

AN INVESTIGATION OF VETERINARY SALES PROFESSIONALS' PERCEPTIONS OF
SELF-DIRECTED LEARNING: A MULTIPLE CASE STUDY

by

Agostino Salvatore Scicchitano

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2019

AN INVESTIGATION OF VETERINARY SALES PROFESSIONALS' PERCEPTIONS OF
SELF-DIRECTED LEARNING: A MULTIPLE CASE STUDY

by Agostino Salvatore Scicchitano

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2019

APPROVED BY:

Christopher Taylor, Ph.D., Committee Chair

Ronald Lupori, Ed.D, Committee Member

Lawrence Braue, Ed.D, Committee Member

ABSTRACT

The purpose of this multiple case study was to investigate sales professionals' perceptions of self-directed learning within their current positions. The veterinary industry is a highly knowledge-intensive entity that values professional identity, sense of self, compassion, competence, and the human-animal bond; the veterinary sales professional plays an important role in this industry. However, with sales training waning after the first three years of a sales professional's employment, self-directed learning becomes an important tool for the veterinary sales professional. Yet, there are no studies that provide an in-depth understanding of the role of self-directed learning in veterinary sales. The following central question was investigated in this study: what are tenured veterinary sales professionals' perceptions of their use of self-directed learning within the context of their careers? The theoretical framework used to explore this phenomenon was self-determination theory that encompasses the tenets of autonomy, relatedness, and competence. Semi-structured interviews, an online discussion group, and document analysis were used to gather data from 13 tenured veterinary sales professionals employed by a global veterinary sales organization. Using the theoretical propositions and pattern matching analysis, results showed that veterinary sales professionals using self-directed learning were ambitious, self-motivated, and naturally curious; they utilized self-directed learning to personally grow and professionally advance in their careers, become experts in their field, and fill perceived learning gaps. Understanding these factors can further shape veterinary sales companies, sales training programs, and higher education institutions looking to influence performance, motivation, and training standards within their organizations.

Keywords: self-directed learning, veterinary sales, self-determination theory, autonomy, relatedness, competence, knowledge-intensive organization, motivation, tenured

Dedication

I dedicate this study to the following groups who have profoundly affected and impacted me throughout the years. I am thankful for all that you do. May God always shine His light upon you.

To those brave warriors in the military and in law enforcement who risk their lives on a daily basis, I have walked in both your shoes and I understand the sacrifices that you make. Thank you for standing tall to protect our liberties at freedom's door.

To those compassionate individuals in the veterinary world (veterinarians, practice managers, technicians, and countless others) who strive daily to make this world a better place, I have worked alongside you and I empathize with you. Thank you for making society better for all of us by caring so deeply in what you do.

To those industrious people in the sales profession who grind day-in and day-out, I have carried a bag and I know the challenges you face as you chase goals to make ends meet. Thank you for raising your hand; without you, economies would cease to exist.

To those born to teach, whether in the boardroom of corporate America or the classroom of rural America, I am you; I have dedicated the rest of my career to coaching, mentoring, and influencing those wanting to better themselves through learning. Thank you for being role models to many, young kids and adults alike.

I pray that this study will help to inspire many in sales and sales training to always take strides forward for the advancement of the profession and the betterment of society. "Trust in the Lord with all your heart, and do not rely on your own insight. In all your ways acknowledge him, and he will make straight your paths." Proverbs 3:5-6 (RSV-2CE)

Acknowledgments

First and foremost, I thank God for carrying me through this long and arduous journey these last five and a half years during the doctoral process. He has always been with me through the many challenges in life, including getting me through Afghanistan in the early days of the war. I know He is watching over me.

I want to thank my loving wife, Holly Jo, and my three incredible children, Vincenzo, Giovanni, and Sofia, for wholeheartedly supporting me throughout this entire process. There were countless hours spent away from family working on schoolwork, studying, writing papers, and completing this dissertation. Their love and support during this time was immeasurable. I love you all. Thanks for always standing by me, supporting me, holding me up, and cheering me on every step of the way. It means so much to me to have you all by my side. HJ – God gave me the greatest life partner, companion, and best friend, in you. I'm so thankful to have you beside me on this life-long adventure. Ti amo.

I also want to thank my committee members, Dr. Larry Braue and Dr. Ron Lupori. Thank you for your insight, your feedback, and your support. I appreciate you taking the time to help me become a better doctoral student and researcher. Your guidance was invaluable.

Finally, but certainly not least, I want to thank my committee chair, Dr. Chris Taylor, for his unwavering mentorship, encouragement, and advice these past two years. He was always available for a quick word, a thoughtful conversation, or an encouraging talk. His prayers were always welcomed and needed, and I enjoyed having him as my mentor and coach. Even though he was officially my committee chair, I will always consider him a friend. Sir, thank you for helping me through this process, I am forever grateful.

Table of Contents

ABSTRACT	3
Dedication	4
Acknowledgments	5
List of Tables	11
List of Figures	12
List of Abbreviations	13
CHAPTER ONE: INTRODUCTION.....	14
Overview.....	14
Background	15
Historical.....	15
Social.....	17
Theoretical	18
Situation to Self.....	19
Problem Statement	21
Purpose Statement.....	23
Significance of the Study	24
Research Questions.....	26
Research Question 1	26
Research Question 2	27
Research Question 3	28
Definitions.....	28
Summary.....	30

CHAPTER TWO: LITERATURE REVIEW	32
Overview	32
Theoretical Framework	32
Self-Determination Theory Overview	33
Self-Determination Theory, Motivation, and Education	39
Self-Determination Theory, Motivation, and the Workplace	40
Significance of the Theory	42
Related Literature	43
Sales Training	44
Knowledge-Intensive Organizations	45
The Veterinary Industry	46
Self-Directed Learning	49
The Veterinary Sales Professional and Self-Directed Learning	59
Summary	61
CHAPTER THREE: METHODS	64
Overview	64
Design	64
Research Questions	66
Setting	67
Participants	68
Procedures	71
The Researcher's Role	74
Data Collection	77

	8
Interviews.....	78
Online Discussion Group.....	81
Document Analysis.....	83
Data Analysis.....	85
Creating a General Strategy.....	86
Using an Analytic Technique to Outline Themes.....	86
Creating Generalizations and Interpretations.....	88
Trustworthiness.....	88
Credibility.....	89
Dependability and Confirmability.....	89
Transferability.....	90
Ethical Considerations.....	90
Summary.....	91
CHAPTER FOUR: FINDINGS.....	93
Overview.....	93
Purpose Statement and Research Questions Review.....	93
Participants.....	95
Ben.....	96
Charles.....	97
Chris.....	99
David.....	100
Jim.....	101
Mark.....	102

Mike	103
Mary	105
Nate	106
Ray	107
Sadie.....	108
Stan	110
Sophie	110
Results.....	112
Theme Development.....	113
Research Question Responses.....	135
Summary	147
CHAPTER FIVE: CONCLUSION.....	149
Overview.....	149
Summary of Findings.....	149
Discussion.....	153
Theoretical	154
Empirical.....	160
Implications.....	164
Theoretical	165
Empirical.....	167
Practical.....	169
Delimitations and Limitations.....	171
Recommendations for Future Research	174

Summary.....	177
REFERENCES	181
APPENDIX A: LIBERTY UNIVERITY IRB APPROVAL LETTER	191
APPENDIX B: STUDY SITE APPROVAL	192
APPENDIX C: E-MAIL INVITATION FOR INITIAL QUESTIONNAIRE	193
APPENDIX D: INITIAL QUESTIONNAIRE	194
APPENDIX E: INTRODUCTION CORRESPONDENCE FOR CONSENT	196
APPENDIX F: INFORMED CONSENT FORM.....	197
APPENDIX G: SEMI-STRUCTURED INTERVIEW QUESTIONS	200
APPENDIX H: ONLINE DISCUSSION GROUP QUESTIONS	202
APPENDIX I: MEMBER-CHECK REQUEST E-MAIL	203
APPENDIX J: FIGURE 1 COPYRIGHT PERMISSION	204
APPENDIX K: FIGURE 2 AND FIGURE 3 COPYRIGHT PERMISSION	205

List of Tables

Table 1. Participant Overview.....	95
Table 2. Summary of Themes.....	113

List of Figures

Figure 1. The Self-Determination Continuum.....	38
Figure 2. The Natural Maturation Toward Self-Direction.....	51
Figure 3. Andragogy in Practice Model.....	54

List of Abbreviations

Self-Directed Learning (SDL)

Self-Determination Theory (SDT)

CHAPTER ONE: INTRODUCTION

Overview

The purpose of this multiple case study was to investigate veterinary sales professionals' perceptions of self-directed learning within their current positions. Self-directed learning within the sales profession is a new concept that has been explored recently (Boyer, Artis, Fleming, & Solomon, 2014a; Boyer, Edmondson, Artis, & Fleming, 2014b). It has been used as a tool to close the traditional sales training gap in selling industries when training has waned (Boyer, Artis, Solomon, & Fleming, 2012; Lassk, Ingram, Kraus, & Di Mascio, 2012; Pullins, Timonen, Kaski, & Holopainen, 2017). Even in highly knowledge-intensive entities such as the veterinary industry, a need exists to interact with clients on a higher-order thinking level (Hunter, 2010; Leovaridis & Cismaru, 2014; Matsuo, Hayakawa, & Takashima, 2013). Furthermore, the veterinary industry is a unique environment that values professional identity, the human-animal bond, competence, learning, and a strong sense of self (Allister, 2015, 2016; Dolby & Litster, 2015; Knesl, Hart, Fine, & Cooper, 2016; Page-Jones & Abbey, 2015). Veterinary sales professionals are challenged to remain competent and relevant when dealing with veterinarians in a knowledge-intensive environment (Hunter, 2010). Understanding veterinary sales professionals' perceptions of self-directed learning in a challenging environment may advance and inform practice in university programs, the veterinary industry, organizational training departments, and other institutions that see the benefits of a long-term learning strategy (Alvarez, Taylor, & Rauseo, 2015; Cummins, Peltier, Erffmeyer, & Whalen, 2013; Pullins et al., 2017; Sogunro, 2015).

This introductory chapter will outline the background of the current problem relating to sales training and self-directed learning, the significance of the study, and the purpose of the

study to explore research questions surrounding tenured veterinary sales professionals' perceptions of their use of self-directed learning within the context of their current positions. The chapter concludes with a listing of common definitions used throughout the study.

Background

The following section will describe the historical evolution, the social contexts, and the theoretical concepts of sales training and self-directed learning. As self-directed learning has evolved throughout the last few decades, many have seen the utility and benefits of this concept grow within the adult education framework (Merriam, Caffarella, & Baumgartner, 2007). The use of self-directed learning in professional sales, although limited, has gained ground (Boyer et al., 2014a). Even within the social context of knowledge-intensive and identity-driven entities such as the medical and veterinary industries, different forms of learning are important to their progression (Allister, 2015, 2016; Bones & Yeates, 2012; Hunter, 2012; Page-Jones & Abbey, 2015). Ultimately, the theoretical advancement of self-directed learning will continue to greatly influence and grow the study of andragogy throughout many different professions and academic institutions for years to come (Knowles, Holton, & Swanson, 2012).

Historical

Boyer et al. (2014a) confirmed that "Four decades of research on self-directed learning have shown that empowering adults with greater control over their learning objectives, methods, and outcomes yields beneficial results" (p. 66). Used primarily in non-selling occupations for many years, self-directed learning in professional sales has been limited (Boyer et al, 2014a). Since the inception of a self-directed learning methodology with Tough's (1978) research on adult learning projects in 1971, the adult education arena has embraced this concept of learning (Merriam et al., 2007). Many pioneers of andragogy, including Knowles (1975), have discussed

the maturation process of learning as adults become more self-directed through time (Merriam et al., 2007). Mainly seen in the early stages as a linear model by Tough (1978) and Knowles (1975), self-directed learning has recently taken a more interactive approach between the learner and the environment with Garrison's (1997) research (Merriam et al., 2007). At the time of this study, two schools of thought concerning self-directed learning were prevalent in the literature. The first concept relates self-directed learning to self-teaching when adults teach themselves in a specific subject area; this can be synonymous with taking an independent study course at work (Knowles et al., 2012). The second ideology refers to the adult learner "taking control of goals and purposes of learning and assuming ownership of learning...the learner sees knowledge as contextual and freely questions what is learned" (Knowles et al., 2012, p. 184). This definition relates to the autonomous nature of self-directed learning when the adult learner fully embraces learning through personal growth (Knowles et al., 2012).

Although many industries have seen current traditional sales training dramatically decrease after the onset of initial employment training, self-directed learning has been explored as an option to fill this void (Artis & Harris, 2007; Boyer et al., 2012; Gordon, Shepherd, Lambert, Ridnour, & Weilbaker, 2012; Pullins et al., 2017; Wan, Compeau, & Haggerty, 2012). Artis and Harris (2007) concluded that "If there is not sufficient formal instruction, then salespeople are more willing to use self-directed learning methods" (p. 16) as a substitute for their own workplace learning. Current researchers identified a major gap between what was taught in existing organizational sales training and what was applied practically in the field of selling (Pullins et al., 2017). Many sales organizations lack advanced training needed by sales professionals outside of initial soft-skills training at the start of employment (Laask et al., 2012; Pullins et al., 2017). Some sales professionals look to fill this knowledge gap by exploring their

own learning journeys through self-directed learning (Boyer et al., 2012; Boyer et al., 2014a; Gordon et al., 2012). For sales professionals, self-directed learning could be a valuable tool in developing themselves professionally to interact knowledgeably and intelligently with customers.

Sales professionals in industries that require advanced knowledge skills must meet these everyday challenges (Hunter, 2010; Leovaridis & Cismaru, 2014; Yang, Fang, & Lin, 2012). Self-directed learning is a tool that enhances this knowledge-base (Hunter, 2010; Rodriguez & Armellini, 2013). The medical industry is a “knowledge-intense” (Hunter, 2010, p. 455) entity where effective sales professionals possess a higher-order of thinking, an internal desire to personally learn, a self-initiating mechanism of gaining knowledge, and an autonomous learning style (Hunter, 2010). Yet, the overall research in self-directed learning practices within the pharmaceutical and medical industries continues to be under-represented (Hunter, 2010; Matsuo et al., 2013). Even with a lack of research in the specific arena of veterinary sales, self-directed learning has advanced since the inception of the concept in the early 1970s and will continue to be explored within the growing sales profession at-large (Boyer et al., 2014a; Knowles et al., 2012; Merriam et al., 2007).

Social

The veterinary profession continues to be a close community of people who value the human-animal bond; “The strengthening of the bond between humans and their pets has changed the landscape for veterinary medicine” (Knesl et al., 2016, p. 43). Researchers point to the growing societal necessity of the human-animal relationship, the importance of animal welfare, and the professional identity, competence, and trust within the veterinary industry (Knesl et al., 2016; Page-Jones & Abbey, 2015; Reinisch, 2009). The veterinary profession, as a whole,

encompasses many people who illustrate a high degree of career and professional identity (Allister, 2015, 2016; Page-Jones & Abbey, 2015). In general, the emphases on learning and professional competency continue to be highly regarded themes throughout the profession (Page-Jones & Abbey, 2015). The role of veterinarians in society and the advancements in veterinary medicine to promote and improve both human and animal welfare is a mainstay in the knowledge-intensive profession (Bones & Yeates, 2012). Sales professionals who relate to the profession and deliver knowledge, products, and services to veterinarians play a role in these societal advancements. Although current literature describes professional identity, competency in knowledge, and the human-animal bond as important facets within the veterinary profession, researchers have not focused on veterinary sales professionals' roles, interactions with veterinarians, or veterinary sales training methodologies (Allister, 2015, 2016; Knesl et al., 2016; Page-Jones & Abbey, 2015). Yet, researchers studying sales discuss many of the barriers and challenges faced by sales professionals who navigate complex, content-heavy, knowledge-intensive industries; these entities continue to rely on dedicated, intelligent, and motivated sales professionals who embrace lifelong learning (Hunter, 2010; Leigh, DeCarlo, Allbright, & Lollar, 2014; Matsuo et al., 2013; Pullins et al., 2017).

Theoretical

The theoretical roots of self-directed learning began with Knowles in the late 1960s when he announced clear distinctions between childhood learning and adult learning (Merriam et al., 2007). The concept of andragogy, adult learning, is a recent theoretical proposition; prior to Knowles's theory, learning amongst children and adults was regarded as a synonymous, generalized process of concepts and frameworks (Knowles et al., 2012; Merriam et al., 2007). Many of the early clinical psychologist and social scientists such as Freud, Jung, and Erikson

contributed greatly to the progression of human development and experiential learning (Knowles et al., 2012). Their influence in the field of education led to “the central role of self-concept in human development and learning, receiving increasing reinforcement from the entire field of psychiatry as it moved away from the medical model toward an educational model in its research and practice” (Knowles et al., 2012, pp. 45-46). Yet, many adult learning theorists, grounded in early psychological constructs, strived to adapt child learning theories to the adult realm (Knowles et al., 2012). This resulted in Knowles’s initial work to define a new concept referred to as andragogy (Knowles, 1975; Knowles et al., 2012; Merriam et al., 2007).

Knowles set forth a series of six assumptions that have propelled andragogy to further study: as adults mature, they become more self-directed; adults gather a wealth of experience that is rich in learning; readiness to learn is influenced by an adult’s social role; adults are problem-centered learners, rather than oriented towards a subject-centered approach; adults learn through internal motivation; and adults need reasons why they must learn (Knowles et al., 2012; Merriam et al., 2007). These tenets have formed the underlying basis of self-directed learning as “self-directed learning is more in tune with our natural processes of psychological development...as we grow and mature we develop an increasingly deep psychological need to be independent” (Knowles, 1975). Much of the desire to move away from parental control towards autonomy has created the notion that adult learners want to take responsibility for their own learning (Knowles, 1975; Knowles et al., 2012). Therefore, self-directed learning affords adults the opportunity to understand their learning needs, use experiences to further their learning, and make decisions that support their personal learning growth (Merriam et al., 2007).

Situation to Self

Using the framework of a multiple case study, I sought to investigate sales professionals’

perceptions of self-directed learning in their current positions to inform practice within the veterinary sales community, sales training, and undergraduate programs that influence future sales professionals. Yin (2014) contended that the innate depth and exploration of a phenomenon in a real-world context lies at the root of the case study methodology. As a former veterinary sales professional who avidly participated in self-directed learning to increase my medical knowledge, I have a vested interest in learning about the perceptions, motivational factors, and learning practices of other tenured veterinary sales professionals. I strived daily to bring value to veterinarians and relate with them through meaningful and competent conversations. As a current sales training manager within the veterinary industry, I am constantly focused on ways to improve the sales training programs I am involved in. Even though I am close to this profession and this industry, I elicited the help of other colleagues and looked for variable findings to avoid bias at all costs (Yin, 2014). Taking a direct and logical approach to the research with multiple perspectives fit well within my interests and the structure of my study. This perspective aligned with my scientific and military background as I followed a systematic approach to the research using Yin (2014) as a guide.

Creswell (2013) stated that those who are postpositivists will look at research scientifically, logically, and holistically while considering multiple viewpoints and using various levels of data analysis. Although Yin (2014) described case study methodology through the realist lens, acknowledging and incorporating the relativist perspective of different participant meanings enlightened the research. Using a scientific perspective while being open to varying viewpoints, I viewed this research comprehensively while looking through the postpositivism lens. Correspondingly, Yin (2014) provided a structured case study protocol to direct the researcher and enhance reliability within the case study; this entails a level of order and structure

not commonly seen in past case study research. While dealing with independent, successful, autonomous, and driven veterinary sales professionals of varying backgrounds and experiences, following a scientific and structured approach to research seemed most desirable and effective.

Understanding the veterinary sales professionals' perceptions of self-directed learning in light of past and current training programs could inform practice and influence current sales training methodologies. The clearly distinctive nature of the veterinary sales professional's career and job requirements show that a different approach to the traditional training must be examined, one that caters to the autonomous and self-reflective learner (Boyer et al., 2012; Boyer et al., 2014). The tenets of competence, relatedness, and autonomy of self-determination theory align with the role of veterinary sales professionals (Ryan & Deci, 2000). Veterinary sales professionals strive to be effective and competent in their everyday interactions, while yearning to connect and relate to their clients (Ryan & Deci, 2000; Wlodkowski, 2008). By nature of the profession, self-determination theory provides a relevant theoretical framework to complement this study.

Problem Statement

The problem is that current sales training wanes after the first few years of initial employment, creating an organizational training void (Boyer et al., 2012; Pullins et al., 2017). This training gap potentially leads to performance insecurities, career instability, and low motivation which can adversely affect corporations and the economy at large by stemming impact and growth (Kohlrausch & Rasner, 2014; O'Lawrence, 2017). Furthermore, this gap in sales training between learning and practice affects knowledge-intensive organizations, such as the veterinary environment for example, that require sales professionals with a deep and complete understanding of medical content knowledge who can relate to the industry and apply

critical thinking skills (Hunter, 2010; Matsuo et al., 2013; Pullins et al., 2017). Organizations with limited training opportunities have unmotivated employees who lack the desire to grow with the group, leading to detrimental outcomes for the economic outlook in society (Kohlrausch & Rasner, 2014; O'Lawrence, 2017). This training gap becomes more relevant in the veterinary arena which seeks to advance the veterinary societal role, the welfare of animals, and the human-animal bond (Bones & Yeates, 2012; Knesl et al., 2016; Page-Jones & Abbey, 2015; Reinisch, 2009). Further lack of training and communication in the veterinary world can hinder diagnostic outcomes and treatment protocols which are detrimental to the profession (McDermott, Cobb, Tischler, Robbe, & Dean, 2017). Possible causes of this problem stem from discordant sales training needs between sales professionals and sales organizations, outpaced sales training in organizations that evolve too quickly, fluctuated requirements of a global workforce, lack of career direction for prospective sales professionals within undergraduate sales programs, and the shortage of critical thinking skills development within higher education (Alvarez et al., 2015; Cummins et al., 2013; Pullins et al., 2017; Wan et al., 2012). Particularly, in a knowledge-intensive veterinary industry, sales professionals may fill this gap by taking charge of their own learning journey through self-directed learning (Boyer et al., 2012; Boyer et al., 2014; Hunter, 2010). Universities and higher education programs with student-learners, especially those pursuing sales careers, may benefit from self-directed learning. Students who display high levels of self-directed learning principles and critical thinking skills fare better with current and future learning performance (Cummins et al., 2013; Sogunro, 2015). A detailed case study that investigates sales professionals' perceptions of self-directed learning within their current positions may inform future self-directed learning practices and affect change within the veterinary sales industry, the sales profession, and higher education sales programs at large.

Purpose Statement

The purpose of this multiple case study was to investigate veterinary sales professionals' perceptions of self-directed learning within their current positions. Exploring and understanding the perceptions, reasons, and motivating factors that compel tenured veterinary sales professionals to engage in self-directed learning in a knowledge-intensive industry may inform practice within sales throughout the profession and undergraduate institutions influencing future sales professionals. Within this research, tenured veterinary sales professionals represent those who have been selling within their current veterinary sales position for longer than three years and have participated in organizational sales training during that time (Boyer et al., 2012). In most organizations, training wanes after the first three years of employment and some sales professionals engage in self-directed learning to fill the training gap (Boyer et al., 2012). Even in educational settings, students who learn and apply self-directed learning principles are better suited for future learning potential (Cummins et al., 2013; Sogunro, 2015). Therefore, the exploration of past and current self-directed learning practices and perceptions may provide valuable insights. For this study, self-directed learning is defined as the self-customization of learning, through motivation, to meet the individual adult learners' needs in fulfilling a training gap (Boyer et al., 2012). The study investigated 13 North American tenured veterinary sales professionals who participated in self-directed learning outside of standard corporate sales training. The contribution of self-directed learning practices and motivators within the unique realm of veterinary sales can help lead universities, sales industries, and veterinary organizations to consistently adopt self-directed learning methodologies and advance adult learning throughout these arenas.

The self-determination theory tenets of autonomy, relatedness, and competence play key motivational roles in learning (Ryan & Deci, 2000). Knowles et al. (2012) confirmed that “personal autonomy” (p. 187) influences adult learning. Sales professionals who invest in optional self-directed learning practices are goal-oriented, grounded, and reflective (Merriam et al., 2007). More so, Merriam et al. (2007) confirmed that adult learners become autonomous through familiarity with the content and competency in their knowledge. With regards to relatedness, the veterinary profession values a high level of professional identity, an innate compassion for the welfare of animals, and a devotion to the human-animal bond (Allister, 2015, 2016; Armitage, Maddison, & May, 2016; Bones & Yeates, 2012; Knesl et al., 2016; Page-Jones & Abbey, 2015). Lastly, pertaining to competence, Wlodkowski (2008) declared that “adults feel competent when they know they have attained a specific degree of knowledge or a level of performance that is acceptable by personal standards, social standards, or both” (p. 111). Those in the veterinary industry have a desire to be competent and relevant in a knowledge-intensive industry that requires such actions (Page-Jones & Abbey, 2015).

Significance of the Study

Within the current literature, many organizational sales leaders believe that basic sales skills are sufficient enough to be successful and the initiation for further training is sometimes neglected (Artis & Harris, 2007; Gordon et al., 2012; Leigh et al., 2014). Lassk et al. (2012) contended that “Empirical studies show that salespeople at most marginally agree that sales training programs address the skills needed to be successful in their role” (p. 146). With the current gaps that exist in sales training, this study may add to the growing body of literature pertaining to self-directed learning practices and sales (Lassk et al., 2012; Pullins et al., 2017; Toytari et al., 2011). Especially pertinent in an industry that values the human-animal bond and

the societal welfare of animals, the universal importance and advancement of veterinary medicine may be informed through this study as veterinary sales professionals play a large role in the overall industry (Bones & Yeates, 2012; Knesl et al., 2016; Page-Jones & Abbey, 2015; Reinisch, 2009). Lastly, as higher education programs contemplate the benefits of self-directed learning and critical thinking to future personal and professional learning goals, the study can enhance current practices at the university level (Alvarez et al., 2015; Cummins et al., 2013; Newberry & Collins, 2015; Sogunro, 2015).

The theoretical tenets of self-determination theory serve as a foundation to this study; autonomy, relatedness, and competence guide the advancement of content knowledge through self-directed learning (Ryan & Deci, 2000). The independent, autonomous, and self-reliant nature of sales leads some to take part in self-directed learning within their career development (Hunter, 2010; Merriam et al., 2007). In the knowledge-intensive veterinary industry, veterinary caretakers value their profession, their compassion towards animals, and the human-animal connection; relating to veterinarians and their staff becomes an important component within the industry (Allister, 2015, 2016; Bones & Yeates, 2012; Knesl et al., 2016; Ryan & Deci, 2000). Finally, if a sales professional feels an inadequate level of knowledge when interfacing with medical clients, they will be motivated to self-learn and become competent knowledge-brokers in the course of their duties (Wlodkowski, 2008). Understanding the perceptions of self-directed learning and the methods used by veterinary sales professionals may provide motives as to why this choice of learning method was pursued when considering the concepts of relatedness and competency.

Lastly, this study may be of practical significance by investigating the use of self-directed learning practices in tenured veterinary sales professionals and consolidating the relevant tactics

and tools utilized during personal learning and professional development. Applying the key findings of this exploration, others within the veterinary sales industry can do the same.

Considering current limited research on self-directed learning methodologies and sales training, this study may advance the career development of many sales professionals (Boyer et al., 2012; Lassk et al., 2012). The study findings may also apprise training departments and undergraduate institutions to implement self-directed learning opportunities for employees and students alike in their continual professional development journey. Finally, the informed use of self-directed learning practices may mutually benefit veterinary sales professionals who interact daily with veterinary caretakers and the overarching veterinary profession to advance the human-animal bond and the societal welfare of animals.

Research Questions

Within the context of this study, the following questions will be used to guide the research:

Research Question 1

How do tenured veterinary sales professionals describe their uses of self-directed learning within the contexts of their current positions? Current studies such as Hunter (2010), Leigh et al. (2014), Matsuo et al. (2013), and Pullins et al. (2017) explored how medical sales professionals use varying learning styles, to include self-directed learning, within their professional sales careers; gaps within the learning environments were annotated and discussed. Others such as Allister (2015) and Page-Jones and Abbey (2015) discussed the unique attributes critical to the veterinary industry. Medical sales professionals, by nature of their positions, deal with a large amount of knowledge-laden content that must be understood and synthesized (Hunter, 2010, Lassk et al., 2012). Many adult education experts agree that sales professionals are best suited

for the autonomous and individualized learning styles of self-directed learning (Boyer et al., 2014a). Although the literature confirms that many organizations have formal training programs for their sales professionals within the first three years of employment, after three years the training seems to wane (Boyer et al., 2012). Therefore, this study aims to focus on those veterinary sales professionals after the three-year time period. As there is currently no literature investigating this particular phenomenon of self-directed learning in the veterinary sales arena, examining the self-directed learning perceptions of this category of professionals may annotate and enhance the current literature.

Research Question 2

Why do tenured veterinary sales professionals participate in self-directed learning?

Within this category, it is important to investigate the critical themes and factors that contributed to the veterinary sales professionals' uses of self-directed learning. Allister (2015) and Page-Jones and Abbey (2015) discussed the unique nature and identity that encompasses the veterinary profession; these factors may influence the veterinary sales professionals to focus on self-directed learning when relating to the veterinary caretaker. Others, such as Hunter (2010) contended that the high knowledge content within the medical sales profession creates a need for medical sales professionals to learn more information on their own while meeting these challenges. Yet, others such as Gordon et al. (2012) and Lassk et al. (2012) concluded that organizations and their leaders lack in providing adequate training needed for their sales professionals to succeed in their roles, causing sales professionals to seek training on their own. Regardless of the reason, this study informs practice by providing guidance for the veterinary sales industry and the veterinary sales professional as to why this group conducts self-directed learning.

Research Question 3

What do participants identify as the motives behind their uses of self-directed learning? Researchers such as Artis and Harris (2007), Boyer et al. (2014a), and Wan et al. (2012) discussed the continual impact of motivation to self-directed learning within the sales profession and corporate organizations; both intrinsic and extrinsic motivational factors play a role in sales professionals' desire to take learning into their own hands (Ryan & Deci, 2000). Others such as White (1959) discussed the levels of motivation in the adult learner and their impact towards attitude and competency. Yet, Chene (1983) stated that "learning is meaningful in so far as the adult seeks to achieve certain standards in knowledge and skills which have a public character and which he/she is brought to value" (p. 44). It is important to examine and understand the specific motivational factors governing self-directed learning for the veterinary sales professional to advise the industry and higher education.

Definitions

1. *Autonomy* – Autonomy is a concept that highlights the independent nature of a person and that person's ability to choose what they perceive has value (Chene, 1983).
2. *Competence* – Competence describes a person's yearning to be successful at something they value; it is a measure of effectiveness with regards to personal and societal standards (Wlodkowski, 2008).
3. *Continuing professional development* – Learning activities, generally within a professional context such as the medical industry, used to show competency or certify professionals throughout a specific time-based period; structured and unstructured activities conducted after graduation from a certified professional program measured in units or hours (Caple, 2005).

4. *Human-animal bond* – The strong, personal connection made between humans and animals, generally in a companion-animal setting, where humans are willing to do whatever is needed to maintain the welfare of the animal (Knesl et al., 2016).
5. *Knowledge-intensive* – A demanding or challenging job, organization, or industry in which continual learning is imperative to keep up with fast-paced employer or business objectives (Hunter, 2010).
6. *Relatedness* – The feeling of being connected with others, the sharing of common goals, the interaction within a community, and the engagement in personal relationships (Baard, 2002).
7. *Self-determination theory* – Originated by two psychologists at the University of Rochester, the theory revolves around autonomy, relatedness, and competence as major factors behind motivation and personality (Ryan & Deci, 2000).
8. *Self-directed learning* – Self-directed learning is when learning content is personally customized by the adult to meet their individual needs and encompasses an aspect of self-motivation (Boyer et al., 2012).
9. *Tenured* – Although no exact specific time period is annotated as to the length of time when a sales professional is considered a long-standing member of an organization, studies show that the traditional training in sales organizations declines at approximately the three-year point of employment. Therefore, for the purposes of this study, three years is used as the marker for tenured veterinary sales professionals (Boyer et al., 2012).
10. *Veterinary sales professional* – Referred to as territory managers or area representatives, they are veterinary company sales representatives charged with selling products and

services, delivering veterinary content, and bringing overall value as a resource to the veterinary care team (Prendergast, 2017).

Summary

The course of this study aims to explore and understand the perceptions, compelling reasons, and motivating factors that propel tenured veterinary sales professionals to engage in self-directed learning in a highly knowledge-intensive and identity-driven industry where an understanding of medical discourse, knowledge, and technical competence are valuable aspects to the veterinary profession. As with any sales organization, a gap exists between what is taught in sales training and what is applied to the field of selling (Pullins et al, 2017). Not all sales professionals hold themselves accountable for their learning or implement their sales training knowledge within the working environment of their industry (Pullins et al., 2017). This notion is further exacerbated in knowledge-intensive organizations and industries, such as the medical industry, that rely on higher-order levels of thinking to move business objectives forward (Hunter, 2010). This concern is even more so in the veterinary profession where sense of self, value, identity, competence, compassion, and the human-animal bond play a significant role in the overall industry (Page-Jones & Abbey, 2015). The importance of relating to the veterinary profession within the context of self-directed learning to keep pace with the veterinary expert remains a high priority for the veterinary sales professional. In a society that is becoming more engaged in animal welfare, the human-animal bond, and the universal implications of human and animal interactions, the collaboration of veterinary sales professionals with veterinary caretakers to advance the veterinary profession is paramount (Bones & Yeates, 2012; Knesl et al., 2016). This investigation strives to gain an understanding of the perceptions, motivational factors, and

key practices that influence veterinary sales professionals to be self-directed in their own professional development initiative.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter provides a detailed discussion of the theoretical framework serving as the basis for this study encompassing veterinary sales professionals' perceptions of self-directed learning. It also outlines the existing literature specifying current sales training practices and self-directed learning impacts to the sales profession. Beginning with the theoretical framework, Ryan and Deci's (2017) concept of self-determination theory discussing autonomy, relatedness, and competence is discussed. Next, the fulfillment of basic psychological needs according to Ryan and Deci's (2017) research is delineated. Most importantly, the relevance of self-determination theory concepts to the education and workplace environments with regards to intrinsic and extrinsic motivating factors is emphasized. Lastly, the significance of the theory in relation to the veterinary sales profession is discussed. The related literature section encompasses a review of many important topics such as the current state of sales training and gaps, the exploration of knowledge-intensive organizations, and the detailing of the veterinary industry. An overview of self-directed learning in the general workplace, in education, and in sales follows. Finally, the chapter concludes with a discussion on the tenets of self-directed learning and the veterinary sales profession and then summarizes the key points to annotate gaps in the literature that will need to be addressed.

Theoretical Framework

The concepts of autonomy, relatedness, and competence, as defined by Ryan and Deci (2000, 2017) in self-determination theory, create the underlying framework for this study. Many foundational theorists and researchers have looked at these three tenets within the single-lens scope; some have related these to self-directed learning (Chene, 1983; Merriam et al., 2007;

Tough, 1978; White, 1959; Wlodkowski, 2008). Ryan and Deci (2017), two research psychologists, have intertwined the distinctive psychological needs of autonomy, relatedness, and competence to address human behaviors of personality development and motivation. Specifically, within the context of this study, the areas of education and the workplace environment are most relevant with regards to self-determination theory (Gagne & Deci, 2005; Ryan & Deci, 2000, 2017; Vansteenkiste, Lens, & Deci, 2006).

Self-Determination Theory Overview

As a psychological theory, Ryan and Deci (2017) have explored the inherent desire for human beings to interact and engage with their social environments. These psychological needs, at the core of the theory, are “nutrients that are essential for growth, integrity, and well-being” (Ryan & Deci, 2017, p. 10). Ryan and Deci (2002, 2017) contended that all human beings have a natural inclination to interact with their surroundings with the intention to cultivate personal growth. Within the prospectus of human psychology, the underlying premises of self-determination theory take into consideration many of the opposing arguments within human and cognitive development by creating an overarching framework to address the evidence from both perspectives (Ryan & Deci, 2002). Many of the basic Aristotelian viewpoints of human development and the natural motivation to actively grow and seek challenges in the search of finding one’s sense of self forms an initial premise for self-determination theory (Ryan & Deci, 2002, 2017). Discussing the psychological concept of what is the “true self” has been debated since the birth of philosophy and continues to be a source of debate in psychological circles (Ryan & Deci, 2002). This discourse involving the active organism is explored in cognitive psychology as Piagetian observations of psychological development and environmental interactions form catalysts to personal understanding and progression (Miller, 2011; Ryan &

Deci, 2002, 2017). Therefore, the theory has many foundational roots in human psychological development and cognitive growth.

The basic premise of self-determination theory brings together the idea that human beings are inclined to connect individual facets of their internal self with others in the overall social environment as a healthy and natural process within the organization (Ryan & Deci, 2002). Ryan and Deci (2002) confirmed that the theory “begins by embracing the assumption that all individuals have natural, innate, and constructive tendencies to develop an ever more elaborated and unified sense of self” (p. 5). However, the theorists are rooted in reality; they argued that social and environmental conditions can either support and nurture the natural tendency to grow one’s sense of self or hinder the progression altogether (Ryan & Deci, 2002). Ultimately, Ryan and Deci (2002, 2017) established that this active process should not be taken for granted as the need for psychological growth must be nurtured.

The concepts encompassing basic psychological needs have been a focus of debate for many years in which psychologists have had varying thoughts on the factors that contribute and nurture the essential growth of the human psyche (Ryan & Deci, 2017). Whereas scientists have agreed upon the basic physical needs of food and water as essential to organisms within biology, psychological needs have been more ambiguous and less distinct (Ryan & Deci, 2002, 2017). Yet, Ryan and Deci (2002, 2017) discussed the critical importance of promoting basic psychological needs as essential to the personal growth and development of cognition. As organisms strive to satisfy their needs, described by Ryan and Deci (2002, 2017) as nutriments, their interactions with the environment either satisfy their needs to support healthy growth or hinder the development altogether. Ryan and Deci (2002) stated the implicit requirement for mankind to have “continual exchanges with their environment to draw from it those necessities

that allow them to preserve, maintain, and enhance their functioning...the healthy human psyche ongoingly strives for these nutriments and, when possible, gravitates toward situations that provide them” (pp. 4-5). This framework provides the underlying tenets for the three basic psychological needs described by the theorists as essential to the human psyche (Ryan & Deci, 2002, 2017).

Within the theory, the three basic needs of autonomy, relatedness, and competence are critical to personal growth; the nurturing or neglecting of these needs have consequential results (Ryan & Deci, 2002, 2017). Overall, the fulfillment or disregard of these three needs within the environment delivers the social structure as either complementary towards cognitive growth or dismissive of the process (Ryan & Deci, 2002). Understanding the factors that influence these basic needs and the impetus to fulfill these social human tendencies is an important concept to be researched. Furthermore, in the field of psychology, the understanding and application of psychological needs to self-motivation has been studied extensively as to the factors that advance psyche health and well-being (Ryan & Deci, 2000, 2017). Knowles et al. (2012) stated that “The urge for self-actualization is the driving force motivating human behavior” (p. 30). Motivation is integral to personal growth and learning (Knowles et al., 2012).

Autonomy. Autonomy, a basic psychological need discussed by Ryan and Deci (2017), refers to the desire for people to live their own experiences, make their own decisions, and be in harmony with their own value system. Previous to self-determination theory, autonomy has been undervalued and misplaced as a concept of individualism or self-reliance; however, autonomy functions as a voluntary choice made by the individual and done without reservation within free-will (Chene, 1983; Merriam et al., 2007; Ryan & Deci, 2017). Independence and the ability to be free from others without any external controls runs contradictory to the concept of autonomy.

Chene (1983) defined autonomy as the process when “one can and does set one’s own rules, and can choose for oneself the norms one will respect...autonomy refers to one’s ability to choose what has value, that is to say, to make choice in harmony with self-realization” (p. 39). This concept of autonomy, with many misinterpreted meanings, quite simply refers to the need for humans to voluntarily determine their own paths in life (Ryan & Deci, 2017).

Relatedness. Relatedness refers to the universal need to interact socially with others, to belong to a group, and to feel a connection with humanity (Ryan & Deci, 2017). At the most basic function, people want to feel accepted by others; “There is no full functioning without relationships” (Ryan & Deci, 2017, p. 295). Although relationships are a critical human function, Ryan and Deci (2017) confirmed that meaningful interactions are the ones that satisfy the personal need to relate. The measure of importance lies in the quality of the relationship where deep, personal feelings are experienced and the feeling of necessity is satiated (Ryan & Deci, 2017). Therefore, the decision to relate to others in a personal and meaningful relationship considers the autonomous nature of an individual to accept the interaction (Ryan & Deci, 2017). Relatedness plays an important role within human development as human beings seek ways to fill the gaps of isolation and longing for acceptance and to feel a sense of personal belonging within social structures (Ryan & Deci, 2017).

Competence. Competence, an ever-changing need that has been thoroughly researched in psychology with regards to motivation, refers to a human being’s desire to be an effective member of society with meaningful environmental interactions (Ryan & Deci, 2017; White, 1959). Ryan and Deci (2017) stated that “People need to feel able to operate effectively within their important life contexts” (p. 11). This notion of mastery is a critical human concept that plays a significant role in society. Human beings, when interacting with others within a social

context, want to be effective and to seem competent in the world (Wlodkowski, 2008). Competency occurs when they feel that they have attained a certain level of knowledge and are confident in articulating that knowledge to society at large (Wlodkowski, 2008). Yet, competence can be easily extinguished through a lack of confidence in self-realization or outside influences negatively affecting the innate need (Ryan & Deci, 2017). Ultimately, a sense of feeling valued when interacting with others is a driving motivator for competency (Wlodkowski, 2008). Human beings have a need to belong to social groups and part of the acceptance process depends on the level of worth brought to the social organization (Ryan & Deci, 2017). Ultimately, Ryan and Deci (2002) concluded that “the need for competence leads people to seek challenges that are optimal for their capacities and to persistently attempt to maintain and enhance those skills and capacities through activity” (p. 7).

Amotivation, Extrinsic Motivation, and Intrinsic Motivation. Within self-determination theory, Ryan and Deci (2000, 2017) detailed and discussed the many forms of motivation across the Self-Determination Continuum shown in Figure 1. The range of motivation, from left to right, shows the level at which motivation occurs from the self (non-self to a level of self-determination) (Ryan & Deci, 2000, 2017). The continuum also relates the level of motivation to the internalization and integration that regulates specific behavior; internalization occurs as people incorporate behaviors into their psyche and integration relies on the behavior becoming a part of their sense of self (Ryan & Deci, 2000, 2017). The far left of the continuum shows “amotivation,” a term coined by the psychologists to highlight the lack of action or lack of intent when performing an action perceiving no value (Ryan & Deci, 2000, 2017). The far right shows the typical self-determined action of intrinsic motivation in which someone performs actions for the pleasure, value, and internal satisfaction that the action brings

through a high level of autonomous means (Ryan & Deci, 2000, 2017). Lastly, the concept of extrinsic motivation, opposite to intrinsic motivation, is “represented by behaviors that are instrumental for some separable consequence such as an external reward or social approval, avoidance of punishment, or the attainment of a valued outcome” (Ryan & Deci, 2017, p. 14). Depending on the level of autonomy within extrinsic motivation, the continuum further dissects the notion of extrinsic motivation into varying categories; this ranges from the basic level of extrinsic motivation encompassing external rewards and punishments to the more advanced extrinsic motivator tenet of integrated regulation that shares qualities with intrinsic motivation, yet actions are still conducted outside of the realm of personal enjoyment and satisfaction (Ryan & Deci, 2000, 2017).

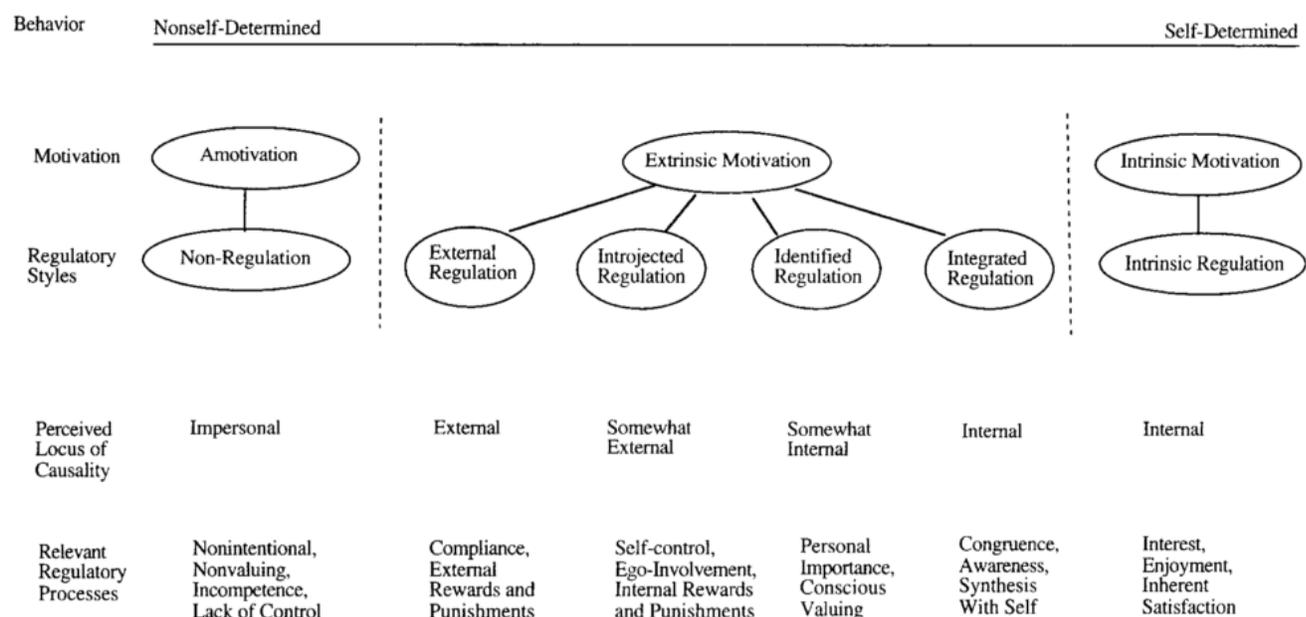


Figure 1. The Self-Determination Continuum. Diagram shows the types of motivation along the continuum with the regulatory style, the loci of causality, and the matching processes relevant to the motivation type. Adapted from “Self-determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-being,” by R. M. Ryan and E. L. Deci, 2000, *American Psychologist*, 55, p. 72. Copyright 2000 by the American Psychological Association.

Self-Determination Theory, Motivation, and Education

Throughout educational research, self-determination theory has shown that students flourish in learning environments when they are independently motivated and when teachers support their autonomous learning (Reeve, 2002; Vansteenkiste et al., 2006). Although the nature of motivation varies dependent on whether the drive is intrinsic or extrinsic, the concept has been studied extensively from elementary school to graduate school in understanding the underlying factors affecting student actions (Reeves, 2002; Ryan & Deci, 2000, 2017; Vansteenkiste et al., 2006). Whether motivation is an intrinsic entity (manifested through personal enjoyment and satisfaction) or an autonomous extrinsic form (conducted to meet certain goals that have been internalized but not innately satisfying), the need to relate to others and to be perceived as competent remain focal concepts of motivation (Reeves, 2002; Ryan & Deci, 2000, 2017; Vansteenkiste et al., 2006).

Recent research discussed the concept of goal framing and the relationship to motivation (Vansteenkiste et al., 2006). Goal framing occurs when student learning activities are placed within the context and boundaries of motivating goals, whether intrinsic or extrinsic, to understand educational motivations and enhance learning (Vansteenkiste et al., 2006). Ryan and Deci (2017) discussed goal framing as a key component in qualifying and highlighting learning activity outcomes and goals attained at the completion of the event. Much of the research confirms the necessity of both external and internal motivational goals of learning (Ryan & Deci, 2017). In fact, Ryan and Deci (2017) highlighted the influential effects of extrinsic goals important to repetitive learning and memorization; yet, the validity of long-term internalization and sustained learning occurs through intrinsic goal framing. Ultimately, autonomous-supportive learning environments increase enjoyment and engagement in learning, as well as

promote a more active and aligned learning setting to natural human tendencies (Reeves, 2002; Ryan & Deci, 2017; Vansteenkiste et al., 2006).

Within self-directed learning, when learners personalize content to meet their individual needs, self-motivation plays a large role (Boyer et al., 2012). The concept of satisfying basic psychological needs, especially in the academic learning environment, produce students who are more engaged and more integrated in their learning experience (Ryan & Deci, 2017). Within education, self-determination theory research shows that autonomous motivations such as internal pleasure in learning, perception in confidence, and increased self-worth provide major benefits to students and their learning outcomes (Reeves, 2002). Therefore, self-determination theory with regards to autonomy, relatedness, and competence, has merit in the realm of adult learning as learners seek to manifest their value within society through autonomous learning (Wlodkowski, 2008).

Self-Determination Theory, Motivation, and the Workplace

The organizational setting within the workplace environment provides a unique case study for many researchers of work motivation (Ryan & Deci, 2017). The understanding of what motivates some adults to be completely committed and engaged at work versus some to be “amotivated” and intentionally lacking desire plays a large role within self-determination theory (Ryan & Deci, 2017, p. 16). Key factors in the workplace to foster motivation are empowering adults to take charge of their work environment (autonomy), creating a team atmosphere and encouraging respect (relatedness), and experiencing personal growth through knowledge-building and challenges (competence) (Baard, 2002). Ryan & Deci (2017) contended that a workplace employee “is trying every day to do his or her best on the job...most people *want* to contribute; they *want* to experience competence in what they do, and many *want* to feel like a

meaningful part of a collaborative organization” (p. 558). The positive organizational outcomes demonstrated by motivated employees through performance and commitment, as well as the personal benefits of satisfaction and relevance, continue to be documented within the research (Baard, 2002; Gagne & Deci, 2005; Ryan & Deci, 2000, 2017).

The work environment, in many adults’ lives, is the predominant daily setting for many with diverse experiences and levels of motivation (Ryan & Deci, 2017). Some identify and internalize their work as personally satisfying and meaningful, while others find the work setting as onerous and burdensome (Ryan & Deci, 2017). More and more organizations strive to understand motivational factors in the workplace to increase productivity and effectiveness (Ryan & Deci, 2017). Within workplace motivation and employee efficacy research, similar to many of the educational findings, autonomy-supportive activities that limit control and promote initiative through competence deliver many benefits to the workplace environment (Baard, 2002; Gagne & Deci, 2005; Ryan & Deci, 2000, 2017). Gagne and Deci (2005) confirmed that “autonomy-supportive (rather than controlling) work environments and managerial methods promote basic need satisfaction...these in turn lead to persistence, effective performance, job satisfaction, positive work attitudes, organizational commitment, and psychological well-being” (p. 346). In the work environment, leaders play a large role in the level of motivation and psychological needs satisfaction of their employees (Baard, 2002). The balancing act of how much to empower or control employees, either intrinsically or extrinsically, to reach the desired state of effectiveness continues to be a challenge for many managers (Baard, 2002; Ryan & Deci, 2017). In the end, self-determination theory and the workplace environment prove to be a relevant topic of discussion as more organizations search for optimal measures to increase

productivity for their employees through meeting these basic psychological needs (Baard, 2002; Gagne & Deci, 2005; Ryan & Deci, 2000, 2017).

Significance of the Theory

The veterinary profession is one that identifies strongly with professional identity and one that values the role of veterinary caretakers in society (Allister, 2015, 2016; Page-Jones & Abbey, 2015). A strong sense of self, education, and technical competence are key elements of the professional identity (Allister, 2015, 2016; Dolby & Litster, 2015; Page-Jones & Abbey, 2015). Also, the human-animal bond, the personal connections made with animals, and the advocacy of animal welfare place veterinary caretakers within unique relationships in society (Knesl et al., 2016). All these influences made throughout the veterinary industry, as well as the self-fulfillment of personal values, provide evidence that the basic needs within self-determination theory parallel the very nature of those within the veterinary profession (Allister, 2015, 2016; Knesl et al., 2016; Page-Jones & Abbey, 2015).

The veterinary industry, just as other medical-related entities, also encompasses a high degree of knowledge and content attainment that requires mastery (Leovaridis & Cismaru, 2014; Yang et al., 2012). Professionals in this knowledge-intensive work environment need motivation, autonomy, and competence to function appropriately (Leovaridis & Cismaru, 2014; Yang et al., 2012). The ability to understand and articulate key medical concepts confidently and competently provide a sense of value and worth to the sales professional (Ryan & Deci, 2017). Understanding the underlying motivating factors, whether intrinsic or extrinsic, that drive veterinary sales professionals to becoming medically competent with customers and autonomous in their learning may provide insight to the behaviors that lead to the satiation of these psychological needs (Ryan & Deci, 2000, 2017). Therefore, these basic psychological needs of

autonomy, relatedness, and competence have merit within self-determination and the knowledge-intensive veterinary landscape.

Related Literature

Self-directed learning in the adult learner is a significant topic that has been researched for over four decades in many different types of industries and organizations (Boyer et al., 2014a). Yet, only recently has this concept been used in the professional selling environment (Boyer et al., 2014a; Boyer et al., 2012). Especially in the medical and pharmaceutical industries made up of knowledge-intensive organizations, the level of knowledge needed to interact with medical personnel requires higher-order thinking and problem-solving skills (Leovaridis & Cismaru, 2014; Matsuo et al., 2013). In veterinary medicine, another example of a knowledge-intensive learning industry, participants are required to have deep and thorough understandings of content knowledge as they interact with each other and with their clients; possessing technical competence is a major factor in veterinary interactions (Allister, 2015, 2016; Armitage-Chan et al., 2016; Hunter, 2010; Matsuo et al., 2013; Pullins et al., 2017). Yet, traditional sales training has been unexceptional and lacking in meeting the needs of sales professionals in these industries, and self-directed learning has helped diminish the learning gap (Boyer et al., 2012; Matsuo et al., 2013; Pullins et al., 2017). Current adult learning theory principles highlight the importance of successful learning transfer when adult learners manage their own learning experiences and when those practices are relevant to the individual (Knowles, 1975; Knowles et al., 2012). Ultimately, adult learners are given the independence and autonomy to choose specific learning journey paths or to decide whether inaction is their path of choice when it comes to self-directed learning; this remains a critical component to the theorem (Knowles et al., 2012).

Sales Training

Sales training within organizations remains the largest training expenditure when compared to the overall training budget (Association for Talent Development, 2016; Singh, Manrai, & Manrai, 2015). On average, organizations spend more training funds per sales professional annually than training for other employees across a myriad of functions; this can be upwards of hundreds of dollars more per year per sales professional (Association of Talent Development, 2016). The Association for Talent Development (2016) estimates that corporations in the United States spend over \$15 billion annually on sales training programs. Yet, the overall effectiveness of traditional sales training as a tool to prepare sales professionals for their specific careers has been questioned for many years (Boyer et al., 2012; Gordon et al., 2012; Leigh et al., 2014; Pullins et al., 2017). Pullins et al. (2017) contended that “Throughout the history of sales research, scholars have identified a gap between theory and practice: the discrepancy exists between what is being taught in classrooms and sales training, and the actual everyday practice of selling” (p. 17). In today’s challenging environment, sales organizations must take a different look at their sales training programs (Fu, 2015; Lassk et al., 2012; Pullins et al., 2017). The current approach to sales training has created a knowledge gap for sales organizations that continues to grow wider (Boyer et al., 2012; Lassk et al., 2012; Pullins et al., 2017). After the third year of sales employment, the amount of traditional sales training offered to the individual sales professional drops drastically (Boyer et al., 2012). Even more relevant to the issue is that sales professionals are often dissatisfied with the training received from their organizations with many contending that training remains ineffective in meeting their professional needs (Boyer et al., 2012; Gordon et al., 2012; Lassk et al., 2012).

The ability to have a higher-order level of knowledge, aside from the standard skills training taught at the onset of employment, is a critical aspect of long-term professional selling (Leigh et al., 2014). The individual development of the sales professional beyond the standard body of knowledge needed to just merely perform the job function is key in closing this void between theory and real-world application (Leigh et al., 2014; Pullins et al., 2017). The selling environment in today's world has become more complicated in a competitive job market that requires sales professional to demonstrate specific and effective critical thinking skills (Alvarez et al., 2015; Cummins et al., 2013). Alvarez et al. (2015) concluded that "salespeople today need critical thinking skills to effectively perform in more challenging and complex roles" (p. 233). However, deficiencies in traditional organizational sales training further hinders the development of critical thinking skills in sales professionals needed to face present-day challenges in selling (Alvarez et al., 2015; Cummins et al., 2013).

Knowledge-Intensive Organizations

Knowledge-intensive organizations are unique and specialized entities that value the pursuit of knowledge, have a distinct identity, have highly informed and qualified self-reliant employees, and respect innovation (Leovaridis & Cismaru, 2014; Yang et al., 2012). Medically based organizations are regarded as knowledge-intensive learning organizations because sales professionals are required to be highly knowledgeable in a very competitive environment where continual learning is a key necessity to meet company and personal goals (Hunter, 2010; Soklaridis, 2014). The need to constantly update practices, techniques, and methods through education confirm that the perpetual learning journey provides a strategic advantage within these types of organizations (Soklaridis, 2014). This higher-order thinking and knowledge attainment are also increasingly important to the effectiveness of sales professionals when dealing with

doctors in the medical market (Hunter, 2010). Instilling a climate that values identity, shared experiences, autonomy, collaboration, and an investment in knowledge provides the foundation for a successful culture in a knowledge-intensive organization (Leovaridis & Cismaru, 2014).

Within current and past research, hospitals are generally regarded as knowledge-intensive learning organizations, although not specifically characterized as such (Soklaridis, 2014). However, many contend that those working in knowledge-intensive environments must “become more skilled at creating, acquiring and transferring knowledge” (Soklaridis, 2014, p. 831) and “to perform effectively, knowledge workers must be able to take responsibility for their own developmental needs, and in particular, to regulate their own learning” (Fontana, Milligan, Littlejohn, & Margaryan, 2015, p. 32). In the knowledge-intensive organization, the onus of learning is placed on the individual student within the self-regulated environment who manages their own learning journey (Fontana et al., 2015). Knowledge-intensive environments value learner-centered activities over teacher-centered events, which are key to self-regulation and self-directed learning (Fontana et al., 2015).

The Veterinary Industry

The veterinary industry is one that values professional identity, technical competence, continuing professional education, and the importance of the human-animal bond (Allister, 2015, 2016; Armitage-Chan et al., 2016; Caple, 2005; Bones & Yeates, 2012; Dolby & Litster, 2015; Knesl et al., 2016; Page-Jones & Abbey, 2015). These characteristics influence the career path of many veterinary caretakers who personalize, identify, and integrate with the profession (Allister, 2015, 2016). High expectations in personal and professional standards of conduct also play a critical role in the vocation (Armitage-Chan et al., 2016; Mossop & Cobb, 2013). As with any health care profession, those within the veterinary community are held to a higher standard

of ethics, behaviors, and attitudes that shape their professional identity (Mossop & Cobb, 2013). The foundation of ethics and professionalism within veterinary medicine encompass the attributes of honesty, altruism, personal values, empathy, confidence, technical competence, and autonomy as consistent themes within the profession at large (Mossop & Cobb, 2013).

Allister (2016), a veterinarian and researcher, stated “Professional identity – how we see ourselves as professionals – our values, beliefs and norms of behavior are central to the trust placed in our profession by society” (p. 316). The veterinary career is an extremely important field where many have a strong sense of self, are autonomous by nature, have a resilient attitude, have high expectations, and consider themselves ethically and morally sound (Allister, 2015, 2016; Page-Jones & Abbey, 2015). Not always seen in other professions, the culture surrounding veterinarians and those in the industry are distinct and unique to the vocation (Allister, 2015). As part of veterinary training, instilling a sense of professional identity and pride is a critical part of the initial education that is carried throughout a lifetime career (Allister, 2015, 2016). Many come into the industry with a strong sense of purpose; however, the veterinary identity is further honed and expanded throughout the profession and is a fundamental concept for many (Page-Jones & Abbey, 2015). Those looking to enter the veterinary profession quickly relate to the industry as a common purpose and bond subsists (Allister, 2015, 2016; Page-Jones & Abbey, 2015). The veterinary industry values personal and psychological well-being; veterinary caretakers enter the profession to be mentally engaged, to have personal fulfillment, and to feel meaningful (Cake, Bell, Bickley, & Bartram, 2015). Self-awareness, reflection, self-efficacy, and autonomy allow veterinary caretakers to grow with the profession and feel connected with veterinary medicine (Cake et al., 2015). Research shows many of the positive benefits and contributions related to working in the veterinary industry and overall well-

being (Coke et al., 2015). These include personal growth, professional engagement, meaning and purpose, and socially associating with others through specialized challenges, lifelong learning, belonging to a group with a common cause, helping animals and society, and positively contributing to something larger than oneself (Coke et al., 2015). These factors play a role in the desire to work within the veterinary industry (Coke et al., 2015).

Continuing professional education and remaining technically competent are two attributes that permeate the veterinary profession and are held in high regard amongst those in the industry (Caple, 2005; Dale, Pierce, & May, 2013; Dolby & Litster, 2015; Page-Jones and Abbey, 2015). Continual learning in the advancement of veterinary medicine ranks high amongst many veterinary professionals as important to their careers in both personal and professional development (Dale et al., 2013). Many veterinary professionals who value education also see themselves as educators to the community, often taking part in specific society health roles within their local or state jurisdictions (Page-Jones & Abbey, 2015). The notion to be technically competent in the profession, especially in the highly knowledge-intensive and medically relevant field of veterinary medicine, is a fundamental premise of the industry (Page-Jones & Abbey, 2015). The pursuit of learning to remain competent in the face of society is an underlying tenet within the veterinary profession that defines the veterinary identity (Page-Jones & Abbey, 2015).

Lastly, the human-animal bond and the relationship between the veterinary profession and society is one of extreme importance. Knesl et al. (2016) stated that “As veterinarians, we support not only our patients but also the millions of humans who share their lives with animals...the veterinary profession is built on human connections with animals...the human-animal bond is important in all settings” (p. 42). The unique societal expectations of those in the

veterinary profession has changed drastically over the years, with veterinarians taking on a larger and more distinct role as the chief educators and proponents of animal welfare and the human-animal bond (Bones & Yeates, 2012; Dolby & Litster, 2015; Knesl et al., 2016). The education and promotion of animal welfare, to many, is the primary role of those in the veterinary industry (Dolby & Litster, 2015). The relationship between veterinarians and society at large continues to advance both the profession and animal welfare as veterinary professionals are regarded as bastions of community and animal health (Knesl et al., 2016).

Self-Directed Learning

Allowing adult learners to take responsibility for their own learning content has been a general premise in adult educational research for over four decades (Boyer et al., 2014a; Knowles et al., 2012). Yet, this concept of self-directed learning has been widely debated and discussed since the 1970s with varying definitions, interpretations, and critiques (Merriam et al., 2007; Wlodkowski, 2008). Only recently has this topic been further studied compared to other areas of cognitive learning as the scope and interest of this subject has increased beyond the field of education to other institutional areas (Merriam et al., 2007). The primary goal of self-directed learning is to empower adult learners, whether unaided or within the direction of a formal learning environment, to plan, execute, and assess their own learning journey (Knowles, 1975; Knowles et al., 2012; Merriam et al., 2007). It is the process of this learning experience that has been widely researched and discussed in recent years (Merriam et al., 2007).

Tough (1978), one of the early pioneers of self-directed learning, studied adults who participated in learning projects, many that were self-initiated and planned, to understand the impact of such projects on their learning. Tough's (1978) linear model outlining steps in, what he described as, self-planned learning projects led to additional research on the topic when many

realized the significance of self-directed learning experiences in adults (Merriam et al., 2007). As research developed and many academics accepted the premise that numerous adults participate in self-directed learning, some in the adult learning community continued to question the role of self-regulation in adult learning (Knowles et al., 2012). At the center of the argument, researchers are still trying to understand whether self-directed learning is a distinctive and innate feature in adult learners or if educators must play a role in enabling and facilitating adult learners to be autonomous and self-directed in their learning (Knowles et al., 2012). Knowles (1975), the father of andragogy (the art and science of adult learning), stated that “there is convincing evidence that people who take the initiative in learning (proactive learners) learn more things, and learn better, than do people who sit at the feet of teachers passively waiting to be taught (reactive learners)” (p. 14). Self-directed learning, therefore, is the method of learning when adult learners personally customize their own educational experiences to meet their individual needs, create their own learning goals, and monitor their learning outcomes, generally through initiative and self-motivation (Boyer et al., 2014a; Knowles, 1975).

Knowles (1975) described the distinctive differences between teaching children and facilitating adults in learning. In early development, children require physical and psychological needs fulfillment to grow and learn (Knowles, 1975). However, as adults grow and mature, they “develop an increasingly deep psychological need to be independent, first, of parental control, and then, later of control by teachers and other adults. An essential aspect of maturing is developing the ability to take increasing responsibility for our own lives” (p. 14-15). Furthermore, the need and ability for self-directedness is a natural inclination as children mature into adults; however, human culture hinders the process by continuing a pedagogical framework of learning versus instilling a more autonomous view of education (Knowles et al., 2012). As

children move into adulthood at the natural rate of growth (figure 2), pedagogy is continued and the gap of being self-directed grows where andragogy would have been the more appropriate form of learning (Knowles et al., 2012). The archaic set of beliefs, as described by Knowles et al. (2012), revolve around set assumptions in learning that continue to exist today in both child and adult learning models. This teacher-centered approach is foundationally grounded in the following assumptions: learners only need to know information presented by their teachers to move through the educational process, not what is important for their lives; learners are dependent on teachers for their learning needs; only the experiences of teachers, not learners, is relevant to the process; learners must be ready to learn when the teacher is ready to teach; learning is content and subject-matter related; and motivation to learn is external (Knowles et al., 2012). Pedagogical assumptions that have been in place for centuries permeate the educational landscape and have been adapted for the adult learner; yet, adults learn differently than children and a different set of assumptions must apply (Knowles et al., 2012).

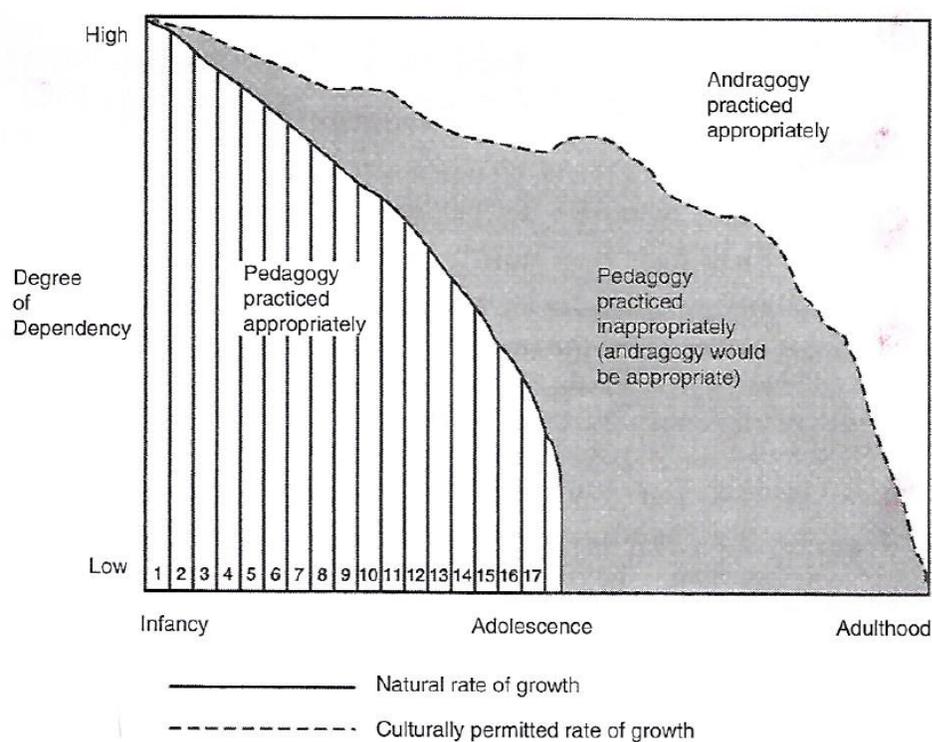
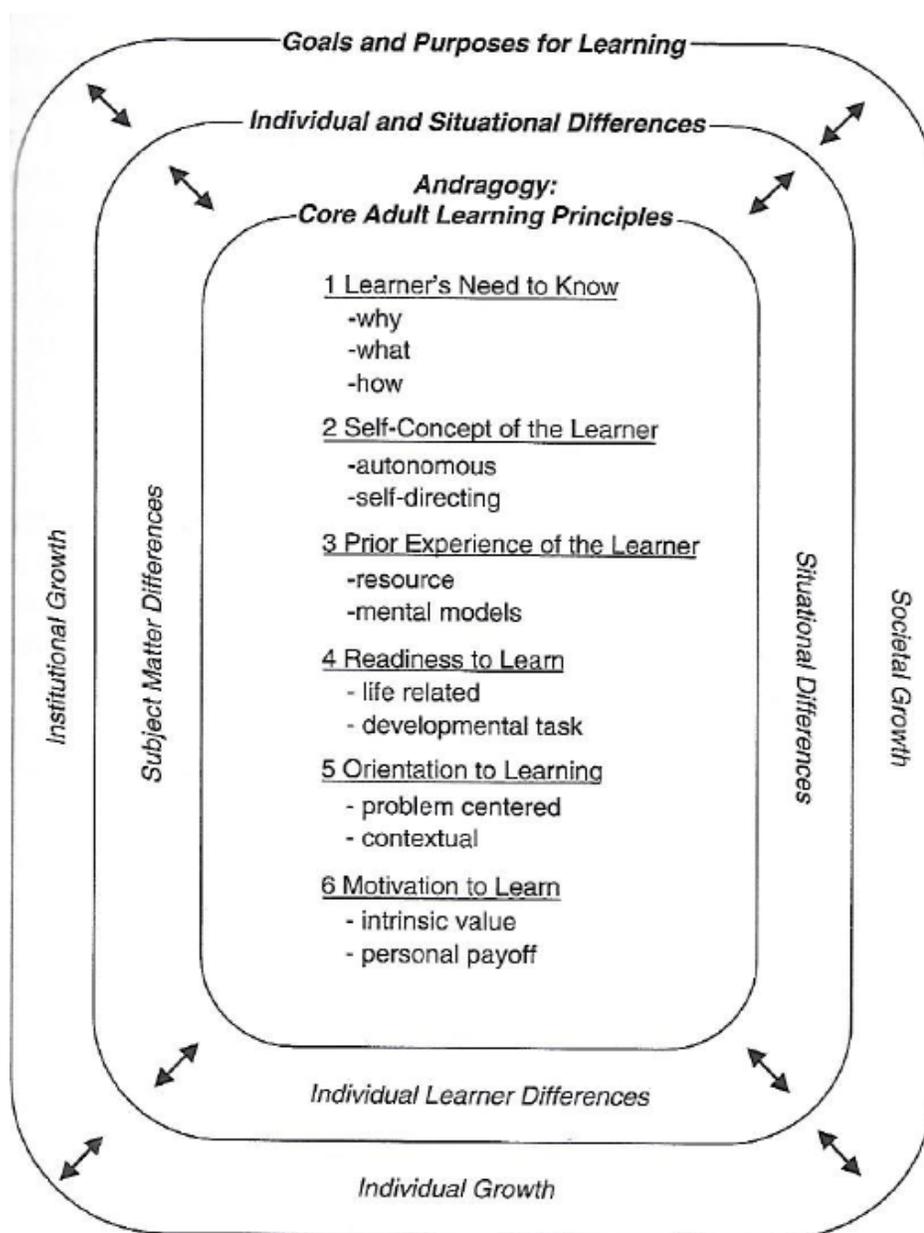


Figure 2. The Natural Maturation Toward Self-Direction When Compared With the Culturally Permitted Rate of Growth. Diagram compares the growth rate as pedagogy is practiced and as natural maturation decreases over time with a graphical representation of when pedagogy is continually practiced inappropriately at the time andragogy would be best represented. Adapted from *The Adult Learner: The Definitive Classic in Adult Education and Human Resources Development* (7th ed.) (p. 61), by M. S. Knowles, E. F. Holton, and R. A. Swanson, 2012, New York, NY: Routledge. Copyright 2012 by Taylor & Francis.

This need to be self-directing in life through the development process evolves and matures; the differences in approach from a teacher-directed methodology that focuses on the educator as the primary source of developing, implementing, and assessing the learning journey to that of an independent inclination to self-learn becomes the natural order (Knowles, 1975). The assumptions and approaches to self-directed learning that are student-focused differ greatly than the methodologies outlined in teacher-directed learning (Knowles, 1975). Knowles et al. (2012) confirmed that theories of teaching revolve around the ability of one person to influence another's learning; teacher-centered activities focus on this tenet of education. Although many theories of teaching exist, the basic premise highlights the valued experiences of the learner, the internal motivation to learn, and the problem-centered methods towards self-realization and self-direction (Knowles et al., 2012). The different assumptions that guide the adult andragogical model include the following: adult learners have a desire to know why they need to learn something; adults want to be responsible for and seem competent in their own learning journey; the learner's experiences play a role in their learning; adults are ready to learn when a life situation or event dictates the need to learn; learning is centered around the lives of adults, not subjects; and adult learners may have some external motivation to learn, but the main driving

force to learning is intrinsic by nature (Knowles, 1975; Knowles et al., 2012). Knowles et al. (2012) stated that to truly understand the art and science of adult learning, the concepts and differences between pedagogy and andragogy must be studied and applied. The comparisons in assumptions between the two learning methodologies, started by Knowles (1975), continue to play a major role in adult learning research.

Knowles et al. (2012) further created “andragogy in practice...an enhanced conceptual framework to more systematically apply andragogy across multiple domains of adult learning practice” (p. 146). Three facets of the model relate to goals and purposes for learning in adults, individual and situational differences faced by adults, and highlights of the core adult learning principles first conceptualized by Knowles (1975) and later refined (Knowles et al., 2012) (figure 3). The interactive model highlights the distinctions amongst adult learners and shows flexibility in the complexity of adult learning while taking into consideration the individual and situational differences that occur (Knowles et al., 2012). Knowles et al. (2012) described the importance of adult learning in the shaping of learning experiences through individual personal growth, institutional advancement, or societal changes. Within individual and situational differences, Knowles et al. (2012) confirmed that these tenets are variables that dictate the various learning strategies that may be used at any given time. This may include situations when adult learners in areas without access to learning materials may take a more self-directed approach to learning by taking charge of their own individual experience because the circumstances prescribe such action (Knowles et al., 2012). The diagram serves as an interactive and flexible guideline for various adult learning situations while keeping the core adult learning principles at the forefront of the model (Knowles et al., 2012).



*Figure 3. Andragogy in Practice Model. The interactive model depicts the core adult learning principles and purposes for adult learning while providing a flexible approach to various learning situations. Adapted from *The Adult Learner: The Definitive Classic in Adult Education and Human Resources Development* (7th ed.) (p. 147), by M. S. Knowles, E. F. Holton, and R. A. Swanson, 2012, New York, NY: Routledge. Copyright 2012 by Taylor & Francis.*

Within adult learning, the personalization of learning events grounded in autonomy lead to more effective outcomes (Boyer et al., 2012). The need to grow professionally, learn additional skills, proactively acquire knowledge, and set personal educational goals has been seen in research as factors influencing self-learning (Wan et al., 2012). Although not always apparent to the individual as self-directed learning, many adult learners have pursued other types of learning and conducted personalized learning activities aside from traditional classroom methods to enhance their own skillset and knowledge (Wan et al., 2012). The application of self-directed learning has influenced movements and motivations towards lifelong learning, experiential training, and personal growth (Merriam et al., 2007). Therefore, self-directed learning can be a valuable tool for the adult learner within a myriad of industries or experiences, to include the profession of sales.

Self-directed learning in the workplace. Even though 40 years of research confirms the general benefits of self-directed learning, there has been limited research in the effectiveness of self-directed learning in the workplace or the factors that drive employees to be self-directed in their learning (Boyer et al., 2014a, 2014b). Motivation and goal attainment have been cited as reasons for autonomous learning, yet more research is needed to recognize and understand the relationship between these two major factors (Boyer et al., 2014b). Researchers interested in organizational motivation and efficiency continue to study self-directed learning within these institutions with the primary goal of annotating the key influencing strategies that replicate positive outcomes (Wan et al., 2012). Wan et al. (2012) found that factors such as having competence in individual attributes and creating specific learning and job goals influenced the use of self-directed learning. This understanding of self-directed learning as a benefit to adult learners in the workplace environment continues to influence the curiosity of many, especially

those closely aligned with teaching at the adult education level (Marcos-Cuevas, Critten, Squire, & Speakman, 2014).

Tough (1978) discussed, in his early research, the desire for many adults to work on self-directed learning projects as personal growth opportunities. Manning (2015) confirmed that adults within training capacities in working environments “have integrated non-formal learning into their work stream with a majority spending between one to three hours per week on these types of activities” (p. 4). Using self-directed learning projects in the workplace to increase knowledge, these adult learners were motivated to keep up with industry trends and changes while using this learning to influence and encourage those they train within the workplace (Manning, 2015). Industries value self-directed learning in the workplace environment as they recognize the positive benefits to this type of learning; additionally, researchers continue to study the reasons and motivating factors that enable and influence employees to conduct autonomous learning (Raemdonck, Gijbels, & Groen, 2014; Rana, Ardichvili, & Polesello, 2016). Employees in challenging and demanding jobs have a higher propensity to learn on their own with the desire to stay abreast of new job requirements, trends, and processes if they possess a prodigious level of motivation to self-learn (Raemdonck et al., 2014). Furthermore, support from management also plays a role in self-directed learning in the workplace when employees are encouraged to pursue opportunities to learn; managers maintain a high degree of influence with regards to employee self-directed learning (Raemdonck et al., 2014). Organizations that foster challenging career environments and demand a certain level of critical thinking, along with a supportive learning atmosphere that enables the pursuit of knowledge, encourage and motivate self-learning amongst employees (Raemdonck et al., 2014; Rana et al., 2016). Understanding the ability and measuring the capacity of employees to conduct self-directed learning in the work environment

continues to be a topic of discussion for researchers and employers as many in the workforce look to understand the productivity of these employees through job progression (Fontana et al., 2015).

Self-directed learning in education. An area of further exploration in self-directed learning and critical thinking is the university environment and higher education (Alvarez et al., 2015; Cummins et al., 2013; Edmondson, Boyer, & Artis, 2012; Newberry & Collins, 2015; Rodriguez & Armellini, 2013; Sogunro, 2015). Studies show that self-directed learning at the university level positively correlates to academic performance, future aspirations, life satisfaction, creativity, and curiosity (Edmondson et al., 2012). Yet, universities spend limited time preparing those who seek careers as sales professionals for success and researchers spend less than 5% of the sales education research studying critical thinking skills development at this level (Alvarez et al., 2015; Cummins et al., 2013). Alvarez et al. (2015), when discussing current university sales courses, stated that “The fundamental question, then, centers on the skills needed and teaching delivery methods that can more effectively respond to the current and future needs of sales organizations” (p. 233). A gap exists within these university programs to prepare the sales professionals of the future and empower them with the practical skills needed for the profession (Alvarez et al., 2015). In today’s selling environment, it is not enough to just sell; sales professionals must be strategic, critical thinkers and problem-solvers to succeed (Alvarez et al., 2015). Universities are charged with meeting this particular challenge within their marketing, business, and sales programs (Alvarez et al., 2015; Cummins et al., 2013; Newberry & Collins, 2015).

Sogunro (2015), when researching motivating factors for adult learners in higher education, found that relevance in practical education, experiential instruction, and self-directed

learning were key elements for building a strong foundation at the university level. Sogunro (2015) affirmed that “self-directedness or autonomy is what motivates some adult learners in higher education...adult learners should be encouraged as much as possible to be responsible for their own learning” (p. 31). Those students who learned and applied self-directed learning strategies and critical thinking skills manifested a higher level of determination and self-efficacy throughout the rest of their schooling and future performance (Sogunro, 2015). This resourcefulness in the self-engagement of the learning process provides the student with a foundation for learning that has many ramifications beyond the school environment and into the future workforce (Alvarez et al., 2015; Cummins et al., 2013; Newberry & Collins, 2015; Sogunro, 2015). Self-directed learning has many positive attributes at the university level as students who embrace autonomous learning with a solid foundation in self-efficacy create a path of success as they embark into their professional careers and beyond (Alvarez et al., 2015; Cummins et al., 2013; Newberry & Collins, 2015; Sogunro, 2015). Furthermore, the engagement of self-directed learning in higher education should be correlated and discussed within the experiences of real-world situations; this bridge could inform practice at the educational level and guide self-directed learning to future endeavors in adult learning (Green, Kelso, & Zillioux, 2015).

Self-directed learning in sales. Sales professionals are autonomous by nature; they work independently to solve problems and operate on a consistent basis with limited guidance from managers or supervisors (Artis & Harris, 2007; Boyer et al., 2012, 2014a). However, sales professionals still require training within the performance of their jobs, and some sales organizations struggle at meeting these basic requirements to effectively train them (Boyer et al., 2012; Marcos-Cuevas et al., 2014; Pullins et al., 2017). Furthermore, some organizations fail to

properly evaluate the efficiency of their sales training programs and provide the needed direction to adjust or improve training (Singh et al., 2015). This perpetuates the existing training rift with ineffective and unsuccessful sales training programs that dampen the learning journey of sales professionals (Pullins et al., 2017; Singh et al., 2015).

Self-directed learning, discussed as an opportunity to fill the knowledge gap in sales training, provides the autonomous sales professional the ability to augment their training through self-customization and learner-centered activities (Artis & Harris, 2007; Boyer et al., 2012, 2014a; Marcos-Cuevas et al., 2014). Cron, Marshall, Singh, Spiro, and Sujana (2005) suggested that sales training could be more effective when the training is “likely to be individualized, jointly determined, voluntary, tailored to fit mutual needs and offered in various modes” (p. 124). Learner-centered activities and self-directed learning projects afford opportunities for knowledge and skill growth in adult learners while tailoring to their individual needs and requirements (Manning, 2015; Tough, 1978). Self-directed learning is a tool used by sales professionals to provide enhanced professional development opportunities, industry knowledge attainment and advancement, and mastery in competence needed to differentiate themselves from others in competitive markets (Artis & Harris, 2007; Boyer et al., 2012, 2014a; Marcos-Cuevas et al., 2014).

The Veterinary Sales Professional and Self-Directed Learning

The medical industry and the sales organizations that service them are knowledge-intensive and learning-oriented entities (Hunter, 2010; Leovaris & Cismaru, 2014; Matsuo et al., 2013; Soklaridis, 2014). Organizations such as these require sales professionals who can keep pace with the growing need for knowledge and content, who are adaptable in the face of challenges, and who are specialized to deal with the specific nature of this type of sales (Hunter,

2010; Pullins et al., 2017). Chigerwe, Boudreaux, and Ilkiw (2017) stated “As medical knowledge continuously changes, health care professionals need to acquire skills that will enable them to be life-long learners.” The ever-changing landscape of the knowledge-intensive industry requires higher-order thinking, knowledge attainment, and a desire to learn; these principles remain important facets of medical and pharmaceutical sales organizations who rely on staffing employees that possess these attributes and characteristics (Hunter, 2010; Matsuo et al., 2013; Soklaridis, 2014). Professionals within the veterinary industry are part of a unique environment that relies on relationships, autonomy, and competence (Allister, 2015, 2016; Armitage-Chan et al., 2016; Bones & Yeates, 2012; Dolby & Litster, 2015; Knesl et al., 2016; Page-Jones & Abbey, 2015). Self-directed learning can provide veterinary sales professionals the opportunity to relate to veterinary caretakers, take charge of their own autonomous learning, and remain competent and relevant in veterinary medicine. As seen in other sales environments throughout a myriad of industries, self-directed learning is the tool that enhances knowledge attainment and content growth when sales training expectations for individual learners are not met by established organizational training (Artis & Harris, 2007; Boyer et al., 2012, 2014a; Marcos-Cuevas et al., 2014).

Veterinary industry relationships have always been built on trust and confidence yet must continue to be nurtured and fostered as with any other personal bond (Pepper, 1995). Veterinarians and their staff value professional identity, education, and competence (Allister, 2015, 2016; Dolby & Litster, 2015; Page-Jones & Abbey, 2015). Research shows that companies need to promote an atmosphere that values continuous learning and empowers employees with a desire to learn (Pullins et al., 2017). The learner-centric mentality with an individualized learning plan continues to evolve within the sales training environment but has

proven to be an effective tool for the sales professional (Marcos-Cuevas et al., 2014). Sales professionals want to be more knowledgeable and competent in front of their customers; many aspire to become an expert in their chosen field (Artis & Harris, 2007). The supplementation of self-directed learning in these environments create a more complete experience for the sales professional (Artis & Harris, 2007; Boyer et al., 2012). Self-directed learning allows sales professionals in highly knowledge-intensive industries and learner-centered organizations to take charge of their own learning and to proficiently develop the knowledge needed to perform in their sales positions. Understanding the role of self-directed learning in the veterinary sales profession could enhance the current body of knowledge and provide guidance to the overall industry about the factors most relevant to training these sales professionals within their organizations and empower them with the tools to be more self-directed within their learning journeys.

Summary

The veterinary medical sales professional interfaces with a unique group of people in the veterinary industry that possess and value many key characteristics such as professional identity, devotion to learning, technical competence, and compassion for the human-animal bond (Allister, 2015, 2016; Knesl et al., 2016; Page-Jones & Abbey, 2015). Veterinary caretakers also possess many positive characteristics and attributes associated with well-being such as personal growth, self-awareness, a life of meaning, a sense of belonging to a much larger cause, helping animals and society, and lifelong learning (Cake et al., 2015). Even more important is the fact that the veterinary medical industry is part of an overall knowledge-intensive and learner-centered entity that requires a high-level aptitude of medical knowledge to function (Hunter, 2010; Matsuo et al., 2013). These attributes are unique features to the veterinary profession that

explain why many choose to pursue careers within veterinary medicine and relate to the professional identities associated with the vocation (Allister, 2015, 2016; Cake et al., 2015, Knesl et al., 2016; Page-Jones & Abbey, 2015). Ultimately, veterinary sales professionals must identify with and understand the veterinary profession in order to adapt to this environment; they must be innovative, creative, conversant, and well-informed in their approach to the veterinary caretaker (Leovaridis & Cismaru, 2014).

Sales organizations, at large, see merit and worth in autonomy and competence, yet many must reevaluate their current sales training practices that seem to lack meaningful training after the first few years of new employment (Lassk et al., 2012; Pullins et al., 2017). This knowledge gap has created a void in sales training practices and many organizations do not consider continual learning as part of their sales training (Boyer et al., 2012; Lassk et al., 2012). Instead, much of the training begins to wane after the first three years of employment (Boyer et al., 2012). Self-directed learning, although limited in research and study within the overall sales arena, becomes a very important tool for the tenured sales professional beyond the traditional sales training methodologies used by many organizations (Boyer et al., 2012; Boyer et al., 2014a). Even more so in a highly knowledge-intensive and identity-driven entity such as the veterinary industry, there is limited research outlining the perceptions, benefits, or practices currently in use by tenured veterinary sale professionals who partake in self-directed learning. This study will uniquely address the perspectives of veterinary sales professionals who use self-directed learning as part of their continuing professional development. This may inform practice for many veterinary sales professionals in the industry, aid veterinary medical sales organizations and their training departments to incorporate resources for self-directed learning, advance the

veterinary medical industry, contribute to university programs preparing future sales professionals, and add to the literature on this topic.

CHAPTER THREE: METHODS

Overview

Using guidelines established by Yin (2014) as the research framework, this multiple case study investigated sales professionals' perceptions of self-directed learning within their current positions. Patton (2015) was also used to augment data collection procedures. The research design, the setting, the choosing of participants, the procedures, the data collection methods, the data analysis, and ethical considerations will be discussed in this chapter.

The settings of participants' local territories and the selection process of finding the 13 veterinary sales professionals who participated in this study will be described. The use of interviews, an online discussion group, and document analysis to collect data will be detailed and discussed (Patton, 2015; Yin, 2014). A description of the data analysis procedures to look for common themes and create generalizations in understanding the phenomenon being studied will follow (Yin, 2014). The researcher used Yin's (2014) framework to guide the case study protocol, look through the initial data, devise a general strategy through theoretical propositions, analyze the data through pattern analysis, and interpret the data through generalizations. The researcher intended to develop a comprehensive and deep understanding of veterinary sales professionals' perceptions of self-directed learning through the analysis of common themes and threads. Lastly, trustworthiness and ethical considerations will be addressed to outline credibility, dependability, and integrity throughout the research.

Design

A qualitative study using the multiple case study approach was used for this research. Yin (2014) stated that "a case study investigates a contemporary phenomenon...in its real-world context" (p. 2). This approach provided the best exploration of the self-directed learning

phenomenon of veterinary sales professionals within the boundaries of their current positions. Furthermore, as someone who has experienced this phenomenon as a veterinary sales professional, this flexible design allowed the researcher to study the individual perceptions of each of the participants while highlighting the singular issue of self-directed learning within the real-world context of veterinary medical sales (Creswell, 2013; Yin, 2014). Yin (2014) described the scope of the case study as a real-world bounded system used to investigate phenomenon and the features of the case study as using multiple evidence points to triangulate data and guide the process. Using a specific group of individuals who share a common profession and mutual experience, the bounding of the case incorporated veterinary sales professionals who have been in their respective organization for longer than three years (contextually defined earlier as tenured) and partake in self-directed learning. These parameters defined the boundaries of this case study. Ultimately, Yin (2014) stated that “case study research comprises an all-encompassing method – covering the logic of design, data collection techniques, and specific approaches to data analysis” (p. 17). Using Yin (2014), the case study followed a methodical and deliberate approach within the research.

Understanding the many points of view, the varied perceptions, and the different motivational influences of self-directed learning practices within the sales profession required a flexible and versatile research design. Although there is limited research on this topic specific to veterinary sales, self-directed learning has been used in other sales industries as a training enhancement and enablement tool. The study of self-directed learning within this unique entity may inform practice in similar industries and provide motivational insight. Using the relativist perspective of multiple meanings, the case study design afforded an inclusive and adaptable framework capable of providing insight and meaning to these outlooks (Yin, 2014). Within case

study research, “the variety of approaches to defining a case gives you an opportunity (and responsibility) to define what a case is within the context of your own field and focus of inquiry” (Patton, 2015, p. 259). The distinctive nature of veterinary medical sales and the principle of self-directed learning provided exclusive examples for additional exploration that were best situated in a case study methodology.

Lastly, case study principles revolve around theoretical propositions and phenomenon (Yin, 2014). Yin (2014) stated that “case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes” (p. 21). Case studies are conducted to find themes around theoretical concepts determined to need further analysis and study. The unit of analysis within the case, the topic being studied in-depth, is the focus of the case study (Patton, 2015). Yet, the case analysis is the instrument used to study a phenomenon and theoretical principle that “will have formed the groundwork for an analytic generalization” (Yin, 2014, p. 41). This concept provided a holistic view of the case and the research at-hand (Yin, 2014). The researcher chose Yin’s (2014) research methodology as the foundational framework of the study because it “focuses on the wholeness or integrity of a case, also setting it within its real-world context” (p. 209).

Research Questions

The purpose of this study was to investigate veterinary sales professionals’ perceptions of self-directed learning within their current positions. Therefore, the following research questions were examined:

Research Question 1: How do tenured veterinary sales professionals describe their uses of self-directed learning within the context of their current positions?

Research Question 2: Why do tenured veterinary sales professionals participate in self-directed learning?

Research Question 3: What do participants identify as the motives behind their uses of self-directed learning?

Setting

Veterinary sales professionals experience varying work conditions while undergoing a “high level of autonomy” (Boyer et al., 2014a, p. 66) and a “large number of unique situations in which they operate” (Boyer et al., 2014a, p. 66). Furthermore, many sales professionals have very idiosyncratic job requirements and individual characteristics with freedom of movement and choice (Boyer et al., 2012). These sales professionals work virtually from their home bases and visit professional veterinary medical and research establishments daily, such as veterinary private practices, humane societies, shelters, universities, and corporate veterinary entities (Armitage, 2016; Boyer et al., 2012; Prendergast, 2017). Many work within the confines of an established territory boundary, devoid of everyday face-to-face interaction with managers or co-workers, as they create their own work experiences (Boyer et al., 2012). Therefore, the autonomous nature of their position allows them to work independently within the outside world (Chene, 1983).

Through this context, the study focused on self-directed tenured veterinary sales professionals with three or more years of employment in the same veterinary sales organization. Although there are many different veterinary medical sales companies within the United States, this study highlighted the profession and the participants at a large veterinary company with the assumption that the bounded systems within veterinary health are mostly similar in nature. Just as in human medicine, veterinary medical sales encompass a myriad of specialties, products, and

services. These sales professionals, working in a knowledge-intensive industry, interact with veterinarians and their staffs daily, regardless of the product or service they sell (Armitage, 2016; Prendergast, 2017). The study focused on understanding tenured veterinary sales professionals' perceptions of self-directed learning within their current positions. To fully investigate the many motivational reasons and perspectives of the multiple cases, 13 veterinary sales professionals from the same bounded organizational system were used.

The company used for this study met the established criteria. For example, the organization services the veterinary industry and is a knowledge-intensive and learning-oriented entity that requires medically proficient sales professionals to interact with veterinary practitioners when discussing products or services (Hunter, 2010; Leovaridis & Cismaru, 2014). The chosen veterinary company also has an established training program at the onset of employment where sales professionals conduct initial training when hired into the organization. The company is also a reputable national and international veterinary organization that services veterinarians worldwide with an outside sales force. Lastly, because the sales professionals that made up the cases within this study are autonomous and self-reliant field sales, the settings involved their assigned territories and regions in North America where these sales professionals interacted with veterinary caretakers within their own locale.

Participants

With a focus on self-directed learning perceptions, the participants within this study were tenured veterinary sales professionals who have been selling for three or more years (Boyer et al., 2012). This provided a consistent platform to investigate veterinary sales professionals' perceptions of self-directed learning. Understanding the reasons and motivating factors that compel sales professionals to expand their knowledge-base when traditional training may not

meet their expectations enlightened the lack of research in this arena. The researcher, following guidance from Creswell (2015), “intentionally select individuals and sites to learn or understand the central phenomenon” (p. 205) using purposeful sampling within a global veterinary sales company operating in North America. Using this type of sampling enabled the researcher to choose participants who have been in their positions for longer than three years, are outside field veterinary sales professionals, and have participated in training beyond the initial scope of employment.

Before beginning any research, compliance with regulatory measures was obtained through Institutional Review Board (IRB) approval (see Appendix A). Prior to IRB approval, the researcher contacted the Vice President of Sales for the global veterinary organization via electronic mail to gain verbal and written approval in conducting the study (see Appendix B). Once the organization granted permission and IRB approval was received (see Appendix A), the researcher elicited a list of potential candidates and their contact information; those on the list were employed by the organization as veterinary field sales professionals. Working within one large veterinary company helped narrow the scope of participants who met the desired criteria. To keep the process as localized and controlled as possible, the researcher limited the scope of the study to include only one veterinary organization with many outside sales professionals. This kept the bounded system focused on the individual self-directed learning practices of the particular sales professionals rather than the potential dissimilarities in corporate training methods. Once the list was obtained, a preliminary electronic mail message with a SoGoSurvey link to an initial questionnaire invited potential candidates to take the brief questionnaire (see Appendix C). This method was used to assess the candidates and ensure they have been selling in the veterinary industry for more than three years, are outside field sales professionals, and

conduct self-directed learning activities independent of traditional sales training given by their companies.

Yin (2014) stated “Each case must be carefully selected so that it either (a) predicts similar results (*a literal replication*) or (b) predicts contrasting results but for anticipatable reasons (*a theoretical replication*)” (p. 57). Yin (2014) recommended six to 10 cases within a multiple case study design as the most desirable option to afford “compelling support for the initial set of propositions” (p. 57). Because the intent was to examine the veterinary sales professionals’ perceptions of self-directed learning within the context of their current positions, the need to find a homogeneous group with the same type of attributes led to a purposeful group characteristics sampling strategy (Patton, 2015). Through homogeneous sampling, the researcher had access to a variety of similar cases to investigate the common characteristics and themes within their unique situation and viewpoint (Patton, 2015). The selection of a mixture of tenured veterinary sales professionals with common attributes from within a veterinary medical sales organization represents an opportunity for a comprehensive understanding of the key self-directed learning practices and motivational factors within the scope of the veterinary sales industry.

Although Yin (2014) recommended six to 10 participants within a multiple case study, a focus on 12 to 15 participants was used as a starting point for the research. For qualitative studies, Creswell (2013) recommended five to 25 participants; for the purposes of this study, the number of participants was determined when data saturation was attained and thematic saturation was accomplished. The range goal of 12 to 15 participants allowed for flexibility in data collection had any issues surfaced with sampling while still meeting a required minimum threshold of candidates to conduct the study. With the number of planned participants and the

triangulation of data collection methods, the feasibility of having enough information to replicate the study is likely and data saturation was obtained using the above criteria (Fusch & Ness, 2015).

Procedures

Yin (2014) suggested applying a thorough case study protocol to ensure that the study is focused, the procedures are methodically followed, and the case study remains reliable. The case study protocol should encompass these components: an overview of the case study; data collection procedures used; data collection questions; and a guide for the case study report (Yin, 2014). The researcher constructed a thorough and methodological plan in the form of a case study protocol prior to collecting case study evidence to ensure that the study remained fixated on the topic at-hand (Yin, 2014).

Prior to the start of data collection, the Vice President of Sales for a large, global veterinary company, known by the researcher, was contacted to receive written approval in utilizing their organizational sales professionals (see Appendix B). Formal IRB approval through Liberty University was received and began the data collection process (see Appendix A). A list of the 75 North American veterinary sales professionals from the organization was obtained by the researcher. An electronic mail invitation to participate in the initial survey was sent to the 75 potential candidates with a two-week deadline to complete the survey (see Appendix C); the points of discussion included the basis of the research, as well as permission to submit an introductory electronic questionnaire to obtain demographic information, preferred contact information, experience in the veterinary industry, and involvement with self-directed learning. A weblink to the SoGoSurvey initial questionnaire was attached to the electronic mail invitation (see Appendix D).

Of the 75 initial questionnaires sent, 41 questionnaires were completed (55%) within the two-week timeframe. After tabulating the results, 15 individuals met the initial criteria established for the study and were invited to participate. An electronic mail invitation to participate in the study was sent to these 15 veterinary sales professionals (see Appendix E). An informed consent form was attached to the electronic mail invitation to obtain written consent to participate (see Appendix F). Of the 15 potential candidates who met all of the criteria to participate in the study, 13 veterinary sales professionals were willing to partake in the study and signed the informed consent forms. The 13 participants provided a mix of sales professionals with varying levels of experience within the organization.

After receiving signed informed consent forms and notifying the veterinary organization, the researcher individually coordinated and invited the 13 participants to a face-to-face or videoconferencing interview using the Zoom video communications platform. Because of the virtual nature and independence of the veterinary sales professionals' positions, the locations of their sales territory, and the distances from the researcher, the researcher did not have the accessibility to conduct face-to-face interviews with every participant. Every effort to conduct the interviews face-to-face, the preferred method, was made. The researcher was able to conduct three of these interviews face-to-face; however, videoconference was used for the remaining semi-structured interviews. Interviews were recorded by the video teleconference platform and by iPhone Voice Memos application as an alternative back-up method in case the video teleconference recording failed. The interviews were transcribed by Rev.com, an online professional transcription service, for future analysis. An electronic mail message asking that participants review their interview transcript for accuracy prior to analysis was sent to each individual participant (see Appendix I); this was done to check for validity and to ensure that the

information obtained was credible (Creswell, 2013; Yin, 2014).

To share self-directed learning practices amongst each other, an asynchronous online discussion group using the secured Forumbee online community platform was established and all interviewed participants were invited to participate over a two-week period. Using the online and internet-based discussion group platform with initial discussion group questions facilitated the participatory process (see Appendix H). Participants were encouraged to interact with each other and share best practices for self-directed learning. They were also asked to post materials, artifacts, videos, journal articles, veterinary case studies, participation in veterinary forums, websites, book titles, and other informational facets that show how they engage in self-directed learning outside of their traditional corporate sales training. These practices and conversations within the online discussion group were analyzed to look for common themes amongst the veterinary sales professionals to observe their self-directed learning methodologies and learning activities. This process gained added insight into their perceptions of self-directed learning and the motivational factors that drive them to conduct learning outside of traditional sales training.

Lastly, the documentation collected from the online discussion group was analyzed “to corroborate and augment evidence from other sources” (Yin, 2014, p. 107). The relevant data obtained from personal training documents, professional veterinary websites, journal articles, business and sales websites, books, podcasts, videos, and other sources further enlightened the study as common themes were annotated and observed. Documents provided insight with regards to the tools used in self-directed learning that can inform practice moving forward.

NVivo, a computer-assisted qualitative data analysis software (CAQDAS), was used to analyze the data from the interviews, the online discussion group, and the documents (Yin, 2014). This tool helped to organize the myriad of data collected into categories and themes for

analysis (Yin, 2014). Although Yin (2014) asserted that the tool is a supportive resource, a researcher “will need to study the outputs to determine whether any meaningful patterns are emerging...developing a rich and full explanation or even a good description of your case” (p. 134). Considering the theoretical framework and propositions that form the foundation of the case study, analysis was conducted and organized using the propositions at hand to shape and understand the common themes from the case study (Yin, 2014).

At the onset of evidence attainment and data saturation within the bounded system, communication to all participants was sent thanking them for their involvement; this was done when no additional evidence was needed prior to analysis. All participants, in accordance with discussions during the semi-structured interview, will be given access to the final study after completion.

The Researcher's Role

As a former veterinary sales professional with six years of experience identifying with and selling to the veterinary profession, I have a vested interest in the self-directed learning practices of this group. As a current veterinary sales trainer and sales training manager, I have a deeper curiosity as to how best support and train future veterinary sales professionals within the industry. I entered the profession in 2006 after leaving the U.S. Army as a military officer and did not have any animal health experience nor a degree in any biological or medical field. I quickly realized that to truly relate to the veterinarians I served and to understand this exclusive industry, I needed to further my professional development education. My company provided initial sales training and support at the time of hiring, but to enhance my own education I needed to conduct self-directed learning outside of the traditional sales training environment. The veterinary industry is quite unique with veterinarians expected to master a myriad of medical and

technical information to diagnose and treat many different animal types. This knowledge-intensive industry requires more than just highlighting the simple features and benefits of products and services to make a sale. Veterinarians are knowledgeable and adept scientific diagnosticians with an overarching understanding of many complex issues and disease states; veterinary sales professionals must understand the unique challenges and environments faced by veterinarians to bring value to these scientists. After a few years in this position it finally made sense; I became fully aware of the complicated business of veterinary medicine. I rose to the challenge by increasing my competency level and comprehension of veterinary medicine so I could wholeheartedly support the industry. My motivation to conduct self-directed learning grew so I could be a valued professional partner to the veterinarian.

Added realization came when interactions with veterinarians and other veterinary stakeholders in the medical practice (practice managers and veterinary technicians) became more than just a sale; veterinary caretakers are devoted to their patients, innately compassionate, and value the human-animal bond. Veterinarians have a high sense of identity and quickly relate to their profession immediately after graduation; many desire to be veterinarians at an early age in life. Coming from the military into the veterinary profession with no prior experience with animals, I promptly began to relate to the industry and value my experiences with veterinarians and their staffs. And although many sales professionals choose a selling career in the human health industry with far greater external motivators, there is a satisfaction in working within the veterinary industry that keeps many grounded for a lifetime far beyond the monetary benefits. Thus, taking pride in the professional development of self through self-directed learning becomes far more than just doing well in a job; it becomes a professional and personal fulfillment.

The benefits of adding to the current state within the adult educational environment and focusing on self-directed learning motivations and practices creates another facet to this study. Exploring the influences of self-directed learning may affect students starting out in this career field during and after their professional undergraduate education and inform practice in the limited body of knowledge on this topic. This research may also help to advance undergraduate, graduate, and corporate sales training strategies to better support and enlighten the adult learners seeking to expand their personal and professional development through self-directed learning.

As part of this industry, these are my own personal experiences. A multiple case study approach seemed applicable to the study at hand; conducting an in-depth and thorough investigation into this real-world phenomenon with clear and concise evidence may further inform practice in the veterinary sales field (Yin, 2014). I hope to advance the professionalism of veterinary medical sales by understanding the motivating factors and perceptions that initiate and sustain self-directed learning and annotating and sharing the self-directed learning practices of others in the industry. I also seek to inspire those beginning in the profession or currently enrolled in college programs to initiate a pathway towards self-directed learning as a key factor in their personal and professional development. The veterinary sales professional needs to be heard in today's society; this will enhance the partnerships between veterinary professionals and veterinary medical sales.

To reduce the bias that may exist, I have done the following: conducted my research with the highest ethical standards, considered and addressed all evidence and opposing viewpoints, remained credible throughout the case study search, kept accurate records, and stayed the course within the methodology while understanding my limitations (Yin, 2014). Throughout the case study, I have remained as objective as possible by providing an opportunity

for the participants to be open and honest throughout the data collection process. Although I have been a part of the veterinary industry for many years, have a vested interest in this profession, and have my own opinions of self-directed learning within the industry, I have strived to remain as unbiased as possible throughout the confines of this study.

Data Collection

Within qualitative research, collecting multiple forms of data and partaking in varied data collection activities result in a plethora of rich data that enables the researcher to explore and examine the many facets of the research (Creswell, 2013). Using different sources of evidence to triangulate the data helps with “developing convergent evidence...to strengthen the construct validity of your case study...multiple sources of evidence essentially provide multiple measures of the same phenomenon” (Yin, 2014, p. 121). This is an important factor in creating a reliable, valid, and credible case study (Yin, 2014). To obtain convergent data, I conducted interviews to understand the perceptions, motivations, and factors that contribute to self-directed learning in the veterinary sales profession. Then, I used an asynchronous online discussion group to further explore and annotate common themes and learning practices amongst the participants. Lastly, a thorough document analysis stemming from shared training plans, personal training artifacts, self-training methods, and other documentation obtained from the online discussion group was used to highlight best practices and key learnings from self-directed learning. Prior to the first interview, a pilot study with two veterinary sales training colleagues was conducted to enhance the questions for the interview and the online discussion group prior to deployment in the study. Creswell (2013) stated that a pilot study is extremely important when reviewing and refining the interview procedures and questions. Various challenges and issues may arise within the pilot study phase that can be adjusted and fixed prior to the initial deployment of the interview. Using

a pilot study to help audit the interview questions increases the reliability of the case study (Yin, 2014). The pilot study helped to edit and shape some of the questions used in both the semi-structured interviews and the online discussion group; minor changes in wording of the questions occurred from the valuable feedback received by the sales training colleagues.

Interviews

Yin (2014) contended “One of the most important sources of case study evidence is the interview” (p. 110). Within the case study methodology, interviews serve as critical entities to evidence collection; an informal and open-ended conversation is pursued to gather this evidence (Yin, 2014). Yin (2014) suggested that interviewing is a two-fold process for the case study researcher: follow the case study protocol with a specific and methodical query directed by the researcher and elicit casual, conversational, unscripted, and unbiased responses from the participant. Since the specific sales professionals used in this study work within their own geographic territories throughout the United States, face-to-face interviews were attempted when geographically possible. However, scheduled and recorded video-conference interviews were more practical when geographic separation did not allow for a direct, in-person interview with 10 of the veterinary sales professionals; three interviews were conducted in-person. During the interview, open-ended questions in a semi-structured approach were used; pseudonyms were incorporated to ensure anonymity with interview participants. Following the case study protocol outlined by Yin (2014), the shorter, focused case study interview was used. Yin (2014) suggested that “the specific questions must be carefully worded, so that you appear genuinely naïve about the topic and allow the interviewee to provide a fresh commentary about it” (p. 111). Because the researcher was close to this topic, Yin’s (2014) recommendation was critically important to follow during the interview process. Prior to the actual interviews, the interview

questions were piloted with the researcher's colleagues and the sessions were recorded to hone and revise the queries. The following interview questions were used:

1. Before we begin the interview, please introduce yourself to me.
2. Please tell me about your veterinary sales experience.
3. With all of the different opportunities to sell in other industries, why did you choose the veterinary industry?
4. Walk me through the formal sales training that you have had in your current position.
5. What other types of sales training have you been involved with throughout your sales career?
6. What is your definition of self-directed learning? What are your perceptions of self-directed learning?
7. Please describe why you choose to learn independently, outside the formal channels of sales training?
8. What has influenced you to look at self-directed learning?
9. What does self-directed learning look like to you? When do you conduct self-directed learning? How long does it take you? What specific self-directed learning activities do you do or what self-directed learning actions do you take?
10. Please describe to me what factors contribute to your desire to partake in self-directed learning?
11. What motivates you to further learn on your own?
12. When talking to veterinary professionals, how has self-directed learning affected your competency level to engage them in medical conversations?

13. What successes do you see as a result of your self-directed learning? What challenges do you face when conducting self-directed learning?
14. What advice would you give to those in your profession who are not self-directed learners?

Question one and two are knowledge questions that allows the participants to introduce themselves to the interviewer (Patton, 2015). Since this was the first face-to-face or video conference contact with the interviewer, these questions allowed the participants to divulge facts about themselves and their current career position, as well as helped the interviewer to develop rapport with the participants through common connections (Patton, 2015).

To understand the participants' feelings towards the veterinary industry, question three was used (Patton, 2015). Because veterinarians have a high sense of identity, self, and compassion for the human-animal bond, the researcher aimed to understand if the same link exists with veterinary sales professionals that drives them towards self-directed learning (Allister, 2015, 2016; Page-Jones & Abbey, 2015).

With the waning of sales training after initial employment, a thorough understanding of current sales training practices within the participants' organizations should be placed within context (Boyer et al., 2012; 2014a; Pullins et al., 2017). Questions four and five explored this topic.

Questions six through 11 investigated the sales professionals' perceptions of self-directed learning, their experiences with autonomous learning, and specific incidences in which they used self-directed learning (Boyer et al., 2012, 2014a, 2014b; Knowles, 1975; Knowles et al., 2012). As current sales training fails to meet the current demands of sales professionals, the

supplementation of self-directed learning has been used to fill this gap (Boyer et al., 2014a; Wan et al., 2012).

Relating to veterinarians in a knowledge-intensive industry requires sales professionals who can meet the challenge to engage them in medically relevant conversations (Leovaridis & Cismaru, 2014; Yang et al., 2012). The researcher used questions 12 through 14 to look at the self-directed learning principles within the specific confines of the veterinary industry. These opinion and value questions were meant to elicit responses about their specific experiences and to gain a better understanding of best practices that can be repeated by others moving forward (Patton, 2015). The final question also ended the interview and allowed the participants to add information as needed (Patton, 2015).

Online Discussion Group

In exploring the specific self-directed learning practices of the participants, an asynchronous online discussion group using the secured Forumbee online platform was created (see Appendix H). This online discussion group allowed the veterinary sales professionals to interact, share, and comment on the tools they use to enhance their professional development. Invitations to the specific, password-protected discussion board was sent electronically to each individual and the site remained active for two weeks to allow open discourse amongst the veterinary sales professionals. Pseudonyms were maintained throughout the discussion group interactions, and participation was highly encouraged to discuss self-directed learning practices and experiences in the profession amongst each other. As moderator of the discussion group platform, the researcher facilitated the conversations with general questions to elicit responses. Although everyone participated to some degree, more than half of the participants were actively involved in posting and responding to discussion board threads throughout the two-week period.

Participants were encouraged to post artifacts, articles, website links, journal articles, individual training plans, or other tools and documentation used in the course of their own self-directed learning so further analysis and sharing of best practices could be annotated in the research; this is described in more detail in the documentation section below. The following facilitation questions were used:

1. Without divulging any identifying information about yourself, post a brief and general introduction of your current veterinary sales position and describe your past veterinary sales experience. Include the following: number of years in your current position; number of years in the veterinary industry; brief explanation of current sales position; and brief explanation of past sales experiences in other organizations.
2. Other than standard sales training offered by your company, what type of training have you conducted on your own? Why have you been doing this self-directed training?
3. Find others within the discussion group with a similar stance on self-directed learning and comment on their learning methodologies.
4. Find others within the discussion group that have participated in learning methodologies different than yours and comment on the differences.
5. Share any training plans, documents, journals, websites, and other self-directed training documentation, outside of your standard company training, that you have used throughout your professional veterinary sales career. Provide comments to other members of the group regarding their training materials.

Question one served as an introductory question within the online discussion group to offer an opportunity for the participants to introduce themselves to each other (Patton, 2015). It

provided the foundational groundwork for the rest of the online discussion group.

Questions two through four elicited the participants' thoughts on self-directed learning within the forum to understand the practices that each sales professional employs for autonomous learning (Boyer et al., 2014a; Knowles, 1975; Knowles et al., 2012). The open-ended questions were meant to prompt specific opinions about self-directed learning and current sales training programs within a group environment so that similarities and differences could be annotated and discussed (Patton, 2015).

Question five was specifically designed to obtain documents for future document analysis within the triangulating of data in the case study research (Yin, 2015). The documents were compiled and analyzed for common themes and trends used amongst all participants to highlight their common practices around self-directed learning.

Document Analysis

Yin (2014) discussed the relevance of documents within case study research by stating that "the most important use of documents is to corroborate and augment evidence from other sources" (p. 107). Gathering and analyzing specific documentation obtained directly from the participants in the study as the final data collection method helped to enhance the triangulation of data. As part of the online discussion board, veterinary sales professionals were invited to post individual training plans, journal articles, websites, books, medical training, studies, or other pertinent training documentation and training experiences used throughout their own self-directed learning journeys. Participants were also asked to comment on specific training documentation that they posted. The documentation was then gathered and analyzed to look for common themes amongst the participants in the study, to help inform practice, and to understand the key elements important to veterinary sales professionals regarding self-directed learning.

Document analysis was an important evidence-gathering tool that enlightened the study by providing key resources used by the veterinary sales professionals throughout the course of their self-directed learning. The following describes the documents that were requested and analyzed.

Training Plans. The use of individualized and tailored training plans that veterinary sales professionals use to systemically organize their training materials outside of any training plans given to them by their organization were requested. This included daily, weekly, or monthly specific trainings that the sales professionals conducted on their own accord to enhance their professional learning. Detailed plans were petitioned to determine timing of self-directed learning journeys and consistencies in habits.

Websites of Professional Organizations. Various medical, veterinary, and government websites exist that are sponsored by medical organizations and companies such as the American Veterinary Medical Association, the American Animal Hospital Association, the American Heartworm Society, the United States Department of Agriculture, and many others that provide on-going educational materials, online modules, and continuing education. These institutions provide a wealth of additional educational resources beyond traditional company sales training. Learning which websites veterinary sales professionals used for their self-directed learning could inform future practice for others to follow.

Journal Articles, Research Studies, Books, Podcasts, and Videos. Peer-reviewed articles and studies, as well as veterinary medical books and journals, are used by veterinary professionals for evidence-based learning. If used by veterinary sales professionals to enhance their professional knowledge, the resource and the scope of context may enhance current learning practices for veterinary sales professionals. Also, annotating the business books, podcasts, and videos used by veterinary sales professionals could help to further expand the

knowledge needed within sales.

Miscellaneous Documents and Training Resources. The category of miscellaneous documents and training resources encompassed any other learning tools or concepts that have not been previously described or categorized such as interactive online learning modules, veterinary management courses, mentor relationships with veterinary professionals, professional organizational events or seminars, or other educational experiences. The sharing and annotation of unconventional training resources help to further enhance the overall learning within the profession.

Data Analysis

Within case study research, the data analysis phase is one that has historically been underdeveloped and undefined (Yin, 2014). Yin (2014) outlined a methodical approach to data analysis with strategic techniques that can be used in “examining, categorizing, tabulating, testing, or otherwise recombining evidence, to produce empirically based findings” (p. 132). Using NVivo, a commercially available computer-assisted qualitative data analysis software (CAQDAS), an initial listing of all the relevant data from the data collection was conducted to look for commonalities. Yin (2014) described the initial phase of “playing” (p. 135) with the data as a beginning pattern analysis of emerging concepts. Using the established case study protocol helped to direct the process during this phase by adding focus to a generally unstructured practice (Yin, 2014). The interviews were transcribed and the information imported into NVivo. Key threads from the online discussion group were also introduced into the NVivo software to look for common information and themes. Lastly, the documents and other training resources were analyzed and key information obtained and inputted within the software. This was conducted within the initial handling of the evidence.

Creating a General Strategy

First, Yin (2014) suggested incorporating a general strategy to guide the data analysis process. Using the theoretical propositions outlined in the initial case study research purpose, the key topics from the research literature were further elaborated in the analysis (Yin, 2014). These concepts of autonomy, relatedness, and competency in self-directed learning formed the basis of theoretical propositions as the overarching buckets within the data analysis. The theoretical propositions defined the framework for the study and the data analysis conducted during the first round of a general analysis. Yin (2014) described using the theoretical propositions strategy to prioritize and guide the analysis throughout the remaining case study process. This detailed case study description was important to the underlying basis of the case study. During this initial phase, major categories within self-directed learning and self-determination theory were developed. Once this key information was annotated, it was placed within the overarching theoretical categories as the basis of analysis. This allowed the researcher to begin looking for commonalities amongst the initial data sets and further bucketed this information within the higher-level categories of self-determination theory and self-directed learning. Before any other further investigation was done, the important concepts relating to the theoretical proposition were incorporated into the analysis.

Using an Analytic Technique to Outline Themes

Once a predominant strategy was outlined, Yin (2014) described the use of an analytic technique to organize and structure the evidence. Pattern matching was applied in this case study to compare themes across the board from all participants, as well as confirm the predicted outcomes initially made by the researcher (Yin, 2014). Yin (2014) stated that if pattern matching provides similar results, the internal validity of the case study is enhanced. Creating tables to

display the data and looking for patterns helped with the predictive analysis within the themes (Creswell, 2013). This process also augmented the theoretical proposition outcomes once similarities existed in the patterns that confirmed the initial inquiries made (Yin, 2014). Therefore, pattern analysis played a large role in the case study analytical strategy when looking for common or discordant themes amongst the multiple cases analyzed. As important concepts developed in the pattern analysis under the key theoretical propositions, categories were created to link the common themes across the evidence. Incorporating techniques outlined by Saldana (2006), initial coding strategies were used to look at the data and categorize themes within the theoretical framework described. Attribute coding was initially used to create detailed descriptions of the 13 veterinary sales professionals; this created rich background information which related key themes amongst common characteristics found within the veterinary sales professionals (Saldana, 2006). Then, values coding was incorporated into the analysis which provided key themes as to the beliefs, attitudes, and perceptions of self-directed learning within the group (Saldana, 2006). This further provided a coding framework and guideline as more themes emerged in the course of the analysis. The process of using techniques described by Yin (2014) and Saldana (2006) honed-in on concurrent themes seen from the interviews, online discussion group, and documents while looking for shared ideas amongst the participants in the study.

During the analysis phase, Yin (2014) asserted that four principles must be followed: all evidence should be addressed; all competing outcomes should be considered; the most important concepts of the case study should be confronted; and prior experience and knowledge should be incorporated. To ensure validity and avoid bias, these underlying concepts were considered within the analysis process of the case study.

Creating Generalizations and Interpretations

When analyzing the data, much of the evidence gathered provided rich, detailed experiences and verbatim descriptions that were used to fully understand the common themes and perceptions shared by the participants; this was especially apparent as the first round of coding suggested by Saldana (2006) was incorporated to understand common attributes amongst the veterinary sales professionals. Further coding analysis described by Saldana (2006), with regards to values and perceptions, was further placed into theoretical categories; these commonalities enhanced the case study research and provided generalizations that were elaborated and described to inform practice within the interpretation of the patterns (Creswell, 2013; Yin, 2014). These methods augmented the research study by providing substantiation in fully exploring the phenomenon at hand (Creswell, 2013). Autonomous learning perceptions, usage of self-directed learning methodologies, and motivators to learn emerged as thematic elaborations within data analysis; these generalizations and interpretations, grounded in theoretical propositions, will be discussed. Yin (2014) affirmed that analytic generalizations made and lessons learned from the case study findings provide application to many different situations outside of the research context within the real-world scenario.

Trustworthiness

To address trustworthiness within this study, several techniques were used to enhance credibility, dependability, confirmability, and transferability. Patton (2015) stated that “The credibility of your findings and interpretations depends on your careful attention to establishing trustworthiness” (p. 685). The rigor involved in doing meaningful and thoughtful research enhances the overall study methodology by taking into effect the multiple viewpoints, collection

methods, and due diligence (Patton, 2015). The techniques that were used to augment the trustworthiness of the study are described below:

Credibility

Credibility and validation of the data occurred in a few different ways. Participants in this study were sent the transcripts of their individual interviews and invited to check them for accuracy immediately after completion and transcription of their interview process; this was done before analysis was conducted (Creswell, 2013). The researcher used this technique as data was obtained and transcribed to ensure that participants agreed with the outcome of the interviews. Member checking was also conducted once findings were determined; asking the participants in writing about the accuracy of the findings and the legitimacy of the interpretations helped to validate the findings of the research as credible (Creswell, 2015). In addition, the corroboration of evidence through triangulation and the use of multiple sources increased the validity and credibility of the case study (Creswell, 2013; Yin, 2014). Finally, the review of the draft case report through colleagues and other key outsiders provided an objective view to the research (Yin, 2014). Yin (2014) stated that within the review process “the corrections made...will enhance the accuracy of the case study, hence increasing the construct validity of the study” (p. 199).

Dependability and Confirmability

Yin (2014) contended that the use of a case study protocol and the development of a case study database affect the reliability, dependability, and confirmability of the research. The true test of this component lies in the ability of another researcher to replicate the findings of the study (Yin, 2014). The researcher created an environment that strived to diminish errors and biases by establishing a case study protocol at the beginning of the research and annotating key

framework procedures (Yin, 2014). Also, the development and management of a case study database that securely housed the data within a chain of evidence increased the reliability of the research (Yin, 2014). Being able to track the evidence through the systematic process affirms dependability and confirmability throughout the course of the case study (Yin, 2014).

Transferability

Yin (2014) acknowledged the importance of having a “complete” (p. 202) case study that has been thoroughly conducted, assessed, analyzed, and described. Exhausting the evidence analysis within the boundaries of the case allowed for the researcher to provide a thorough, detailed, and comprehensive description of the findings which can then be used throughout other contexts (Yin, 2014). The findings of self-directed learning within the veterinary sales profession, at the completion of analysis and description, can then be used in other industries or other venues, such as education, to further inform practice.

Ethical Considerations

Ethical considerations in any human study must be fully observed and followed throughout the research. Yin (2014) confirmed the critical importance of protecting human subjects by obtaining informed consent, protecting participants from harm, maintaining confidentiality, protecting vulnerable groups, and choosing participants impartially. Creswell (2013) stated that deception must be avoided at all costs and data should not be plagiarized or misrepresented. The researcher fully adhered to all of these principles to ensure that the highest level of ethics were used prior to, during, and after the course of the study. Consideration was given to protect the identities of all participants involved. All forms of data were secured through a password-protected case study database and formal handling of the material was conducted to respect all participant information in the study from start to finish (Yin, 2014). The

use of pseudonyms for all participants and settings were incorporated to protect participants' identities (Creswell, 2013). These ethical considerations were of the utmost importance to the nature of this research.

Summary

Yin (2014) detailed a methodological approach to case study research that enables researchers to investigate phenomenon through a real-world context. The investigation of veterinary sales professionals' perceptions of self-directed learning in their current positions follows the guidelines and framework defined by Yin (2014). Thirteen veterinary sales professionals with similar defined characteristics were carefully selected through purposeful homogeneous sampling from a large veterinary medical sales company to participate in the study. Contact with an executive from the veterinary organization and the use of an introductory questionnaire provided for the selection of the desired number of participants. Because these were remote field sales employees who work independently within a specific territory boundary outside of a brick and mortar office location, the setting was varied as participants were in their natural selling environments. This afforded the researcher varying perspectives from other veterinary sales professionals throughout the United States.

The use of three methods, the interview, the online discussion group, and document analysis, provided a cross-section of data. Within the credibility and validity of the case study research, using multiple sources is very important (Yin, 2014). By following a case study protocol, looking through the initial data, devising a general strategy through theoretical propositions, analyzing the data through pattern analysis and coding, and interpreting the data through generalizations, a comprehensive understanding of veterinary sales professionals' perceptions of self-directed learning was established (Saldana, 2006; Yin, 2014). This study will

uniquely contribute to the veterinary medical sales literature on self-directed learning by detailing the self-directed learning perceptions, motivations, and strategies used by veterinary sales professionals. In an industry with limited self-directed learning scope, this study can also inform practice in undergraduate programs of students entering the profession, veterinary sales training organizations that build training, and individual veterinary sales professionals looking to expand their knowledge foundation within their careers.

CHAPTER FOUR: FINDINGS

Overview

This chapter outlines the data analysis findings from semi-structured interviews, an online discussion board, and document analysis using 13 veterinary sales professionals. First, a review of the purpose statement and research questions outlines the foundational premise for the inquiries being answered. A biographical introduction to each of the study participants highlights their roles, education, work territory, sales experience, and desire to enter the veterinary industry; pseudonyms that align with participant demographics are used to protect the anonymity of all study contributors. With self-determination theory (Ryan & Deci, 2000, 2002, 2017) as the guiding principle for theme development, themes are presented and research questions are answered that provide the pivotal concepts to the study. Lastly, a summary of the study findings concludes the chapter.

Purpose Statement and Research Questions Review

The purpose of this multiple case study was to investigate veterinary sales professionals' perceptions of self-directed learning within their current positions. Using a large veterinary company that employs field sales representatives, a multiple case study was conducted to explore and understand the perceptions, reasons, and motivating factors that compel tenured veterinary sales professionals to engage in self-directed learning outside of standard corporate training. The theoretical framework of self-determination theory outlining the three major tenets of autonomy, relatedness, and competence formed the foundational analysis for theme development guiding the research questions (Ryan & Deci, 2000, 2002, 2017). An examination of 13 distinct semi-structured interviews, an online discussion forum, and documents were used.

In multiple case study approaches, the researcher seeks to investigate a phenomenon within the context of a real-world situation (Yin, 2014). Using a bounded system within the confines of current veterinary sales professionals who conduct self-directed learning, the researcher sought to understand veterinary sales professionals' perceptions and motivations by analyzing their words, experiences, and methods (Yin, 2014). This methodical approach of the case study analysis provided the best and most flexible process to studying self-directed learning in the veterinary sales professional world while allowing the researcher to focus on the individual perceptions and actions of the participants (Creswell, 2013; Yin, 2014). All participants have experienced the same phenomenon and mutual experiences within a common profession which provided the parameters defining the bounded system within this case study design (Yin, 2014).

Yin (2014) also described the case study as a pertinent methodology for theoretical propositions. The specific themes that emerged from this study revolved around the tenets of autonomy, relatedness, and competence to answer the research questions. These three central theoretical concepts formed the basis of the initial thematic generalizations that led to more specific groupings within scope. To understand the phenomenon, the following research questions were examined within the theoretical lens of self-determination theory:

Research Question 1: How do tenured veterinary sales professionals describe their uses of self-directed learning within the context of their current positions?

Research Question 2: Why do tenured veterinary sales professionals participate in self-directed learning?

Research Question 3: What do participants identify as the motives behind their uses of self-directed learning?

Participants

Thirteen tenured veterinary sales professionals who have been involved in the veterinary industry for longer than three years in their sales positions participated in the study. Since all of the sales professionals work for the same company but in different geographic locations, the different types of veterinary sales companies or location of sales territory had no bearing on this particular study. Gender was also not a factor in this study as the researcher narrowed down the participants to only those who have participated in self-directed learning and have been in their position for three or more years; three of the participants are female and 10 are male.

Backgrounds and experiences varied amongst the group with some of the participants choosing to enter the animal health industry for personal reasons after working other human medical industry positions while others grew up in the industry through youth work experiences or exposure to family members as veterinarians. The table below shows all of the participants, their ages, degrees attained, regions where they live, regions where they work, number of total general years in sales, and number of total years specifically in veterinary sales. Pseudonyms were used to protect participant identities.

Table 1

Participant Overview

Participant's Name (Pseudonym)	Age	Degree(s) Attained	U.S. Region of Habitation	U.S. Region of Sales Territory	# of Total Years in Sales	# of Total Years in Veterinary Sales
Ben	36	B.A. (Communications)	Southwest	Southwest	6	3
Charles	62	B.S. (Chemistry)	Northeast	Northeast	35	30
Chris	39	B.A. (Political Science)	Southeast	Eastern U.S.	14	14

David	29	B.S. (Pre-Med / Biology)	Northeast	Northeast	8	8
Jim	32	B.A. (Family and Consumer Science)	Midwest	Midwest	14	6
Mark	44	B.S. (Education with minor in Business)	Southeast	U.S.	22	8
Mike	40	B.A. (History); currently enrolled in M.S. program (Organizational Leadership)	Midwest	Midwest	14	14
Mary	49	B.S. (Marketing)	Midwest	Midwest	26	23
Nate	43	B.S. (Russian); M.A. (Humanities)	Northwest	Northwest	12	11
Ray	37	B.S. (Pre-Med / Biology); M.B.A	Southeast	U.S.	14	14
Sadie	42	B.S. (Psychology)	Northeast	U.S.	20	6
Stan	42	B.A. (Communications); M.B.A.	Southeast	Southeast	9	8
Sophie	51	B.A. (Economics); M.B.A.	Northeast	U.S.	20	10

Ben

Ben is one of the more junior participants in the organization, only having been in his position slightly over three years. In his early 30s, Ben had sales experience prior to joining the veterinary industry working in the energy and information technology business after obtaining an undergraduate degree in business. Ben is currently a field sale representative in the Southwest

region of the United States for the organization and, as a naturally curious person, has participated in self-directed learning to further his knowledge of the industry and business acumen. With six years of sales experience in total, yet fairly new to the animal health industry, Ben was drawn to his position because of a love of animals:

I'm an animal lover at heart. A bunch of adopted animals here at the house, all from clinics, actually... Yeah, the reason I wanted to get into it is really just I love the animal space. I've heard from multiple references it's a great career path. Everybody seemed to be really happy with just the balance it provided, so, yeah. I sought it out, got into it...

Ben had some extensive formal training when he started in his veterinary sales career that involved a mix of classroom training, peer-mentoring in which he rode with sales professional peers visiting veterinary practices, and one-on-one training with his manager. Since then, he has taken part in sales meetings and collaborative training with other sales professionals, but the majority of his learning has been self-directed.

If something isn't given to me, it's up to me to go find it out... I don't believe in sales as trying to be pushy or deceptive. I just have to know the product inside and out to always give the best value proposition to the customer. That's something that I fully believe in. So, if that self-directed learning means however I need to fill in those gaps, that's my avenue that I go look for the information.

Ben is very happy in his role and plans to continue in the veterinary health industry as he progresses in his sales career.

Charles

With 30 years in the veterinary industry and in his early 60s, Charles had the most experience of all the participants. His undergraduate degree in the biological sciences and

chemistry was originally his stepping-stone to enter veterinary school and eventually become a veterinarian. His earliest experiences of working as a cage cleaner and veterinary technician in college provided a foundation and interest in the veterinary world. However, needing a job out of college and given an opportunity to enter the job market, Charles chose to begin his sales career in the construction industry while many of his college friends chose to enter the human medical and pharmaceutical market. Eventually, Charles was able to enter the veterinary market as a sales professional and as a veterinary hospital manager, and he has been a part of this industry ever since.

I had a bunch of friends, because I was a science major in college, I had a bunch of friends that went to the human route, and although those folks made a lot of money, their job description to me was not appealing at all. The veterinary industry, everything about it I loved. I loved the science, I loved the animals, and I ended up loving the people also. The people that we sold to and developed relationships with, I really enjoyed and really just enjoyed just the environment and the relationships that I developed with them.

Much of the formal training that Charles has been a part of throughout his career has been sporadic, with a week of training when he started and company sales meetings throughout the year. When asked about sales training throughout the industry, he stated:

So it's actually been mostly self-learning. There's always quarterly meetings, national meetings...But it's actually an interesting question because I think there's always been a lack of training. There's always been a lack of understanding of what the sales rep actually needs in the field to be successful...It's just real easy to run them through a week training and throw them out there and ask them to do their job. Training is expensive. It's time out of the field usually.

Charles is a field sales professional in the Northeast region of the United States and is a consummate learner with daily and weekly self-directed learning activities to continually hone and sharpen his craft. Even after 30 years in the industry, Charles feels the constant pressure and need to evolve in his learning to keep up with the industry as self-directed learning has allowed him to grow professionally and expand his knowledge-base for his career.

Chris

Chris received an undergraduate degree in political science and served as a United States Army officer before starting his sales career in the veterinary industry. With over 14 years of veterinary sales experience, he accidentally “fell into it...fresh out of the army” while looking to get into some type of business-related field out of the military. A sales professional mainly in the Southeastern and Eastern portion of the United States, Chris has excelled in his sales career; although this has been the only industry in which he has sold, he has been very happy in the veterinary realm:

If you're gonna sell to a group of people, what better group of people to sell to than people who get up every day to make life better for pets and the people who care for them? They're great people to have a good conversation with. The sales cycle is conversational or through relationship building.

As Chris entered the veterinary industry, he did not receive much formal training at the time. This training consisted of one week of classroom training in which he was given a packet of information to learn on his own. Much of the training consisted of on-the-job learning with peers and managers.

It started with drug sales, top 10, 20 drugs that we would make for veterinarians. And it was kind of a self-learning, we just got a packet of information. I spent a week at a

pharmacy where we did role playing, we did drug testing, drug knowledge, and then observed overall pharmacy operations and got to listen to pharmacists talk to veterinarians about the very drugs that I had been learning. Then I spent a week actually in the field with the sales coach and sales trainer...kind of learning on-the-job.

Chris feels very strongly about sales training within the profession as an essential function to success. When asked about training and self-directed learning, he responded:

Personally, I think it should be necessary. It should be required in any industry, much the same way that we require our doctors to go do training. We, too, as sales professionals should always be mandated to do some sales training and re-trainings throughout our years as well to keep ourselves sharp.

Chris continues to learn daily and uses self-directed learning as a professional opportunity to enhance his knowledge and grow within his position.

David

David, who sells mainly in the Northeast region of the United States, is the youngest participant in his late 20s yet has over eight years of experience in veterinary sales; he has spent his professional selling career within the same organization in the veterinary industry. Originally planning to be a human doctor after receiving his undergraduate degree in biology, it was in his junior year of college that he realized he wanted to pursue a career in the business world rather than become a doctor. He began researching pharmaceutical sales as an opportunity to merge his biology undergraduate degree with his desire to work in business and obtained a position as a veterinary sales representative within the organization he currently supports. When asked why he chose to work in the veterinary industry versus taking a position on the human health side, David stated:

I found it such a niche market. I think it's got so much potential and there's so much growth in the industry. And I've always wanted to get involved in a space where there was major advancements and there was great insights into better health outcomes, and how can I play a part in making that actually happen? And don't get me wrong, I looked into the human side, but I found it just a lot more appealing and a lot more rewarding on the animal side and decided to jump into that field headfirst.

David considers himself naturally curious about the world around him and is constantly striving to learn new things and to better himself as a person and as a sales professional. Much of the learning that motivates David consists of a personal desire to better himself.

I think self-directed learning is understanding yourself as a sales professional, to where your strengths and where your weaknesses are...I think it's really important to hone in on strong skill sets that you have and work to become even better than that every single day...I think that taking ownership of your outcomes is how to make a successful sales professional...you have to have that ambition to be better every single day.

David chooses to participate in self-directed and self-initiated learning to enhance himself both professionally and personally.

Jim

Living and selling in the Midwest, Jim has been in sales for 14 years but has only been in the veterinary sales industry for six of those years. He has an undergraduate degree in family and consumer science and originally planned on working in a career in human health. However, with limited opportunities in his geographical area to work in the human or veterinary medical market out of college, he began his professional career selling print media. A few years later he

was given the chance to work in both the human pharmaceutical market and the veterinary industry and chose to work with animals.

I've always loved animals, to be honest with you, always loved animals. And I actually got offered a job on the human side with pharma. The turnover rate was really high on that side, and I really just wanted to stick with the veterinarians.

Much of the formal training that Jim participated in encompassed classroom training at the onset of employment and on-the-job training with peers and managers. Yet Jim did not feel adequately prepared for the challenges of the position as much of the instruction revolved around features and benefits of products rather than how to sell the products to veterinarians. Self-directed learning became a way to close the training gap; "it really allows them to expand and learn how they really are able to dive deeper into some of the learning...I love it, honestly, 'cause everyone learns differently."

Mark

In his current specialized position selling to veterinarians throughout the entire United States, Mark has over 20 years in the sales profession with just about nine of those years specifically in the veterinary industry. The majority of his time in sales has been in the human pharmaceutical industry selling drugs to urologists, neurologists, and pulmonologists and working with both hospitals and academic institutions. Prior to taking a position in his current organization, he worked in the veterinary pharmaceuticals market selling diabetes products, heart failure medications, and vaccines to veterinarians. Although his original interest was to stay in the human health industry after receiving an undergraduate in kinesiology with a business minor, his unique past eventually drew him back to veterinary medicine:

Wanted to go to the veterinary side, but at the time the human side was really expanding. I had an opportunity to join a company and so I jumped on it. Although, I've been around the veterinary side of things my whole life. My father was in the veterinary business for 40 plus years. He owns a veterinary practice. Been around it pretty much my whole life.

Mark participated in an extensive formal onboarding and training process when he first started in the human medical industry. Within his veterinary experience, training was not as extensive as his previous human medical experience; however, it adequately met his needs as a sales professional. Mark is passionate about self-directed learning as a significant tool in personal and professional development.

I think it's a must. I tell my kids all the time, I mean, you always got to be learning. I mean, my father taught me that when I was young, and never stop learning. If you think you're an expert in something, there's always somebody that knows more than you do, or can do it better than you. You always gotta have a little bit of an edge. You've got to continuously grow and learn and that's just life...I say this to my kids all the time, you have to have self-discipline to improve yourself. You always got to be constantly looking at ways to learn. If you're not, then you're not maximizing your overall potential.

Mike

Mike, who works in the veterinary industry in the Midwest and lives in the same location, has spent about 14 years in the profession of sales with all of that time within the veterinary industry. Prior to sales, Mike received an undergraduate degree in history and entered the United States Army as an officer where he served for five years. He is currently pursuing a graduate

degree in organizational leadership. When asked why he joined the veterinary industry, he stated:

I came into the veterinary industry kind of by accident through a recruiter from the military that helps transition military officers into the civilian world...when I began, it was more like the veterinary industry chose me. I fell into it a little bit by accident, to say, I was looking for a job more with the government or for government contractors and when things didn't work out that way because of job freezes, I took this job in veterinary sales because it was an opportunity and I needed a job.

Mike's in-depth veterinary sales experience spans two different organizations and he is a naturally curious learner who loves to voraciously read books and articles that interest him. Currently working on a graduate degree in leadership, he has a new-found appreciation for self-directed learning. When asked why he continues to stay in the industry, he replied:

Once I got into it though, I really enjoyed working with the customers that we worked with and the mission that we had at the end of the day we were helping clients who love their animals and that, that appealed to me for some reason. I tell people...I just had a conversation the other day with someone looking to transition into the veterinary industry...when you're on sales calls, even on your worst day, there's probably a dog sitting there wagging its tail in your lap when you're on the worst sales call of your life. So it's kind of a cool place where you get to see veterinarians who are professional veterinarians, they have a wealth of medical and scientific knowledge that they can share with you...You get to see some really cool stuff. They're just good people. They really chose their profession, not because of the money or because of the status or anything. They chose their profession to help animals. I think that's kind of a cool concept.

Mike feels very passionate about self-directed learning as critical to personal and professional development. As one who takes learning seriously, Mike states:

I don't know if people really, generally speaking, people really understand the power of self-directed learning and actually not just the power but the benefit...I think training and the opportunity to build your skill set and your competencies through self-directed learning can almost be seen as a benefit...I've talked to a number of people who say 'I want professional development. I want professional development.' I think this is a great way to engage in that type of thing...and I ask myself how do I just continue to learn more and expand my wealth of knowledge?

Mary

Mary, a veterinary sales professional in her late 40s, has an undergraduate degree in marketing and has been in the veterinary industry for 23 years in the Midwest and Mid-Atlantic regions with a total of 26 years in sales. Her first three years were spent selling telecommunication services before she was offered a position in the veterinary industry. Throughout her long and successful career in veterinary sales, she has sold diagnostics, pharmaceuticals, and business solutions to veterinarians. When asked why she has stayed in the veterinary business for so long, she replied:

I think veterinarians are just really down to earth people, great people. A lot of them don't do it for the money. They're doing it because they really care about the animals and to help the animals. I'm pretty passionate about helping people. Not worrying about myself. I'm gonna take care of my customer, and then everything else will fall into place. But they're like family.

When discussing her formal training, Mary made note of the extensive training she received in the telecommunications business. However, that changed when she arrived in the veterinary world where self-directed learning became more of an important factor to progressing in her field.

I would do a lot on my own because just going to meetings is not sufficient enough for you to learn all the products. You have to do a lot of reading, and what I also do is I call a lot of my colleagues, learn from them...if there's certain medical things I didn't understand, I always had a key handful of doctors that I would go to and talk to them and have them help me.

Mary feels very strongly about self-directed learning as a necessity in the profession. She is an advocate of striving to be as knowledgeable as possible when selling in the medical field.

You take an initiative on your own outside of what the company demands of you to make you an expert in that field...I think it's something that's very necessary to do because you're not gonna be an expert from just doing the bare minimum. You have to go above and beyond. It's not just a job. It's, I really feel, part of who you are and you want your doctors to rely on you. Just doing the bare minimum is not gonna cut it.

Nate

Nate, another former United States Army officer with nine years of service, is in his early 40s and has spent a total of 12 years in sales with 11 of those years in the veterinary industry and one year in the human health industry. He has an undergraduate degree in Russian and a graduate degree in humanities, but has chosen sales as his profession. He resides and works in the Northwest region of the United States. He entered the veterinary industry mainly by chance

as he was looking for non-sales opportunities but was placed in veterinary sales through a corporate recruiter working with junior military officers.

It kinda maybe wasn't originally what I planned on but I had an opportunity to interview for it...As I learned more about it, it seemed very attractive, lot of good opportunity, that kind of thing and so when I learned a little bit about it, it seemed like a good fit and that's why I went for it. It wasn't something coming out of the military I necessarily had planned on.

Nate has enjoyed his time in the veterinary world and continues to conduct self-directed learning as a way to improve and excel in his position; the self-directed learning methodology suits his style of learning.

Well I think that for certain types of people I think it might be more that they don't need a lot of supervision or direction, that you'll be able to learn to accomplish a given task and then also through maybe maintaining that level of excellence...I think it's great because this is a role where you kind of create your own schedule, you have to be motivated, you have to be kind of a self-starter, and with the self-directed learning, maybe it's something you can also do when you're driving between calls and appointments, if it's something that you can listen to.

Ray

Influenced by a neighbor who was a practicing veterinarian, Ray began working at his neighbor's veterinary hospital as a kennel assistant when he was a teenager and instantly fell in love with the industry. All throughout high school and college, Ray continued to work in veterinary practices while majoring in biology and minoring in business. Now, in his mid-30s

and having been in veterinary sales for his entire career of 14 years, Ray has enjoyed his time in the veterinary business:

I feel very comfortable in a veterinary practice. I kind of grew up in a veterinary practice, so kind of wanting to maintain that kind of comfort level of being in a veterinary practice, but maybe not wanting to be in the same veterinary practice day in and day out. So to kind of preserve that, but then leverage the business side to do more. I was kind of like a perfect combination for me. The business aspect of it is very interesting, but not many businesses you're able to combine science and a love of animals...my neighbor was a vet and I loved animals.

Ray comments on the limited formal training he has experienced in the industry and how self-directed learning is an opportunity to close the gap in training.

It's been very little, I will say that. Very little formal training...Really the standard was hey, we're going to have a national sales meeting once a year and we're going to have some sessions and get you up to date...it's like rapid round, here's the new products, here's what you need to know. There's this constant on-going...Yeah, I would say we have had to train ourselves.

Sadie

Living in New England but covering veterinary sales throughout the United States in a specialized role for the past six years, Sadie is in her early 40s and has spent her entire professional career of 20 years in sales. Prior to her veterinary sales position, she sold advertising for radio, television, and print. She obtained an undergraduate degree in psychology but loves to sell. When asked why she chose veterinary sales, she replied:

I ended up here accidentally, but I've stayed very much on purpose. A friend recommended I apply so I took a chance. It was a little bit scary, but also exciting and ... it's become my home. It's the kind of place that I like being, not just the company itself but my clients have been my favorite clients that I've ever had, and so definitely staying in the veterinary industry is something that I'll continue to do. It wasn't on purpose, but I'm so glad that I fell into it.

In the course of her veterinary sales career, Sadie has also had limited formal training and has relied on others within her organization or self-directed learning on her own to learn the nuances of the industry and her position.

Formal sales training not so much. When I started here, I learned a lot of the science and I learned a lot about the medications that we sell because that's where I was comfortable, and so I learned as much as I could...did a lot of just listening in and getting to know what everyone else in the company was doing...it wasn't formal training, it was definitely self-directed training...I am okay functioning in that arena.

Sadie is self-motivated and has a desire to both learn as much as she can and to succeed in her chosen career. When asked about her definition of self-directed learning, she responded:

My definition of self-directed learning would be that I go above and beyond what the tools that I'm given in the office. I read a lot of science journals, both for human and veterinary. And I try to read a lot of books that will help me improve my sales techniques, but also I wanna know what's going on in the industry so that I can keep my partners and prospects up to date...I think you have to be motivated to push yourself to that place...I think it's something that a person has...instinctually, a lot of people wait,

from my experience, wait for people to tell them what to do and when to do it, instead of taking the initiative and figuring it out on their own. A lot of grit I think it takes.

Stan

Living and selling in the Southeast region of the United States, Stan is in his early 40s and has been in professional veterinary sales for nine years. Prior to that, he sold advertising to businesses. He holds an undergraduate degree in communications and a Master of Business Administration. Stan commented on the type of customers he encounters every day that encourages him to continue on with veterinary sales.

For the customer base. Dealing with veterinarians and vet clinics, predominantly veterinarians, they're much more welcoming customers than certainly having been in advertising sales where you're partnering with businesses in that regard as well, but it was not as welcoming of an environment as veterinary sales. Veterinary is just...you drive around and you play with dogs all the time. Who wouldn't want to do that?

When discussing self-directed learning, Stan's response was direct and to the point as he described the purpose of conducting this type of learning methodology.

My definition of it would be learning that I had the initiative to begin. Something that I was not told to do, but learning that I sought out...I think that you typically learn more if it's your idea. If you had the initiative to start it and go begin it, you're probably likely to gain more from it than if I have to tell you to go do something...It is a very important part of being a good sales rep, I think.

Sophie

Sophie comes to the veterinary industry with an undergraduate degree in economics and a Master of Business Administration with a finance concentration. In her early 50s, she has been

in her current veterinary sales position covering the United States for the past five years but is based out of New England. She also has five more years of previous veterinary experience in another organization for a total of ten years in the veterinary industry. Prior to working with veterinary practices, she sold for 20 years in the construction business. Sophie also has experience riding horses in her personal time; she grew up with horses which were a huge part of her life. With an extensive background in finance, sales, and equine, she stated why she chose to enter the veterinary industry:

I have a tremendous respect for a veterinarian as a profession...I've been exposed to veterinarians my whole life, companion animal veterinarians and then equine veterinarians when I started riding at the age of 10. So looking at veterinarians as a profession and as an industry I was really drawn to combining my business acumen, my passion for animals, my personal pet owner and horse ownership experience working across dozens of veterinarians in my adult life. And I felt that there was so much that we could do together to help veterinarians grow their practices, be more successful, grow client engagement. And being a client as well as a partner to these veterinarians I think it's just a really unique position to be in to help them.

Sophie, as with many of the other sales professionals interviewed, did not have much formal sales training in her veterinary role. Self-directed learning, for Sophie, is an opportunity to grow in her profession by creating her own learning path not provided by the organization.

My definition of self-directed learning would be identifying the topics you want to learn about and coming up with a plan which includes resources, time, and tools needed in order to accomplish that plan to learn the topics that you want to learn about...You're touching on something that's just so near and dear to my heart. I learned over the course

of my career, professional and personal life, that no company, no manager, no individual is every going to give you 100% of what you need to be successful. So I feel very strongly that each individual, whether it's a salesperson or in any profession, is inherently responsible for getting what they need to be successful and seeking out all of those resources, training, books, people, white pages, podcasts, Ted talks...I'm in control of my learning.

Results

With self-determination theory as the underlying premise for answering the research questions, all of the themes aligned closely with the tenets of autonomy, relatedness, and competence during data analysis. Much of the theoretical framework informed the data analysis process, providing three major perception sub-themes per the self-determination theory categories. Although other less prominent sub-themes developed, three distinct sub-themes per category were clearly noticeable during this process and were used in the course of this study. These are annotated within the study as perception sub-themes and align with the larger self-determination theory principle within this study. Throughout data analysis and coding, the frequency of the various perception sub-themes below were tabulated while analyzing the information obtained from the semi-structured interviews, the online discussion forum, and the documents. The following table highlights the major self-determination theory categories (autonomy, relatedness, and competence), the top three perception sub-themes aligned to these categories, the number of sales professionals out of the 13 participants exclusively commenting on the particular perception sub-theme topics, the number of unique references to these sub-themes obtained through all data sources, and the overall rankings of these sub-themes in order of frequency (unique references) and importance. A detailed analysis of each sub-theme follows.

Table 2

Summary of Themes

Self-Determination Theory Category	Perception Sub-Theme (Sub-Category)	# of Sales Professionals Commenting	# of Unique References	Overall Ranking
Autonomy	Ambition to be Self-Motivated and Successful	12	101	1 st
	Desire to Personally and Professionally Grow	13	84	2 nd
	Naturally Curious for Constant Learning	10	48	4 th
Relatedness	The Need for Common Ground	8	24	7 th
	Inherent Desire to Help Veterinarians	5	19	8 th
	Developing Deep Relationships	3	11	9 th
Competence	Becoming an Expert in Your Field	11	79	3 rd
	Filling Learning Gaps	7	48	5 th
	Earning Respect as a Trusted Advisor	8	47	6 th

Theme Development

With self-determination theory as the overarching theoretical framework, each of the categories and sub-themes will be examined.

Autonomy. As the first and most basic psychological need discussed by Ryan and Deci (2017), autonomy describes an individual's desire to live their own experiences, make their own decisions, and exist by their own value system of what they deem is important. This concept of autonomy has many misinterpreted meanings but simply refers to the need for humans to

voluntarily determine their own paths in life (Ryan & Deci, 2017). When data analysis and coding was conducted and themes were categorized, three major sub-themes aligned with autonomy. These three categories were clearly apparent when totaling the number of unique references displayed and were discussed by almost all sales professional: ambition to be self-motivated and successful within their career and personal life; desire to personally and professionally grow; and naturally curious for constant learning in everything they do.

Ambition to be self-motivated and successful. The most prominent permeating factor and perception resonating throughout the semi-structured interviews and the online discussion group from 12 of the 13 participants is the overwhelming desire and ambition to be self-motivated, take learning into their own hands, and strive for success. In fact, of all the sub-themes annotated from the data analysis phase, ambition to be self-motivated and successful garnered the most unique responses and references from all of the data-gathering methods. Almost every sales professional discussed the importance of ambition to their profession and highlighted this theme as a major motivating factor for why they conduct self-directed learning in their day-to-day life and profession. Because all of the participants are sales professionals, it was no surprise that this was a major characteristic that resounded from the analysis. David, the youngest of the study participants, stated the following:

In sales, you've got to be hungry to want to earn it. And you've got to be hungry to want to excel every single day. They say you get out what you put in. So, I was heavily focused on being successful...I think knowledge is an amazing tool. And it's not something that can be bought. And so, even if the person with the most money in the world may not make a great salesperson, but the one person that may not have a lot of money that is hungry to learn, and understands the industry, and understands the aspect of

the sales process, that's what drives my hunger. Because I think the smarter you are and the more knowledge-based you are, that's the more successful you'll be.

Mark discussed his aggressive attitude and desire to succeed as an important factor to his self-learning.

I think it goes back to my competitive nature, wanting to know as much as I can about what's going on in the market, making sure I'm staying on top of things, having that cutting edge. I think that's probably the biggest thing.

Sophie adamantly discussed the sole responsibility of the individual to seek out learning by stating the following:

So I feel very strongly that each individual, whether it's a salesperson or in any profession, is inherently responsible for getting what they need to be successful and seeking out all of those resources, training, books, people, white pages, podcasts, TED talks. It is the responsibility of the individual.

Stan summarized ambition, success, and self-learning best when he discussed the importance of self-directed learning to his veterinary sales role.

I think that you typically learn more if it's your idea. If you had the initiative to start it and go begin it, you're probably likely to gain more from it then if I have to tell you to go do something...you just have to have a personal drive to be better at what you do...I'm just driven to be better at what I do. I don't want to ever be stagnant. I like to be progressing.

The permeating desire to be self-motivated and the ambition to be successful resonated throughout much of the interviews, discussion board forum, and documents. Ben, in many instances, stated that he is "self-motivated" and participates in self-directed learning to "better

myself.” He mentioned that his career is very important to him by stating, “...career-wise I know the more information I have, the better of a job I’ll do. I just get obsessive. I really enjoy learning about what I don’t understand.” Chris agreed with Ben, discussing how he is the biggest driver and motivator in his career and how he continually yearns to be better in his position by learning as much as he can; “...the biggest influence is myself...the idea that I could actually, through my learning, that I could provide a better path forward...and shape the way.” Mike, a proponent to putting in the effort to achieve success, annotated that “You get out of the experience what you put into it. If you’re willing to take the opportunity to learn, take advantage of it...as long as you put 100% effort into it, you will get something out of it.” The continual movement and effort forward as a contributing and motivating factor was also discussed by Nate who adamantly confirmed:

So there’s a drive there, of course, of wanting to improve...that’s the satisfaction that I’m kind of in control and I can work in a particular area and get better at it, I think is its own reward in a lot of ways.

Finally, Stan declared his perceptions of personal motivation and ambition when it comes to self-directed learning versus standard company training.

You’re never going to become an expert based on what we teach you. You’re not going to become an expert based on me. I’m not going to teach you enough to become an expert. If you want to be an expert then you’re going to have to have that personal drive to go and be an expert on your own, to go find it...you just have to have a personal drive to be better at what you do...to go figure it out.

Desire to personally and professionally grow. Although not the most prominent theme when analyzing the most unique references overall and coming in at second in totality, this

category included responses from all 13 participants in the study throughout all three of the data analysis procedures. Every participant discussed self-directed learning as an opportunity to grow both personally and professionally; the desire to not remain knowledge-stagnant in their personal lives or in their professional careers was a common theme throughout. All felt very strongly that the desire to self-learning provided a personal and professional path towards growth and prosperity, especially when looking for future roles and opportunities. Ben proclaimed, “Improving on these types of skills will make you a better, more well-rounded sales professional. It can also help you prepare for future roles or aspirations you have in your professional development.” Chris agreed stating, “Either continue to grow or you need to find another job. It’s not for you and you’re not doing anybody, yourself, or the company you’re working for any favors if you’re not trying to get better at your craft.” Mary adamantly discussed the importance of growth by stating, “I think it’s something that’s very necessary to do because you’re not gonna be an expert from just doing the bare minimum. You have to go above and beyond.” Mike talked about the importance of personal accountability as a way to evolve in your professional development.

There has to be an accountability and I think a growth mindset where you are looking to grow and expand, and you have to be proactive and responsible about that yourself...So, from a self-directed learning perspective, if you’re not willing to change and adapt to the adapting industry and learning how that industry is adapting, you’re going to become a legacy very soon, right? I’ve talked to a number of people who say ‘I want professional development, I want professional development.’ I think this is a great way to engage in that type of thing...it’s how do I just continue to learn more and expand my wealth of knowledge so I can do a number of different things.

Mike further talks about the sales professionals who have been stagnant in their positions because of their inability or refusal to grow in their learning; “Sometimes, it’s easy to go stale in this job if you’re not constantly challenged and that kind of thing, so I think that was just sort of a big part of it so you’re not getting stale because that’s easy to do.”

Stan also discussed the importance of not remaining inert in his personal and professional life as learning is a part of who he is and what he does.

I do that because a) I have a thirst for knowledge and b) I just have a personal drive to be better at what I do. Personal drive is my number one reason for self-directed learning.

I’m just driven to be better at what I do. I don’t want to ever be stagnant. I like to be progressing.

Many of the sales professionals exhibited a natural desire and drive to achieve personal and professional goals and to constantly improve themselves. Ray stated, “So, there’s a drive there, of course, constantly wanting to improve.” Sophie, in agreement with Ray, proclaimed, “I’m reading or seeking out something that’s going to make me better, make me better professionally, sometimes personally...I am very much a goal setter and a goal achiever...I would say goal achievement would be the number one motivator.”

Finally, the ability to continually grow and evolve is an important factor; self-directed learning is the vehicle that allows for this persistent personal and professional growth. Without it, many of the sales professionals agreed that unproductivity and failure follow; this career in sales is fueled by the desire to personally and professionally develop. Charles stated, “It’s the only way to bring value and success. I don’t understand how you can be successful, short term and long term, without growth, without personal growth.” Jim concluded, “...in sales, we continuously have to grow and you don’t really have that time to where you just kind of stagger

and wait to see what everybody else is doing. You really have to keep your foot on the gas at all times.” Lastly, Mark truly sees the critical importance of self-learning and development as a lesson in life; it is a human necessity:

I think it’s a must. I tell my kids all the time, I mean, you always got to be learning. I mean, my father taught me that when I was young, and never stopped learning. If you think you’re an expert in something, there’s always somebody that knows more than you do or can do it better than you. You always gotta have a little bit of an edge. You’ve got to continuously grow and earn that’s just life...I mean, if you’re not learning, you’re dead.

In totality, the importance of personal and professional growth for all of the sales professionals who conduct self-directed learning was apparent. This factor rated second highest of all themes and was commented on by all of the sales professionals throughout the semi-structured interviews, the online discussion board, and the resources analyzed.

Naturally curious for constant learning. From all of the data analysis conducted, the fourth most prominent overarching sub-theme and a key factor in autonomy is the insatiable and constant desire for many of the participants to seek out learning across all topics in their personal and professional lives. Much of their personalities as sales professionals have driven many to conduct self-directed learning in a myriad of topics of interest. When asked about self-directed learning, Ben replied:

...as far as self-directed learning, it’s something I’ve always appreciated because it’s just in my personality to seek out information. I’m an avid reader. I obsess over certain subjects and I like to know as much as I can...it’s just part of my personality...I just like to know everything.

This desire for constant learning came up multiple times in the semi-structured interviews, the online discussion board, and in the document analysis when looking at the many different categories of topics that sales professionals have participated in for self-directed learning. David stated, “I think it’s just my hunger to try and learn as much as I possibly can.” Mark, an avid viewer of online videos for self-learning with self-help projects, discussed how he uses the internet to quench his desire for knowledge; “I’m always watching YouTube videos to learn how to do something around the house, just always constantly learning...I mean, if you were to ask my wife what does Mike like to do? He always likes to learn something new.” Sophie also talked about an inner, deep desire to learn.

Because I’m never satisfied. I love learning. I always have. If I could drop everything and go back to school it isn’t about the degree, it’s about the learning...I just sort of have this insatiable need to learn...I truly believe that I was just born with this insatiable need to want to learn more.

Curiosity as a word and a theme was apparent throughout the semi-structured interviews with the sales professionals conducting self-directed learning. Mike, a self-proclaimed history buff and an avid reader, mentioned how he is drawn to self-learning because of his inquisitive nature.

The bottom line, I think I am curious and by nature a learner. So that doesn’t mean I know everything, but I do like, I’ve always liked to read. I’ve always liked to engage in learning about things that I don’t know about already. So, I think from my perspective it’s simply curiosity and the desire to continue learning...a show comes on the History Channel, I’m interested. Someone gives me a book about whatever, odds are I’ll take a look at it...I just like learning about stuff.

Sadie, another curious learner, described the importance of learning as much as possible to share that knowledge with others. She stated:

I wanna find out as much as I can about the different things that are going on so I can share those and extend my knowledge base to other people. I think it's only helpful to have more information, so I share it...I'm a bit like a squirrel. I'm not okay just going with whatever we have. I always wanna learn more.

Relatedness. As the second psychological need described by Ryan and Deci (2017), relatedness refers to the universal desire to be accepted by society, to interact socially with others, to belong to a group, and to feel connected with humanity. Relatedness is all about meaningful interactions and deep relationships; humans strive to feel a sense of personal belonging and acceptance within the social structures of civilization (Ryan & Deci 2017). Although not as prominent as expected when conducting data analysis and emerging last in frequency amongst the categories within the study, three sub-themes of relatedness were annotated: the need for common ground when interacting with veterinary professionals; inherent desire to help veterinarians; and developing deep relationships.

The need for common ground. Almost a third of the participants discussed the need to establish a common ground with veterinary professionals to be effective in their careers; self-directed learning gave them the ability to understand veterinary medicine in a mutually beneficial approach. Mike stated it best during his interview when he discussed his interactions with veterinarians:

...what I do think is important is being able to find that common ground in a topic that we can both talk about having that mutual respect to talk about it from our own

perspective...but hopefully the goal is that we can learn from each other on that topic and both move forward in a productive, mutually beneficial way.

Self-directed learning, in Mike's opinion, helped to expand his ability to speak and relate to veterinarians on a different level.

Yeah, so I think...it just broadens your perspective and your scope of how you see things. So very simply put, before I started with self-directed learning, I may have a single or very narrow approach to anything. But going through self-directed learning...has just broadened my approach to not always look at something at face value...just seeing different perspectives, whether that's the side of an argument, a person's experience, whatever it is, but just broadening that to see different perspectives and realizing why might those perspectives may have value.

Jim and Mary both agreed with Mike and took the same stance as to how self-directed learning has allowed them to interact with and relate to veterinarians from their sales viewpoint. The ability to find the commonality by changing their approach has helped them meet success. Jim stated, "...a lot of it was just new ways to approach veterinarians...and of course stumble...if one method is not working, it's just a new approach to add to...get them to think differently or coming at it in a new way." Mary felt much the same way, finding ways to relate to veterinarians by building trust, trying new approaches to learning, and seeing if they meet success: "I always say trying a different angle because my angle might not be working. Let's try something different. I think it's kind of fun to try something new and see if you are successful with learning it."

Charles, Sophie, and David discussed the value of shared interests, mutual knowledge, and common ground as foundational to relationships in the veterinary profession and in sales.

Charles, who takes pride in relationship selling, declared, “It all comes down to conversation and sharing interest and sharing information and listening...and meeting the needs of the veterinarian.” Sophie further addressed the importance of having these meaningful relationships both personally and professionally when establishing common ground with veterinarians: “So that need...to be engaging, to be interesting, to be interested, and form a network...that is smart, ambitious, energetic also is important.” David, channeling his background in biology and pre-medicine, discussed the value of understanding and comprehending the medicine when relating to veterinarians; “...understanding the medical side of things, just based off of my asking of questions within a veterinary practice, with understanding it from the doctor’s perspective...has allowed me to understand...the practice.”

Inherent desire to help veterinarians. Five of the sales professionals reflected on their inherent desire and need to help veterinarians. Although not the most prominent theme throughout the interviews, discussion board, and document analysis, the comments that were annotated with regards to helping veterinarians show an underlying responsibility felt by these sales professionals. Charles, who once aspired to become a veterinarian and has spent over 30 years in the industry, when asked why he participates in self-directed learning in his profession, responded:

Just an inherent responsibility to do your job to the best of your ability, to help veterinarians and their staff. To be a valuable resource to the people that you work with, to be a valuable resource to the veterinarian. It truly is, I think, more of an inherent desire...I think it’s inside of you, I think it’s something that you feel. You feel a responsibility to be that way. And, you know, you realize that it helps you in your job. You realize that it helps you in everything you do...it’s an inherent feeling of

responsibility to be the best that you can possibly be...to offer the best value to the people that you work for and with.

This sentiment was repeated by others who also felt very strongly about taking care of their customers, the veterinary professionals, first and foremost as a top priority; once this occurs and customers know you care about them, success follows. Ben proclaimed that his sales accomplishments “happen naturally” because he “just cares about his customers.” Mary attributes her “philosophy of winning” to a variety of factors: “I like learning, I like helping, I like educating...I’m pretty passionate about helping people and not worrying about myself. I’m gonna take care of my customer and then everything else will fall into place.” Mary said it best in her closing comments when she exclaimed “they’re like family!”

Developing deep relationships. Although receiving the least amount of references throughout the study, developing deep relationships was consistently mentioned by three of the sales professionals as a critical component to sales and the veterinary industry. Ben, Charles, and Chris referred to the pursuit of knowledge as an opportunity to bring value and develop meaningful, lasting relationships with veterinarians. Throughout the interviews with these three sales professionals, it became apparent that developing these types of relationships was a component that needed inclusion within the study. Ben stated that “I really feel they feel that sincerity and a lot of that comes from self-directed learning.” Self-learning allowed Ben to sound genuine and authentic rather than phony and false when speaking one-on-one with veterinary professionals; this became a huge concept for Ben as it allowed him to develop trusting relationships. Chris agreed with Ben, concluding that much of what he does in veterinary practices “is conversational and through relationship building which gives me access to veterinarians. Access is not some sort of rigamarole where you gotta bring a whole bunch of

food just to gain access. It's about building relationships, bringing value, and connecting with the veterinarians." Charles has spent a career of 30 years building such meaningful relationships. Of all the participants in the study, Charles was most passionate about his role in connecting deeply with the clients that he serves.

All the talking we do, all the stuff we do outside of being in front of a veterinarian is all find and good, but the rubber hits the road as soon as your eyes meet the veterinarian's eyes. And that conversation you have with the veterinarian is everything...When you get in front of that veterinarian, to me, that's where the rubber meets the road. That's where you can have the best outcome, the best effect, and gain their respect and develop real relationships, relationships that matter.

Charles was adamant that preparation in knowing your job, your product, and the medicine is influential in creating value with the veterinarian. These meaningful interactions form the basis for deep relationships.

I think you can feel it every day. I think on every sales call when you walk in and offer value, when you walk in and you can have intelligent conversation about something, when you walk in and you can develop your relationship deeper, you can get to a place where you can accomplish something, you know. You can identify what you're trying to accomplish on a sales call, and if you're able to accomplish those things on the call, you earn the right to take it even further.

Lastly, Charles had much of the same perspective that Ben and Chris shared with regards to the importance of self-directed learning when building deeply grounded and valued relationships by stating, "self-directed learning...it's the only way to bring value to the relationships that you develop. It's the only way to bring value and success."

Competence. Competence has been highly researched throughout psychology with regards to motivation; humans have an innate desire to feel effective and competent within society and in their interactions with others (Ryan & Deci, 2017). As human beings look for belonging in social groups, the level of acceptance in society is affected by the level of worth that person brings to the group (Ryan & Deci, 2017). Within this study, competence played a large role in theme development as many of the sales professionals discussed and iterated the critical components of appearing competent in their day-to-day interactions with veterinary professionals. Many sought this innate psychological need as a necessity to becoming an effective sales professional and extremely crucial towards being a true expert in the field and in the profession. The three themes denoted within the competence self-determination theory category are the following: becoming an expert in your field; filling learning gaps not provided by traditional sales training; and earning respect as a trusted advisor.

Becoming an expert in your field. Repeatedly, almost every sales professional within the study cited this theme as necessary to the profession, critical to success, and foundational to building confidence. When dealing with veterinary medical professionals, 11 of the 13 sales professionals perceive that the main purpose to self-directed learning is to become an expert in their chosen profession, especially when looking to advance their sales and remain relevant to their clients. Chris, when discussing the importance of training within the profession, adamantly stated:

Personally, I think it should be necessary. It should be required in any industry, much the same way that we require our doctors to go do training. We, too, as sales professionals, should always be mandated to do training throughout our years to keep

ourselves sharp...you need a fundamental understanding...so that you can continue to engage in that conversation.

This concept of being sharp was repeated throughout many of the interviews, the discussion board, and the types of documents, books, and internet websites used for self-directed learning. Ben specified, "I just have to know the product inside and out to always give the best value proposition to the customer." Charles echoed the same type of sentiment, talking about the intrinsic purpose of truly understanding the product, the profession, and the customer:

I think it's a responsibility that you take on with the position. In order to sell anything, I think the best position to be in when you're selling is to be an expert in what you're selling. Without expertise in what you're selling, you are not nearly as successful. So, there's an innate responsibility to take every opportunity to learn as much as you can...to be better at your job...to understand the industry at a deeper level...to rise above the norm, to be better than the next guy.

Mark discussed the importance of putting in the time and effort in self-directed learning to be better than the competition, remain pertinent, and advance the skill set within the profession to becoming an expert.

Yeah, it goes back to the competitive side, making sure that I have a little bit of cutting edge. I look at the people that have been successful and no matter what they're doing, I mean, the amount of hours and time they dedicate to their skill or to their profession, or whatever it may be, I mean that's why they're experts. If you want to be an expert in your field, I mean, you got to stay ahead of things.

Mary mentioned many times throughout the interview and in her discussion board postings about striving for more than the "bare minimum" in the performance of her duties within the

profession. Self-directed learning, beyond what has been offered to her in standard company training, has allowed her to move past the foundational knowledge base she first possessed. Her advice to more junior sales professionals revolves around putting forth the additional effort with self-directed learning to become an expert in the profession.

You take an initiative on your own outside of what the company demands of you to make you an expert in that field. I think it's something that's very necessary to do because you're not gonna be an expert from just doing the bare minimum. You have to go above and beyond...It's not just a job. It's, I really feel, part of who you are, and you want your doctors to rely on you being the expert...Just doing the bare minimum is not going to cut it. You have to go above and beyond and do all the extra stuff...to be the best person you can be, you always need to be educating yourself and going above and beyond...doctors, a lot of times, rely on us as being the experts. Even though we don't have the doctor degree, they want us to know what we're talking about.

Stan also felt that learning "allowed me to become an expert to the veterinarian." Even years later from his initial start in the industry, veterinary professionals look to Stan as an expert in his field: "...when I go to conferences or anything like that and I see the veterinarians, they all come to me and think of me as a resource and an expert...they still see me as that."

Part of being perceived as an expert in the field also stems from projecting competence and being confident in what you state and how you interact with veterinary clients, especially in a highly knowledge-intensive industry. Nate, when interacting with veterinarians, stated that he conducts self-directed learning because "you wanna feel a certain level of competency before you can have those tough, medical conversations." Specifically, Nate discussed the changing trends in veterinary medicine and the need to continue to remain relevant on a day-to-day basis.

Technology continues to grow every single year and that's why if you wanna stay current, those doctors will eventually see that you're competent and will be looking to you to educate them on where we're at now in technology, how can we solve this particular problem whereas two or three years ago maybe the company's level of knowledge that we've given can only go as far.

Sadie also discussed this concept of competence and the importance of communicating with veterinary professionals; the need to truly understand the many idiosyncrasies of the veterinary industry to be an expert in the field and be on par with veterinarians.

I wanna know all of those different avenues so that I can speak with them about different medications, different recalls. I wanna know all that other stuff, too, that isn't just packaged up and given to us here in training, so that I can have a conversation with the practice that I think would be helpful to them.

Ultimately, self-directed learning has given many of the sales professionals the confidence to approach veterinary professionals, medical scientists, while engaging them in meaningful conversations to advance their products specifically and veterinary medicine as a whole. Ben conferred that "...self-directed learning, if anything, it's just given me confidence. The more sales books I read, the more I realize...that a lot of my success is due to it." Mark agreed with Ben by declaring:

Definitely it's helped. Not just from a compensation standpoint but also from a confidence standpoint, you know, that I can confidently have a conversation about products or disease states and go into that conversation knowing that hey, I'm not an expert, you know, compared to the veterinarian, but I can have an intelligent conversation with them.

Mark elaborated further by discussing how self-directed learning, more than standard training, has truly given him the confidence to perform his duties within his sales position and approach veterinarians.

I think, to me, that allows me to be able to go into that presentation with a lot more confidence. I think that's been key...the confidence to go out there and be able to talk about what we're selling, about what we're doing, what we're providing. Because, I mean, that's one of the biggest things I think. Because once you have the knowledge, then it's being able to have that conversation and that confidence to be able to present it.

Lastly, Charles, when approached with the subject of self-directed learning and sales, simply stated, "Knowledge breeds confidence, key in sales."

Filling learning gaps. More than half of the sales professionals in this study used self-directed learning as a means to minimize the training gaps that exist from company-sponsored training programs or from the feeling that they lack knowledge in a particular area. Many of them had limited formal organizational training other than minimal classroom training or on-the-job training experiences, therefore, self-directed learning played a large role in ensuring that they were professionally prepared in their sales role to be successful. However, in some instances, just keeping up with industry updates or reacting to a need in their sales role has led the sales professional to learning on their own.

The lack of formal training and resources across the board in veterinary medicine is apparent when discussing corporate training processes with these veterinary professionals in the study, some who have been in the veterinary industry for many years and with multiple companies. Charles, who has spent an entire veterinary sales career of 30 years working for a myriad of companies, felt that the veterinary industry has historically always lacked in formal

training; self-directed learning is the preferred method Charles uses to overcome this barrier. When asked about formal sales training when he first started his current position, Charles responded, “It’s actually an interesting question because I think there’s always been a lack of training. There’s always been a lack of understanding of what the sales reps actually needs in the field to be successful.” Mark agreed with Charles, confirming “When I came to veterinary medicine...there was very little training. Very inconsistent. Inconsistency in messaging, levels of knowledge within a product, and disease state.” Much of the same continues today, Mark stated, and self-directed learning is what he uses to further provide the knowledge he needs to perform in his job function; “...not every company is going to provide you the resources, so you got to go find it.” Ben, the least-tenured veterinary sales professional in the study, discussed his use of self-directed learning to overcome training gaps from his formal training when he first entered the industry. New to the industry, it took Ben some time to learn the nuances of veterinary sales and feel comfortable in his role. He, especially, found many of the rules and laws surrounding veterinary pharmaceuticals to be confusing and unclear; through research and self-discovery, he took it upon himself to learn the laws so he could be a valuable asset to the company and to his customers while feeling competent in the position.

If you’re a self-directed learner, you’ll seek out that information that you didn’t pick up in your formal training or that you’re comfortable with and you’ll make yourself comfortable. That way, you can address it and be that much more confident and certain. If anything, you can always get ahead of it...I took it upon myself to try to fill in those gaps to get to the bottom of it, ‘cause veterinarians ask you very point blank. You should be the expert.

Ray also discussed the converse relationship he sees between formal training and self-directed learning and the need to use self-learning to fill the training gap: “Yeah, it’s been very little, I will say that. Very little formal training...we don’t always have the information available in training so we have to pull that on our own from other places.” During his interview, Nate adamantly proclaimed the importance of self-directed learning to improve in your day-to-day profession; company training is not meant to make you better in your job, only to give you the foundation to begin your sales career. Nate stated, “A lot of companies, once they train you, that’s it. If you’re gonna get better, that’s up to you to do that. Otherwise, you’re only gonna be as good as what they’ve given you.” The most emphatic and passionate response, when approached about self-directed learning and formal sales training, came from Sophie who stated, “You’re touching on something that’s just so near and dear to my heart. I learned over the course of my career, professional and personal life, that no company, no manager, no individual is ever going to give you 100% of what you need to be successful.” Ultimately, the consensus across more than half of the sales professionals in the study show that formal sales training lacks in preparing sales professionals to perform their day-to-day jobs selling to veterinarians; self-directed learning has been the viable solution to filling these gaps.

Not all learning gaps exist because of a limited corporate training program, as stated by these sales professionals. In some instances, learning gaps arise with the changing pace of the industry or questions that come up from veterinary clients asking about specific products or industry topics. In these cases, some of the sales professionals in the study stated that self-directed learning played a large role in filling these types of learning gaps. Ben, in his limited scope of being relatively new to the position and to the veterinary industry, feels that self-

directed learning has enabled him to shorten the learning gaps that he knows he has on his personal quest to becoming a very successful veterinary sales professional.

I just try to find things to fill in the gaps. Like I said, sometimes they're just little things that come up not because it was missed in sales training, just there's new changes in our industry so I wanna learn about it...I just have to know the product inside and out to always give the best value proposition to the customer. That's something that I fully believe in. So, if self-directed learning is what I need to fill in those gaps, that's my avenue that I go look for that information.

Charles agreed with Ben stating much of the same when it comes to learning something that he feels is important to his position; "When I come across something that I don't know or I don't have clarity on or I don't fully understand, that's when I decide to spend some time and delve into it and figure it out and to learn." Nate feels that self-directed learning is one of the most important contributors to learning and growing, especially if there is a need to learn something new to lessen the knowledge gap in sales and be better than other sales professionals or the competition.

...if you can get better at a particular approach that nobody else is resorting to, then maybe even if your success rate is only 10 to 20 percent better than the next guy...you're gonna get the appointment and they're not. And so it's another way to resolve that problem and work more effectively.

Ray also felt strongly about using self-directed learning as a competitive advantage when understanding the learning gaps in the industry, stating that "We have to educate ourselves...because we don't know...we're moving and our industry is moving so fast...we need to pick and choose what's most important to us."

In the end, the importance of taking ownership of self-learning to fill the knowledge gaps, whether through lack of formal corporate training or rapid day-to-day changes in the professional landscape of veterinary sales, is a concept discussed by over half of the respondents in the study. Their perceptions show self-directed learning as a viable tool to lessen the learning gaps in their personal and professional lives.

Earning respect as a trusted advisor. Over half of the participants in the study mentioned throughout their interviews and in the discussion board forum responses that earning the respect of veterinary professionals by becoming trusted advisors made more of an impact on their day-to-day sales positions when they felt competent and confident through self-directed learning. As trusted advisors, these sales professionals elevated their standing with veterinarians and were looked at differently than just mere sales representatives. Charles stated that “Self-directed learning always strengthens your personal foundation and increases your value to the customer...That consultative value to our customers is, I think, invaluable and there’s no other way to do it without having a foundation in learning.” Mark also discussed the criticality of establishing a sound knowledge foundation through self-directed learning; this aspect of personal growth further increases the value and validity that is brought to the veterinary profession by the sales professional rather than just being another salesperson trying to sell the practice something.

I think it gives you an opportunity to really start to be a true trusted advisor to your customer versus a salesperson. If you can build that confidence and that foundation and your customer starts to look at you as an advisor, then they’re going to start to really see how they can work with you and coordinate with you, versus you’re just another salesperson.

Sadie, in a discussion board response, agreed with Charles and others by writing:

The more we learn, the more we take ownership of our learning, and the more we learn about the power of listening to our customers, the better we will be as trusted advisors to the team members, the veterinarians, and the practices we serve.

Throughout much of the discussion concerning being a trusted advisor, many of the sales professionals wanted to be seen more than just a salesperson; they wanted to be the go-to person for the veterinarian. Rather than relying on the status quo in learning, many saw self-directed learning as the opportunity to become more. David, mentioned previously as a naturally curious and constant learner, repeatedly asks himself "...what value can I bring to the practice...just so I can always be that trusted advisor role to them." Ultimately, those who discussed being trusted advisors to veterinarians understood the true difference between just being a salesperson versus being something more; Stan, when talking about his role with customers, stated it best: "They didn't think of me as a sales rep. They thought of me as...somebody they could trust. And then if they trusted me, they were obviously much more likely to do what I tell them."

Research Question Responses

Using the themes previously discussed and additional data collected throughout the interviews, discussion boards, and document analysis, the three key research questions will be answered.

Research Question 1: How do tenured veterinary sales professionals describe their uses of self-directed learning within the context of their current positions? The main question to understanding veterinary sales professionals and their perceptions of self-directed learning within the scope of their positions begins with why they chose to enter a compassionate, caring, learner-focused profession in the first place. Understanding the reasons why certain people are drawn to the veterinary profession helps to inform the character and personality traits

associated with the sub-themes within autonomy and relatedness. Sales professionals such as Ben, Charles, and Sadie were drawn to the veterinary world because of the reputation of the industry; Ben affirmed his attitude towards veterinary professionals by stating, "...I ended up loving the people...The people we sold to and developed relationships with, I really enjoyed and really just enjoyed the environment and the relationships that I developed with them." Sadie, comparing the industry to others she has been a part of, discussed how veterinarians have been her most favorite of people to work with. The sentiment of respect and awe for the profession was further agreed upon by Sophie who spent a lifetime dealing with many veterinary professionals throughout her time as a horseback rider and horse owner. Others, such as Mark and Ray, grew up around veterinarians either through family or neighbor connections; these perceptions were formed early on also through a lifetime of influence and exposure. Ray, for example, conferred how he felt "very comfortable in a veterinary practice...grew up in a veterinary practice, so kind of wanting to maintain that kind of comfort level" as he chose his career after college. Even a deep-rooted love of animals, as discussed by a few of the sales professionals such as Ben, Charles, Jim, Mike, Ray, and Sophie, led them to a career servicing veterinarians; Ben, in the beginning of his interview, adamantly stated "I'm an animal lover at heart, a bunch of adopted animals here at this house and all from clinics, actually" while Jim proclaimed, "I've always loved animals, to be honest with you, always loved animals." All in all, the perceptions of these sales professionals within the veterinary industry revolve around early and continuous devotions to relatedness, specifically the themes of wanting to relay common ground and developing deep relationships with veterinarians and their staff. Sadie confirmed this by stating, "I really like the compassion and the empathy that doctors and nurses have, not just for their patients but also for their pet owners and horse owners as well...it makes

me want to be a part of this industry.” Mary agreed in this discourse, asserting the following:

I think veterinarians are just really down to earth people, great people. A lot of them don't do it for the money. They're doing it because they really care about the animals and to help the animals. I'm pretty passionate about helping people.

The uniqueness of being part of a profession that helps shape the human-animal bond, provides compassionate care to animals, and strives to better society has drawn some to be a part of the vocation either directly or indirectly; this desire to relate has further shaped many of the underlying foundational perceptions of these professionals.

Secondly, how veterinary sales professionals define self-directed learning also places context around how they perceive this type of learning. Taking control of their own learning journeys and opportunities to grow in their position through self-initiated learning is how many described self-directed learning. Ben stated multiple times that when he first started in his position, he “did a lot of self-directed learning...if something is not given to me, it's up to me to go find it out...just taking an initiative to understand whatever I don't understand.” Charles agreed, describing how he used self-directed learning to “identify those opportunities and making sure that you take part in that and just be diligent enough to understand what you need to do on a daily basis, weekly basis, on a monthly basis as part of your job.” Jim, Mark, and Stan also confirmed that initiative and ambition to be self-motivated were critical factors within their definition of self-directed learning; Stan stated that “my definition of self-directed learning is learning that I had the initiative to begin, it is something that I was not told to do but learning that I sought out.” The naturally curious, ambitious, and self-motivated autonomous sales professional seems to be the ideal candidate to fit the persona of the self-directed learner in the veterinary industry. David, who took a much more introspective approach to describing how he

perceives self-directed learning, affirmed the following:

I think self-directed learning is understanding yourself as a sales professional, to where your strengths and where your weaknesses are...I think it's really important to hone-in on strong skill sets that you have and work to become even better every single day. I think the self-learning is a sales professional's ability to look at many different resources he or she can use to better themselves on different skill sets and at different levels.

Ultimately, how sales professionals described self-directed learning as a way to be flexible and expand their knowledge within their current profession shows the many facets of this learning modality. Charles stated that self-directed learning was something "You do on your own time, you do it, it's individualized. I can do it to learn what I need to learn, not necessarily what someone else needs to learn. So there's a lot of flexibility to it." Nate, specifically, liked the ability to conduct learning anytime and anywhere as a way to describe his use of self-directed learning.

It's something you can also do when you're driving between calls and appointments. If it's something you can listen to, you can recapture valuable time that might be wasted otherwise stuck in traffic or while traveling, sitting in an airport, that kind of thing because a lot of your time is spent commuting or traveling.

Self-directed learning, for these veterinary sales professionals, is an opportunity for them to satiate naturally curious and ambitious feelings, while being flexible to their day-to-day duties, in hopes of growing professionally and personally in their lives. These themes were apparent as they described their perceptions of self-directed learning.

The type of self-directed learning must be explored to answer the question of how they view this type of learning within the context of their current position. While conducting the

document analysis of training plans, articles, books, and materials used within the scope of their self-directed learning, almost all of the sales professionals looked at peer collaboration as a necessary tool within their development. Ben and Charles relied very heavily on initiating learning through collaboration. Ben stated, "I constantly collaborate with my peers and my management, constantly asking them about things I don't know...I consider that my own informal training." Ray also confirmed the value of learning from others; "...asking people, I think that's how great sales reps learn. Great sales reps are not scared to try something new and ask others what they are doing." This type of one-on-one learning, initiated by the sales professional, even extended to learning from veterinarians in the field. David stated, "I would ask a lot of questions in the field. I used to utilize the doctors and technicians to really try and help me understand as much as I can. So, on-the-job training was huge for me." Over half of the sales professionals, as part of their self-directed learning plan, listened to podcasts and audiobooks while in the car traveling between sales calls. Stan is a fan of business and sales podcasts that he listens to weekly. Jim listens to audiobooks in the car and tends to focus on one book at a time. This method seemed to be a popular way to conduct self-directed learning for the busy sales professional. Sales books, blogs, and business-oriented resources also showed to be an effective self-directed learning tool as many of the sales professionals relied on these resources to help them with their business acumen. Sales professionals also relied on sales books as a necessary part of their sales development. Sophie stated, "I'm always in the middle of a business book, so that might be something that I read as part of my self-learning on a daily basis." Others, like Mary, agreed; "I do a lot of reading and I've bought a lot of books. Just reading different things from different people to see why they are successful." David has been particularly interested in readings books on what makes a great sales leader as he looks to further

grow in his professional opportunity within the organization. Many of these books and audiobooks within the self-directed learning portfolio of the veterinary sales professional related to advancing their business acumen so they could be business consultants to veterinarians. These books included *State of the Art Selling*, *The Challenger Sale*, *SPIN Selling*, *The Sales Bible*, *Zig Ziglar's Secrets of Closing the Sale*, *Good to Great: Why Some Companies Make the Leap and Other's Don't*, *Leading with Emotional Courage*, *Selling to the Top*, *The Art of Selling*, and *Selling with Noble Purpose*. Whether reading the hard copy of the book by devoting daily and weekly time to learning, listening to the audiobook on the road between sales calls, or perusing through the accompanying websites to the books while at home, business-related books, websites, and materials seem to be the most popular category amongst the majority of the sales professionals as part of their professional development. Although understanding the veterinary industry to discuss meaningful medical terminology and concepts seems to be an important aspect of self-directed learning, less than half of the participants read medical journals from *The American Veterinary Medical Association*, peruse websites from organizations such as the *American Animal Hospital Association*, or read magazines such as *Veterinary Advantage Magazine* published monthly by the North American Veterinary Community. When asked to supply documents or summaries of self-directed learning materials, the majority of those collected leaned heavily towards business concepts and less towards veterinary medicine; although, Charles, Chris, Mary, Mike, and Sadie enjoyed reading veterinary and science journals and articles as part of their self-directed learning journey. Charles stated, "I read a lot of veterinary journals and articles, especially *JAVMA (Journal of the American Veterinary Medical Association)*...you can find about any topic to learn about in there." Mary confirmed, "I will read medical journals on certain topics to be a better educated rep...I get different journals that

come in the mail...I read those regularly so I can have meaningful conversations with veterinarians.” Sadie, as part of her self-directed learning ritual, will “read a lot of medical journals...human, animal health, I read a lot of industry studies and white papers just to keep up-to-date with what’s going on in the industry.”

Lastly, the timing of self-directed learning journeys for the veterinary sales professional must be discussed. Throughout the semi-structured interviews and the online discussion board, many of the sales professionals stated the lack of time and prioritization as a challenge to self-directed learning. With all of them working in a commissioned sales model, lack of time to conduct learning posed a major issue to all of the sales professionals interviewed. Chris affirmed, “It’s one of those things that, it’s always on the back burner. It’s never a priority...I would say just the time aspect to actually do it.” David agreed, stating “I think just figuring out the right time for it and really carving that time out is always difficult with the heavy workload.” Jim discussed the other competing demands that sometimes hinder him from conducting self-directed learning; “Yeah, I mean time, it’s always tough. Kids, everything else, just kind of takes up a lot of time.” All the participants within the study understand the importance of self-directed learning to their careers and their sales success. Pro-actively scheduling time to learn is an important tactic to many who want to invest in their personal and professional learning growth. Ben, who does a lot of travel for his sales position, stated that he does most of his self-directed learning reading at “Hotels, when I’m at the hotels at night. Also, I do it in the mornings over coffee. I love to read in the morning, that’s how I start my day.” Short, daily readings for industry magazines or sales websites and blogs seems to be the norm for many. Larger reading projects such as sales books are a nightly feat before going to bed for many such as Jim, Mark, and Sadie. Others, such as Nate, listen to podcasts or audiobooks in between sales

calls or conduct some type of self-directed learning research as needed:

I wouldn't say that it's necessarily every single day that I'm doing some type of learning activity. It's kind of like this week or this month here is what I'm reading. And then you kind of go through it if you feel like you need more information, maybe you buy the second book or listen to the next podcast kind of thing. It sort of goes through phases where you find one guy, you like his approach, then you kind of learn everything you're gonna learn, then you leave that along for a while and move on to the next one.

Ultimately, in terms of timing for self-directed learning, the busy veterinary sales professional is conducting smaller scale learning journeys in the morning prior to starting their daily sales calls through watching videos, listening to podcasts, or perusing the internet. These individualized learning paths also involve understanding industry trends by listening to podcasts or audiobooks on the road in between sales calls to help them with their business acumen. Additionally, self-directed learning includes reading larger scale books on sales and business either at night or when traveling in hotels to help propel their professional careers. These perceptions and activities were consistent throughout the interviews, online discussion board, and document analysis within the study participant group.

Research Question 2: Why do tenured veterinary sales professionals participate in self-directed learning? This important question, annotated through the analysis of many of the themes, revolves around why tenured veterinary sales professionals participate in self-directed learning. The key element to this question deals with the top themes that were constantly reiterated by the majority of the sales professionals throughout the study: the desire to grow in their chosen field, the curiosity to learn more than what organizations provide, and the competence and desire to become an expert in their chosen field while filling the perceived

learning gaps that accompany tenure. At the heart of the study, these categories portray the why to self-directed learning.

The urge to become an expert in their chosen field, to personally and professionally grow, and to fill the perceived learning gaps that exist because of the lack of company training resources were clearly shown to be the most prominent reasons why veterinary sales professionals in this study chose to seek learning resources on their own. Mark stated, “There aren’t many self-directed learning resources out there for veterinary sales. You have to find your own resources or apply general sales principles to the industry.” Mark went on to further state that the lack of resources has caused some to delve into their own learning journeys while others continue to remain stagnant.

I think to my point earlier, if a company makes it easier for you, I think, in my experience, I see more and more people take the initiative for self-directed learning. But when they don’t have those resources available, a lot of times some people aren’t going to take the initiative to do so.

Stan, agreeing with Mark, confirmed that “when I came to veterinary medicine, that was not the case. I mean, there was very little training. Very inconsistent. This is the reason why I took learning into my own hands.” Ray also affirmed the lack of resources, in general, within the veterinary sales industry. Ray stated, “Well, I think there’s just not enough sales training. I think we’re moving and our industry is moving so fast that there’s too much information out there. We need to pick and choose for ourselves what is most important.”

Even more important is the desire to be successful and to self-initiate learning to meet those goals and become experts in their fields; this innate and autonomous feeling to be a great sales professional drives the underlying reason why the majority of veterinary sales professionals

in this study do self-directed learning. Charles declared that the reason why he does self-directed learning is because he wants to “rise above the norm, to be better than the next guy. A competitive nature, maybe. But it’s actually... just trying to be better at your job and feeling an inherent responsibility to be better.” Mark, when describing why he participates in self-directed learning, related it to the fact that those who are great in their jobs and rise to the top above the competition in sales are the ones that take learning seriously.

Yeah, it goes back to that competitive side, making sure that I have a little bit of a cutting edge. I look at people that have been successful and no matter what they’re doing, I mean the amount of hours and time they dedicate to their skill or to their profession or whatever it may be, I mean that’s why they’re experts. If you want to be an expert in your field, I mean, you got to stay ahead of things.

Mary, with the same type of sentiment, also confirmed why she conducts self-directed learning.

I think it’s something that’s very necessary to do because you’re not gonna be an expert from just doing the bare minimum. You have to go above and beyond...to be the best person you can be, you always need to be educating yourself and going above and beyond.

The feeling to do more, to be better, and to be successful is inherent in the tenured sales professionals that take the time and make the effort to do self-directed learning. It is a part of who they are. They continually do more than what is given to them within their organization because they strive to be the best sales professionals that they can be. The way to do this, for many of those participating in this study, is to take learning into their own hands to fill the perceived training gaps that hinder them from meeting success.

Research Question 3: What do participants identify as the motives behind their uses of self-directed learning? Although those participating in the study are all commission-based sales professionals, it is apparent from the thematic analysis that many are intrinsically motivated; the desire to learn because of their natural curiosity seemed to supersede their desire to make money. As sales professionals, money is an important aspect to the position. However, many feel a calling to the veterinary industry and an internal desire to build meaning in their life and with their clients. David, when asked what motivates him to conduct self-directed learning, stated the following:

I do this to satisfy a need to perform at my best...I think just wanting to learn more...that ambition for knowledge is what craves me to teach myself things...I'm very hard on myself so I want to learn as much as I can.

Even Ben discussed his motives for self-directed learning by affirming what David initiated; “Yeah, I just like to know everything. Yeah, curiosity, though, and self-motivation. To do my job better...funny enough, actually, I'm intrinsically motivated...I've just always believed that the money follows...I really don't worry about the backend.” This internal desire to do well and take control of your own learning and your own career was also addressed by Mary when asked why she does self-directed learning. Mary stated, “Desire...well, because I like learning, I like helping, I like educating, and my kind of whole philosophy is to win...yeah, it comes from me. A lot of it is driven from me, so I would say...intrinsic.” Mike, Sadie, and Sophie also felt the same way. Sadie felt that the desire to be self-directed is an instinctual feeling that some people possess while others do not.

I think it's something that a person has...a lot of people wait, from my experience, wait for people to tell them what to do instead of taking the initiative and figuring it out on

their own. A lot of grit I think it takes...It's self-inflicted...I just wanna know more, I'm always hungry for more information.

Sophie, when asked about her motivations to conducting self-directed learning within the scope of her sales position, declared:

The majority of my sales skills I think have been self-taught...I'm happy to do it myself because then I'm in control of my learning...I'm 100% intrinsically motivated. There are some outside influences that motivate me, but I would say...what motivates me, my need to succeed, and when I say succeed, succeed in my own definition.

This personal desire to set goals and to achieve these goals permeates much of what was discussed when the topic of motivation transpired during the interviews and online discussion board. Money as an extrinsic motivator did come up within the nature of their sales position, but for the most part many had the same type of response declared by Nate:

More intrinsic, but if there was no extrinsic benefit, I would probably still do it to some extent. But yeah, I feel that I'm self-directed in my learning because of an internal motivation to want to be better. But in sales, there has to be some extrinsic motivation also.

Within this veterinary industry sales profession study, the inherent desire to succeed became the overarching motivation for many of the sales professionals who look to personal and professional attainment. Many were focused on the day-to-day task of satisfying an internal self-need to learn and succeed while also helping veterinary professionals thrive within their businesses. These aspects, permeating the industry at large, seem to motivate those who enter the veterinary sales profession; many continue to stay for a lifetime, drawn to a career personal and professional fulfillment.

Summary

Thirteen veterinary sales professionals with more than three years in the profession and in their current sales positions participated in individual semi-structured interviews, contributed to an online discussion board forum, and provided documentation showing the types of self-directed learning that they have been involved in. Sales and veterinary experience varied amongst the study participants, but all have participated in self-directed learning through one form or another. Only a few were exposed to the veterinary industry prior to securing positions within the veterinary world, but many, passionate about animals and the veterinary mission at-large, have stayed on with the industry and have been very happy with their decision. As themes were developed through analysis to answer the research questions around their perceptions of self-directed learning, the tenets of self-determination theory clearly defined many of the categories that emerged. Three major perception sub-themes per each of the three overarching self-determination theory categories were annotated and analyzed.

Within autonomy, ambition to be self-motivated and successful, desire to personally and professionally grow, and natural curiosity for constant learning were among three of the top four sub-themes that were prevalent with the majority of the sales professionals participating. The need for common ground, an inherent desire to help veterinarians, and the development of deep relationships with veterinary professionals were important aspects of relatedness to the veterinary professionals and consistently iterated by a few of the participants; however, these themes were not as thematically predominant within the data analysis. Competence relative to becoming an expert in your field, filling learning gaps, and earning respect as a trusted advisor were sub-themes that repeatedly surfaced by the majority of respondents as important factors fueling the need for self-directed learning within the veterinary sales profession.

Ultimately, all of the sales professionals discussed the importance of self-directed learning as necessary to growing in their profession, relating to veterinary professionals, and filling the learning gaps left by traditional corporate training. With a motivating desire to be successful and at the top of their selling profession, many of the sales professionals within this study discussed the ambitious nature of being successful and wanting to learn so as to be a trusted advisor and asset to the veterinary professional. This inherent desire expressed by the veterinary sales professional has led many to join and remain in the veterinary sales industry through a sense of belonging and a yearning to further advance the veterinary profession. Lastly, although many lack the time to devote large amounts of effort to the self-directed learning experience, many have found time in the mornings, in between sales calls, or at night to read books and listen to podcasts on sales and business acumen in general. Some have taken the time to read veterinary and medical journals to keep up with industry trends, but the majority of those participating in this study sensed a major chasm around business and sales concepts versus veterinary medical principles; many focused on business principles for their self-directed learning paths. Through peer collaboration, business websites, business books, or business podcasts, the majority of sales professionals within this study group felt that becoming business partners with veterinarians was most important for their learning development and their self-directed learning journey before relying heavily on medical concepts. This permeated the conversation, the online discussion board, and the document analysis when finding what resonated most with the veterinary sales professional and when ascertaining their perceptions of self-directed learning.

CHAPTER FIVE: CONCLUSION

Overview

In this chapter, interpretations of the data are discussed and conclusions are made concerning the perceptions of self-directed learning and veterinary sales professionals. The purpose of this multiple case study was to investigate veterinary sales professionals' perceptions of self-directed learning within their current positions. Self-directed learning has been a studied concept for many years, yet analysis and application of this topic to medical or veterinary sales organizations has been limited in scope. This study adds to the current restricted literature by influencing current corporate training and university practices, especially those shaping future and current sales professionals. The chapter includes a summary of the findings answering the three research questions proposed in the study, a discussion of the findings in relation to the empirical and theoretical review of the literature highlighting the key concepts that both confirm and diverge from the current research on the topic of self-directed learning, a review of implications of the study and the impact to certain stakeholders such as veterinary sales professionals, the veterinary industry, training organizations, and institutions of higher learning, a discussion of study delimitations and limitations, and a recommendation for future research.

Summary of Findings

Thirteen veterinary sales professionals with three or more years in the industry who conduct self-directed learning as part of their own personal and professional development participated in individual semi-structured interviews, contributed to an online discussion board forum, and shared their self-directed learning materials and documents for investigation. The data analysis and coding, grounded in theoretical propositions, resulted in nine major sub-themes or categories associated with the three tenets of self-determination theory, autonomy, relatedness,

and competence that demonstrated the veterinary sales professionals' perceptions of self-directed learning. Within autonomy, the ambition to be self-motivated and successful, the desire to personally and professionally grow, and natural curiosity for constant learning were emergent insights to self-directed learning. In relatedness, the need for common ground, the inherent desire to help veterinarians, and the development of deep relationships were reasons why self-directed learning was conducted. Lastly, in exploring competence, becoming an expert in their field, filling learning gaps, and earning respect as trusted advisors all appeared as key reasons for self-directed learning within the veterinary sales profession. These annotated themes helped to further answer the three research questions designated to the study: how do tenured veterinary sales professionals describe their uses of self-directed learning, why do tenured veterinary sales professionals participate in self-directed learning; and what do participants identify as their motives behind their uses of self-directed learning?

When tenured veterinary sales professionals were asked how they describe their uses of self-directed learning, all of them stated that they look to self-directed learning as an opportunity to personally and professionally grow in their own learning journeys and in their motivation to advance within their professional careers. Every participant in this study viewed self-directed learning as the learning tool necessary to meet these goals, and all aspired to higher ambitions past their current veterinary sales roles. It was interesting to see that all of the sales professionals in the study felt that to proceed further within their own careers, self-directed learning was the instrument needed to advance. Although most had individualized approaches to self-directed learning with regards to learning topics and modalities, all expressed a continual desire to further learn in their personal and professional life experiences. Using business books, veterinary professional journals, podcasts, audiobooks, and both business and veterinary websites, the

veterinary sales professionals within the scope of this study fervently strived to develop their professional acumen as a means to advance in their careers. Furthermore, a majority of veterinary sales professionals within this study discussed their uses of self-directed learning to fill the learning gaps they perceived existed from the lack of company training to meet the demands of their sales positions. This competence factor also led to many stating that they wanted to become experts in their field and earn the respect of veterinarians as a trusted advisor, one of the main reasons why they use self-directed learning. Although some routinely conducted self-directed learning on a daily basis to keep up with industry trends and to relate to those within the veterinary sales profession, the busy schedule of sales hindered the ability of some to prioritize learning over other major demands such as family and school. Yet those within this study repeatedly stated the importance of self-directed learning as critical to their personal and professional life; remaining stagnant in their learning was not an option for all interviewed. The overwhelming majority perceived self-directed learning as a major component to their successes in their veterinary sales roles. Whether it was a daily or weekly occurrence, done during the morning while having their coffee or on the road in between veterinary sales calls, or completed using a book, audiobook, or podcast format, all the participants described their varied uses of self-directed learning within similar contexts: self-directed learning is a much needed vehicle to help the curious veterinary sales learner propel their personal and professional learning journeys no matter the method or the timing; yet, to not remain personally and professionally stagnant, self-learning must be part of their core fabric of who they are.

The second question asks why do tenured veterinary sale professionals participate in self-directed learning, and many of the themes already discussed apply to answering this important inquiry. All of the veterinary sales professionals participating in this study discussed their

ambitions and desires to propel and grow in their personal lives and in their professional careers. Self-directed learning, in their minds, is the tool that enables them to gain important knowledge and insights to further their careers. This is especially poignant to the autonomous veterinary sales professional who chooses to not remain indolent in their learning journey. Also, many stated that self-directed learning is important in allowing them to establish a common ground with veterinarians; some even discussed this topic of relatedness further by stating they participate in self-directed learning due to an inherent desire to help veterinarians and develop deeper relationships with them. Through an increase in knowledge and an opportunity to be a trusted advisor and business consultant, veterinary sales professionals felt a personal and compelling need to take learning into their own hands. Ultimately, more than half of the veterinary sales professionals both in the interview and during the online discussion board stated that they had to learn various business and veterinary medicine topics on their own to fill existing learning gaps they perceived to be present due to lack of company training resources or divergent expectations. Being competitive and knowing more than the next sales professional becomes a huge driver for some as they look to enhance their current knowledge through self-directed learning. To many, this inherent desire to be successful in their chosen profession and their innate curiosity to learn lay at the foundation to the question of why these veterinary sales professionals conduct self-directed learning outside of the normal sales training channels.

The third question focuses on what do participants identify as the motives behind their uses of self-directed learning. Almost all of the sales professionals described an intrinsic desire to learn based on natural curiosity and ambition; this intrinsic motivation far out-weighed their desire to make money, even though all of them are commission-based veterinary sales professionals. This calling to be a part of the veterinary industry and to help veterinarians has

kept many in the industry even though financial gains seem to be far greater in the human health sector. Many expressed a love of learning from within, hence why they choose to conduct self-initiated learning. Although money did come up in the semi-structured interviews and the online discussion board as a motivator to exceed in sales, by far the inherent desire to personally and professionally succeed in their roles superseded their desire to make money. In terms of dealing with veterinarians, an unselfish aspiration to help veterinary professionals succeed in their roles, a yearning to deeply relate to veterinary professionals on a personal level, and the need to feel competent and relevant to the veterinarian while earning their respect and trust were all components of motivation that drove many of the sales professionals in the study to conduct self-directed learning. These motivations, mostly veterinary-centric, form a foundation for these veterinary sales professionals; counter-intuitive in nature when describing perceptions of motivation for sales professionals, the veterinary sales professionals within this study are focused on intrinsic and altruistic motivations that have led them to self-directed learning. Ultimately, the naturally curious, ambitious, and self-motivated autonomous learner who deeply cares about the veterinary practitioner and the overall purpose of the veterinary industry appears to emerge as the ideal persona of the self-directed veterinary sales professional.

Discussion

Within the theoretical and empirical review of the literature, self-directed learning and veterinary sales will be discussed. Much of the previous research conducted confirms and reassess the discussion regarding this study and the key attributes applied to self-directed learning and sales. Further theoretical and empirical discussions that follow expand the concepts of self-directed learning and sales to further inform the current literature. Yet, some specific differences have emerged that may be uniquely related to the veterinary sales profession.

Theoretical

The concepts of autonomy, relatedness, and competence within self-determination theory, as defined by Ryan and Deci (2000, 2017), played a large role within the underlying framework of this study. As the themes began to emerge within the data analysis, the categories aligned very closely with the three innate psychological needs described by Ryan and Deci (2000, 2017). Although many foundational theorists observed and researched these three components within a limited scope, many others have related these three tenets to self-directed learning (Chene, 1983; Merriam et al., 2007; Tough, 1978; White, 1959; Wlodkowski, 2008). Within the realm of education and the workplace, self-determination theory has also impacted the discussion of personality development and motivation; much of the research conducted by Ryan and Deci (2000, 2017) have greatly influenced the thought process of motivation within these environments (Gagne & Deci, 2005; Ryan & Deci, 2000, 2017; Vansteenkiste, Lens, & Deci, 2006).

Ryan and Deci (2002, 2017) discussed the three basic psychological needs of autonomy, relatedness, and competence as critical to personal growth; the neglect or nurturing of these needs can have a significant impact on individuals. Autonomy, one of the most basic of psychological needs, refers to the desire for people to live their own experiences and make their own decisions; it is the human psychological need to voluntarily determine their own paths in life (Ryan & Deci, 2017). As such, all of the sales professionals within the scope of this study discussed their perceptions of self-directed learning as a significant aspect of their desire to personally and professionally grow; self-directed learning, to many such as Charles and Jim, provided the fuel to achieve these goals of personal and professional fulfillment. The fear of remaining stagnant and not having control of their professional destiny, or, in other words, being

devoid of autonomy, permeated much of the conversation in terms of why those within the study seek continual learning opportunities. Mark attributed not growing in learning or knowledge to dying, a metaphor for life, that shows if one does not nurture their intellectual growth through self-initiated learning, one mentally dies. Although morbid in thought, this aligns with Ryan and Deci's (2000, 2017) discussion of the importance in nurturing the basic psychological needs as critical to growth. Even more relevant is that almost all of the participants expressed the importance of ambition and self-motivation as key to being successful within the scope of their specific sales careers. As the most prominently discussed theme during all phases of data collection, it was not surprising to see that motivated and dedicated sales professionals seek success through having a highly ambitious nature. Being hungry for sales, as described by David, is why he does what he does. Seeking out learning opportunities to be better than the next salesperson or the competition drives much of why Sophie conducts self-directed learning. Mike takes every advantage to learn as he correlates learning with success. These types of motivating factors, discussed by Ryan and Deci (2000, 2017) in varying degrees of amotivation, extrinsic motivation, and intrinsic motivation, show that intrinsic and extrinsic motivation tendencies play a role for these sales professionals. Even though a few discussed monetary motivation as a reason for why they conduct self-directed learning, the underlying theme resonating from almost all of the sales professionals shows a deeply personal enjoyment and satisfaction from self-directed learning that has allowed them to feel a sense of fulfillment in their careers and their personal lives.

With relatedness, Ryan and Deci (2017) outlined the universal psychological need to belong to a group and interact socially with others. Human beings long for acceptance and feel a need to belong to groups (Ryan & Deci, 2017); many of the veterinary sales professionals

detailed their interactions with veterinary professionals much in this manner. The need to establish common ground with veterinary practitioners by having meaningful conversations that relate to the industry was a theme stated by more than half of the participants in the study. This was a mutually beneficial approach that created an impetus for some of the sales professionals, especially those coming from outside of the veterinary industry, to delve into medical journals and industry publications with the intent of developing a foundational knowledge base to find commonalities with veterinarians. Mike detailed the need for common ground as a way to develop a mutual respect for each other, critical to both sales and the veterinary industry. Self-directed learning enabled Mike and other to expand their knowledge base so that conversations and interactions were conducted at a more advanced level versus having a basic and superficial relationship. This commonality, described by Mary, further advanced the feeling of success by bringing the relationship to a more personal and significant level. Many of the sales professionals such as Charles, Sophie, and Daniel discussed these commonalities with veterinarians as foundational to their sales careers; without a shared interest or a common purpose, the very notion of sales in general becomes devoid. Along with the need for common ground, the theme of developing deep relationships did come up a few times; although not as prevalent in terms of themes, some of the veterinary sales professionals felt drawn towards the profession on a much deeper level than just selling to veterinarians. Some like Ben and Charles talked about the underlying and deep desire to further relate to veterinarians in a purposeful way. Some have a personal desire to build more than superficial sales relationships. This innate psychological need of relatedness definitely applied to the veterinary sales professional and their everyday life of dealing with veterinarians on a much more personal level than just seller to

client and further illuminates a level of uniqueness when selling to those in the veterinary profession.

Competence, the final psychological need discussed by Ryan and Deci (2017), is one that has been thoroughly researched in psychology. The desire for human beings to appear competent within the civilized environment has larger ramifications within the societal psyche; human beings want to be valued by others and be accepted within the social organization (Ryan & Deci, 2017; Wlodkowski, 2008). By far, the premise for veterinary sales professionals to take part in self-directed learning stems from a yearning to become experts in their field; this topic of competence was highly discussed by almost all of the sales professionals within the study. Many felt that learning outside of company training helped them to be better sales professionals and more competent when dealing with veterinary practitioners. Mary, Stan, and others vehemently described the importance of knowing the product, the medicine, and the industry to not only advance their own professional careers, but to advance the veterinary profession at-large. Much of earning the respect of veterinarians begins with veterinary sales professionals who take learning into their own hands while becoming experts in their chosen fields. Ryan and Deci (2002) also stated that competence plays a role in driving people to seek challenges while striving to be better and more knowledgeable in their everyday interactions. More than half of the sales professionals within the study stated that they conducted self-directed learning to become more conversant with veterinary professionals and be seen as trusted advisors. During multiple occasions throughout the semi-structured interviews and the online discussion forum, the term trusted advisor played a pivotal role in leading many to not settle for the status quo in their day-to-day interactions with veterinarians. Sadie proclaimed that learning as much about the industry and listening to customers profoundly impacts the thought-process of veterinarians

who look to competent sales professionals as trusted advisors. David and Stan confirmed that those who are considered trusted advisors by veterinarians are more than merely sales professionals to them; they become valuable members of the team. Mary takes this further by stating that personal relationships combined with the deep sense of purpose and trust shows some to be considered as family. This psychological phenomenon of competence was a driving force for many to feel a sense of relevance, respect, and belonging within the veterinary industry.

Lastly, Ryan and Deci (2000, 2017) discussed the role of motivation within self-determination theory; this ranges from amotivation (the lack of intent when an action is perceived to have no value) to levels of extrinsic motivation to intrinsic motivation. Pertaining to education, the researchers discussed the roles of both extrinsic and intrinsic goals as defining factors for wanting to learn (Ryan & Deci, 2017; Vansteenkiste et al., 2006). The personalization of learning activities while satisfying the basic psychological needs produces students who are more engaged and integrated within their learning experiences (Ryan & Deci, 2017). The autonomous learners within this study created self-directed learning experiences to grow in their chosen fields, relate to veterinarians on a higher-level, and fill perceived learning gaps within their knowledge acumen. Reeves (2002) stated that motivations in learning because of internal drive, development of confidence, and increase in self-worth all play a large role in the learning outcomes. Many of the study participants described their internal motivations to succeed in their careers as a driving force for self-directed learning; this learning methodology helped them to find common ground with veterinarians while developing competence and confidence within the encompassing veterinary industry. From this perspective within the scope of the study, self-determination theory and motivation go beyond the educational realm and show merit within the workplace environment and sales in general. Ryan and Deci (2017) sought to

understand the motivating and psychological factors that contribute to workplace engagement. Empowerment in taking charge of their work environment, encouragement to respect others within a team environment, and nourishment of personal growth experiences through knowledge-building are critical factors to workplace motivation (Baard, 2002). Environments that foster autonomy and provide opportunities for employees to take initiative through competence within the workplace strongly correlate with motivation and the promotion of basic psychological needs (Baard, 2002; Gagne & Deci, 2005; Ryan & Deci, 2000, 2017). Although many of the participants in the study stated that they conduct self-directed learning to fill gaps and voids within their knowledge of business and veterinary medicine, almost all of them discussed the desire to become experts in their chosen career so they can fulfill the innate psychological need to take control of their own futures and develop within their personal and professional lives.

The significance of self-determination theory within the framework of self-directed learning perceptions of veterinary sales professionals revolves around the underlying tenets of the veterinary profession; a strong sense of self within the professional identity, the importance of learning, technical competence, and personal connections within the human-animal bond (Allister, 2015, 2016; Dolby & Lister, 2015; Knesl et al., 2016; Page-Jones & Abbey, 2015). These factors all influence the highly personable and compassionate veterinary profession that parallel the basic psychological needs described by Ryan and Deci (2000, 2017). This study provides a further understanding of the underlying motivational factors within the industry; relating sales professionals' fulfillment of the basic psychological needs through self-directed learning shows the desire for many to remain relevant in the industry. Although some were drawn to the profession through family connections or childhood experiences, many of them

described a continued connection to the profession through interactions with veterinarians, a desire to help the profession, or the compassionate bond that drives many to stay in the industry. A few of the participants described an inherent desire to help veterinarians in their common cause and a determination to earn their respect as trusted advisors; these reasons, through the perceptions of veterinary sales professionals, illuminate the importance of self-directed learning. These basic psychological needs of autonomy, relatedness, and competence further highlight the foundational reasons why veterinary sales professionals take learning into their own hands for the betterment of their careers and the veterinary setting at large.

Empirical

Self-directed learning in adults, although a researched topic for many decades, has only recently been applied to professional selling, and a limited amount of research exists within this arena (Boyer et al., 2014a; Boyer et al., 2012). Furthermore, the application of self-directed learning to the medical and pharmaceutical industries, considered knowledge-intensive entities, has increased in research as these types of sales professionals are required to possess problem-solving skills and higher-order thinking in their interactions with medical professionals (Leovaridis & Cismaru, 2014; Matsuo et al., 2013). These concepts can also be applied to the veterinary profession as a deep understanding of veterinary medical concepts while remaining competent in front of veterinary practitioners is important in relation to the industry (Allister, 2015, 2016; Armitage-Chan et al., 2016). Interestingly, sales training in many of these organizations continues to be the largest training expenditure when compared to the overall training budget (Association for Talent Development, 2016; Sing et al., 2015). The Association for Talent Development (2016) reported that corporations in the United States spend over \$15 billion annually on sales training programs. However, research shows that in traditional selling

environments, a major training gap exists as the needs of sales professionals are not being met by corporate training programs (Boyer et al., 2012; Matsuo et al., 2013; Pullins et al., 2017). This leads to the sales professional, as an adult learner, to take charge of their own learning path through self-directed learning (Knowles et al., 2012).

Deficiencies in current sales training approaches were addressed by the participants in the study. More than half of the respondents, all with three or more years within their current positions and within the industry, discussed their uses of self-directed learning as a solution to this dilemma; many have witnessed the lack of specific training as a barrier to meeting their individual professional needs. These perceptions align with much of the research that highlights the dissatisfaction of organizational training as ineffective in meeting the needs of sales professionals (Boyer et al., 2012; Gordon et al., 2012; Lassk et al., 2012). Charles, with over 30 years in sales, stated that the veterinary industry has always lagged behind in meaningful and effective organizational training throughout. There was an overwhelming consensus to those who discussed formal corporate training initiatives as lacking in consistency and focus. Although research shows that many sales organizations invest resources within the first three years of employee training (Boyer et al., 2012), the perception of training gaps even at the onset of veterinary sales employment has led some veterinary sales professionals such as Ben and Nate to take the initiative to learn on their own. Sales training, according to Nate, provides a beginning foundation to meet some minimal requirements of the job, however, the prevailing thought-process of improvement and sustainment falls under the auspices of continually learning to fill the training gaps through self-directed learning. Therefore, using self-directed learning through books, audiobooks, podcasts, journal articles, and websites on a regular basis led many within the study to fill the existing knowledge gaps needed within their veterinary sales career.

Even more so is the need for today's sales professional to adapt to the changing selling landscape by using higher-order thinking skills, innovation, and advanced knowledge (Alvarez et al., 2015; Cummins et al., 2013; Newberry & Collins, 2015). Knowledge-intensive organizations, such as those in the medical industry, require highly informed and knowledge-seeking individuals (Hunter, 2010; Leovaridis & Cismaru, 2014; Soklaridis, 2014; Yang et al., 2012). Within these types of organizations, the responsibility of learning is placed on the individual employee who must manage their own learning journey by valuing learner-centered activities (Fontana et al., 2015). Almost all of the participants in the study discussed their perceptions of self-directed learners as being ambitious and naturally curious; characteristics that they feel are part of their nature. David, the youngest of the study participants, was adamant that to advance further in his role and his career, self-directed learning was the key. Interestingly, this was a prevailing theme throughout the interviews, discussion boards, and document analysis; no matter the age, time in sales, or time in the industry, all of the participants felt an innate desire to further better themselves even if at the tail end of their careers. More than likely, this can be attributed to the distinct nature of the sales professional at large, although something not explored within the confines of this study. However, the prevailing thought of the knowledge-intensive organization, such as the medical or veterinary institution, highlights the ability of the sales professional to have a higher-order level of knowledge (Hunter, 2010; Leigh et al., 2014; Soklaridis, 2014). The compelling feeling to become an expert in their chosen field, beyond being within the status quo or relying on standard training practices, was another major and emergent thought-process throughout the many discussions and interactions with the study participants. These discernments permeated much of the conversation, within the semi-structured interviews and the online discussion boards, as to why they chose to be self-directed

learners within the sales profession. All of the sales professionals discussed the importance of becoming experts in their chosen veterinary sales profession and commented that this theme plays a critical role in their success and is foundational in their knowledge attainment. It appears that within the knowledge-intensive entity, those conducting self-directed learning understand the importance of moving beyond the basic sales skills to feel competent and meet confidence within their chosen profession. Chris adamantly suggested that mandatory training in the profession throughout the sales career should prevail, much like veterinary and medical professionals are required to conduct continuing education; although not inherently self-directed within mandatory training, Chris commented that this is one of the main reasons why he perceives self-directed learning as important to his professional career. The confidence that comes with knowledge fulfilment through self-directed and self-initiated learning has led many such as Mark, Sadie, and Stan to feel successful, approach veterinarians on an equal setting, and remain relevant in the industry despite the obstacles and the competition to selling.

The added dimension of self-directed learning and sales, not seen in any of the current literature, includes the veterinary industry. As seen by those within the study, some grew up in the industry through ties to family or friends while others were compelled to join the industry through their love of animals and compassion for the profession. Although much of the research revolves around the sales industry in general, many of the same principles within self-directed learning and sales can also apply to the veterinary industry. The professional identity experienced by many veterinary practitioners encompasses a strong sense of self, a high standard of care, a moral compass of ethical behavior, and a character of purpose (Allister, 2015, 2016; Cake et al., 2015; Page-Jones & Abbey, 2015). Some of the participants in the study commented on their desire to help veterinarians and develop deep relationships with those in the industry;

relating to the veterinary practitioner, in general, shows that some in the veterinary sales profession are drawn by the same characteristics valued by veterinary practitioners. Charles, the oldest member in the study with over 30 years in the veterinary industry, has a deep passion and respect for the veterinary practitioner; it is a part of his personal fabric and being. Charles discussed that to be the best and most valuable resource to the veterinarian requires a high-level of knowledge through self-directed learning; the ability to relate to veterinarians is lost without this. The idea of helping to advance the industry became deeply personal for a few of the participants like Charles, Ben, and Mary who felt a calling and purpose towards this. Even further, some like Ben, Charles, and Chris see purpose and meaning to developing value-added and trusted relationships with veterinarians. It seems that for some, self-directed learning is the bridge that provides veterinary sales professionals the opportunity to deeply relate to veterinary practitioners through taking charge of their own learning journeys. This, in turn, builds veterinary and business sales competency to move them towards success within their profession. Although much of what has been described confirms the purpose of self-directed learning and sales in general, the underlying facet of the veterinary profession in specificity shows why many are drawn to the veterinary industry and commit themselves to a singular purpose of thought; immersion and acceptance within the veterinary landscape. Self-directed learning is that major notion, for the veterinary sales professional, towards developing autonomy for professional growth, relatedness in veterinary relationships, and competence and confidence in knowledge.

Implications

This study focused on tenured veterinary sales professionals' perceptions of self-directed learning within the context of their roles to address a gap in the literature regarding the motivating factors and uses of self-directed learning within the veterinary sales industry.

Although studies have been conducted regarding self-directed learning and sales in general, the unique nature of working in a highly knowledge-intensive industry with distinctive values, such as the veterinary profession, has not been investigated. Although many common attributes and perceptions exist within the realm of general sales and veterinary sales, the theoretical, empirical, and practical implications will be explored and annotated for key stakeholders within the veterinary sales, sales training, and higher education entities.

Theoretical

The basic tenets of self-determination theory, as discussed by Ryan and Deci (2002, 2017), show that the psychological needs of autonomy, relatedness, and competence are foundational to the psychological well-being of human beings; they are essential components to social welfare and personal growth. Furthermore, the fulfillment or disregard of these psychological needs play a large role in personal growth and in motivation (Ryan & Deci, 2002, 2017). Yet, adults have the freedom to take learning into their own hands, be self-directed in fulfilling their own learning needs, and choose to support their learning journeys if desired (Knowles, 1975; Knowles et al., 2012; Merriam et al., 2007).

The veterinary industry, as described by many researchers, is one that identifies strongly with a sense of self, competence, and a professional identity encompassing personal connections with both animals and humans (Allister, 2015, 2016; Dolby & Litster, 2015; Page-Jones & Abbey, 2015). As veterinary sales professionals were interviewed and as they collaborated amongst each other within the online discussion board, it became evident that many of the same influences and characteristics surrounding veterinary practitioners parallel those of veterinary sales professional. Furthermore, the fulfillment and nurturing of many of these basic psychological needs, outlined by Ryan & Deci (2002, 2017), were important within the context

of veterinary sales professionals and their current careers. The desire to personally and professionally grow, the ambition to be self-motivated, the development of deep relationships, and the yearning to be competent in their chosen field highlight many of the personal attributes associated with sales professionals who dedicate time to self-directed learning.

The underlying premise of self-determination theory and motivation with regards to extrinsic and intrinsic motivators affect all facets of sales, regardless of industry, as well as education at large. Ryan and Deci (2017) discussed their research involving motivation and the workplace to determine why some adults are engaged at work and others are ambivalent to the concept. Ultimately, autonomy in taking charge of your work environment, relatedness in creating a team atmosphere full of respect, and competence in personal growth through challenging work experience all play a major role in work motivation (Baard, 2002; Ryan & Deci, 2017). This is important for this study because many consider sales to be a profession motivated by extrinsic means such as commission rather than intrinsic behaviors that come from within. Although money did come up as a point of conversation in some of the interviews when the sales professionals were asked what motivated them to conduct self-directed learning, time and time again the intrinsic motivators far outweighed the extrinsic factors; ambition, personal and professional growth, expertise, and natural curiosity were ranked highest as reasons for conducting self-directed learning. For educational purposes, many researchers have discussed the importance of autonomy-supportive learning environments as critical to increasing enjoyment and engagement in learning (Reeves, 2002; Ryan & Deci, 2017; Vansteenkiste et al., 2006). In both sales and education, the ability for managers, instructors, and trainers to facilitate and encourage self-directed learning and autonomous learning activities can impact the learning and work experience. Many of the veterinary sales professionals in this study were positively

affected by self-directed learning. Self-determination theory as a basic framework through autonomy, relatedness, and competence with regards to self-directed learning supports the efforts of sales professionals throughout all industries, especially veterinary sales professionals, as well as those in higher education who aspire to be sales professionals.

Empirical

This study highlights a few major points with regards to self-directed learning and the veterinary sales profession as self-directed learning continues to advance as a sales training resource and tool. Although only recently explored within the sales profession, self-directed learning has many benefits that can be applied to specific sales industries and organizations as this concept grows and aligns with adult learning and training principles. Among these are the implications of self-directed learning within sales and sales training, as well as specific entities such as knowledge-intensive organizations which include medical and veterinary institutions.

It is known that traditional sales training does not always meet the needs of the recipients of the training; the overall effectiveness of sales training as a tool to prepare sales professionals for their specific careers has been questioned time and time again throughout the years (Boyer et al., 2012; Gordon et al., 2012; Leigh et al., 2014; Pullins et al., 2017). Many sales professionals are dissatisfied and feel that the training they receive is ineffective (Boyer et al., 2012; Gordon et al., 2012; Lassk et al., 2012). Various opportunities to improve traditional sales training exist when sales and sales training organizations realize that gaps need to be filled. First, assessments of where shortfalls subsist should be implemented to help tailor instruction. Allowing differentiated instruction, multiple platforms, and self-paced learning opportunities for sales professionals may help in this instance once shortcomings are annotated. Knowles (1975) and many others discussed the importance of having adult learners take responsibility for their own

learning; it is important to empower the adult learner to plan, execute, and assess their own learning paths (Knowles et al., 2012; Merriam et al., 2007). However, not all adult learners understand how to do this and some guidance from training departments may be necessary to leverage self-directed learning within their organizations. Ultimately, sales professionals are autonomous by nature and, as seen in this study, are ambitious and naturally curious. Relating to the very essence of the sales professional and getting them on the right path to self-directed learning will give them the confidence to tailor their learning to their specific needs.

The other aspect to consider is the uniqueness of the veterinary industry as a knowledge-intensive institution. These types of organizations value the pursuit of knowledge, consist of self-reliant employees, and have a distinct identity; they require highly knowledgeable sales professionals who value continual learning to meet the demands of a competitive environment (Hunter, 2010; Leovaridis & Cismaru, 2014; Soklaridis, 2014; Yang et al., 2012). Furthermore, the veterinary profession is one that associates with a distinct professional identity, values education, exudes competence, and regards relationships with the human-animal bond in the highest distinction (Allister, 2015; 2016; Armitage-Chan et al., 2016; Caple, 2005; Bones & Yeates, 2012; Dolby & Litster, 2015; Knesl et al., 2016; Page-Jones & Abbey, 2015). This adds another dimension to the self-directed learning angle for veterinary sales professionals who strive to relate to veterinarians through common experiences and deep relationships, desire to help veterinarians to advance the profession, and endeavor to become experts in their chosen field to earn the respect of veterinarians as trusted advisors. These notions, relating to current and aspiring veterinary sales professionals, should be foundational reasons to conduct self-directed learning as they continue to build their knowledge to effectively relate and competently discuss

veterinary topics of interest to veterinary practitioners while attributing to their own personal and professional growth.

Practical

As we look to self-directed learning and the sales workplace environment, various practical measures can be implemented to enhance the growth of knowledge and the development of skillsets. Researchers who have studied this concept have strived to understand how various environments affect the propensity to conduct self-directed learning; those in demanding and challenging careers gravitate to self-learning to stay ahead in their positions when they possess a high degree of motivation (Raemdonck et al., 2014). When commenting on self-directed learning in their current careers, many of these veterinary sales professionals exuded confidence as they discussed their ambitious tendencies to climb professionally in their organizations and to become experts in their field. Therefore, organizations hiring sales professionals must provide a challenging and supportive learning environment packed with opportunities for sales career progression. Learning must be fostered and encouraged with guidance and direction, as needed, which allows sales professionals to take charge of their own learning journeys; a list of topics and resources can be supplied that allow sales professionals to choose their own learning paths. Customizing learning opportunities and providing learner-centered activities that are individualized and differentiated in content will further close the training gaps apparent in traditional corporate training (Artis & Harris, 2007; Boyer et al., 2012, 2014a; Cron et al., 2005; Marcos-Cuevas et al., 2014). When possible, sales training professionals should take an active role in helping to mitigate the training gaps by offering differentiated instruction when needed. Training professionals in these organizations also have the unique opportunity to augment existing training by coaching sales professionals in

understanding their weaknesses, annotating their training gaps, and directing them to take charge of their own learning; in other words, sales trainers can play an important role in motivating the sales professionals under their purview. Within this study, the type of individualized training varied with some focusing on business books and audiobooks to be business consultants to veterinarians, while others felt more compelled to read industry-relevant resources and white papers to keep up on veterinary updates. Either way, tailoring learning opportunities to augment individual knowledge gaps will help build the confidence needed to be proficient in sales.

Since time for learning throughout the days and weeks was perceived to be a challenge for many of the sales professionals because of competing demands of sales generation and personal factors, allocating time on the calendar for professional development daily or weekly, depending on personal preference, should be considered. This way, sales professionals have dedicated time for learning just as they would dedicate time on their calendars to meet with potential clients. Most felt that morning was the best time for self-directed learning, so apportioning specific ritualistic time on a daily or weekly basis will ensure that continual learning is conducted and not deferred.

Sales organizations should also strive to employ those with the characteristics associated within this study: ambitious, self-motivated, and naturally curious. Furthermore, within the veterinary sales organization, sales professionals should also have attributes that closely align with the veterinary mission and purpose: desire to help advance the veterinary profession, compassion for animals and people, and passion for the veterinary industry. Those within the veterinary sales profession care deeply about their careers, their customers, and their purpose; they strive to better themselves and their customers through knowledge advancement and personal and professional growth. They understand and see the importance of self-directed

learning to their careers, and they take part in this learning with fervor and ardor. Ensuring that the right people with the right demeanor are chosen to be veterinary sales professionals can further help advance the industry and the profession.

Lastly, the impact of self-directed learning and higher education is an area that needs discussion for practical application. Universities spend very limited time preparing future sales professionals for success or helping them with their critical thinking skills (Alvarez et al., 2015; Cummins et al., 2013; Edmondson et al., 2012; Newberry & Collins, 2015; Rodriguez & Armellini, 2013; Sogunro, 2015). However, in education, self-directed learning positively correlates to academic performance, future aspirations, life satisfaction, creativity, and curiosity (Edmondson et al., 2012). With limited research demonstrating self-directed learning and the future impact to sales professionals, universities can implement self-directed learning strategies that provide foundational life skills to aspiring sales professionals. Instilling habits early on at the university level can provide the confidence and determination needed by sales professionals to take learning into their own hands and to succeed in their future careers.

Delimitations and Limitations

Various delimitations were made to define the boundaries and provide focus within this multiple case study. As organizational training diminishes greatly after the first three years of employment and sales professionals look to engage in self-directed learning to fill this training gap, this study focused on veterinary sales professionals with three or more years in the veterinary industry and in their position (Boyer et al., 2012). New hire sales training, training within the first few years of employment, or organizational training practices were not considered. Only those established sales professionals who have been in their roles and in the same industry for longer than three years were used. Furthermore, veterinary field sales

professionals who actively visit veterinary practices to sell products and services were highlighted in this study; those sales professionals who conduct veterinary sales over the phones in call centers as inside sales representatives were not included. With self-directed learning perceptions as the instrumental topic within the study, only those veterinary sales professionals who conduct self-directed learning were considered. Lastly, organizational sales training practices can vary from organization to organization. Since the focus was self-directed learning of individuals and not overall organizational sales training programs, all participants came from the same company and variation in organizational training was not considered and would be irrelevant to the confines of this study.

Numerous limitations existed in this study and will be addressed. Three main areas of consideration are type of veterinary sales professional, data collection, and bias. All three of these topics influenced the study and will be discussed.

Different types of veterinary sales professionals exist in the industry; diagnostic sales, pharmaceutical sales, veterinary software sales, and distribution sales to name a few. Each sales professional has a different product or service to sell the veterinarian within a myriad of categories. One may sell complicated software solutions to benefit the veterinarian while the other sells basic everyday products such as bandages, syringes, and other essential items. All have different perspectives of what they would need to learn to potentially fill perceived training gaps. Within the scope of this study, veterinary sales professionals selling veterinary business and technology solutions were used. All participants in this study were purposefully chosen for their general role of being a veterinary sales professional, having three or more years in the position, and conducting self-directed learning; however, specific roles amongst veterinary sales professionals differ and may have an impact on perceptions and results. Although the sales

professionals used in this study did discuss the importance of having some medical conversations, particular participants mostly focused on business solutions to grow veterinary practice revenue. Many of the resources and training materials used by these sales professionals had business-related impacts. However, all of the sales professionals did annotate that they were focused on personal and professional growth and were reading and listening to self-help business books; the types of books read may be a reflection of their personal desire to have more responsibility within the organization moving forward. The interview and document analysis may be different and more focused on medical concepts had other types of veterinary sales professionals participated in this study, those selling veterinary pharmaceuticals or diagnostic testing solutions to veterinarians. This should be considered for future discourse.

Sales professionals, in general, are commission-based financially and lead very busy lives as they visit many clients within the course of any given day. Getting them scheduled for an interview was not an issue and once the researcher had their undivided attention, data collection during the semi-structured interview provided very rich data. Yet, prioritization for participating in the two-week online discussion board forum and gathering training documentation was a different story. Participation after the semi-structured interview was sporadic and inconsistent. Although it did provide the needed data through mutual interaction and a myriad of resources used for self-directed learning, the semi-structured interview proved to be the most effective data gathering tool for this group of individuals. Perhaps allowing more time for discussion and interaction online would have yielded additional data and insights to use in the study; this premise also holds true for gathering documentation and training resources. Relying on sales professionals to supply their training documents, resources, websites, and book listings for self-

directed learning would have been better facilitated during the semi-structured interview process or through a researcher-supplied template and should be considered for future studies.

Finally, researcher personal bias may have influenced the analysis and interpretation of the data presented. The researcher is a former veterinary sales professional and current veterinary sales training manager who has sold in a variety of medically-focused veterinary sales roles; personal bias as to the perceptions of self-directed learning and veterinary sales should be considered. All steps to reduce bias were utilized, however, the possibility of some bias within the research exists. When asking questions during the semi-structured interview, it was difficult to detach from the role and remain neutral as a researcher. Yet, staying close to the prescriptive semi-structured interview script allowed the researcher to remain as neutral as possible during the interview process.

Recommendations for Future Research

As the first study that investigated veterinary sales professionals' perceptions of self-directed learning, much more can be done to further research self-directed learning, sales professionals, and the veterinary industry. The limited scope of this study highlights the need for further research, particularly the impact of specific self-directed learning tools and resources that can influence veterinary sales professionals and others in sales roles throughout varying industries. As the research highlighted, the biggest reason why veterinary sales professionals conduct self-directed learning is because of their ambitious nature to professionally advance in their chosen profession, followed by a desire to be an expert in their field. Filling learning gaps, as highlighted by the general sales literature and research, is a perceived reason to conduct self-directed learning; however, for the sales professionals in this study, it appeared to be prioritized lower on their continuum. Yet, sales research in the last few decades has highlighted self-

directed learning as a solution to existing training gaps perceived by many sales professionals. Understanding the fact that sales training gaps are inevitable in a complex business world, the time for future research to delve into this phenomenon and find ways to mitigate training gaps in formal organizational training is now. Future research can focus on ways to differentiate and customize instruction for sales professionals throughout all industries to help lessen the gap and encourage self-directed learning as part of the overall learning journey. Furthermore, specific training initiatives for veterinary sales professionals can be highlighted and shared throughout veterinary industry organizations to improve veterinary organizational training methodologies.

Self-directed learning and the workplace environment continues to be a debated topic as organizations look to ways of increasing productivity and measuring training strategies to find their effectiveness (Fontana et al., 2015). Although research has been done to highlight key characteristics, attributes, and motivating factors that show a propensity for conducting self-directed learning in the workplace environment, showing the actual tactics to success and understanding the specific resources and tools are topics of consideration that need further exploration (Fontana et al., 2015; Raemdonck et al., 2014; Rana et al., 2016). Perhaps a quantitative study to annotate specific tools and strategies within sales and veterinary sales can further enlighten the subject and provide important resources that can be used in sales training departments of organizations that coach and mentor sales professionals.

Raemdonck et al. (2014) discussed the importance of manager support to encourage employees to pursue learning on their own. Managers have a high degree of influence over their sales professionals, especially when it involves sales training (Fu & Jones, 2015). Although this concept of manager support was not explored in this survey, many sales professionals in this study highlighted the desire to professionally grow in their careers and pursue higher

opportunities within the organization. Of interest is the influence of managers and their impact to self-directed learning. Future studies, both quantitative and qualitative, can explore this topic of self-directed learning and the relationship between managers and sales professionals throughout various industries; an analysis of both positive and negative encouragement with regards to the propensity for employee self-learning can be studied. This may influence leadership training across multiple industries as organizations look to foster supportive and motivating learning environments (Raemdonck et al., 2014).

Another area of future research is self-directed learning and higher sales education in universities. The challenges that sales professionals face in today's competitive selling environment requires thoughtful and critical thinking skills, problem-solving abilities, a strategic mindset, and real-world practice; business programs in universities must be prepared to correlate these challenges to the educational environment and inspire students to succeed (Alvarez et al., 2015; Cummins et al., 2013; Green et al., 2015; Newberry & Collins, 2015; Sogunro, 2015). Although research encompassing self-directed learning at the university level shows that those future students who partake in self-directed learning meet success later on in their careers, the specific tools and resources used by sales education programs to encourage students or the types of self-directed learning that students participate in has not been explored. This type of research can further inform practice across university programs and sales training organizations alike as a repository of best practices is built and shared amongst sales professionals.

Lastly, future research specific to the veterinary sales professional should be considered that continues the research started here with this study. The veterinary industry is a unique entity full of compassionate, identity-driven, and knowledgeable individuals who care deeply about the human-animal bond and society at-large (Allister, 2015, 2016; Dolby & Litster, 2015; Page-

Jones & Abbey, 2015). Many of the sales professionals who participated in this study discussed the reasons why they chose to sell in the veterinary industry; some grew up in the industry through family or friend relationships while others were drawn here because of their love of animals. Many of them envision themselves staying in the industry for a long time. Self-directed learning has enabled some to find common ground with veterinary practitioners as they look to earn their respect. Understanding the key characteristics that underline the veterinary sales professional and self-directed learning can further enhance finding the right people who can meet success within the veterinary sales professional. Also, as this study investigated the perceptions of self-directed learning to understand the motivating factors and underlying reasons why veterinary sales professionals look to self-directed learning, further research should focus on the tools used by these sales professionals that help them meet success with veterinarians. What specific training resources have they used to help them advance their sales opportunities with veterinarians? Also, using a quantitative study to correlate veterinary sales professionals who conduct self-directed learning with their sales success of hitting quota may be interesting to see the effects of self-directed learning. As difficult as it may be with many varying factors influencing a correlative study with regard to commission and success, perhaps comparing groups of veterinary sales professionals who conduct self-directed learning to those who do not can yield some interesting research that further makes the case for self-directed learning and veterinary sales.

Summary

The profession of sales is a difficult endeavor that requires autonomy, relatability, and competence to succeed. Sales professionals, mostly commission-based in pay, are required to face many challenges in the course of their day to meet their given quotas, and traditional

organizational training does not always give them the tools to thrive and prosper in this ever-changing professional landscape. Veterinary sales professionals face an even unique challenge as they enter an industry that is highly identity-driven, knowledge-intensive, and personalized; veterinarians are exceedingly compassionate people who deeply care about the human-animal bond and the welfare of animals in society. Therefore, to meet these demands in a highly competitive environment, some veterinary sales professionals take training into their own hands through self-directed learning to fill the existing knowledge gaps, establish common ground with veterinarians, earn their respect as trusted advisors, and become experts in their chosen field. More so, veterinary sales professionals who conduct self-directed learning do so because they are naturally curious and ambitious learners with a deep desire to grow personally and professionally in their lives. They feel a part of the profession and exhibit a need to develop deep relationships with veterinarians. Perhaps different than other sales jobs in which sales professionals may just sell a product or service, veterinary sales professionals seem to be deeply drawn to and invested in the profession; self-learning as a means to helping veterinarians, keeping up with the industry, and remaining competent becomes a personal quest for some sales professionals who desire to advance their careers and enhance the overall veterinary industry.

Not everyone partakes in self-directed learning. As a former veterinary sales professional, this researcher entered the industry years ago for many of the same reasons expressed by those within this study. As one of the few who invested the time and effort needed to grow personally and professionally, this researcher realized quickly that self-directed learning was a key initiative needed to reach these goals while connecting with veterinarians and helping the veterinary industry. This researcher became personally vested in the journey by learning early on that formal organizational sales training has many limitations. This study, although

limited in scope, shows that there are others in the industry that feel the same way as this researcher: self-directed learning is a valuable tool for the veterinary sales professional.

Understanding the motivating factors that influence self-directed learning and veterinary sales is an important first step. Many of these valuable insights can help tailor future research and actionable change as veterinary sales organizations look to improve sales training and sales success amongst their professionals. First and foremost, hiring managers in veterinary sales and sales at large should look at the key attributes of a self-directed and self-motivated learner who is highly autonomous and driven by nature. The underlying theme of ambitious and naturally curious learners seems to be a valued trait amongst those that take self-learning seriously. They strive to be experts in their fields and look to grow personally and professionally; these are the types of individuals needed in veterinary sales positions. Secondly, sales training organizations, especially those in knowledge-intensive industries like veterinary sales, must look at training gaps early on in employee careers and find ways to provide additional coaching, mentoring, and training opportunities to limit these shortcomings. Encouraging self-directed learning and providing resources to help coach and inspire sales professionals towards this path may propel employees on a trajectory to becoming more self-initiated in their learning journeys. The existence of training gaps and the perception that self-directed learning can help fill these holes in knowledge was a common theme annotated throughout the literature and shown to be a recurring aspect affirmed within this study. Especially in the veterinary industry that relies on relationships and competence, veterinary sales professionals look to self-directed learning as a way to remain relevant and competent in front of their veterinary clients. Lastly, these themes found in the research can further help shape educational training within growing academic business and sales programs at universities. As more and more students ponder sales as a future

career, the need for higher education institutions to instill these attributes at the foundation of learning can further lead to habits of success in the future careers of these students.

Hopefully this study will inspire further research in this topic and help to initiate positive change to sales training organizations, the veterinary sales industry, and higher education sales programs. Much still needs to be done with regards to self-directed learning and veterinary sales. As sales research continues to expand and principles learned throughout general sales are applied to the veterinary ecosystem, the ambitious, self-motivated, and naturally curious veterinary sales professional can continue to be a sales trailblazer in the overall industry. Future veterinary sales professionals can strive to partake in self-directed learning knowing that this type of learning journey can influence the development of deep relationships with veterinarians, help them become experts in their field, and earn the respect of being a trusted advisor to the practitioner. Ultimately, self-directed learning provides the building of competence that appears to be lacking in veterinary sales training today; through this focus, the veterinary sales professional, the veterinary practitioner, and the veterinary industry at large all benefit from this simple, yet impactful adult learning methodology.

REFERENCES

- Allister, R. (2015). Questions of identity. *Veterinary Record: Journal of the British Veterinary Association*, 176(17), 431-432. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Allister, R. (2016). What does it mean to be a vet? *Veterinary Record: Journal of the British Veterinary Association*, 178(13), 316-317. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Alvarez, C. M. O., Taylor, K. A., & Rauseo, N. A. (2015). Creating thoughtful salespeople: Experiential learning to improve critical thinking skills in traditional and online sales education. *Marketing Education Review*, 25(3), 233-243. doi:10.1080/10528008.2015.1044859
- Armitage, S. (2016). Working in the veterinary marketplace. *The Veterinary Record*, 178(13), 1-2. doi:10.1136/vr.i1598
- Armitage-Chan, E., Maddison, J., & May, S. A. (2016). What is the veterinary professional identity? Preliminary findings from web-based continuing professional development in veterinary professionalism. *Veterinary Record: Journal of the British Veterinary Association*, 178(13), 318-323. doi:10.1136/vr.103471
- Artis, A. B., & Harris, E. G. (2007). Self-directed learning and sales performance: An integrated framework. *Journal of Personal Selling & Sales Management*, 27(1), 9-24. doi:10.2753/PSS0885-3134270101
- Association for Talent Development. (2016). *2016 state of sales training*. Retrieved from <https://www.td.org/research-reports/2016-state-of-sales-training>

- Baard, P. P. (2002). Intrinsic need satisfaction in organizations: A motivational basis of success in for-profit and not-for-profit settings. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 255-275). Rochester, NY: The University of Rochester Press.
- Bones, V. C., & Yeates, J. W. (2012). The emergence of veterinary oaths: Social, historical, and ethical considerations. *Journal of Animal Ethics, 2*(1), 20-42. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Boyer, S. L., Artis, A. B., Fleming, D. E., & Solomon, P. J. (2014a). The impact of perceived organizational support on self-directed learning in sales training. *Journal of Marketing Channels, 21*(2), 65-76. doi:10.1080/1046669X.2013.854192
- Boyer, S. L., Artis, A. B., Solomon, P. J., & Fleming, D. E. (2012). Improving sales performance with self-directed learning. *Marketing Management Journal, 22*(2), 61-75. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Boyer, S. L., Edmondson, D. R., Artis, A. B., & Fleming, D. (2014b). Self-directed learning: A tool for lifelong learning. *Journal of Marketing Education, 36*(1), 20-32. doi:10.1177/0273475313494010
- Cake, M. A., Bell, M. A., Bickley, N., & Bartram, D. J. (2015). The life of meaning: A model of the positive contributions to well-being from veterinary work. *Journal of Veterinary Medical Education, 42*(3), 184-193. doi:10.3138/jvme.1014-097R1
- Caple, I. (2005). Continuing professional development for veterinarians. *Australian Veterinary Journal, 83*(4), 200-202. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Chene, A. (1983). The concept of autonomy in adult education: A philosophical discussion. *Adult Education Quarterly, 34*(1), 38-47. Retrieved from <http://web.b.ebscohost.com>.

ezproxy.liberty.edu/

- Chigerwe, M., Boudreaux, K. A., & Ilkiw, J. E. (2017). Self-directed learning in veterinary medicine: Are the students ready? *International Journal of Medical Education*, 8, 229-230. doi:10.5116/ijme.5929.402f
- Cron, W. L., Marshall, G. W., Singh, J., Spiro, R. L., & Sujan, H. (2005). Salesperson selection, training, and development: Trends, implications, and research opportunities. *Journal of Personal Selling & Sales Management*, 25(2), 123-136. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: Sage Publications, Inc.
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Boston, MA: Pearson Education, Inc.
- Cummins, S., Peltier, J. W., Erffmeyer, R., & Whalen, J. (2013). A critical review of the literature for sales educators. *Journal of Marketing Education*, 35(1), 68-78. doi:10.1177/0273475313481157
- Dale, V. H. M., Pierce, S. E., & May, S. A. (2013). Motivating factors and perceived barriers to participating in continuing professional development: A national survey of veterinary surgeons. *The Veterinary Record*, 173(10), 247-253. doi:10.1136/vr.101492
- Dolby, N., & Litster, A. (2015). Understanding veterinarians as educators: An exploratory study. *Teaching in Higher Education*, 20(3), 272-284. doi:10.1080/13562517.2014.1001835
- Edmondson, D. R., Boyer, S. L., & Artis, A. B. (2012). Self-directed learning: A meta-analytic review of adult learning constructs. *International Journal of Education Research*, 7(1), 40-48. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>

- Fontana, R. P., Milligan, C., Littlejohn, A., & Margaryan, A. (2015). Measuring self-regulated learning in the workplace. *International Journal of Training & Development, 19*(1), 32-52. doi:10.1111/ijtd.12046
- Fu, F. Q. (2015). Motivate to improve salesforce performance: The sales training perspective. *Performance Improvement, 54*(4), 31-35. doi:10.1002/pfi.21474
- Fu, F. Q., & Jones, E. (2015). Bridging research and practice: How sales training can contribute to new product launch success. *Performance Improvement, 54*(2), 29-36. doi:10.1002/pfi.21459
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report, 20*(9), 1408-1416. Retrieved from <http://www.nova.edu/ssss/QR/QR20/9/fusch1.pdf>
- Gagne, M., & Deci, E. L. Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*(4), 331-362. doi:10.1002/job.322
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly, 48*(1), 18. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu>
- Gordon, G. L., Shepherd, C. D., Lambert, B., Ridnour, R. E., & Weilbaker, D. C. (2012). The training of sales managers: Current practices. *Journal of Business & Industrial Marketing, 27*(8), 659-672. doi:10.1108/08858621211273600
- Green, T. M., Kelso, C. M., & Zillioux, D. (2015). The nexus between education and training: Implications for the adult learner. *Journal of Research in Innovative Teaching, 8*(1), 64-79. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu>

- Hunter, C. P. (2010). Ways of learning in the pharmaceutical sales industry. *Journal of Workspace Learning*, 22(7), 451-462. doi:10.1108/13665621011071118
- Knesl, O., Hart, B. L., Fine, A. H., & Cooper, L. (2016). Opportunities for incorporating the human-animal bond in companion animal practice. *Journal of the American Veterinary Medical Association*, 249(1), 42-44. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. New York, NY: Association Press.
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2012). *The adult learner: The definitive classic in adult education and human resources development* (7th ed.). New York, NY: Routledge.
- Kohlrausch, B., & Rasner, A. (2014). Workplace training in Germany and its impact on subjective job security: Short- or long-term returns? *Journal of European Social Policy*, 24(4), 337-350. doi:10.1177/0958928714538216
- Lassk, F. G., Ingram, T. N., Kraus, F., & Di Mascio, R. (2012). The future of sales training: Challenges and related research questions. *Journal of Personal Selling & Sales Management*, 32(1), 141-154. doi:10.2753/PSS0885-3134320112
- Leigh, T. W., DeCarlo, T. E., Allbright, D., & Lollar, J. (2014). Salesperson knowledge distinctions and sales performance. *Journal of Personal Selling & Sales Management*, 34(2), 123-140. doi:10.1080/08853134.2014.890902
- Leovaridis, C., & Cismaru, D. M. (2014). Characteristics of organizational culture and climate in knowledge-intensive organizations. *Romanian Journal of Communication & Public Relations*, 16(2), 35-56. Retrieved from <http://web.b.ebscohost.com.ezproxy>.

liberty.edu/

- Manning, C. A. (2015). The construction of personal learning networks to support non-formal workplace learning of training professionals. *International Journal of Advanced Corporate Learning*, 8(2), 4-12. doi:10.3991/ijac.v8i2.4367
- Marcos-Cuevas, J., Critten, P., Squire, P., & Speakman, J. I. F. (2014). Enhancing the professional mindset of future sales professionals: Key insights from a master in sales transformation. *Journal of Marketing Education*, 36(2), 144-155. doi:10.1177/0273475314531964
- Matsuo, M., Hayakawa, K., & Takashima, K. (2013). Learning-oriented sales management control: The case of a pharmaceutical company. *Journal of Business-to-Business Marketing*, 20(1), 21-31. doi:10.1080/1051712X.2012.690174
- McDermott, M. P., Cobb, M. A., Tischler, V. A., Robbe, I. J., & Dean, R. S. (2017). Evaluating veterinary practitioner perceptions of communication skills and training. *The Veterinary Record*, 180(12), 305-310. doi:10.1136/vr.103997
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). Learning in adulthood: A comprehensive guide (3rd ed.). San Francisco, CA: Jossey-Bass.
- Miller, P. M. (2011). *Theories of developmental psychology* (5th ed.). New York, NY: Worth Publishers.
- Mossop, L. H., & Cobb, K. (2013). Teaching and assessing veterinary professionalism. *Journal of Veterinary Medical Education*, 40(3), 223-232. doi:10.3138/jvme.0113-016R
- Newberry, R., & Collins, M. K. (2015). Aligning sales curriculum content and pedagogy with practitioners' needs. *Research in Higher Education Journal*, 27, 1-14. Retrieved from <https://eric.ed.gov/?id=EJ1056176>

- O'Lawrence, H. (2017). The workforce for the 21st century. *Issues in Informing Science and Information Technology Education*, 14, 67-85. Retrieved from <http://www.informing-science.org/Publications/3724>
- Page-Jones, S., & Abbey, G. (2015). Career identity in the veterinary profession. *Veterinary Record: Journal of the British Veterinary Association*, 176(17), 433-437.
doi:10.1136/vr.102784
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Pepper, D. (1995). Maintaining a vet-rep rapport. *In Practice*, 17(1), 41-42. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Prendergast, H. (2017). Sales representatives do more than sell. *Veterinary Team Brief*, 5(3), 44-47. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Pullins, E. B., Timonen, H., Kaski, T., & Holopainen, M. (2017). An investigation of the theory practice gap in professional sales. *Journal of Marketing Theory & Practice*, 25(1), 17-38.
doi:10.1080/10696679.2016.1236665
- Raemdonck, I., Gijbels, D., & Groen, W. (2014). The influence of job characteristics and self-directed learning orientation on workplace learning. *International Journal of Training & Development*, 18(3), 188-203. doi:10.1111/ijtd.12028
- Rana, S., Ardichvili, A., & Polesello, D. (2016). Promoting self-directed learning in a learning organization: tools and practices. *European Journal of Training and Development*, 40(7), 470-489. doi:10.1108/EJTD-10-2015-0076

- Reeve, J. (2002). Self-determination theory applied to educational settings. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 183-203). Rochester, NY: The University of Rochester Press.
- Reinisch, A. I. (2009). The human-animal bond: A benefit or a threat to the integrity of the veterinary profession? *The Canadian Veterinary Journal*, *50*(7), 713-718. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Rodriguez, B. C. P., & Armellini, A. (2013). Interaction and effectiveness of corporate e-learning programmes. *Human Resource Development International*, *16*(4), 480-489. doi:10.1080/13678868.2013.803753
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3-33). Rochester, NY: The University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York, NY: The Guilford Press.
- Saldana, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Los Angeles, CA: Sage Publications.
- Singh, V. L., Manrai, A. K., & Manrai, L. A. (2015). Sales training: A state of the art and contemporary review. *Journal of Economics, Finance and Administrative Science*, *20*(38), 54-71. doi:10.1016/j.jefas.2015.01.001

- Sogunro, O. A. (2015). Motivating factors for adult learners in higher education. *International Journal of Higher Education*, 4(1), 22-37. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Soklaridis, S. (2014). Improving hospital care: Are learning organizations the answer? *Journal of Health Organization and Management*, 28(6), 830-838. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Tough, A. (1978). Major learning efforts: Recent research and future directions. *Adult Education*, 28(4), 250-263. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Toytari, P., Alejandro, T. B., Parvinen, P., Ollila, I., & Rosendahl, N. (2011). Bridging the theory to application gap in value-based selling. *Journal of Business & Industrial Marketing*, 26(7), 493-502. doi:10.1108/08858621111162299
- Wan, Z., Compeau, D., & Haggerty, N. (2012). The effects of self-regulated learning processes on e-learning outcomes in organizational settings. *Journal of Management Information Systems*, 29(1), 307-340. doi:10.2753/MIS0742-1222290109
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66(5), 297-333. Retrieved from <http://web.b.ebscohost.com.ezproxy.liberty.edu/>
- Wlodkowski, R. J. (2008). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in Self-Determination Theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31. doi:10.1207/s15326985ep4101_4

Yang, C., Fang, S., & Lin, J. L. (2012). Rethinking the theory of the hospital: A knowledge-based view. *Service Industries Journal*, 32(12), 1923-1936. doi:10.1080/02642069.

2010.545877

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Los Angeles, CA: Sage Publications, Inc.

APPENDIX A: LIBERTY UNIVERSITY IRB APPROVAL LETTER**LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

October 8, 2018

Agostino S. Scicchitano

IRB Approval 3497.100818: An Investigation of Veterinary Sales Professionals' Perceptions of Self-Directed Learning: A Multiple Case Study

Dear Agostino S. Scicchitano,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

6. Collection of data from voice, video, digital, or image recordings made for research purposes.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research
The Graduate School

LIBERTY
UNIVERSITY.

Liberty University | Training Champions for Christ since 1971

APPENDIX B: STUDY SITE APPROVAL

December 14, 2018

Ms.
Vice President, B2B Sales and Marketing

Dear

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is An Investigation of Veterinary Sales Professionals' Perceptions of Self-Directed Learning: A Multiple Case Study and the purpose of my research is to understand the methods and practices used by veterinary sales professionals to further their own self-learning when organizational training wanes.

I am writing to request your permission to contact veterinary sales professionals in your organization and invite them to participate in my research study.

After receiving a list from you, sales professionals will be sent an initial online questionnaire to identify 12 to 15 veterinary sales professionals that meet the study criteria. Once participants are identified, they will be asked to participate in a one-hour interview and on online discussion group. Total time of participation will be no longer than three hours over a two-week period. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time.

Thank you for considering my request. If you choose to grant permission, please sign and date below and send back by email to ascicchitano@liberty.edu.

Respectfully,

Agostino S. Scicchitano
Doctoral Candidate / Principal Investigator
Liberty University, School of Education

The researcher has my permission to use my organization and employees within my organization as a study site.

Signature: _____

Printed Name: _____

Position: Vice President, B2B Sales and Marketing

Organization: _____

Date: 12/20/2018

APPENDIX C: E-MAIL INVITATION FOR INITIAL QUESTIONNAIRE

Sender	Agostino S. Scicchitano
Sender Email	ascicchitano@mail.sogosurveys.com
Reply-To Email	ascicchitano@liberty.edu
Subject	Agostino S. Scicchitano Doctoral Research Initial Questionnaire - Veterinary Sales Profession and Self-Directed Learning

 This is how your email invitation will look when viewed from the participant's inbox.

Dear Veterinary Sales Professional,

As a current veterinary sales professional / veterinary sales trainer and a doctoral graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for completing my doctoral degree. The purpose of my research is to investigate veterinary sales professionals' perceptions of self-directed learning that augments current corporate training practices. I am writing to invite you to complete a brief initial questionnaire to determine if you meet the criteria needed for this study, at which point you will be invited to further participate in the study through an interview and an online discussion group.

If you are 18 years of age or older, have been a veterinary sales professional selling to veterinarians for longer than three years in the same position, have conducted or participated in self-directed learning activities (self-initiated and self-motivated learning outside of current and traditional corporate training), and are willing to participate you will be asked to complete a brief initial questionnaire. It should take approximately 10 minutes for you to complete the questionnaire. Your name and / or other identifying information will be requested as part of your participation, but the information will remain confidential.

Please click on the button below to access and submit your initial questionnaire responses before January 11th, 2019:

[Click here](#)

By completing and submitting this initial online survey, you are consenting to participating in the initial survey. From these initial responses, I will randomly select 12 to 15 participants and invite them to the next phase of the research (an interview and participation in an online discussion group) that will not exceed more than three hours of total time of involvement.

I personally thank you for your participation and look forward to working with you on this study. If you have any questions, please contact me at ascicchitano@liberty.edu or (207) 228-3828.

Respectfully,

Agostino S. Scicchitano
 Doctoral Candidate
 Liberty University, School of Education

This email is sent on behalf of the person/organization whose name appears in the FROM field by SoGoSurvey. If you have any questions about the email, please contact the sender by replying to this email.

If you prefer not to receive future reminders about this survey, please [click here](#).

If you prefer not to receive future surveys from the organization behind this survey, please [click here](#).

We request you not to forward the survey link to anyone. Each survey link is unique and intended for the recipient only.

APPENDIX D: INITIAL QUESTIONNAIRE**Initial Questionnaire**

Veterinary Sales Professionals' Perceptions of Self-Directed Learning

Agostino S. Scicchitano, Principal Investigator

Liberty University, School of Education

- 1) Are you a veterinary sales professional?
 - a) Yes
 - b) No

- 2) Have you been in your current sales position for three years or more?
 - a) Yes
 - b) No

- 3) How long have you been in your position?
 - a) 3 – 5 years
 - b) 5 – 10 years
 - c) 10 – 15 years
 - d) 15 – 20 years
 - e) Longer than 20 years

- 4) Do you currently or have you recently (in the past 6 months) conducted self-directed learning activities (self-initiated and self-motivated learning outside of current and traditional corporate training) on your own?
 - a) Yes
 - b) No

- 5) Estimate how often in the last year you have conducted self-directed learning?
 - a) A few times total in the last year (less than 5 times total)
 - b) A few times every other month (6 to 12 times total)
 - c) A few times monthly in the last year (1 to 5 times per month)
 - d) A few times weekly in the last year (1 to 5 times per week)

- 6) Estimate how many hours in the last year you have conducted self-directed learning?
 - a) Less than 5 hours
 - b) 5 to 10 hours
 - c) 10 to 25 hours
 - d) More than 25 hours

- 7) What types of resources do you use for self-directed learning? (check all that apply)
 - a) Medical journals
 - b) Continuing education modules
 - c) Medical white papers and case studies

- d) Professional veterinary organizations websites
 - e) Live medical seminars
 - f) Other – (please specify)
- 8) Will you be willing to participate in further research if asked that will entail a recorded one-hour interview with the principal investigator and a two-week online discussion group to gather additional research – total time of participation no more than 3 hours)?
- a) Yes
 - b) No

Name: _____

Position: _____

Telephone Number: _____

E-mail Address: _____

*By submitting this initial questionnaire online, you are consenting to the use of this information solely for the purpose of the principal investigator to review and invite potential participants to take part in the study. Your contact information will not be shared or distributed. Do not submit your initial questionnaire if you do not wish to participate in this study.

APPENDIX E: INTRODUCTION CORRESPONDENCE FOR CONSENT

Dear Veterinary Sales Professional,

Thank you for your interest in participating in my doctoral dissertation research on veterinary sales professionals' perceptions of self-directed learning. You have been chosen to participate in the interview and the online discussion board, and I am excited about the possibility of your participation in this study. Prior to coordinating and commencing the interview and online discussion group, it is important that you read and sign the required informed consent form.

My study is a qualitative multiple case study to investigate veterinary sales professionals' perceptions of self-directed learning. I aspire to explore and understand the perceptions, reasons, and motivating factors that compel tenured veterinary sales professionals to engage in self-directed learning outside of traditional sales training. Your participation and input will help to inform practice and provide valuable insight to the sales profession regarding the key factors that support self-directed learning in sales professionals.

Thank you for your participation in this study. I wholeheartedly value your time and input and I look forward to working with you to provide valuable insight to the profession. If you have any further questions before signing the attached informed consent form, do not hesitate to reach me at ascicchitano@liberty.edu or (207) 228-3828.

Respectfully,

Agostino S. Scicchitano
Doctoral Candidate
Liberty University, School of Education

APPENDIX F: INFORMED CONSENT FORM

The Liberty University Institutional
Review Board has approved
this document for use from
10/8/2018 to 10/7/2019
Protocol # 3497.100818

CONSENT FORM

An Investigation of Veterinary Sales Professionals' Perceptions of Self-Directed Learning: A
Multiple Case Study

Agostino S. Scicchitano
Liberty University
School of Education

You are invited to be in a research study focusing on veterinary sales professionals' perceptions of self-directed learning. The study will focus on the motivations and actions of tenured veterinary sales professionals' who partake in self-directed learning outside of traditional corporate sales training. You were selected as a possible participant because of the results of your initial questionnaire responses: tenured veterinary sales professional currently in a veterinary sales position for longer than three years who conducts self-directed learning. Please read this form and ask any questions you may have before agreeing to be in the study.

Agostino S. Scicchitano, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to investigate veterinary sales professionals' perceptions of self-directed learning within their current positions. Exploring and understanding the perceptions, reasons, and motivating factors that compel tenured veterinary sales professionals to engage in self-directed learning may inform practice within sales throughout the profession and undergraduate institutions influencing future sales professionals.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Participate in a one-hour face-to-face or videoconference interview with the researcher. The interview will take place in a mutually agreed upon time and location and will be audio and video recorded.
2. Participate in a two-week online discussion group with the researcher and other participants. Any comments or answers to discussion group questions posted to the discussion group will be analyzed and used within the study. Online discussion group total participation should not exceed more than two hours during this two-week period.
3. Share self-directed learning artifacts, documents, ideas, activities, and practices with the researcher and the discussion group participants as data for the study.
4. Participate in the member-checking process after data is obtained to provide feedback and review the accuracy of the information provided and to assess the findings.

Risks: The risks involved in this study are minimal, which mean they are equal to the risks you would encounter in everyday life.

Benefits: The benefits to participating in this study are:

1. Sharing of best practices amongst veterinary sales professionals that can be used in future interactions with veterinary professionals.

The Liberty University Institutional
Review Board has approved
this document for use from
10/8/2018 to 10/7/2019
Protocol # 3497.100818

Although not direct benefits to you, this study will benefit our common veterinary profession in the following ways:

1. Helping future veterinary sales professionals be successful in their careers.
2. Helping to shape corporate training within veterinary sales organizations and other sales entities.
3. Helping to shape undergraduate and graduate sales education curriculum by defining self-directed learning practices.
4. **Providing a voice to veterinary sales professionals and the veterinary sales community.**

Furthermore, the findings of this may also apprise training departments and institutions of learning to implement self-directed learning opportunities for employees and students alike in their continual professional development. The use of self-directed learning practices may mutually benefit veterinary sales professionals and veterinary professionals to advance the human-animal bond and the societal welfare of animals.

Compensation: Participants will not be compensated in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. I may share the data I collect from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data. Participants will be assigned a pseudonym and the pseudonym will be used throughout to protect participant identity. Data (research records, interview recordings, transcripts, and documents) will be stored securely on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted. Written records and documents will be kept in a secure file cabinet until converted to electronic form, at which point hard copies will be destroyed. All electronic files will be backed up using an online backup service. Because multiple participants will be involved in the online discussion group, I cannot assure participants the security of identities or that other members of the focus group will not share what was discussed with persons outside of the group.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University, your current employer, or the principal investigator. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from online discussion group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

The Liberty University Institutional
Review Board has approved
this document for use from
10/8/2018 to 10/7/2019
Protocol # 3497.100818

Contacts and Questions: The researcher conducting this study is Agostino S. Scicchitano. You may ask any questions you have now by e-mail to ascicchitano@liberty.edu or by telephone at (207) 228-3828. If you have questions later, **you are encouraged** to contact the principal investigator / researcher at the same e-mail or phone number listed above. You may also contact the researcher's faculty chair, Dr. Chris Taylor, at cwtaylor2@liberty.edu or (205) 222-6427. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher or faculty chair, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record and/or video-record me as part of my participation in this study.

Signature of Participant

Date

Signature of Investigator

Date

APPENDIX G: SEMI-STRUCTURED INTERVIEW QUESTIONS

The use of these open-ended questions for the semi-structured interview with participants were also piloted with a small group of veterinary sales training colleagues prior to the start of the interviews and modified or adjusted as necessary.

1. Before we begin the interview, please introduce yourself to me.
2. Please tell me about your veterinary sales experience.
3. With all of the different opportunities to sell in other industries, why did you choose the veterinary industry?
4. Walk me through the formal sales training that you have had in your current position.
5. What other types of sales training have you been involved with throughout your sales career?
6. What is your definition of self-directed learning? What are your perceptions of self-directed learning?
7. Please describe why you choose to learn independently, outside the formal channels of sales training?
8. What has influenced you to look at self-directed learning?
9. What does self-directed learning look like to you? When do you conduct self-directed learning? How long does it take you? What specific self-directed learning activities do you do or what self-directed learning actions do you take?
10. Please describe to me what factors contribute to your desire to partake in self-directed learning?
11. What motivates you to further learn on your own?
12. When talking to veterinary professionals, how has self-directed learning affected your competency level to engage them in medical conversations?

13. What successes do you see as a result of your self-directed learning? What challenges do you face when conducting self-directed learning?
14. What advice would you give to those in your profession who are not self-directed learners?

APPENDIX H: ONLINE DISCUSSION GROUP QUESTIONS

1. Without divulging any identifying information about yourself, post a brief and general introduction of your current veterinary sales position and describe your past veterinary sales experience. Include the following: number of years in your current position; number of years in the veterinary industry; brief explanation of current sales position; and brief explanation of past sales experiences in other organizations.
2. Other than standard sales training offered by your company, what type of training have you conducted on your own? Why have you been doing this self-directed training?
3. Find others within the discussion group with a similar stance on self-directed learning and comment on their learning methodologies.
4. Find others within the discussion group that have participated in learning methodologies different than yours and comment on the differences.
5. Share any training plans, documents, journals, websites, and other self-directed training documentation, outside of your standard company training, that you have used throughout your professional veterinary sales career. Provide comments to other members of the group regarding their training materials.

APPENDIX I: MEMBER-CHECK REQUEST E-MAIL

Dear Study Participant,

Thank you for meeting with me for the interview and for your insights and perceptions on self-directed learning. Your time and participation is valuable to me, and I appreciate your insights.

Attached to this correspondence is a transcript of your interview. As part of the validation of data process, I ask that you please review the contents of the interview to ensure that your comments and perspectives are accurately captured in the study. If, for any reason, you feel that something was omitted or disregarded in the course of the interview please feel free to add to the interview. This can be done in an e-mail to me as an attachment or you can print and edit the contents of the transcript and send via U.S. mail. We can also discuss via telephone or videoconference and record as an addition to the transcript.

Please only add clarifying or elaborative comments to the transcript or change and address portions of the transcript that you feel are inaccurate. Do not be concerned with grammar or other spoken slang in the course of your review.

After reviewing the transcript, please send back to me by e-mail at ascicchitano@liberty.edu or U.S. mail at Agostino S. Scicchitano, 29 Ada Drive, Durham, ME 04222.

Thank you once again for your participation and candidness during the interview. Your input and insight are greatly appreciated and will be an asset to this study. I look forward to your participation in the online discussion group. If you have any further questions, please contact me and I would be happy to discuss with you.

Respectfully,

Agostino S. Scicchitano
Doctoral Candidate
Liberty University, School of Education

APPENDIX J: FIGURE 1 COPYRIGHT PERMISSION

5/31/2018 Rightslink® by Copyright Clearance Center



**Copyright
Clearance
Center**

RightsLink®

[Home](#)
[Account Info](#)
[Help](#)




**AMERICAN
PSYCHOLOGICAL
ASSOCIATION**

Title: Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being.

Author: Ryan, Richard M.; Deci, Edward L.

Publication: American Psychologist

Publisher: American Psychological Association

Date: Jan 1, 2000

Copyright © 2000, American Psychological Association

Logged in as:
Agostino Scicchitano

[LOGOUT](#)

Grant Reuse

APA hereby grants permission at no charge for the following material to be reused according to your request, subject to a required credit line. Author permission is not required in this instance.

- Single text excerpts of less than 400 words (or a series of text excerpts that total less than 800 words) from APA books and journals.
- 1-3 Chart/Graph/Tables or Figures from 1 article or chapter.
- Note that scales, measures, instruments, questionnaires, photographs, or creative images are NOT included in this gratis reuse.
- Also, the abstract of a journal article may not be placed in a database for subsequent redistribution without contacting APA for permission.

[BACK](#)
[CLOSE WINDOW](#)

Copyright © 2018 [Copyright Clearance Center, Inc.](#) All Rights Reserved. [Privacy statement](#). [Terms and Conditions](#).
Comments? We would like to hear from you. E-mail us at customercare@copyright.com

APPENDIX K: FIGURE 2 AND FIGURE 3 COPYRIGHT PERMISSION

[External] FW: Scicchitano Doctoral Dissertation - permission to use figures from book (Updated Oct. 8th, 2019)

 You replied on Thu 10/10/2019 9:03 AM



Academic Books Permissions <mpkbookspermissions@tandf.co.uk>

Wed 10/9/2019 4:06 AM
Scicchitano, Agostino



Scicchitano - T&F-Books-Per...
575 KB



Updated Scicchitano - T&F-B...
576 KB

2 attachments (1 MB) Download all Save all to OneDrive - Liberty University

[EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content.]

Dear Agostino

9781856178112 | Adult Learner, 7e | Edn. 7 | Paperback | 2 x figures (4.1 & 7.1)

Thank you for your permission request.

Further to your email of 8 October 2019, permission is granted for use of the above material in your forthcoming doctoral dissertation, subject to the following conditions:

1. The material to be quoted/produced was published without credit to another source. If another source is acknowledged, please apply directly to that source for permission clearance.
2. Permission is for non-exclusive, English language rights, and covers **use related to your doctoral dissertation**. This includes permission to post the published doctoral dissertation to ProQuest (www.ProQuest.com) and make it accessible with other published dissertations. Also permission to use these two figures within the body of the published dissertation, including publishing it electronically in PDF format.
3. Full acknowledgement must be given to the original source, with full details of figure/page numbers, title, author(s), publisher and year of publication.

Kind regards

Annette Day
UK Books Permissions
www.tandf.co.uk

Information Classification: General