a genuine response of real issues practitioners were facing to unanswered and unspoken about questions, but known deficiencies. Some of the general information interview questions included: a) What are the biggest challenges in your corporate medical sales training environment and how do you deal with them?, b) If you could change anything you wanted about your corporate medical sales training environment, what would it be and why?, and c) In your view, what answers are still needed to add valuable contributions to the field of corporate medical sales training?

It is interesting to note that these questions from the survey questionnaire evoked some of the more passionate and lengthy responses across the entire group of respondents, triggered emotional flare ups, gasps and laughs, and induced voice inflection tones of obvious frustration and angst among several respondents. Various irritations

were noted, but ultimately could be themed into hindrances imposed due to lack of resources or time.

Candidate #1 expressed the biggest challenged faced was "getting sales representatives out of the field to be able to do training. The cost and time of people out of the field, is the biggest issue." It was interesting to note that the literature review, survey answers, and field experience knowledge all strongly suggested it was extremely difficult to measure training outcome results by practitioners; however, the same collective practitioners and organizations were adamant in determining that time out of the field was measurable to a point where it was cost prohibitive to provide training levels desired without producing data as to what sales representative time out of the field truly cost the organization in terms of sales revenue. Candidate #9 stated, "Being able to measure learning transfer so you can essentially establish a return for your learning dollar is something that is difficult to do." Candidate #2 stated,

The biggest challenge is definitely budget. In my work with the National Sales Director there are many things he wanted to get done, but there was simply no budget for it. After I develop my strategic plan for the year, there are always things that pop up where more training is needed or wanted for a certain directive. I then get caught in a dilemma because if I provide the things that are requested to be a team player and support the various initiatives, I would then get dinged because I was not able to stay within my budget. So, my conundrum is that I am always going to have a 'needs improvement' on evaluations in the categories of supporting corporate training projects or staying within the budget allotted me. It never fails.

Candidate #3 described the biggest challenge in the corporate medical sales training environment was "employing adult learning principles and walking away from power point presentations. If I could change anything it would be to do more customized training for sales people dependent on their regions and challenges specific to their areas." To answer what valuable contributions to the field were still needed, Candidate #3 further answered,

We need to figure out how to increase the persistency of training. Training tends to be a one-time event and there is not a whole lot of follow up to it, and that probably needs to be explored a little bit more. All of the challenges deal with insufficient resources because detouring from PowerPoint presentations is not inherently hard.

So, this idea spoke largely to the fact the organization may not have had another model to pivot to in order to constitute a change in then-current practices. If it was known how to implement adult learning principles clearly, the move may have already happened.

Candidate #4 stated one the biggest challenges that was ultimately from lack of time and resources was obtaining approval for training materials. "Because the market is changing so quickly often times by the time you get something approved and ready to present you have to adapt again because the market has changed again." Further, and obviously, because we work within stringent guidelines from the FDA (United States Food and Drug Administration) we have to be more conservative than we may want, and some companies are more conservative than others. The approval process is just brutal because it does not allow you to be as adaptive as you'd like to be, and keeps you in a box of what you have to do.

Candidate #1 stated manpower and capacity were the biggest challenges today, which fell in line with the insufficient time and resources theme.

Not being equipped to take on some marketing events without having to give up something else is always the struggle. The something else is most often the time out of the field. All of the managers want their sales representatives to have more training, but when you ask them how much time they are willing to allow that representative to be out of the field and not in front of customers attempting to make sales then that is where the pushback talking points begin.

Candidate #5 weighed in, "I think everyone sees the answer to any problem as being 'additional training', and if that did not improve the outcome then 'the training must not be good.' . . . "I am not sure if we are even asking the right question. I think the right question is 'How do we ensure that the intended audience gets it and is able to execute on the training they received?" . . . "We really need to be cognizant of the fact that everyone is not going to get it just because they sat in a classroom one day."

Emerging Theme: Meager Learner Engagement and Pull Through

Assessing engagement may be considered a soft skill as measuring learner engagement in real time, or as a snapshot, could be misleading if there was not an obvious or blatant sign of disengagement. Several respondents mentioned activity that could be demonstrated to show engagement. These included use of flipcharts, evaluating case studies, role playing and simulation, question and answer sessions, small and large group exercises, games and verbalization, formal presentations, two-way dialogue, and competition teams with incentives and prizes for winning. These techniques could be easily applied and are wonderful ideas to demonstrate activity among learners. These

techniques, however, are still at risk of being deficient if the purpose surrounding the activity is not rooted in adult learning theories. Without a framework or structure, having flipcharts or a verbalization game could still put the learner in jeopardy of not gaining substantive revelation capacity for application of the information presented.

When appraising how to grasp when the learner understood what was needed in order to be effective for the task, several thoughts surfaced on how to ultimately determine learner comprehension. Several respondents, including Candidates #3, #4, #5, and #11 collectively stated when the learner was able to teach the information to others by owning it and explaining it thoroughly, that was a definitive way to know they understood the concepts. Some other respondents, including Candidates #1, #3, and #12 stated they recognized learner comprehension from the learner modeling the learned behaviors or skills in the field on a field ride evaluation in front of a customer, noting that this was the highest priority and ultimately the only test needed to show comprehension.

Other respondents, including Candidates #6 and #10 answered that performing well on exams, written and verbal assessments, and asking good questions during classroom time was appropriate to measure engagement and pull-through of trainer efforts. While the last group of respondents, including Candidates #2, #7, #8, and #9 stayed with this thought process, but elaborated that feedback from role plays and certification of skills by the trainers was a way to confirm mastery of the material, because during a certification process objections and challenges were presented to the information learned, forcing the learner to defend or counter with thoughts that came from a deeper understanding that was higher than a regurgitation of information at the appointed time.

These then-current practices put the responsibility on the student to somehow 'get' what the trainer disseminated, but may not properly evaluate how the trainer was coordinating and 'pulling-through' these activities to ensure the learner preparedness. Candidate #4 stated,

When I'm standing in front of the room delivering you don't really know who is getting it and who is not. It's not until you walk over during the exercise and activities and ask the right questions before you discover who gets it and who doesn't.

This respondent actively pursued accountability to pull-through the training efforts.

Emerging Theme: Senior Management Perception of Low Training Value

Organizations that would hope to ensure top sales results needed to have leadership in place that would support an environment that lent itself towards growth and development, with a vigorous pursuit of models, programs, and frameworks that yield themselves to the adaptation to practices, with the potential to yield the highest results. Stagnation of mindset was often a pre-cursor to subpar performance and many would concede that organizations thrived or failed based on the decisions of its leadership; whether in marketing strategy, talent acquisition, diversity of thought, and/or training practices.

Candidate #9 submitted,

There is no set way to measure how training is impacting sales results. In today's environment everybody is contemplating if taking time out of the field is taking time away from sales. So, we constantly have to associate selling through various different metrics and dashboards to ensure that senior sales and marketing

management understands the value that training helps to improving skills and competencies that in time are going to lead to improved sales.

Moreover, "The training role plays a critical impact to the organization because it is the source of power that helps ensure that the foundation is there to set the individuals up for success by having the skills and competencies they need."

If senior management was simply not willing to allocate budget dollars towards the department, this indirectly became a hindrance to the sales and revenue goals they had, because the sales force would not be operating at optimum levels. Most of the respondents mentioned having to generally do more with less, and trying to figure out ways to present to senior management their value or contribution to the bottom line, all while being held to a higher standard of accountability for the performance of the field sales force. Even if a respondent did not specifically mention a department that was under supported by senior management, the topic surfaced in the explanation of their role within meetings with other stakeholders, such as the marketing, compliance, or legal teams having higher priority in setting the training agenda than the actual sales trainers.

Another way senior management indirectly influenced the training department was by the placement of the department in either the costs component of the organization or the investment component metrics of the profit and loss balance sheet. By simply placing the training department into the cost spectrum philosophically changed the approach to training and how it was viewed within the organization. Just as with any investment in regular life, the stakeholder would want to see that grow and put the time and effort into making it succeed. With costs, just as in real life, they were reduced to the bare bones necessity or cut altogether in times of struggle.

Summary

This chapter presented data gathered from a qualitative research interview of qualified participants with knowledge and experience in the arena of corporate medical sales training. Survey respondents were asked a total of 29 questions with a chance to elaborate on any of the topics covered or not covered, in any manner they saw fit. This information was gathered and presented in two main distinctive formats.

The first format was a data table that grouped interview responses to show at a glance the comparative answers to questions provided in the categories of demographic data, sales training, and andragogy identification. This presentation style was helpful to demonstrate correlations between how survey participants engaged learners with regard curriculum development in their background previous to their sales training role.

Another example from the table could be used to evaluate and summarize whether characteristics of the organization's sales trainers had any correlation to the cumulative revenue generated by the same organization. Another example from the table could be used to evaluate if job title had any correlation to years of sales training or total business experience.

The second format to present the data was in the determination of emerging themes that had the tendency to surface in varying degrees from multiple survey participant responses around the same topic. For instance, the majority of survey respondents answered, "no," to the survey interview question 'Did you have any adult learning strategy, curriculum development, or instructional design experience previous to your medical sales training position? If yes, please explain." Since similar, or the same, answers were provided among the majority of the respondents (in this case all

respondents), an emerging theme received additional attention in the writing and evaluation of the response to determine why the responses were closely linked among various survey participants from different sectors of corporate medical sales training, different titles, and different ages.

The majority of the data that materialized were able to be segmented into some distinct emerging themes. The emerging themes included: (a) deficiency of education acumen, (b) dearth of competent trainers, (c) privation of outcome measures, (d) sparse technology training efficacy, (e) sales model ineffectiveness, (f) paucity of training goals, (g) insufficient resources and time allotment, (h) meager learner engagement and pull through, and (i) senior management perception of training value. Several direct quotes from verbatim transcriptions were used to support the key findings and elaborate on how the themes were developed.

Chapter Five: Discussion, Implications, and Conclusions

The purpose of this study was to investigate if current corporate medical sales training programs aligned their curriculum and people-development activities to the ideologies employed by research, based adult learning theory. The principles of andragogy, a specific learning theory, were explicitly examined due to their ease of application to business environment verticals. To scrutinize the efficacy of the then-current medical sales training programs, action research was instituted and a qualitative research interview survey was conducted to qualified participants. Stratified purposive and snowball sampling methods were utilized, followed by the categorization of respondent answers using open and axial coding qualitative data analysis techniques. The results proved in aggregate that corporate medical sales trainers were frustrated with the perceived uncontrollable aspects of their roles, and were ill-prepared at best for the controllable aspects of their roles.

An overarching theme that continued to manifest throughout the study was that corporate medical sales trainers had several deficiencies in multiple areas, with numerous deficits being unknown to them, as related to employing sales training processes around a scholarly-researched learning methodology. To a large degree, there was difficulty engaging the vocational aspects of the job function for the medical sales trainers, due to a gross deficiency in education acumen, where the majority of the medical sales trainers had no experience in instructional design, curriculum development, or adult learning theory; and were 'winging it' with input from and reporting to other individuals within the organization, who also possessed no to little formal training experience from an educational perspective. Overall, several significant gaps were revealed related to

competencies, which elaborated on and supported the notions identified within the literature analysis and research data findings on the topic.

Table 6 shows an alignment with the emerging themes presented in Chapter Four of this dissertation, derived from the interview data of the surveyed candidates, and links them to the literature review data presented in Chapter Two. The left column displays the nine emerging themes that surfaced from the interview candidate responses and visibly portrays which page numbers to search within the dissertation to view the exact quotes that either supported the spirit of the emerging theme or supported why the emerging theme surfaced in the first place. The right column shows the supporting literature review data. It is noteworthy to point out that alignment in this instance was not a synonym for agreement. It was plausible for the supporting literature review data to be in complete disharmony with the emerging theme, but still support and align with the emerging theme. For example and for illustrative purposes only, if the emerging theme from interviewing survey candidates was 'lack of geography knowledge,' the supporting research data from the literature review might produce a quote that stated, "I love sailing throughout the world and have lots of geographical knowledge. I just hope my ship does not fall off the edge of the earth when the ocean ends." In this example, even though the data disagreed with the theme by stating they have 'lots of knowledge' when the theme was 'lack of knowledge,' the data indicates there was 'lack of geography knowledge,' because the earth is round and not flat; and ships do not fall off water cliffs.

Alignment of Emerging Themes to the Literature Review

Table 6

_	ging Themes with Literature Review
1. Deficiency of	Supporting Literature Review Data
Education	
Acumen	
Page 34	"In most medical sales forces today "you may find it difficult to find someone who can tell you their current style of selling and how they are analyzing it for improvement" (Hopkins, 1995, p.313).
Page 35	"Spin selling is a precisely defined sequence of four question types that enables the salesperson to move the conversation logically from exploring the customers' needs to designing solutions, or to uncover implied needs and develop them into explicit needs that you, the salesperson, can resolve" (Spin Selling, 2011, p.1).
Page 45	"The research data indicated that without systematic, ongoing learning and reinforcement, approximately 50% of the learning content is not retained with five weeks by the learner, much less applied. "Within 90 days, 84% of what was initially learned is lost" (Sales Performance International, 2011).
Page 45	"Further data found that "employees will usually retain only about 4 percent of what they have learned after about six weeks with traditional learning techniques" (Low, 2009, p.42).
Page 49	"The younger generations (known as generation X, the digital adaptives, and generation Y, the digital natives or 'millennials') differ from older generations in their perceptions about the world and their attitudes toward learning" (Haghighat, 2008, p.52).
Page 50	"Andragogy is an education process for problem finding and problem solving in the present, it is oriented to the discovery of an improvable situation, a desired goal, a corrective experience, or a developmental possibility in relation to the reality of the present circumstance" (Ingalls 1976, p.144).

Note: Page numbers are from this document.

Table 6. Continu	<u>lea</u>
2. Dearth of	
Competent	
Trainers	
Page 36	"Diagnostic sales could be considered uniquely difficult because there are (A) multiple points of care for a patient which leads to selling to multiple stakeholders. (B) challenges in measuring whether or not a diagnostic test actually impacts the final patient outcome, and (C) a complex reimbursement
	environment' (Young, 2011, p. 50).
Page 37	"Many sales training organizations would concede that they "inculcate the culture and philosophy through our sales training programs" (Stewart & Champion, 2007, p. 129).
Page 37	"This notion becomes critical because "most of the adult educators [in this space] have had little to no
J	formal instruction to prepare them to help adults learn" (Henschke, 1998, p. 11).
Page 39	"For example, you can ask for a show of hands, ask participants to vote on the answer to a question you
- 4.84 6 3	pose, or post different ideas on the wall, and ask participants to vote with their feet by standing beside the
	sign they agree with. You can also put controversial statements on flipcharts, read the statements, and ask
	participants to move on to the flipchart that best describes their opinion" (Meloche & Sterns, 2005, p. 37).
Page 40	Also, "using previously established sales councils (collection of top sales reps) to offer guidance is most
1 age 40	helpful" (Adamson, 2011, p.41).
Daga 46	
Page 46	"Field managers should be utilized to conduct a formal verbal assessment of a rep's selling skills including
D 51	their ability to use the selling model to deliver a presentation" (Riggle, 2007, p. 84).
Page 51	"Lindeman ascribed to adult education the necessity of furthering the discovery of the meaning of
	experience, assisting in the critical evaluation of such experience, and attempting to understand the
	preconceptions underlying such conduct, all of which find a ready echo in the writing of current critical
	theorists of adult education" (Brookfield, 1984, p. 188).
Page 56	"By being flexible and willing to adapt to the needs of the adult learners, the instructor can be a motivating
	force in the classroom, rather than a hindrance and demotivator" (Patterson-Mills et al., 2011, p. 1).

Note: Page numbers are from this document.

Table 6. Continued	
3. Privation of	
Outcome	
Measures	
Page 37	"In planning for the future, pharmaceutical, biotech, medical device and diagnostic companies must reassess sales force objectives to create and manage a customer-facing organization that is prepared to meet the stakeholder's evolving information and service needs" (Gasper, 2010, p.30).
Page 44	"Multi-year industry studies also indicate that many, if not most companies have not realized measurable improvements that have been sustainable. In essence, it appears that sales training does work, but results taper off quickly, and in many cases return to pre-training levels" (Sales Performance International, 2011).
Page 44	"Companies are spending billions on sales training and improvement initiatives annually, but industry research provides limited evidence that these investments are attaining sustainable results for most corporations" (Sales Performance International, 2011).
Page 45	"New skills fail to 'stick' without a committed change in the overall sales approach and philosophy" (Sales Performance International, 2011). "If there is no process "backbone" to attach new practices to, the new methods are applied sporadically and soon fall into disuse" (Sales Performance International, 2011).
Page 45	"In territory sales, there is overwhelming evidence that rigorous targeting of prospects can pay huge dividends, but many sales training initiatives never include any formal education and tools for quantitative targeting methods.
Page 56	"Effective training provides a foundation that enables participants to perform the behaviors designated in the objectives for the training, which in turn should directly correlate to the desired result on the job or in life" (Milano & Ullius, 1998).
Page 45	Strategic and complex sales can involve a very different skills emphasis than more transactional selling situations" (Sales Performance International, 2011).
Page 58	"It is generally accepted that educational development occurs best through sequencing of learning activities into developmental tasks so that the learner is presented with opportunities for learning certain topics or activities when he is ready to assimilate them, but not before" (Ingalls, 1976, p. 142).

Note: Page numbers are from this document.

Table 6. Continued	
4. Sparse	
Technology	
Training	
Efficacy	
·	
Page 42	"The ways in which sales training managers synchronize the delivery of instruction make all the difference in the world in how easily, how thoroughly, and how effectively employees learn" (Nilson, 1991).
Page 43	"Web based e-learning has brought even greater administrative efficiencies. Learning Management
C	Systems now have automated assessments, tracking, and record keeping which has eradicated physical
	distribution, and made modifications easier and less time consuming. But the 'page turner' approach has
	remained" (Gram et al., 2008, p.73).
Page 46	"Only 17% of medical companies currently use a learning management system as an analysis of training
8	effectiveness and return on investment. Only 58% of medical companies currently use a learning
	management system as a linkage of training to competencies. However, 100% of medical companies
	currently use a learning management system for compliance assessment" (Benchmark Study, 2010a).
Page 49	"Digital-age employees prefer training that is flexible, self-directed, and high quality" (Haghighat, 2008,
1 450 47	p.56).
Do 22 56	- ·
Page 56	"Engaging training grabs the learners and brings them directly into the learning process" (Milano &
D #6	Ullius, 1998).
Page 56	"The newer generation of students, the Millenials, is challenging educators to deviate from past
	instructional strategies. This involves the infusion of technology into the classroom, increasing
	collaborative efforts, while incorporating real-life experiences" (Patterson-Mills et al., 2011, p.3).
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Table 6. Continued Sales Model Ineffectiveness	*
Page 33-34	"While selling features and benefits [of a product] to a physician is an important first step in any sales plan, it will not secure a purchase order from today's cost-conscious facility administrator" (Barry, 2010, p.28).
Page 34	"When selling to C-suite hospital leaders, a sales rep must have the talent to engage C-suite hospital decision-makers in conversation about potential value propositions beyond specific product lines, and shift the conversation towards overall time savings, costs of streamlining with one vendor, or speaking to executional risks" (Ott & Numerof, 2009, p.58).
Page 34	"Progress along the sales learning curve is measured in an analogous way: The more a company learns about the sales process, the more efficient it becomes at selling, and the higher the sales yield" (Leslie & Holloway, 2007, p.144).
Page 56	"It seems important that one has an adult learning theory that guides her/his practice" (Henschke, 2011b, p.1).
Page 56	"Employers are better served when they take into account the characteristics of their adult learners and what motivates them when developing company workshops" (Isenberg & Glancy, 2011, p.2).
Page 56	"Repetition for the sake of repetition just does not 'cut it' with adult learners, and it is unlikely that learning will take place" (Patterson-Mills et al., 2011, p.1).
<i>Note:</i> Page numbers	are from this document.

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6. Paucity of Training Goals	
Page 33	"Coupling and converting the goals of the sales representative to the medical sales environment becomes significantly more complex since "these novices need to be able to communicate at an expert level with healthcare providers with years of education in a highly specialized field" (Low, 2009, p.42).
Page 38-39	"There are a series of critical steps for gathering knowledge for use in developing learning that accelerates the path to top performance, including: (A) uncover the implicit thought processes that top reps use to make sales, make them explicit and incorporate them into the learning activities, (B) put the top sales reps, product managers and training developers into the same room to work out the content together, (C) use a systematic process of identifying and categorizing the types of sales situations that reps encounter, and (D) work through prototypical sales situations together to uncover how the sales rep think about it, and identify what product knowledge is needed at each point in the sales call" (Rosenbeck, 2010, p.41).
Page 45	"Very few organizations implement the necessary assessment and measurement vehicles to determine if sales training investments yield the desired outcomes over some sustained period of time" (Sales Performance International, 2011).
Page 56	"In efficient training the content and learning activities are as straightforward and uncomplicated as possible, so the learner's energy will not be drained unnecessarily" (Milano & Ullius, 1998).
Page 56	"If the learner sees no connection between the job/course and the activities, that person will very likely lose interest and not succeed in the class" (Patterson-Mills et al., 2011, p.1).
Page 60	"With an andragogical approach each learner inevitably becomes his or her own curriculum designer" (Ingalls, 1976, p.151).
Note: Page numbers	ere from this document

Note: Page numbers are from this document.

7. Insufficient Resources and Time Allotment	
Page 37	"Since 'time in territory' is often a sacred precept for sales organizations, exposure to training is often forced into an intensive classroom experience, where the goal is to infuse as much 'learning' as possible into a limited time frame" (Sales Performance International, 2011, p. 3).
Page 40	"By giving medical device sales professionals the opportunity to observe their product in action, guide its implementation in a simulated situation and present their product to their customers, you teach them not only about their product, but also how to effectively sell it to their customers. This process is called See one, do one, teach one" (McLean, 2011, p. 38).
Page 41	"Vendors (e.g. meeting planners, advertising agencies, public relations agencies) and ad hoc members can be added as needed throughout the launch planning process" (Riggle, 2007, p. 58).
Page 42-43	"Large pharmaceutical companies focused 73% of their training delivery methods on product knowledge training and 27% on sales skills training" (Benchmark Study, 2010a).
Page 44	"The American Society for Training and Development (2010) estimates that U.S. organizations spent nearly two-thirds of the aggregate training dollars on the internal learning function, such as staff salaries and internal development costs. The remainder was allocated to external services such as workshops, vendors and external events" (American Society for Training & Development, 2010).
Page 52	"In the andragogical approach to education, the experience of adults is valued as a rich resource for learning" (Ingalls, 1976, p. 151).

Note: Page numbers are from this document.

Table 6. *Continued* **8. Meager**

Learner Engagement and Pull Through	
Page 37	"The goal of training is to create authentic learning environments, not to cover content. It therefore becomes essential to know your audience and make training relevant and reusable" (Martin, 2011, p. 33).
Page 37	"It is virtually impossible for sales professionals to learn, retain, and apply more than a small percentage of what is typically offered in intensive, multi-day [or single day] training events – unless there is a systematic reinforcement approach across an extended period of time" (Sales Performance International, 2011, p. 3)
Page 39	"When using traditional, passive learning methods alone – such as books, powerpoint presentations, webinars, or flash sides – participants generally are not actively engaged in learning, and the amount of knowledge successfully transferred is relatively low. However, knowledge transfer within a serious game-based environment is four times greater than through traditional learning methods" (Low, 2009, p. 38).
Page 46	"Empowered learners will require and demand very different mixes of content and context" (Kruse, 2011, p. 50).
Page 52	"Because so many of our educational or training environments have been influenced by traditional pedagogical practices, adults tend to come into educational or training programs expecting to be treated like children and prepared to allow the teacher to take responsibility for their learning" (Ingalls, 1976, p. 140).
Page 56	"Many jobs require ongoing training and employees often are at odds about attending these training classes" (Isenberg & Glancy, 2011, p. 2).
Page 60	"In contrast, in learning programs where students feel unsafe and threatened, where they are viewed as underlings or life achievements not honored, those students tend to regress developmentally, especially in self-esteem and self-confidence" (Billington, 2000, p. 2).

Note: Page numbers are from this document.

2 2 :	•
9. Senior	
Management	
Perception of	
Training Value	
_	"Coveral themas followed the nation of "it does not matter if you think you can run a great sales training
Page 40	"Several themes followed the notion of "it does not matter if you think you can run a great sales training program, what matters is if the sales force thinks you run a great sales training program" (Adamson, 2011, p.41).
Page 40	"Since the American Association of Higher Education (AAHE) published the 'Seven Principles of Good
C	Practice in Education' in 1987, teaching institutions have established this resource as the cornerstone of
	learning. Corporations also began to integrate these principles into their learning strategies for employees
D 41	- until the emergence of new communication and information technologies" (Haghighat, 2008, p.52).
Page 41	"Leading edge companies are moving away from presentational instructional methods to more active and
	learner-centered methods" (Rosenbeck, 2010, p.41).
Page 44	"Large pharmaceutical companies outsourced \$5.5 million worth of training per company on average and
	\$2.3 million for biotech companies, with a range from \$300,000 to \$9,000,000. This works out to be
	approximately \$2,050.00 outsourced dollars per learner for pharmaceutical companies and \$5,096 for
	biotech companies" (Benchmark Study, 2010a).
Page 47	"The implications are clear from this data: the traditional use of experienced and top performers' best-in-
1 450 17	class behaviors as models for future success may need re-examination and modification by companies to
D 50	increase sales force effectiveness in the overall sales force" (Vitello et al., 2008, p.69).
Page 52	"Education often focuses on conceptual or historical knowledge while training, in contrast, focuses more
	on building the specific area of knowledge, skills, or attitudes that directly influence a person's ability to
	perform a job, execute a task, or solve a problem" (Milano & Ullius, 1998).
Page 52	"It is not important for teachers of adults to appear as if they have all the answers, but it is helpful if they
	attempt to respond to all the questions and look to the learners for help in discovering some of the answers
	that they don't know" (Ingalls, 1976, p.146).
Page 59	"Organizations that value employee's learning can expect to be more competitive in the marketplace"
rage 37	
	(Vatcharasirisook & Henschke, 2011, p.2).

Note: Author of paper synthesized literature review with emerging themes. Page numbers are from this document.

Of note, virtually every category of emerging themes had a similar amount of data support. However, there were two categories, 'dearth of competent trainers' and 'senior management perception of training value' that produced the most data from a volume perspective. Whether any additional significance should be placed on that fact was unclear, due to the fact that volume or sheer number of quotations and data points may not be credible evaluation, solely because it was not a scientific process.

Answering the Research Questions

How do corporate medical sales training models current at the time of this writing align with the principles of andragogy? Although some theoretical assumptions and concepts in the framework of andragogy were practiced by the medical sales trainers from the research data, they were not identified by the trainers as researchbased principles nor correlated to any specific learning theory. They were haphazardly applied and simply reduced to ideologies used out of convenience and not purposefully infused into the regular practice of medical sales training. Therefore, overall and based on the research data collected, medical sales training models current at the time of this writing did not align with the principles of andragogy. The results from the interview candidates communally stated that trainers were not aware of what model they were using for their medical sales training, if they were using any sales or sales training model at all. The training seemed to be disjointed from session to session, not scalable nor adaptive, and not grounded in duplicable methodology. Moreover, many examples surfaced to support the andragogical concept of the learner being self-directed and that corporate medical sales training catering to this distinction was non-existent. The role of the learner's experience as a rich resource for learning was mentioned throughout the

data, however, it was generally described as a common best practice and not as a purposeful part of a training framework. The learner's readiness to learn was not considered, as the research showed most training events were guided by dates and times on an arbitrary calendar rather than 'needing to know, in order to do.' A great example of this was shown to be in 'advanced skills training,' where after one year to eighteen months in the sales representative role with that particular company, the corporation deemed it appropriate to bring in all of the sales representatives within this window for additional training, solely based upon their tenure with the organization and nothing else. Why this time frame was chosen was anyone's guess. The orientation for learning by default was for immediate, and not postponed application, since upon completion of the training event the sales representative would theoretically be deployed to the field to sell their widgets or services. Understanding of the learner's motivation for learning was assumed to be chiefly for capturing incentive compensation, monetary bonuses, and to be positioned for higher ratings on performance evaluations. Since assumption was the lowest form of knowledge, no real consideration was given that motivation in adult learning could be much more internally oriented (self-esteem, confidence, and recognition by others). The research data showed that evaluation of motivation in adult learners was fictitious. Additionally, a recurring theme presented in the research data that proved within the then-current corporate medical sales training structure that adults were not taught things with a reason on why it was needed to be known, but rather because of the 'teacher said so' paradigm, which was more pedagogical in nature versus andragogical in nature. This dichotomy is illustrated in Table 2.

In terms of what the research data exhibited, and compared to the andragogical process steps, corporate medical sales trainers and their associated curriculums and designs also did not align with the principles of andragogy. According to the research, then-current practitioners in this space were not adequately preparing the learners for the training programs. At best, a 'baseline' assessment via an online module or learning management system may have been used to introduce some general background concepts, but did very little to inform the learner on the upcoming training experience or how it would be conducted or describing the building blocks to expect within the forthcoming training programs. Neither a physical or psychological climate setting was created with bright exciting colors or infused with authenticity, mutual trust and respect, or critical thinking. To the contrary the training setting and environment was usually at a headquarters building open space, or at a hotel conference room, which was almost never decorated to help set a more interconnected learning environment. Several sources cited how training was a very anxious event for the learners and generally not looked forward to as a pleasurable or fun experience or event. Moreover, it was problematic to state that critical thinking occurred when all of the respondent answers to the specific interview questions stated that role-playing occurred at every event; with further data showing that role-playing was a term reduced to an exercise on 'verbalization' of the words, phrases, and impressions that the medical sales trainers commanded the audience to repeat constantly until memorized verbatim in several cases.

According to the research data, mutual planning of the learning activities was virtually never engaged in with the facilitator, which resulted in decreased commitment to the program by the learner, and therefore a momentous departure away from

andragogical principles. Even more so, diagnosing learner needs was far-fetched, because the collective then-current operating procedure taught to the masses with the mentality that if the information was not understood by the learner it was incumbent upon the learner to figure out what was missed or what they were not understanding and to go on their own time to figure it out the best way they knew how. To be more in line with andragogical principles, the facilitator would need to incorporate an in-depth review of the learner's acquisition of knowledge, understanding, skill, attitude, value, and interest, and then translate those learning needs into particular objectives, such as uncovering deep concerns, maintaining originality or rationality, and cultivating tolerance for ambiguity. Simply put the facilitator was responsible for transitioning the information into revelation, and then the learner should migrate the revelation into transformation through the consistent and persistent process of application. Transformation and application of thought equals change and change equals learning! Then-current processes stopped short at information dissemination.

The research data from the respondents showed no pattern for learning experiences mutually designed by the leaders and participants. Instead of identifying resources most relevant to addressing each objective with effective strategies, the thencurrent corporate medical sales training practices allotted for the leader to determine which resources should be allocated for each problem by distributing and assigning which marketing visual aids or 'leave behinds' should be shared with customers and under what circumstances. No deviation was allowed without repercussion, and if the outlined 'steps to success' were not adhered to, performance ratings and demerits could likely be depended upon by the medical sales representative, from the sales training

management and from first line sales management. There was no use of learning contracts in the corporate medical sales training environment, which was a foremost effective way of helping the learner structure and conduct the learning, based on the research data about applying andragogical principles. Finally, there were no real tools for efficacious measurement or evaluation, or any steps to assess if the learner achieved any objectives from the training course. The closest marker the corporate medical sales programs used were arbitrary 'certification' processes of the medical sales representative at the end of a training course or event. The then-currently accepted process, as gathered from respondent answers to the interview questions and from personal lived experience, outlined and detailed a method whereby the medical sales representatives rotated to different stations where several members of the leadership team threw out sales 'objections' that could potentially surface in the sales field from customers. They then typically ranked the sales representatives, based on who did the best job at reciting or regurgitating the memorized 'sales messages' given to them verbatim in the earlier training event.

Can a corporate medical sales training program be designed that applies andragogical principles? Yes, it is possible to design a medical sales training program that applies andragogical principles. Based on the research data, the major components needed to implement this model would be to first understand the six theoretical assumptions in the andragogy learning theory and then also apply the eight process elements to a curriculum design tailored around the then-current gaps and pain points from the respondent answers to the qualitative research survey interview questions and align with research data from an extensive literature review on all the relevant topics.

Concurrently, the instructional designer would also need to have a keen understanding of the different sales models applicable to various selling scenarios and be able to tailor the message to various audiences with varying levels of education, experience, ages, and motivations. Next, implementation of this model would need to be filtered through a practitioner with a high emotional intelligence, self-awareness, and formal knowledge of adult learning principles to be able to instantly determine how to pivot the strategy and concepts to facilitate the learning to the millennial generation up through the baby boomer generation, which by and large were the four age categories that makeup workforces in most organizations in any sector. Added to the mix would need to be sufficient tactics on how to measure outcomes, meet training time and cost goals, pullthrough monitoring of continued effectiveness with additional stakeholders, and increase the training value and perception in the sight of superiors and internal decision makers. All of this education acumen would also need to be re-produced in any adjunct or supportive technology capacities or learning management systems to maintain optimum results. Finally, repetitive and mutually planned coaching sessions would need to be implemented to ward off the training relegated to a one-time or specific-occasion event. If a formally trained practitioner was not available for the design and implementation of the medical sales training program, it would be advisable to educate the medical sales training management and their direct reports with a 'train the trainer' program that allows for the educator to develop greater awareness of the theories and concepts of adult learning principles, theories, and concepts.

How does andragogy inform medical sales training? According to the research, andragogy did not inform medical sales training at the time of this writing, but also from

the research there were paths that would allow for andragogy to inform medical sales training. Many sources from respondent answers to interviews questions, literature review articles, and job descriptions incorporated the use of the phrase 'adult learning principles' as something known about and that should be used in theory; but in practice, there was no accountability or transparency on where, when, or how andragogy was being used to inform medical sales training. One example of this surfaced when I was contacted by an industry sales recruiter for a 'sales training manager' position that was to be publically advertised in my region shortly after I was made aware of the posting. At the time, I had recently completed and passed my comprehensive exam from my university doctoral courses (a test over all of the credit courses within the university program in instructional leadership and adult education). I expressed to the recruiter that since I felt competent in the area of curriculum development, instructional design, and adult learning theory, I would be open to hearing more about the opportunity. Shortly afterwards, I received a job description via email that expressed that the candidate should possess strong and advanced knowledge of adult learning principles, to adequately connect these skills to the requisition and job duties. A short while later it was communicated to me that the position had been filled by an internal candidate who was then-currently a sales representative who had posted for the position in the past twice before, and both times did not secure the role. This action was not necessarily a disappointment, but more of a revelation and insight into the strong disconnect medical sales training departments believed of what qualified as a 'training manager.' I remember being more disappointed in the pattern and state of my chosen industry and

profession versus the actual job role going to the sales representative without the 'strong and advanced' knowledge of adult learning principles.

The recruiter contacted me afterwards in essence as encouragement to proverbially hold my head high. I vividly recall responding to her by likening my experience to a parable I instantaneously conjured up about a fictitious job opening calling for an individual with a 'strong and advanced' skill set in helping patients manage their cancer symptoms. I whimsically explained how the hiring manager interviewed multiple nurses from cardiology backgrounds (heart abnormalities), because he thencurrently managed a cardiology department and knew nurses to be caring individuals. But you (speaking to the recruiter) presented an actual oncologist (physician who specializes in cancer treatment) for the role, and this individual was not given consideration because the oncologist was outside the norm of what was usually presented to this manager; or the manager knew that the oncologist may potentially know more than he did about cancer treatments for patients. I then went on to ask the recruiter who she would you feel more sorrow for in this scenario, the cardiology department manager or the actual oncologist? She expressed to me that this was an excellent question, and she probably would 'scratch her head' about the cardiology department manager more so than the oncologist. The sales recruiter proceeded to then ask me about who I felt more sorrow for? I responded that I felt the most sorrow for the pretend patients with the cancer symptoms, because they may not be obtaining the best care possible. Fast forward back to real life and the pretend cancer patients in my allegorical story were the medical sales representatives that would have to endure being practiced upon. The impact was also deeper than probably realized, because everyone encountered by this 'trainer' would

be affected by this individual's gap in knowledge for the entire duration of their tenure with that organization.

Implications

The implications from the research data collection, literature review, personal experience, and emerging themes were all stark and evident. The results were very telling and portrayed an urgent need for medical sales training staff members to be trained on how to effectively teach adult learners in a complex, regulated industry that was ever changing. There was suspicion before that adult learners were not adequately prepared, but the results exhibited immediate needs, first from an unavailability of rich data on the topic, and then from the gaping holes in the general body of knowledge noted from then-current practitioners; all of who identified needs and pain points. The interview results only partially mirrored data from the literature review, due to the fact that others may have identified some gaps, but none seemed to attack the problem from a learner-centered approach, actually birthed out of a specific learning theory to guide the practice of training adult sales personnel. Any attempt at improvement seemed to be echoing some individual's best practice that seemed to work for someone else in the organization, but without any confirmation, validity rubric, or measurement. Uncovering intelligence from the research data and study participants would now inform my leadership decisions by having proper protocols in place that would aid in measuring performance, installing transparency and accountability, and displaying tangible returns to all vested stakeholders. The revamp and overhaul of then-current processes should start with a design of a prototype corporate medical sales training platform, complete

with teachable and scalable modules to deploy across several functional categories in the medical sales verticals and adaptable to the needs of multiple generations of learners.

Design of Prototype for Corporate Medical Sales Training

In order for the research to come to life and be effective there needed be a way to demonstrate how to address the needs of the gaps within the research. I designed a training prototype, specifically for the medical sales training space, directly out the needs that surfaced within the research and interview data from the then-current practitioner answers. With access to so much data on the topic of education, there was really no excuse for medical sales training departments to not accurately incorporate these platforms into their sales training programs. The fact these two worlds had not collided before has been mind-boggling to me. "An information explosion has accelerated the pace of adult learning" (Isenberg, 2007, p. 2).

Tables 7 through 11 represent a prototype model that consists of five training modules designed to teach adult practitioners how to teach their adult learners. All of the modules have program objectives and learner objectives. The modules gradually become more advanced throughout their progression and are also designed to not be too detailed or rigid, in order to easily adapt to varying organizational sizes, industry sub-categories of sales, and to remain flexible for upward or downward scalability, depending on the organizations' goals, time-horizon, and senior leadership input. The prototype was purposefully streamlined in a simple delivery format in order to accommodate the audience of primarily sales representatives. "Sales people tend to be more outgoing and more gregarious so there is usually less of an issue of people not wanting to contribute and participate" (Candidate #1). Most importantly, an overview of the concepts needing

to be included is discussed, while also allowing for versatile application methods from the practitioner in order to make the model their own.

Andragogical Paragon for Medical Sales Trainers: A Content Model

Table 7

Module One: The Sales Trainer Role and Responsibilities

Program Objectives:

- A. Subject Matter Proficiency, Scholarship, and Evaluation.
- B. The Interdependent Nature of Teaching and Learning.
- C. An Overview of Sales Models.
- D. Trends, Techniques, and Materials Influencing Sales Education.
- E. Adhering to Organization Guidelines and Industry Specific Parameters.
- F. Understanding Leadership and Influencing Power.
- G. Involve Learners in Diagnosing Their Learner Needs and Mutual Planning of Curriculum

<u>Learner Objectives:</u>

Upon completion of this module, the learner will be able to:

- H. Learn "how to learn" to become topic proficient.
- I. Recognize the bilateral essence of teaching and learning.
- J. Determine how to identify and distinguish appropriate selling models (Consultative, Strategic, Solution, Spin Selling, etc.) for appropriate selling situations.
- K. Understand their macro selling milieu internally and externally.
- L. Realize the capacity of their delegated authority.
- M. Incorporate and engage learner experience into the training session.
- N. Establish credibility to learners derived from problems encountered and solved.
- O. Establish a climate of mutual respect, authority, and trust.

Table 8

Module Two: Understanding the Adult Learner and Adult Learning Theory

Program Objectives:

- A. Principles of Adult Learning and Key Contributors
- B. Andragogical Theoretical Assumptions.
- C. Andragogical Process Elements.
- D. Competency Components and Measurement.
- E. Accommodating Generational and Diversity Dynamics in Corporate Culture.

Learner Objectives:

Upon completion of this module, the learner will be able to:

- F. Understand the foundational philosophies in adult learning theory.
- G. Comprehend the learner's self-directing spirit, experiences, readiness, orientation, and motivation to learn.
- H. Construct a curriculum suited for medical sales training.
- I. Have awareness of different generational markers of learners responding to divergent stimuli.
- J. Understand Malcolm Knowles thoughts on learning improvement as it relates to knowledge, understanding, skill, application, values, and interest.
- K. Associate diversity, generational linkages, and industry experience into instruments for assessment of education outcomes.
- L. Develop group activities of mutual interest to audience and program objectives.
- M. Identify scenarios where adult learning theory is not being adopted consistently.
- N. Involve learners in diagnosing their learning needs.
- O. Involve learners in forming their learning objectives.

Table 9

Module Three: Principles of Teaching and Adult Learning

Program Objectives:

- A. Understanding of Andragogical Theoretical Process Steps.
- B. Establishment and Overview of Learning Contracts.
- C. Comprehension of Content Design and Curriculum Evolution Strategy.
- D. Foundation of Classroom Management.
- E. Foundation of Syllabi Development.
- F. Institution of Evaluation Techniques.
- G. Launch of Qualitative Assessments.
- H. Debut Technology in Training.

Learner Objectives:

Upon completion of this module, the learner will be able to:

- I. Produce an instructional design.
- J. Create a curriculum incorporating researched based principles coupled with real world data.
- K. Develop a curriculum steeped in research based concepts that incorporates the following:
 - 1. Prepares the learners for the program.
 - 2. Sets an adequate learning climate and environment.
 - 3. Involves learners in mutual planning.
 - 4. Diagnoses learning needs.
 - 5. Translates learning needs into objectives.
 - 6. Designs a pattern of learning experiences.
 - 7. Helps to manage and carry out learning plans.
 - 8. Evaluates achievement of objectives.
- L. Assimilate andragogical principles into distance learning and e-learning management platforms.
- M. Transition theoretical concepts into practice.
- N. Construct and explain a learning contract as defined by andragogical process standards.

Table 10

Module Four: Instructional Delivery Formats, Measurements, and Costs

Program Objectives:

- A. Encounter Didactic Method Training
- B. Vitalize Socratic Method Training
- C. Edify Andragogical Training Approach
- D. Diagnose Internet Based or Home Study Training
- E. Invigorate Asynchronous Training Environments
- F. Dissect and Analyze Kirkpatrick's Learning and Training Evaluation Model
- G. Learning Contracts: Theory to Practice (Advanced)

Learner Objectives:

Upon Completion of this module, the learner will be able to:

- H. Compare and contrast differing approaches to instructional delivery and its impact on learners through lens of direct experience
- I. Assess how to subsume resources and tools within the provided budget.
- J. Measure training effectiveness and outcomes.
- K. Realize sales representative performance indicators.
- L. Appraise when to appropriately outsource varying training components, if necessary.
- M. Align training goals and available resources.
- N. Determine and discuss personal philosophy of teaching.
- O. Analyze what scenarios are appropriate to apply various teaching formats and applications.
- P. Explain reactions to training, learning attitude, knowledge transfer, and implementation results in the context of Kirkpatrick's Evaluation Model.

Module Five: Emerging Adult Learning Best Practices

Program Objectives:

- A. How to Engage Adult Learners in Training.
- B. Influencing Senior Management Perceptions of Training Value and Deliverables.
- C. Allotment of Time, Travel, and Sales Representative Field Intelligence.
- D. Pull Through Training Strategy with First Line Management and Supervisors.
- E. Gaining Invaluable Insight through Field Training Ride-A-Longs, Focus Groups, and Surveys.
- F. Garnering Trust through Emotional Intelligence.

Learner Objectives:

Upon completion of this module, the learner will be able to:

- G. Implement best practice strategy for engaging adult learners.
- H. Leverage insights and disseminate action items to display return on time and investment to senior leadership.
- I. Prioritization and maximization of sales representative training time versus field selling time.
- J. Conduct an effective coaching report with transparency, accountability, timebased goals.
- K. Demonstrate self-awareness and exude empathy to foster mutually beneficial relationships with adult learners.
- L. Create a template for Senior Leadership to identity gaps in perceived returns versus actual returns on training time.
- M. Act as a training consultant for the larger organization and appropriately recommend changes.
- N. Pivot to new program modifications in order to adopt emerging themes in the industry or macro-environment.
- O. Systematically measure learner performance to mitigate vacillation in strategy

The next section discusses an Andragogical Process Design Model (Knowles,

1973, 1990, 1995) to be used in conjunction with the Andragogical Content Model.

Tables 7 through 11 describe the learning experience content, and Tables 12 through 18 describe the learning experience process.

Andragogical Paragon for Medical Sales Trainers: A Process Design Model

To be used in conjunction with the Andragogical Content Model.

Table 12

Andragogical Framework - Process Element One – Preparing the Learner

One Day Workshop to begin at 8:00am and end at 5:00pm

- A. 5 minutes An introduction of the presenter should be made to the audience by a respected leader within the learning organization group.
- B. 5 minutes Presenter will handout a packet of information with a table of contents and numbered pages to the audience members to include a:
 - a. Questionnaire asking "What do you know about Adult Learning".
 - b. Self-Diagnostic Rating Scale of current competency (i.e. Instructional Perspectives Inventory.
 - c. Assumptions and Process Elements of Pedagogical and Andragogical Models of Learnings.
 - d. Guidelines for using learning contracts.
 - e. Building Blocks for the Adult Learning Experience.
 - f. Literature from VP's and Data from "Fortune 500" medical sales training departments suggesting training should be improved.
 - g. Autobiography/Reflections of Benjamin C. Washington II.
- C. 7 minutes Presenter provides time for audience to glance through packet of information.
- D. 3 minutes Presenter assigns listening teams (clarification, rebuttal, elaboration, practical application).
- E. 25 minutes Presenter provides a short lecture overview of what information was provided within the packet as well as an overview of:
 - a. History of gaps in training and current needs assessment.
 - b. Dissertation 9 emerging themes from qualitative interview data.
 - c. Dissertation literature review articles.
- F. 7 minutes Presenter gives opportunity to generate questions in their listening teams.
- G. 20 minutes Presenter answers questions generated from the listening teams.

Andragogical Framework – Process Element Two – Establishing a Climate Conducive to Learning

The purpose for establishing a conducive climate is for the participants to not feel ashamed, embarrassed, or talked down to. If this exists, energy would be diverted from learning.

- A. 10 minutes Have the workshop participants introduce themselves to each other and provide name badges and markers, where participants will write their name to encourage everyone within the group to start calling them by first name for less formality.
- B. 10 minutes Have participants share with each other what makes them unique by expressing their work role, special knowledge and skills, and questions, problems, or concerns they are hoping to have addressed by the workshop.
- C. 10 minutes Designate one participant to share thoughts of another person in the group.
- D. 3 minutes Presenter explains to group to call him/her by first name to not portray the "expert" stigma that could surface with group dynamics.
- E. 5 minutes Presenter tells some jokes/ personal training anecdotes to audience to invoke humor.
- F. Presenter ensures the participants have comfortable chairs, frequent breaks, adequate ventilation and lighting, and availability of drinks and snacks.

Table 14

Andragogical Framework – Process Element Three – Involving Learners in Mutual Planning

People tend to feel committed to a decision or activity to the extent that they have participated in making the decision with the reverse being even more true feeling uncommitted to decisions being imposed on them without the chance to influence it. In a particular training event involving particular individuals, a learning need is not a need unless so perceived by the learner.

Simulate the design of a learning contract to include:

- 1. Learning Objectives What are you going to learn?
- 2. Learning Resources and Strategies How are you going to learn?
- 3. Completion Date What is your target date for completion?
- 4. Evidence of Accomplishment of Objectives How are you going to know that you learned it?
- 5. Criteria and Means for Validating Evidence How are you going to prove that you learned it?
- A. 45 minutes Use huddle groups to showcase key competencies of the organization and industry specific parameters.

Andragogical Framework – Process Element Four – Involving Learners in Diagnosing Their Own Learning Needs

- A. 5 minutes Presenter hands out the instructional perspectives inventory and allows the participants to complete.
- B. 20 minutes Watch a video of an effective presentation and group facilitation.
- C. 20 minutes Ask participants if their learners were to rate them w/ the video serving as a perfect score for our example what would their score be and why. Is there room for improvement? What are some areas right now that you wish you could answer higher on the inventory questionnaire?
- D. 20 minutes Whole Group Discussion & Whole Group Reflection.
- E. 5 minutes Hand out fake money for participation and explain that the individual with the most money at the end of the workshop will receive a prize. As the workshop proceeds the dollar amounts need to visibly increase.

Table 16

Andragogical Framework – Process Element Five – Translating Learning Needs into Objectives

- A. 15 minutes Presenter asks participants to take their written self-assessed feedback of learning needs to use for development of procedures.
- B. 15 minutes Suggest the learners consider and reflect on their audience. Do they have experienced professionals, or are their sales representatives new to the industry?
- C. 15 minutes Ask participants is their environment complex (rare diseases, oncology, buy & bill, REMS) or straightforward (hypertension, diabetes, cholesterol products).
- D. Ask participants:
 - a. 10 minutes What resources do you need to be successful?
 - b. 10 minutes What strategies do you wish to learn more about?
 - c. 10 minutes What projects do you see lending themselves to helping you?

Andragogical Framework – Process Element Six – Involving Learners in Designing Learning Plans and Process Element Seven– Managing a Pattern of Learning Experiences

30 minutes - Facilitator provides a break time to participants.

30 minutes - Facilitator takes feedback from diagnosis and creates 3 short case studies.

- A. 15 minutes Provide a case study of a learning objective submitted to them by their Senior Management Team.
- B. 10 minutes Ask for volunteers to demonstrate how they would approach satisfying the learning objective.
- C. 10 minutes Divide room up to present 3 case studies of potential management deliverables
- D. Facilitator rotates to different tables discussing, telling, and listening to case study.
- E. 10 minutes Designate one member to be a case reader and proclaim one minute of silence after case is read.
- F. 5 minutes Each participant has opportunity to ask only clarifying questions of the dilemma to be solved.
- G. No advice giving is permissible at this time.

The facilitator roams the room unobtrusively visiting groups and models appropriate listening and questioning techniques.

10 minutes - The participants are asked by facilitator if cases are relevant and representative of a potential problem given by management.

If participants answer YES, move forward having participants come up with answers in bullet style format and turn in their work.

If participants answered NO, modify case or add to it to be relevant to current work situations; then proceed to submission of answers in bullet style format.

20 minutes - Answers read by facilitator anonymously to group for group discussions. Ask participants to take notes on anything they hear that they would incorporate into their approach.

Table 18

Andragogical Framework – Process Element Eight – Evaluating the Extent to Which Objectives Have Been Achieved

- A. 15 minutes Fill out "What do you know about adult learning questionnaire" again and compare answers to first questionnaire provided.
- B. 10 minutes Ask participants to write down answers to: "As a result of this session I will":
- C. Test on 6 andragogical theoretical assumptions and 8 process elements (written).
- D. 20 minutes Create a learning contract (written).
- E. 20 minutes Assign learning/teaching teams into triads to discuss how they will apply what they have learned.
- F. 10 minutes Assemble skill practice groups.
- G. 10 minutes Summative Evaluation of workshop and presenter (leave face down as they exit the door).
- H. 15 minutes Allow time for critical thinking techniques or challenge questions to workshop framework.
- I. 15 minutes Allow alternative viewpoint to arise and channel energy into discussion on "how the learners could/would do it better".
- J. 5 minutes Ask the question of "At what moment were you most engages as a learner in the workshop?"
- K. 5 minutes Ask the question of "At what moment were you most distanced as a learner in the workshop?"
- L. 5 minutes Ask the question of "What was the most confusing or puzzling moment in the workshop?"
- M. 5 minutes Ask the question of "What discoveries were most surprising to you?"

Facilitator thanks everyone involved for their participation and input and end the workshop.

Table 19 describes how each module, program objective, and learner objective within the Andragogical Paragon for Medical Sales Trainers was created to align with the andragogy theoretical framework six assumptions of adult learners (Knowles, 1973) and also stemming from needs denoted from the qualitative interview data of the practitioner candidates. Supporting qualitative interview data did not necessarily mean agreement with the Andragogical Paragon modules or Knowles' six assumptions of adult learners (Knowles, 1973). A candidate's quote in Table 19 may have been used to show how the practitioner candidates were not adhering to the six assumptions of adult learners, in stark

contrast to the principles, or completely oblivious to the principles; therefore making it necessary for the deficiency to be addressed within the Andragogical Paragon modules.

The quotes themselves would then show support as to why a particular program objective or learner objective was deemed necessary within the Andragogical Paragon modules.

Other candidate quotes could show support by being in complete agreement with the principles, as described by their actions and activities; but not realizing their identified 'best practice' stemmed from an overarching theme of a particular learning theory that may have other themes and rhythms to guide practice that the candidate may also agree with. Table 19 also charts the answer to the research questions, 'How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?' and 'Can a corporate medical sales training program be designed that applies andragogical principles?'

Demonstrating the alignment of data from several research sources fosters transparency, validity, and accountability. Table 19 is also effective at portraying information in a succinct manner, a format appreciated by sales professionals.

Table 197

Alignment of Washington Integrated Andragogical Paragon for Medical Sales Trainers with Andragogy Theoretical Framework Six Assumptions of Adult Learners

Knowles (1973, 1990, 1995) Six Assumptions of Adult Learners	Washington Integrated Andragogical Paragon for Medical Sales Trainers	Supporting Qualitative Interview Data Examples
1. Need to Know - reason for learning something	 Module 1, Learner Objective: K Understand their macro selling milieu internally and externally. and Learner Objective: L Realize the capacity of their delegated authority. Module 2, Program Objective: A Principles of Adult Learning and Key Contributors (Knowles, Lindeman, Henschke, Mezirow, Kapp). Module 3, Program Objective: D Foundation of Classroom Management. Module 4, Learner Objective: H Compare and contrast differing approaches to instructional delivery and its impact on learners through lens of direct experience. Module 5, Learner Objective: G Implement best practice strategy for engaging adult learners. 	"In the workshops there isn't an assessment or an application making sure that individual learner needs are being met. The learners come to us for learning, but we are not going to them and requiring that they implement it". – Candidate #1 "Assigning break out leaders is our attempt at identifying that individual learner needs are being addressed. We have people with brand experience actually sitting at each table, to help us gauge whether or not people are getting it". – Candidate #4

Table 198. Continued.

2. Concept of Learner – increasing self-directedness and independent learning opportunities

Module 1, Learner Objective: H

• Recognize the bilateral essence of teaching and learning.

Module 2, Learner Objective: F

• Understand the foundational philosophies in adult theory.and Learner Objective G:

 Comprehend the learners self-directing spirit, experience, readiness, orientation, and motivation to learn.

Module 3, Program Objective: A

• Understaning of Andragogical Theoretical Process Elements.

Module 4, Program Objective: C

• Edify Andragogical Training Approach.

Module 5, Program Objective: E

• Gaining Invaluable Insight through Field Training Ride-A-Longs, Focus Groups, and Surveys.

and Program Objective: F

• Garnering Trust through Emotional Intelligence.

"The goal is to make sure that the learners never pick up their cell phones, because once you see people checking devices you know they're not engaged and that means that you are not following adult learning principles". —Candidate #2

"Most of what we do is based on timing, So the sales person has been with the company for a year and then they have to go to the next level of training. It's not necessarily built on their readiness for the next level. So, I would probably say that is gap that we need to address better". — Candidate #4

"Once I'm sure about the learner's knowledge then I would like to check skill. For example, if you were to tell me how to bat a baseball and walk me through the steps, I would then want to put you in the batter cage and see if you could actually execute on all of the elements you just described to me". – Candidate #5

Table 199. Continued.

3. Learner's Experience –			
learners themselves are rich			
resources for learning			

Module 1, Learner Objective: M

• Incorporate and engage learner experience into the training session.

Module 2, Learner Objective: K

 Associate diversity and generational linkages and industry experience into instruments for assessment of education outcomes.

Module 3, Program Objective: J

• Create a curriculum incorporating researched based principles couples with real world data.

Module 4, Learner Objective: H

• Compare and contrast differing approaches to instructional delivery and its impact on learners through lens of direct experience.

Module 5, Program Objective: A

• How to engage Adult Learners in Training.

4. Readiness to Learn – develops from life problems and tasks

Module 1, Learner Objective: N

 Establish credibility to learners derived from problems encountered and solved.

Module 2, Learner Objective: I

• Have awareness of different generational markers of learners responding to divergent stimuli.

Module 3, Program Objective: E

• Syllabi Development.

Module 4, Learner Objective: K

• Appraise when to appropriately outsource varying training components, if necessary.

Module 5, Program Objective: D

• Pull Through Training Strategy with First Line Management and Supervisors.

"It seems as if adult learners tend to learn from each other as opposed to doing something because the teacher said to do it. We encourage that it because it becomes less about the instructor knowing more than the learner". — Candidate #1

"I sometimes identify people in the room who are experts with the content and utilize them to add a level of diversity to the class. I may even have them teach some of the class". – Candidate #4

"People with tremendous amount of experience can add so much to the class, and we tell the rest of the class we are very fortunate to have them with us today". – Candidate #6
"We always try to leverage [learner] previous

"We always try to leverage [learner] previous experience and knowledge in the training environment". – Candidate #8

"We prefer extremely autonomous individuals who are creative and able to create content. They are multi-task oriented, and adaptive, strategic, and resourceful". – Candidate #10

"The best sales trainers have excellent platform skills and able to take information and submit it in ways that will allow for the participants to understand at their specific levels". – Candidate #11

"The sales trainers should have outstanding sales experience, product knowledge, and a desire to help others achieve their goals". – Candidate #12

5. Orientation to Learning -
immediate application of
learning

Module 1, Learner Objective: J

• Determine how to identify and distinguish appropriate selling models.

Module 2, Learner Objective: H

• Construct a curriculum suited for medical sales training.

Module 3, Learner Objective: I

• Prepares the learners for the program.

Module 4, Learner Objective: M

• Align training goals and available resources.

Module 5, Learner Objective: H

 Leverage insights and disseminate action items to display return on time and investment to senior leadership. "We don't use a particular sales model". – Candidate #1

"I never saw a [sales model] taught. By the time I got into the role they had stopped using it because it was so ineffective". – Candidate #2

"I'm not sure I could describe a sales model that we use". – Candidate #3

6. Motivation to Learn – internal vs external stimulus

Module 1, Program Objective: F

• Understanding Leadership and Influencing Power.

Module 2, Learner Objective: J

 Understand Malcolm Knowles thoughts on learning improvement as it relates to knowledge, understanding, skill, application, values, and interest.

Module 3, Learner Objective: M

• Transition theoretical concepts into practice.

Module 4, Learner Objective: N

• Determine and discuss personal philosophy of teaching.

Module 5, Program Objective: B

• Influencing Senior Management Perceptions of Training Value and Deliverables.

"The organization is always in search of additional training, but they are not willing to forego the selling time and capacity that training may take away from sales times". – Candidate #5

"I think that we still need to better understand the emerging technology, virtual classrooms, and distance learning training and understand if that is just as impactful as live training as far as a modality? Also, if were to go out there and start some type of business I would try to find a way to measure sales training return on investment because everyone wants to know what they are getting for their training dollars spent". — Candidate #9

Table 20 shows how each module, program objective, and learner objective within the Andragogical Paragon for Medical Sales Trainers was created to align with the andragogy theoretical framework eight process elements (Knowles, 1973, 1990, 1995), and also stemmed from needs denoted from the qualitative interview data of the practitioner candidates. Supporting qualitative interview data did not necessarily mean agreement with the Andragogical Paragon modules or Knowles' eight process elements of andragogy (1973, 1990, 1995). A candidate's quote in Table 20 may have been used to show how the practitioner candidates were not adhering to the eight process elements, in stark contrast to the elements, or completely oblivious to the elements; therefore making it necessary for the deficiency to be addressed within the Andragogical Paragon modules. The quotes themselves would then show support as to why a particular program objective or learner objective was deemed necessary within the Andragogical Paragon modules.

Other candidate quotes could show support by being in complete agreement with the process elements as described by their actions and activities; but not realizing their identified 'best practice' stemmed from an overarching theme of a particular learning theory that may have other themes and rhythms to guide practice that the candidate may also agree with. Table 20 also charts the answer to the research questions, 'How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?' and 'Can a corporate medical sales training program be designed that applies andragogical principles?'

Demonstrating the alignment of data from several research sources fosters transparency, validity, and accountability. Table 20 also portrays information in a succinct manner, a format appreciated by sales professionals.

Table 20

11 Alignment of Washington Paragon Model for Medical Sales Trainers with Andragogy Theoretical Framework 8 Process Elements

Knowles (1973, 1990, 1995) Eight Andragogy	Integrated Andragogical Paragon for Medical Sales Trainers	Supporting Qualitative Interview Data Examples
Process Elements 1. Preparing the Learner – learners gain awareness on what to expect from the experience.	 Module 1, Program Objective: C An Overview of Sales Models. and Program Objective: E Adhering to Organization Guideline and industry Specific Parameters. Module 2, Program Objective: B Andragogical Theoretical Assumptions. Module 3, Program Objective: C Comprehension of Content Design and Curriculum Evolution Strategy. Module 4, Program Objective: D Diagnose Internet Based or Home Study Training. Module 5, Program Objective: C Allotment of Time, Travel, and Sales Representative Field Intelligence. and Learner Objective: I Prioritization and maximization of sales representative training time versus field selling time. 	"The one thing that I would change is infusing more technology in the training arena. There are a lot of great distance learning platforms that are truly virtual, meaning video streaming. This would lead to better engagement with the learner and I also think the effectiveness of the learning would be better". – Candidate #8 "I think that it would be beneficial to find ways to measure how much people learn and how quickly it can translate into action. There is that whole belief that if [learners] don't employ it right away they are never going to use it". – Candidate #9
		Cartinual

2. Establishing a Climate Conducive to Learning – a physical climate of comfort and a psychological climate of mutual respect and trust, authenticity, and support.

Module 1, Learner Objective: O

• Establish a climate of mutual respect, authority, and trust.

Module 2, Program Objective: E

• Accommodating Generational and Diversity Dynamics in Corporate Culture.

Module 3, Learner Objective: L

• Assimilate andragogical principles into distance learning and elearning management platforms.

Module 4, Program Objective: E

• Invigorate Asynchronous Training Environments.

Module 5, Learner Objective: K

• Demonstrate self-awareness and exude empathy to foster mutually beneficial relationships with adult learners.

"You have to set the expectations first, and it is incumbent upon you to make your training engaging". —Candidate #2

"I try to make the information applicable to them and what they are actually going to be doing in real life". – Candidate #3

"I want the activities to be more of a two dialogue, which is the same thing the sales reps are trying to do with our customers". —Candidate #4

3. Involving Learners in Mutual Planning – learners sharing the responsibility for planning learning activities with the facilitator.

Module 1, Program Objective: G

• Involve Learners in Diagnosing Their Learning Needs and Mutual Planning of Curriculum.

Module 2, Learner Objective: L

• Develop group activities of mutual interest to audient and program objectives.

Module 3, Program Objective: B

• Establishment and Overview of Learning Contracts.

Module 4, Program Objective: G

• Learning Contracts: Theory to Practice.

Module 5, Learner Objective: L

• Create a template for Senior Leadership to identify gaps in perceived returns versus actual returns on training time.

"There is a way to train and help adults learn complex information, and you have to avail yourself to that". – Candidate #2

"I think the biggest challenges are probably employing adult learning principles and walking away from PowerPoint presentations and really trying to integrate the training into practice while they are learning it". — Candidate #3

4. Involving Learners in Diagnosing Their Own Learning Needs — regarding knowledge, understanding, skill, attitude, value, and interest.

Module 1, Program Objective: G

 Involve Learners in Diagnosing Their Learning Needs and Mutual Planning of Curriculum.

Module 2, Program Objective: C

• Andragogical Process Elements.

and Learner Objective: N

• Involve learners in forming their learning objectives.

Module 3, Learner Objective: N

• Construct and explain a learning contract as defined by andragogical process standards.

Module 4, Learner Objective: L

• Appraise when to appropriate to apply various teaching formats and applications.

Module 5, Learner Objective: M

• Act as a training consultant for larger organization and appropriately recommend changes.

"The goal is to connect with you audience in a way that shows you really care about their success." – Candidate #4

"I measure success through what I would consider my client engagement. I constantly send out engagement surveys and learner satisfaction surveys to gauge where we are on a periodic bases" – Candidate #8

5. Involving Learners in Forming Their Own Learning Objectives – mutually negotiated by learners and facilitator.

Module 1, Program Objective: G

• Involve Learners in Diagnosing Their Learning Needs and Mutual Planning of Curriculum.

Module 2, Learner Objective: O

• Involve learners in forming their learning objectives.

Module 3, Learner Objective: K5

• Translates learning needs into objectives.

Module 4, Program Objective: F

 Dissect and Analyze Kirkpatrick's Learning and Training Evaluation Model.

Module 5, Learner Objective: N

• Pivot to new program modifications in order to adopt to emerging themes in the industry or macro-environment.

"For me I put a lot of measurement on talented people and personnel receiving promotions and moving on to advanced roles. Also, I use survey feedback from the various training venues as indicators as well". — Candidate #9

"There is a baseline exam and then there is a completion exam. We will look at the results from the baseline and completion exam and then from the annualized competency exam. For instance, if we look at our consumable products and we see increased growth from the time we spend training then we will count that as a success". — Candidate #10

6. Involving Learners in Designing Learning Plans

 mutually agreed experiences, resources, projects, and strategy

7. **Jointly Developed Learning Activities** – mutually distinguished techniques and materials

Module 1, Program Objective: B

- The Interdependent Nature of Teaching and Learning. and Learner Objective: I
- Recognize the bilateral essence of teaching and learning. Module 2, Learner Objective: M
 - Identify scenarios where adult learning theory is not being adopted consistently.

Module 3, Learner Objective: K6

• Designs a pattern of learning experiences.

Module 4, Program Objective: A

• Encounter Didactic Method Training.

and Learner Objective: B

• Vitalize Socratic Method Training.

Module 5, Learner Objective: M

 Act as a training consultant for the larger organization and appropriately recommend changes.

Module 1, Program Objective: D

• Trends, Techniques, and Materials Influencing Sales Education.

Module 2, Program Objective: C

• Andragogical Process Elements.

Module 3, Learner Objective: K1 – K8

- Prepares an instructional design.
- Sets an adequate learning climate and environment.
- Involves learners in mutual planning.
- Diagnoses learning needs.
- Translates learning needs into objectives.
- Designs a pattern of learning experiences.
- Helps to manage and carry out learning plans.
- Evaluates achievement of objectives.

Module 4, Learner Objective: O

• Analyze what scenarios are appropriate to apply various teaching formats and applications.

Module 5, Learner Objective: J

 Conduct an effective coaching report with transparency, accountability, time-based goals. "The training is planned by people throughout the organization. First, we come up with a crossfunctional team compiled of sales leaders, compliance leaders, and others who understand the objectives and how to push them through and make it the most effective. These folks include our training teams and third party consultants". — Candidate #11

"In the past we have used different types of gaming situations, case study scenarios, or electronic quick case studies that are able to help the representatives implement what they have learned". – Candidate #11

"As far as practicing, we'll give them a set of instructions and they will have to actually go and pull the report or input the data into their own system. We show them what good looks like and we'll script out a best case scenario and we'll ask them to bring their own flare to it. Even though role playing is arduous it is the best way of getting comfortable with any subject". – Candidate #10

"So, the training role is essential because it describes to both the people who are leading and the people who are following how we accomplish the mission for the organization". – Candidate #11

8. Involving Learners in
Evaluation of Learning
Outcomes – assessment and
measurement of predetermined performance
metrics

Module 1, Program Objective: A

• Subject Matter Proficiency Scholarship, and Evaluation. Module 2, Program Objective: C

• Andragogical Process Elements. and Program Objective: D

• Competency Components and Assumptions.

Module 3, Program Objective: F

• Institution of Evaluation Techniques.

and Program Objective: G

• Launch of Qualitative Assessments.

Module 4, Learner Objective: J

• Measuring training effectiveness and outcomes.

and Program Objective: P

• Explain reactions to training, learning attitude, knowledge transfer, and implementation results in the context of Kirkpatrick's Evaluation Model.

Module 5, Learner Objective: O

• Systematically measure learner performance to mitigate vacillation in strategy.

"[Evaluation] is a big challenge because the district manager becomes a big part in the accountability of the training. The training is only as good as the district manager that is going to pull it through in the day to day work". – Candidate #9

"We measure success in risk reductions and compliance infractions with regards to delivering mis-information that comes back and becomes recorded. Next, an increase in sales in the different geographies based upon the implementation". — Candidate #11

Personal Reflections and Discussion

After creating the Andragogical Paragon for Medical Sales Trainers' modules the natural next step was to allow it to inform my leadership decisions and look for opportunities to test the validity of the program concepts in a setting similar to the environment the modules were intended to impact, if the opportunity could be secured. I was able to conduct a training seminar and workshop at a regional sales meeting for a multiple billion dollar, international company that specialized in biological infusion products in the rare diseases and ultra-orphan products space. The meeting was to be comprised of medical sales professionals, medical science liaisons, and their direct management for the regional arena comprising the representatives from the ten states of Oklahoma, Texas, Missouri, Arkansas, Louisiana, Mississippi, Tennessee, Alabama, Georgia, and Florida. The organization noted that training was always a concern, due to the complexity of the sales process in their difficult to treat therapeutics areas of hematology, oncology, neurology, and nephrology, etc.

The name of the workshop was to be "Communicating with our Customers," and the main directives given to me by the management team were to train the sales representatives on how to understand buying signs, filtering information through differing personality types, and creating a sense of urgency around the goals of testing and treating patients with the companies therapies and diagnostic tools. It is worth mentioning that the particular manager taking the lead at the meeting specifically mentioned to me to try to keep the sales representatives engaged, if at all possible. The workshop was to be centered between several breakout sessions where compliance issues would be discussed, clinical studies would be dissected, and geneticist personnel would

be providing clinical updates regarding the products. Those specific topics have a tendency to not be the most engaging, considering the personalities of medical sales professionals; so death by PowerPoint presentation would probably not be the best strategy to employ. I was given complete autonomy to design and conduct the session without any check in, other management influence, or direction. Having this autonomy was critical, as it allowed for the infusion of andragogy from the very beginning of the design of the program and learner objectives. The only mandated material that I needed to include were some disclaimer statements cautioning the sales representatives that they were not allowed to present any material to customers that were not in line with the product label or within the company approved marketing messages, and that the presentation they were about to view was to be kept confidential and not distributed, since the nature of presentation being conducted at a regional sales meeting meant it was solely for the viewing of internal employees. Although I did involve the use of PowerPoint, it was used as a guide to keep a pace and set the expectations that could be easily viewed on a 100+ inch screen for the entire audience to see.

The workshops consisted of several interactive games and projects, where participants were assembled into teams to work through exercises and developmental tasks. Choices on how to move forward in learning were provided, and anecdotal stories and case studies were infused to engage learners that learned in dis-similar or unique ways. New skill application was allowed to be practiced and techniques of previous sales tactics used by the sales representatives were given by each individual in attendance. As the progression of the workshop continued, sales model alignment was shown to the sales representatives in order to teach them how to employ more of the strategies within a

particular model that aligned with their personality types, as well as their customers' personality types. Time was permitted to ask for clarification of topics before moving forward and incorporation of videos and graphs were used to show similar information in different ways. To keep it fun, fake money was handed out in increasing dollar increments to encourage participation, involvement, and minimize barriers that would make individuals feel uncomfortable with providing input into the session. Finally, all participants were provided a feedback form developed specifically for the workshop sessions, created out of the themes and rhythms of andragogy (See Appendix J). The language, words, and phrases within the feedback form from the title, and throughout, were designed to be engaging, light, and humorous to disarm any pre-textual mindsets from any previous feedback form the participants of the training may have encountered before; and purposefully to prod at the potential thoughts that may have accessed their thoughts to show that harmony and awareness of the human nature were involved in learning. On a scale of one to ten, with ten being the most optimal score, the workshop participants provided a feedback score of ten on all of the categories of assessment, with nine being the lowest score I received from any individual in any category. These feedback scores and the personal comments and emails sent to me and my supervisors were all indicators to me that there was a place in corporate medical sales training for an andragogical approach.

In terms of the actual role of corporate medical sales trainer, my research indicated that there was a consistent, persistent, and in some case insistent bombardment of ill-formed ideology and significant gaps in sales training operating procedure.

Personally, I feel the role in its then-current state should just be re-named for what it was,

which was a junior manager or a manager in training. There seemed not to be a sense of urgency around creating scholars within the training ranks, and was viewed simply as stepping a stone on to the next role of greater perceived significance. With talent and bench strength indicators coming from the ranks of this role, more is needed to be done to adequately prepare adults to be teachers of other adults.

Recommendations for Future Research

Adult education and medical sales training practitioners may benefit from future research that scientifically evaluates a longitudinal study whereby participants would be asked the same interview or focus group questions in different year intervals. For instance, gaining a respondent's assessment in year one, year five, and year ten to ascertain the variance in response related to more 'experience' or 'practice' in the field may be compelling. Another area of study that may yield great insight would be to inquire of study participants from the same organization the exact same set of research interview questions to discern the likelihood or impact of organizational and/or cultural attributes infused into the ideology of the sales training practitioner; or if the teaching paradox or style incorporated was purely individually-based. Still more awareness could be had by comparing the approaches and results of sales training practitioners with educational backgrounds, specifically to those who have no formal education knowledge who simply were proverbially tapped on the shoulder by another individual with greater rank, but still no formal education knowledge.

By also computing a quantitative study that scientifically measures the impact of monetary revenue or profit changes in results of organization's who embrace andragogical learning theory to those that do not, could help demonstrate a case to show

if an organization or business unit should or should not employ andragogical learning theory into their medical sales training practice. Along these lines the specific sub-sets of the healthcare sales industry (pharmaceutical, medical device, biotech, and diagnostic sales) could be compared and contrasted to help determine application efficacy and to help propose tangible results to senior leadership looking for what the impact of embracing andragogical training techniques would or could be. Lastly, future research to follow up to see if the Andragogical Paragon for Medical Sales Trainers Prototype model contains long-term merit with an ever-changing healthcare system could be fascinating. Specifically, determining application steps on how to introduce, outline, and manage the knowledge of the new medical sales trainer who is experiencing trial by fire would elicit tremendous value.

Conclusion

This study spotlighted a practitioner's concern over the quality of instruction provided in current corporate medical sales training environments. Medical sales was defined for the purposes of this study to include pharmaceutical sales, biotech sales, medical device sales, and diagnostic sales. A general background was given on the historical context of how medical sales training has been conducted in the past and up through the present day practices. A determination was made to explore the importance of re-evaluation and re-assessment of the needs of the learners (sales representatives) who are tasked with providing more business results with less resources in a post-2008 global recession environment. Several inherent problems were presented to demonstrate that then-current practices may not have evolved to the point of keeping pace with the then-current needs of various organizations. Also significant gaps were shown within

curriculum designs and about institutional accountability where research surfaced to display how a paradigm shift may be needed moving forward.

Some assumptions and limitations of the study were discussed with several categories displayed within the literature review to demonstrate current thoughts of the collective macro-environment; including data on measuring training effectiveness, delivery formats, and technology use is training. Of note, alignment of any corporate medical sales training program to any specific learning theory seemed to be scanty at best and therefore ripe for an overhaul. Andragogy, a specific learning theory on how to instruct adult learners, was introduced as a potential way to provide guidance and structural support to an area that seemed to have little direction and purpose. A precise methodology involving action research was conducted to answer three research questions.

- 1) How do corporate medical sales training models current at the time of this writing align with the principles of andragogy?
- 2) Can a corporate medical sales training program be designed that applies andragogical principles?
- 3) How does andragogy inform medical sales training?
 A procedure, location, and methods for data collection and analysis were outlined for transparency.

A rich source of data was produced from qualitative interview participant answers where several categories of open ended questions were posed in a defined and specific format (Appendices A-C). From the data nine emerging themes surfaced, and these emerging themes were compared and contrasted to the research data collected from the

literature review. The implications from these sources of data showed a dire need of a new and sustainable delivery format for the space and replacing the previous perceived understanding of virtually everything on the subject involving adult learning theory known by medical sales trainers.

A design of a prototype model was deemed necessary in order to adequately and systemically provide instruction to an audience with little to no formal training, but charged with the responsibility to oversee and impact millions, and in some case billions of dollars through their influence. The creation of the Andragogical Paragon for Medical Sales Trainers was the result of the research and several tables were introduced to show the precise alignment with the created model back to the research data and further supported by the qualitative interviews of practitioners within the space (See Tables 19-20).

A personal reflection of the implementation of the parallels from the Washington Andragogical Paragon for Medical Sales Trainers was presented to demonstrate the themes and rhythms of how to apply andragogy within a corporate medical sales training environment. Fantastic and positive feedback was provided to me after conducting a workshop and seminar using andragogical principles, allowing me to conclude that andragogy is needed, has a place, and would be well received within corporate medical sales training environments.

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Appendix A – Research Interview Questions

Forward Looking & General Information Questions

- 1. What are the biggest challenges in your corporate medical sales training environment and how do you deal with them?
- 2. If you could change anything you wanted about your corporate medical sales training environment, what would it be and why?
- 3. In your view, what research would you most explore to make the corporate medical sales training environment yield greater results a.). General business acumen, b.) Employee morale, c.) Emotional intelligence, or d.) Increasing revenue?
- 4. In your view, what answers are still needed to add valuable contributions to the field of corporate medical sales training?

Demographic/Foundation Information

- 1. What is your current title and what is the current title of the person to whom you directly report?
- 2. How many years of business experience do you have?
- 3. How many years of sales training experience do you have?
- 4. What was your job title and duties immediately previous to your sales training responsibilities?
- 5. What are your job duties now?
- 6. Did you have any adult learning strategy, curriculum development, or instructional design experience previous to your medical sales training position? If yes, please explain.
- 7. Did you ever achieve sales results within your current company in the top 25th percentile?

Sales Training Environment Information

- 1. Can you describe the goal of your corporate medical sales training program?
- 2. How would you say your corporate medical sales training program is different from other programs?
- 3. What are the competencies and characteristics of your organization's sales trainers?
- 4. How many individuals are you expected to train on a yearly basis?
- 5. How does your company measure success for the sales training department?
- 6. How do you personally measure success in your role?
- 7. How are you evaluated in your role?
- 8. Describe the impact your role plays in the organization's mission?
- 9. Describe the sales model(s) your organization uses?
- 10. If you had to assign a dollar amount to the amount of revenue the individuals you train generate for your company, what would that figure be and why?

Identifying Adult Learning Principles

- 1. How do you know when an individual you have trained actually understands the information you need them to understand?
- 2. How do you understand the trainee's motivation or readiness for learning?
- 3. How do you train someone with more years of experience than you possess in a particular subject matter?
- 4. How do you engage your trainees in the learning process?
- 5. Who plans your training agenda and what materials will be covered?
- 6. In a classroom setting how does your department identify that individual learning needs are being addressed?
- 7. What activities or developmental tasks do you or your organization incorporate to help the trainee "practice" what they have learned other than role-playing? Does your company use role playing?
- 8. How do you ensure that all of your trainees leave your sales training session equipped to perform in the field if every individual arrives with varying degrees of knowledge?

<u>Wrap Up</u>

You are free at this time to elaborate, clarify, or add any information to the questions you have answered or topics I did not cover.

Appendix B - Participant Information Letter

Lindenwood University 209 South Kingshighway St. Charles, MO 63303

Dear Participant,

You are invited to participate in a research study conducted by Benjamin C. Washington, II, M.B.A., Ed.D. (candidate) under the supervision of Dr. Susan Isenberg, Dissertation Committee Chair, Lindenwood University. The purpose of this study is to investigate how to apply andragogical principles to the corporate medical sales training environment. Andragogy is the art and science of helping adults learn (Knowles, 1970). Your part in this study will involve participating in audio taped, face-to-face or telephone conversation interview style questions. The information gathered from this study will help contribute to the body of knowledge relevant to corporate medical sales training methodology.

Your participation is completely voluntary, and there is no penalty if you decide not to participate. The risks to being involved in this study are limited to the level of discretion in which you choose to answer the interview questions. Your identity will not be disclosed in any publication of this study.

If you have any questions or concerns regarding this study, or if any problems arise, you may call the investigator, Benjamin Washington, M.B.A., Ed.D. (candidate) at (314) 520-7792. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) by contacting Dr. Jann Weitzel, Vice President for Academic Affairs at (636) 949-4846.

Thank you in advance for your participation.

Kindest regards,

Benjamin C. Washington, II, MBA, Ed.D. (candidate)

Appendix C - Informed Consent for Participation in Research Activities Form

Telephone: (314) 520-7792 (telephone number was provided to interviewee)	
Participant	_
Contact Information	

Principal Investigator: Benjamin C. Washington, II. M.B.A., Ed.D. (candidate)

- 1. You are invited to participate in a research study conducted by Benjamin C. Washington, II, MBA, Ed.D. (candidate) under the supervision of Dr. Susan Isenberg, Dissertation Committee Chair at Lindenwood University. The purpose of this research to investigate how to apply andragogical principles to the corporate medical sales training environment. Andragogy is the art and science of helping adults learn (Knowles, 1970).
- 2. Your participation will involve answering audio taped, face-to-face (or telephone, if face-to-face is not possible) conversation interview style questions. Any correspondence, elaborations, or reflections you provide may be used as data in this study, with any identifying information removed.
- 3. The amount of time involved in your participation should be approximately 45 minutes.
- 4. Risks associated with this research are the very small potential to violate corporate policy if detailed competitive intelligence information is disseminated with reckless abandon or without tact. Reasonable care has been administered in the development of the interview questions so as not to violate any, or give the appearance of violating any corporate policy, competitive intelligence guidelines, or non-disclosure employee agreements.
- 5. There are no direct benefits for you participating in this study. However, your participation will significantly contribute to the body of knowledge relevant to corporate medical sales training methodology and may help society by identifying best practices in employee engagement, retention, and organization profitability.
- 6. Your participation is voluntary, and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will not be penalized in any way should you choose not to participate or to withdraw.
- 7. Confidentiality will be respected and no information that discloses your identity will be revealed in any publication or presentation without your consent. The information collected will remain in the possession of the investigator in a safe location.

- 8. If you have any questions or concerns regarding this study, or if any problems arise, you may call the investigator, Benjamin C. Washington, II MBA, Ed.D. (candidate) at (314) 520-7792. You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at (636) 949-4846.
- o I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.
- o I do not wish to participate in the interview.

Participant's Signature	Date	Participant's Printed Name		
Investigator Signature	Date	Investigator Printed Name		

Appendix D – Allergan Field Sales Training Manager Job Description

Field Training Manager – Neurosciences Health Systems

Description

The Health Systems Field Training Manager (HS, FTM) is responsible for the development and delivery of both foundation and advanced skills training programs that enhance both product knowledge and selling skills for the Neurosciences Health Systems sales team. Implements sales and leadership development skills by executing sales directives and other training programs to achieve sales, profitability and market share specific to the hospital team. Develop and administer product or other technical disease state training as required. Coordinates efforts between the training team, sales leadership, and Neurosciences marketing to enhance the sales representative's ability to deliver advanced product, technical, and reimbursement messages and information. Interfaces with Neurosciences hospital marketing to further develop training materials and communication plans around key marketing initiatives. The employee must conduct their work activities in compliance with all Allergan internal requirements and with all applicable regulatory requirements. Allergan internal requirements include compliance with ethics, environmental health and safety, financial, human resources, and general business policies, requirements, and objectives.

Live Sales Training Program Design and Execution

Co-Lead and facilitate the Neurosciences Training and Development programs which include foundation training, advanced training, hospital essentials, advanced professional skills courses such as professional selling skills, insights color energies.

Driving HSM content development needs and training material updates in partnership with the training mangers for all live training programs.

In collaboration with Director of Sales Training, sales leadership and hospital marketing, identifies national HSM meeting goals and objectives, develops agendas and timelines and workshop content. Assist National Training Managers on the development and delivery of train-the-trainer programs that support the National and Regional sales meetings to ensure consistent execution of content.

On-boarding of New Hires/Field Rides

Manage the HSM new hire on-boarding period across the nation. This includes creating, updating and implementing training materials for pre and post foundation class. Work in collaboration with hospital field sales trainers to ensure timely on-boarding calendars, setting expectations, conducting field rides, and managing overall field ride calendar for HSM new hires.

Conducts "days-in-the-field" with Health System Managers nationally to reinforce Neurosciences selling strategies and to evaluate marketing and sales program effectiveness. Provides consistent input and timely feedback to Irvine based training team as well as HSM National Director and HSMD's as it relates to the execution dynamics of the product messaging, technical knowledge and marketing plan. Collaborate with the HSMD's and human resources to assist with appropriate performance management situations for leadership training and development.

Marketing Team Support

 Interfaces with Neurosciences hospital marketing to develop training and communications to support brand strategy.

- Collaborate with the National Training Manager on the development and update
 of HSM training backgrounders, competitive backgrounders, market updates to
 support hospital and competitive brand strategy.
- Management of updates to the Nerve Center portal and various technology
 applications and systems as well as other sales communications tools to ensure
 current sales and marketing strategy and messaging are available to HSM team in
 collaboration with Sales Training program specialist.

Qualifications

Education and Experience

- Bachelors degree in related field from an accredited (4) year college or university
- Minimum five years of pharmaceutical or medical device sales experience, preferably as a Neurosciences Sales Specialist of Health Systems Manager
- Proven track record with documentation of successful sales performance

Essential Skills and Abilities

- Exhibits a high degree of technical expertise
- Exhibits superior leadership qualities and excellent interpersonal skills
- Demonstrates superior business acumen
- Adheres to a rigorous work ethic
- Demonstrates an ability to form, lead and facilitate integrated teams and individuals
- Exhibits a high degree of flexibility in adapting to a rapidly changing environment
- Strong platform style with proven ability to make group presentations at district/region/nation meetings and to major customers
- Excellent written and verbal communication skills to many and varied communication links such as marketing and sales
- Strong organizational, scheduling, planning and prioritizing abilities
- Ability to manage multiple tasks and responsibilities
- Ability to travel extensively
- Flexibility to relocate for future opportunities

Appendix E – Regeneron Manager/Senior Manager, Immunology Commercial Training Job Description

Regeneron Pharmaceuticals Location: Tarrytown, NY

Known for its scientific and operational excellence, Regeneron is a leading science-based biopharmaceutical company that discovers, invents, develops, manufactures, and commercializes medicines for the treatment of serious medical conditions. Regeneron commercializes medicines for eye diseases, high LDL-cholesterol, and a rare inflammatory condition and has product candidates in development in other areas of high unmet medical need, including oncology, rheumatoid arthritis, asthma, atopic dermatitis, pain, and infectious diseases.

Description Summary:

The Assoc. Manager/Manager, Commercial Training (Dupilumab) will report to the Executive Director, Commercial Training and Development-and is responsible for development, delivery and coordination of brand Immunology specific training materials. Areas of focus include the delivery of product and competitive knowledge, market access and customer interaction skills. Training support includes all areas of commercial including sales, marketing and reimbursement.

Responsibilities:

The Assoc. Manager/Manager, Commercial Training (dupilumab) assists in the development and execution of disease state, brand & therapeutic area specific training programs, and all other relevant training initiatives.

Essential duties and responsibilities include:

- Creates and facilitates workshops for POA and other training meetings.
- Uses best in class means of training delivery including eLearning, self-study, computer-based training, audio/video, classroom and experiential learning to ensure the relevant team is trained and to deliver via a clinical selling model the attributes of our products and services.
- Develops content for and facilitates both new hire and advanced training.
- Works strategically with training department across the Sanofi alliance.
- Assists in the development of Regeneron Field trainers.
- Responsible for developing training activities, including backgrounders and FAQ's on competitive products and updates associated with promoting and maintaining brand strategies and tactics.
- Acts as the training liaison between medical, commercial operations, market access, and brand marketing for new hires and existing field employees.
- Provides courses in such a way to stimulate and motivate attendees utilizing a variety of media.
- Develops a means of measuring the effectiveness of training programs through testing, etc.

- Works effectively as a team member.
- Ensure all training is provided in accordance with company policies and procedures and are conducted in strict compliance with all applicable laws and regulations.
- Ensures all developed materials are appropriately approved through the Medical/Legal/Regulatory (JRC) process.
- Conducts field visits with medical specialists and reimbursement managers to keep abreast of current trends, to identify training opportunities.
- Perform other related duties as directed by the Executive Director of Commercial Training and Development.

Experience and Required Skills:

Bachelor's degree required

- Minimum of five to seven years related experience in specialty pharmaceutical/biotech sales, Dermatology experience preferred.
- 1-2 years internal training or regional training experience required.
- Final level will be commensurate with candidate's experience.
- Strong interpersonal communication skills, ability to work across multiple departments and create effective teams.
- Demonstrated mastery in presentation, facilitation, and influencing skills are required.
- Ability to manage multiple priorities, strong organizational, planning, and project management skills are necessary, with a high results orientation required.
- Demonstrated mastery in oral and written technical communication as well as background with instructional design.
- Computer skills:
 - o Must be proficient in Microsoft PowerPoint, Excel.
 - o Training software such as Adobe CAPTIVATE, Brain shark, etc. helpful.
- Demonstrates Regeneron's Core Success Factors including but not limited to: passion for the work, behaving ethically and professionally, professional excellence and teamwork

To all agencies: Please, no phone calls or emails to any employee of Regeneron about this opening. All resumes submitted by search firms/employment agencies to any employee at Regeneron via-email, the internet or in any form and/or method will be deemed the sole property of Regeneron, unless such search firms/employment agencies were engaged by Regeneron for this position and a valid agreement with Regeneron is in place. In the event a candidate who was submitted outside of the Regeneron agency engagement process is hired, no fee or payment of any kind will be paid.

Regeneron is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, sexual orientation, gender identity, disability status, protected veteran status, or any other characteristic protected by law.

Appendix F – ECA Recruiters Regional Sales Training Manager Job Description

Regional Sales Training Manager – Pharmaceuticals

Location: St. Louis, Missouri area – includes multiple states

Function: Sales Management

Segment: Physician

Category: Pharmaceutical

Compensation: \$145,000 - \$160,000

Compensation Type: Salary and Bonus

Salary: \$120,000 - \$135,000

Bonus: \$25,000 - \$30,000

Commission: ---

Auto Package: Company Car

Travel: Not Specified

Qualifications:

Requirements:

- 4- year degree (BA or BS)
- 3-5 or more years of pharmaceutical sales training or sales management experience
- Documented track record of success with stack rankings, awards, and commendations
- Clean driving record

Please note: Candidates who do not have at least 3 years of Sales Training or Sales Management experience in the pharmaceutical industry cannon be considered for this position and should not bother to apply.

Description:

Company:

- A Major international pharmaceutical manufacturer
- A major well-known corporation
- A leader in their segments of the industry.
- A growing company with a strong pipeline of new products

Position:

- Regional Sales Training Manager
- Train sales representatives in 5 states
- Liaison closely with local district sales managers
- Opening is due to promotion

Territory:

- Ideally based in St. Louis, MO or Kansas City, MO
- Covers Missouri, Illinois, Arkansas, Kansas, Oklahoma, Texas

Benefits

- Total income package is \$144K-\$162K or more
- Base salary \$120K-\$135K
- Bonus that adds an average of 20% of base
- Bonus can be even higher based on personal performance

Benefits

- Company Car and all travel expenses
- Excellent benefit package: Medical, Dental, Life, Disability, 401k, etc.
- Outstanding advancement opportunities

Contact:

• ECA Recruiter name and email address provided

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Appendix G – Genentech Commercial Brand Trainer Job Description

Genentech

Commercial Brand Trainer/ Sr. Brand Trainer

Location: South San Francisco, California

Who We Are

At Roche, 88,500 people across 150 countries are pushing back the frontiers of healthcare. Working together, we've become one of the world's leading research-focused healthcare groups. Our success is built on innovation, curiosity, and diversity. A member of the Roche Group, Genentech has been at the forefront of the biotechnology industry for more than 30 years, using human genetic information to develop novel medicines for serious and life-threatening diseases. The headquarters for Roche pharmaceutical operations in the United States, Genentech has multiple therapies on the market for cancer and other serious illnesses. Please take this opportunity to learn about Genentech, where we believe that our employees are our most important asset and are dedicated to remaining a great place to work.

The Position

The Commercial Brand Trainer role includes responsibilities that are both salesdriven and clinical in nature. Therefore, the Brand Trainer must possess a thorough understanding of the assigned Genentech brand product and their application(s) in the respective disease state(s) given the competitive landscape. Brand Trainers work within a core learning and development support team, made up of their manager, instructional designers, and other project or administrative staff. These teams work closely with

internal and external partners/stakeholders to ensure best fir and alignment of developed/implemented learning programs and other offerings.

Examples Duties and Responsibilities:

- Works with other to assess existing learning and development curricula and specific programs and other offerings and compare/contrast with immediate, medium, and longer term business needs, strategic goals, other targets and anticipated results.
- Works with others to build appropriate and aligned annual or longer-range learning and development plans that will support business partners and other stakeholders in Commercial Operations in achieving their strategic and operating goals, targets and anticipated results. May individually undertake a detailed needs analysis/ data gathering process/project for key learning and development content/topics/subject matter; providing detailed partner/stakeholder input that helps shape the direction, specific offerings, as well as content and facilitation methods/structure for ultimate design and facilitation alignment.
- Works with others to conduct internal business partner/stakeholder reviews of learning and development plans, programs or other activities; ensuring up-front internal client input into the shaping and ultimate development of aligned learning/development plans, programs, and activities.
- Translates annual or other cycle learning and development plans, programs and
 activities into a scheduled calendar of specific sessions/dates for facilitation.
 Supports manager, peers, team members and others however necessary to finalize
 and disseminate such calendars, as well as respond to any internal client or
 external partner questions, concerns, or other comments.
- As and when requested, supports others in the development and implementation
 of an aligned learning and development communication strategy/plan/activities to
 ensure internal partners/stakeholders are fully updated and aware of all assigned
 learning and development programs and other offerings
- Periodically, as and when needed/requested or appropriate, delivers internal presentations to fully communicate department's offerings and support strategies.
- Actively pursues continued education and awareness of field, product, disease state(s)/ indication(s) and surrounding marketplace changes/developments, ands uses where appropriate to incorporate into program and other learning event/activity facilitation, as well as provide such information to manager and team members for continuous departmental review/assessment of existing learning and development offerings.

- Works collaboratively with manager, peers and/or other team members to identify, recommend, and where appropriate/approved, implement new, creative, innovative learning and development offerings or techniques.
- Uses approved learning and development plans, curricula, schedule/calendar, specific programs and activities for assigned responsibilities to proactively learn program/other activity content and prepare for expert facilitation. Channels questions, other needs or challenges, in advance, to the appropriate partners; further ensuring full and exacting preparation for expert delivery of assigned learning/development content.
- As approved, conducts regular field visits, working with field staff and management one-on-one in teams. Provides field consultation, team and/or individual coaching and development; enabling hands-on learning/development support to the assigned employee/management groups
- Continuously assesses and evaluates impact and overall effectiveness of facilitation responsibilities. Does so by consistently reviewing learning program participant evaluations, as well as soliciting additional or other feedback, extracting key themes, patterns and opportunities and channeling such to the appropriate internal partners or stakeholders
- Works with peers/team members to ensure maximum leverage of existing resources, tools, programs, content, etc.
- Complies with all laws, regulations and policies that govern the conduct of Genentech activities

Who You Are

Qualifications and Experience: unless stated as "preferred" or "a plus", all other criteria are required

- Bachelors Degree
- MBA or other related graduate-level degree including Medical, Life Science or other related degrees a plus
- Average of 3 or more years work experience
- A minimum of 2 years previous field experience in the pharmaceutical, biotech, or other related industry
- Previous experience in same or related therapeutic area; to include relevant disease state(s)/indication(s) is preferred
- Previous account management or other managed care experience is a plus
- Previous experience supporting team members and peers in the field in informally developing their skills and abilities; demonstrable through previous formal assignments and team member partnering

- Consistently met or exceed assigned sales or other targets, goals and objectives
- Strong track record for developing and implementing attainable sales or other field business plans
- Business travel, by air or car, is required for regular internal and external business meetings

The next step is yours. To apply, click on the "Apply online" button below.

Genentech is an equal opportunity employer and prohibits unlawful discrimination based on race, color, religion, gender, sexual orientation, gender identity/expression, national origin/ancestry, age, disability, marital and veteran status. For more information about equal employment opportunity protections, view the EEO is the law poster.

If you have a disability and need an accommodation in connection with the on-line application process, please email us at US.Accommodation@roche.com

ANDRAGOGY IN CORPORATE MEDICAL SALES TRAINING

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Appendix H – Novo Nordisk Manager, Sales Training Job Description

Company: Novo Nordisk

Location: Plainsboro, NJ

Position: Full Time

Area of Expertise: Sales, Marketing, Business Development

Title: Manager, Sales Training Specialty – Market Access

Job Category: Field Sales

Purpose: Analyze, develop, implement and evaluate the Diabetes Sales Phase training curriculum. Ensure diabetes sales strategies are supported and executed at Pre-POA events. Provide recommendations into the overall curriculum design strategy which specifically support and enhance competency based training for diabetes sales. Ensure all sales training teams understand and execute against brand and diabetes sales/market access vision and strategies.

Relationships: External relationships include interfacing with various vendors to supplement training needs. Works closely with Associate Directors of Field Training and/or Sr. Area Support Managers to elicit needs/ feedback, evolve training curriculum as needed and ensure execution excellence of established curriculum. Reports to the Associate Director/Sr. Manager, Sales Training. Works closely with sales and marketing leadership teams, e-learning team, instructional designers, evaluation strategists. Leadership Development and all other personnel as required. (I.E. medical, regulatory, and sales operations)

Essential Functions: Needs Assessment/Design/Delivery: Assist in conducting needs analysis which will assist in evaluating design needs. Evaluate and purchase

appropriate programs/materials from outside resources to fill training and development needs. Manage the development and execution of training materials and updates as needed. May design and deliver some, and, oversee all basic and advanced training as needed. Oversee needs analyses strategy and implementation. Regularly interacts with field sales personnel and Regional Field Trainers to ensure in-depth understanding of market, individual/local needs and training is aligned with market needs. Understand and support the development of all levels of Phase Training, (including new product introductions/launches/expansions) curriculum for newly hired field sales representatives and managed care personnel.

Strategic Training and Development: Communicate updates when determined necessary based on best practices, benchmarking and state-of-the-art technology needs. Continuously explore external "best practices" and improvement of all relevant training. Lead POA analysis, design, support, and delivery for curriculum design content specifically to include all agendas, assessments, training workshops, and field guides. Liaise closely with all marketing, medical, and sales operations personnel to ensure all objectives and metrics for the POA are met. Liaise closely with sales leadership, sales operations, and field effectiveness personnel to ensure all key objectives and metrics for onboarding new hires in diabetes sales are met. Manage the communication and execution of e-learning programs to regional field trainers, field sales, or account executives and where appropriate head office personnel in support of "plan of action" training and other projects as assigned in relation to curriculum design. Oversee sales training PRB submissions/process to ensure field training managers receive appropriate system access and training. Oversee the management of all phases of project management

and coordination with vendors in relation to development and maintenance of POA curriculum. Support Brand teams in developing and communicating 'as needed' briefings to the field sales teams. To ensure timely and excellent communication and deployment of all pre/post-poa activities to personnel as required. Work closely with the metrics and evaluations team to conduct regular needs assessment analysis for which support the development of training strategies as it relates to pre-poa and diabetes sales new hire training and development. Work closely to ensure best in class POA's development and e-learning provision.

Fiscal: Develops and monitors performance against department's budgets.

Ensures budgets remain in department and company profitability goals.

Physical Requirements: Approximately 30% overnight travel.

Development of People: Manages the application and communication of all Novo Nordisk policies, procedures, and Novo Nordisk way.

Key Success Factors: Education, Experience, Knowledge and Skills. A Bachelor's degree required. A minimum of 7 or more year's pharmaceutical sales, including elements when possible of field sales, sales management, market access, sales operations, curriculum design and/or sales training experience. Excellent interpersonal, presentation, and communication skills. Previous management/supervisory preferred. Microsoft office software. Proven track record of sales performance results.

Novo Nordisk is committed to equal employment opportunity and providing reasonable accommodations to applicants with physical and/or mental disabilities. We value diversity and solicit applications from all qualified applicants without regard to race, color, gender, sex, age, religion, creed, national origin, ancestry, citizenship, marital

status or mental disability, medical condition, veteran status, genetic information, or any other characteristic protected by federal, state, or local law. If you are interested in applying for employment with Novo Nordisk and need special assistance or an accommodation to use our website or apply for a position, please call the U.S. Toll Free number or email NNIDisabilityAccommo@novonordisk.com with your request. Please note we do not accept applications for employment or employment related solicitations by email address. If you are requesting special assistance, please specify your request in the body of your email. We will not be able to respond to requests unless you specify and ask for special assistance or an accommodation in your message. Determinations on requests for reasonable accommodation are made on a case-by-case basis.

Requirements:

Curriculum, Diabetes, E-Learning, Education, Entry Level Sales, Field Sales, Healthcare, Law, Legal, Management, Manager, Marketing, Marketing Manager, Medical, Operations, Outside Sales, Pharmaceutical Sales, Project Manager, Sales Management, Sales Operations, Science, Special Medicine, Technology, Training.

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Appendix I – Sunovion Sales Training Manager Job Description

Sunovion Pharmaceuticals

Position Title: Sales Training Manager

Department: Sales Operations and Training

Location: Massachusetts

Job Type: Full Time

Summary of Responsibilities: The Sales Training Manager (STM) position will be responsible for aspects of training for a product specific salesforce (Specialty markets) at Sunovion. Areas of direct responsibility for this role include the selling model, product and disease state, PMRC, operations (STAT/VEEVA), coaching, and providing direction to a team of field based trainers. The STM position will be accountable for developing, managing and delivering all training accountable for New Hire and Plan of Action/National Sales Meetings. This position will communicate with sales training leadership, sales and marketing leadership, medical information, sales operations, compliance and other commercial partners to create and deliver quality training curriculum.

Essential Functions:

- 1. Design, create, and deliver training content to continually enhance sales for product/disease state expertise, selling skills, and business acumen expertise. This will include STAT, VEEVA training, business analysis, coaching other for performance, optimizing FBR's, and teaching the selling model.
- 2. Responsible for managing the design, development, delivery, and measurement of initial, POA, launch and certification training.
- 3. Responsible for managing (with management oversight) functional budget to include accruals, forecasting, SOW and PO generation, and vendor management.
- 4. Demonstrate leadership within sales training by offering guidance and support during on-boarding on new training managers.

5. Accountable for continued self-development of skills within role, as well as competencies related to aspirational role within Sunovion, as defined by career development plan.

Minimum Education Requirements: Bachelors

Experience Required: 5-7 Years

Knowledge and Skills (general and technical): Bachelors Degree (preferably in business or life sciences), MBA helpful; 3 years successful field sales experience and institutional experience preferred; leadership aspiration preferred; 1-2 years of sales training experience preferred; for internal candidates, endorsement from current management (Regional Business Manager; Area Sales Director) required.

- 1. Demonstrated success in discussing product and disease information in an appropriate and compliant manner with a healthcare professional
- 2. Strong selling skills approach and ability to model skills for others
- 3. Ability to coach and teach others providing constructive feedback
- 4. Interest in learning and development for self and others continued development
- 5. Ability to translate competencies into skill and knowledge development areas
- 6. Effective leadership and people management skills; experience in motivating others
- 7. Ability to work collaboratively in a team environment across departments and all levels of the organization
- 8. Demonstrated ability to hold self and others accountable to deadlines and responsibilities
- 9. Strong planning and organizational skills
- 10. Highly developed analytical skills
- 11. Creative problem-solving skills
- 12. Understanding of adult learning strategy, engagement, and execution
- 13. Excellent communication, facilitation, presentation skills, both oral and written
- 14. Knowledge of pharmaceutical markets, business acumen, advanced skills and managed care

Confidential Data: All information (written, verbal, electronic, etc) that an employee encounters is considered confidential

Compliance: Achieve and maintain compliance with all applicable regulatory, legal and operational rules and procedures, by ensuring that all plans and activities for and on behalf of Sunovion are carried out with the "best' industry practices and the highest ethical standards.

Mental/Physical Requirements: Fast paced environment handling multiple demands. Must be able to exercise appropriate judgment as necessary. Requires a high level of initiative and independence. Excellent written and oral communication skills required. Requires ability to use a personal computer for extended periods of time.

Appendix J – Sales Training Workshop Feedback Form (Blank)

"I like feedback just as much as the next guy" Form

A. The overall presentation was											
	The best nap I have ever had Surprisingly impressive										
		1	2	3	4	5	6	7	8	9	10
В.	The worksh	op learn	ning con	cepts w	ere						
	A waste of time Actually pretty cool									pretty cool	
		1	2	3	4	5	6	7	8	9	10
c. ⁻	The overall	content	was								
	Rather confi	using								Clearly	Presented
		1	2	3	4	5	6	7	8	9	10
E	Boring as *#\$% Engaging										
		1	2	3	4	5	6	7	8	9	10
5	ame Ole, Sa	ame Ole							I	New and	Interesting
		1	2	3	4	5	6	7	8	9	10
D.	The activitie	es were.									
	l already for	got thei	m						I cai	n use this	tomorrow
		1	2	3	4	5	6	7	8	9	10
1	Not applicable to my job Could help improve sales										
		1	2	3	4	5	6	7	8	9	10
E. The presenter was											
	A joke								See	med Kno	owledgable
		1	2	3	4	5	6	7	8	9	10
ι	Uninspiring Motivating										
		1	2	3	4	5	6	7	8	9	10
F. I would recommend this presentation to additional counterparts											
4	Are you kida	_									heart beat
		1	2	3	4	5	6	7	8	9	10
Sign your name here (Haha, O.K. it was worth a shot) ©©© Thank you for your participation!											
mank you for your participation:											

Appendix K - Comparison of Pedagogy and Andragogy, Updated by Knowles (1995)

Table K21.

Comparisons of Pedagogy and Andragogy

Comparisons of Pedagogy and Andragogy							
	Assumptions			Process Elements			
	Pedagogical	Andragogical		Pedagogical	Andragogical		
Need to Know	Do what the teacher asks	A reason that makes sense to the learner	<u>Preparation</u>	Walt to be told in class the purpose	Gain insight understanding of what is to come		
Concept of learner	Dependent personality	increasingly self-directed	Climate	Tense, low trust, formal, cold, aloof, authority-oriented, competitive, judgmental	Relaxed, trusting, mutually respectful, informal, warm, collaborative, supportive		
Role of learner	To be built on more than used as resource	A rich resource for learning by self and others	Planning	Primarily by teacher	Mutually by learners and facilitators		
Readiness to learn	Uniform by age-level and curriculum	Develops from life tasks and problems	Diagnosis of needs	Primarily by teacher	By mutual assessment		
Orientation to learning	Subject-centered	Task or problem centered	Setting of objectives	Primarily by teacher	By mutual negotiation		
Motivation	By external rewards and punishment	By Internal Incentives, curiosity	Designing learning plans	Teachers' content plans, Course syllabus, Logical sequence	Learning contracts, Learning projects, Sequenced by readiness		
			Learning activities	Transmittal techniques. Assigned readings	Inquiry projects, Independent study, Experiential techniques		
			Evaluation	By teacher, Norm-referenced (on a curve), With grades	By learner-collected evidence validated by peers, facilitators, experts, criterion-referenced		

Note: As cited by Knowles (1995). Compiled by Knowles (1973, 1990, 1995).

Vitae Auctoris

Benjamin C. Washington, II, born and raised in St. Louis, Missouri, is an accomplished, results driven performer whose discipline and meticulous attention to detail allow him to purposefully excel in every arena of life he commits to. With a professional background in medical sales, Benjamin has accumulated consistent top 1% sales rankings for large Fortune 500 medical sales corporations in multiple healthcare spaces. Furthermore, he has parlayed those successful accomplishments into sales and training consulting and speaking engagements for small businesses, professional business organizations, and university forums.

Educational studies have resulted in a Bachelor of Business Administration degree in marketing from Abilene Christian University in Texas where he also excelled as a multiple time NCAA National Champion in collegiate track and field and was selected as captain of the team that went undefeated in four consecutive indoor national championships and four consecutive outdoor national championships under his leadership. Accolades on that level promoted Benjamin to qualify and compete at multiple USA track and field national championship competitions that served as selection events for the World Championship track and field team.

Further studies include a Master of Business Administration degree and highly anticipated Doctor of Education degree with emphasis in instructional leadership and andragogy from Lindenwood University in St. Louis, Missouri.

Benjamin is also an accomplished pianist amassing several national awards, and enjoys attending church services, spending time with his family, and is married to his best friend Jessica, and father to Benjamin III and Selena Michelle.