

TRUSTED VOICES IN TREATMENT: EXPLORING PROFESSIONAL
GUIDANCE AND EDUCATIONAL NEEDS IN EQUINE LAMINITIS CASES

by

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DISSERTATION

Presented to the Swiss School of Business and Management Geneva

In Partial Fulfillment

Of the Requirements

For the Degree

DOCTOR OF BUSINESS ADMINISTRATION

SWISS SCHOOL OF BUSINESS AND MANAGEMENT GENEVA

MAY, 2026

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Dedication

This study is dedicated, first and always, to Ike, my first half-Arabian, whose laminitis case prompted my interest in equine professional communication. It was through caring for him that I first understood the weight of professional guidance, the power of trust between horse and owner and between owner and professional.

His courage during chronic pain, and his trust in the people who cared for him, taught me a great deal about communication and professional responsibility. This study is for him and for the owners and horses navigating laminitis without a clear path forward.

To Dr. Susie Crawford, my veterinarian, whose clinical precision, genuine compassion, and willingness to slow down and explain every step of Ike's care at every stage of his treatment showed me, in real time, what professional communication at its very best looks and feels like.

To Chad Evans, my farrier, whose skilled hands and patient, consistent guidance throughout the long months of therapeutic rehabilitation demonstrated the quiet, essential, and underappreciated power of the professional who simply shows up with a depth of practical knowledge and care that proved invaluable.

To Chris Culbreth, my trainer, who helped me understand what it means to support horse owners through the hardest decisions with honesty, warmth, and without judgement. You modeled the kind of steady, informed, human-centered presence that this research identified as one of the most valuable things any equine professional can offer.

Thank you for being the kind of professionals every horse owner deserves.

And to every veterinarian, farrier, professional trainer, and horse owner who took time out of a demanding, often exhausting professional and personal life to complete this survey and share their experiences, frustrations, and insights honestly and generously: the analysis presented here would not have been possible without your participation.

Acknowledgements

The completion of a doctoral dissertation is never a solitary achievement, and this one is no exception. Many individuals and institutions contributed to its development, and I am deeply grateful to each of them.

I wish to express my deepest and most sincere thanks to Dr. Jose Ramon Bronet, my dissertation chair and Professor of Doctoral Studies at the Swiss School of Business and Management Geneva, for his intellectual rigor, exacting standards, and his unwavering insistence that doctoral work must be earned rather than simply produced. I am grateful for his time, his feedback, and his commitment to developing doctoral researchers who understand what their data show and why those findings are defensible.

My academic foundation was built at two exceptional institutions. California Polytechnic University, Pomona, where I earned my Bachelor of Science in Business Marketing Management, provided the analytical and professional grounding on which all subsequent study has been built. Northern Arizona University, where I completed my Master of Business Administration, deepened my understanding of research, strategy, and applied problem-solving in ways that proved essential throughout this doctoral journey. I am grateful to the faculty and communities of both institutions.

To my family and friends who sustained me through the long stretches of this program with patience, encouragement, and the kind of unconditional support that research cannot measure but cannot exist without. Thank you. Your contributions were deeply appreciated.

And finally, to the horses. To Ike, first and always. To every horse whose welfare is made better when the humans around them communicate effectively, trust one another, and put the animal's needs above their own uncertainty. This dissertation is ultimately about making things better for them, and I hope it does.

ABSTRACT

TRUSTED VOICES IN TREATMENT: EXPLORING PROFESSIONAL GUIDANCE AND EDUCATIONAL NEEDS IN EQUINE LAMINITIS CASES

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Equine laminitis is one of the most serious, painful, and consequential health conditions affecting horses worldwide, accounting for approximately one-quarter of equine euthanasia decisions. Despite advances in laminitis pathology and treatment, outcomes depend on owner compliance with sustained daily management. This compliance is fundamentally shaped by the guidance provided by veterinarians, farriers, and professional trainers.

This study investigated how equine professionals perceived and enacted their role in guiding horse owners' decisions about laminitis treatment and prevention, and factors influencing their communication, education, and collaborative practices across roles.

Drawing on Source Credibility Theory and Diffusion of Innovations Theory, a mixed-methods, cross-sectional survey was administered to equine professionals in the U.S. between November 2025 and March 2026. 266 valid responses were collected from veterinarians ($n = 90$), farriers ($n = 68$), and professional trainers ($n = 108$), yielding a 6.01 percent margin of error at 95 percent confidence.

The survey consisted of 24 Likert-scale items across five constructs: Trust and Communication, Owner Knowledge and Education, Decision-Making Support, Innovation Adoption, and Professional Collaboration. An open-ended question generated 134 substantive responses, analyzed thematically with saturation at response 16.

ANOVA with post-hoc comparisons, chi-square, Kendall's tau and Spearman correlation, and multiple regression revealed significant role-based differences. Veterinarians scored higher than farriers on Trust and Communication and Decision-Making Support. The overall regression model explained 57.7 percent of variance in Decision-Making Support ($R^2 = .577$). Role-specific models differed: Innovation Adoption dominated for farriers ($\beta = 0.790$, $p < .001$), Trust and Communication for veterinarians ($\beta = 0.707$, $p < .001$), and all four predictors were significant for trainers.

Six themes emerged: Owner Education and Knowledge Gaps; Communication Clarity and Honesty; Interprofessional Collaboration; End-of-Life Decision Support; Treatment Innovation and Adaptation; and Owner Adherence and Consistency Challenges. These themes reinforced the quantitative patterns.

All five hypotheses were supported. Findings revealed both consistent cross-role patterns and meaningful role-specific differences. The results supported targeted communication training, interdisciplinary care coordination, and improved owner-education resources. Applying Source Credibility Theory and Diffusion of Innovations Theory in an equine-specific context, this study advances understanding of how communication shapes professional decision-making support in laminitis care.

Keywords: equine laminitis · veterinary communication · source credibility theory · diffusion of innovations · horse owner decision-making · professional collaboration · mixed methods · survey research · thematic analysis · farrier communication

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CHAPTER I: INTRODUCTION

1.1 Introduction

Equine laminitis is widely recognized as one of the most serious, debilitating, and economically consequential health conditions affecting horses across the world. Characterized by inflammation and structural disruption of the sensitive laminae, laminitis affects the specialized tissue that suspends the coffin bone, or distal phalanx, within the hoof capsule. This disruption produces pain that ranges from acute and intense to chronic and relentless, and in its most severe forms leads to permanent structural deformity and the inability to bear weight (Belknap and Geor, 2017; Pollard et al., 2020). The condition is not confined to a single cause or presentation: it may arise through endocrine dysfunction, carbohydrate overload, systemic inflammation, or mechanical overloading of a supporting limb. Its management therefore requires a sustained, multi-component response that unfolds over weeks or months under circumstances that are rarely straightforward (De Laat and Sillence, 2020). When treatment is delayed or inadequately applied, the consequences are severe. Pollard et al. (2020) reported that laminitis accounts for approximately one-quarter of all equine euthanasia decisions in affected populations, a statistic that confirms the condition as both a clinical and welfare crisis in modern horse management.

What distinguishes laminitis management from many other equine health challenges is the degree to which treatment success depends not on veterinary intervention alone but on the daily decisions and sustained efforts of the horse owner. The standard of care for laminitis typically requires strict dietary management, enforced rest or controlled exercise, regular therapeutic farriery, and ongoing veterinary oversight. All of these must be implemented consistently by the owner in a home or barn setting,

often without direct professional supervision and frequently under conditions of significant emotional and financial pressure (De Laat and Sillence, 2020; Morrison, 2010). The horse owner, in this context, is not a passive recipient of treatment but an active co-manager whose knowledge, motivation, and willingness to follow professional advice determine whether clinical recommendations translate into practical outcomes. This reality places professional communication and the quality, clarity, and credibility of the guidance that professionals provide, at the center of what drives or undermines treatment success (Coe, Adams and Bonnett, 2008; Janke et al., 2021).

In the equine sector, horse owners interact with three primary professional groups whose guidance shapes their understanding of laminitis and their response to it. Veterinarians provide clinical diagnosis, medical intervention, and ongoing oversight of the treatment plan. Farriers deliver essential hoof care on a recurring basis, observe the progression or deterioration of the horse's hoof structures across multiple visits, and offer practical therapeutic expertise that is central to laminitis rehabilitation (Lynden, Hollands and Ogden, 2020; Werner, 2012). Professional trainers maintain sustained daily contact with horses and owners in management, exercise, and training contexts and are frequently consulted about routine care decisions in ways that extend well beyond their formal professional mandate (Smith et al., 2024). Together, these three groups make up the "trusted voices in treatment" examined in the present study, the professionals to whom horse owners turn when facing a complex health condition in equine management.

Despite the importance of this professional network, a significant gap exists in the academic literature. Existing research on veterinary-client communication has established clear findings about the relationship between communication quality and client compliance in companion-animal practice (Coe, Adams and Bonnett, 2008; Kanji et al., 2012; Pun, 2020). However, little is known about how equine professionals, particularly

those beyond the veterinary role, perceive their own effectiveness as communicators, educators, and decision-support providers in the specific context of laminitis care. This professional viewpoint, in contrast to the owner-focused emphasis of much existing research, remains largely underexplored in equine health communication.

Despite the recognized importance of communication in equine care, the existing evidence base on this question is spread across separate professional groups. Studies have looked at horse owners' information-seeking and trust in equine veterinarians (Pickering and Hockenhull, 2019), owners' expectations of equine veterinary services (Elte et al., 2024), and end-of-life decision-making within equine veterinary and charity teams (Cameron et al., 2025). However, no study has examined how the three main advisory professions in laminitis care, veterinarians, farriers, and professional trainers, together rate their own communication effectiveness in a single, comparative study. The present study addresses this narrower question.

The present study addresses this less-examined area by placing veterinarians, farriers, and professional trainers at the center of the analysis and examining how they evaluate their own communication practices and effectiveness.

1.2 Research Problem

The central problem that motivated this research was the persistent inconsistency of owner decision-making in equine laminitis cases, a pattern that has significant consequences for equine welfare and remains insufficiently explained in the literature. The core problem is that inconsistent and uncoordinated communication among equine professionals contributes to variability in owner decision-making, ultimately affecting laminitis treatment outcomes and equine welfare.

This inconsistency is well-documented in the literature, consequential for horse welfare, and widely recognized by professionals who encounter it daily. Studies of horse

owner behavior consistently reveal that owners vary widely in their capacity to recognize early warning signs, respond promptly to professional advice, maintain compliance with demanding care protocols, and make timely and welfare-centered decisions when the prognosis is poor (Pickering and Hockenhull, 2019; Cameron et al., 2025). This inconsistency is not primarily a function of owners' indifference to their horses' welfare; most owners are deeply invested in their animals' wellbeing. It reflects instead a complex interaction of knowledge gaps, competing information sources, financial constraints, emotional pressures, and, critically, the quality and consistency of the professional guidance they receive (Acton, McLean and MacKay, 2024; Lesté-Lasserre, 2025). The problem lies in inconsistent, uncoordinated, or ineffective communication across equine professionals, which contributes to variability in owner decision-making and ultimately influences treatment outcomes and welfare trajectories for laminitic horses.

Existing research on veterinary-client communication has demonstrated convincingly that the manner in which professionals communicate with clients is a primary determinant of client understanding, trust, and compliance (Coe, Adams and Bonnett, 2008; Rutherford and England, 2024). However, the overwhelming majority of this research has been conducted in companion-animal settings (dogs and cats in formal clinic environments) where the dynamics of professional-client interaction differ substantially from those encountered in equine practice. As Hockenhull and Antillón, (2026) and Pun (2020) document, companion-animal consultations typically occur in structured clinical settings with a single professional, involve relatively short-term treatment plans, and engage a narrower range of professional influencers than those relevant in equine care.

The equine sector, by contrast, is characterized by decentralized care environments such as barns, training facilities, and competition grounds. In these settings,

multiple professionals play overlapping and sometimes conflicting advisory roles, and treatment plans must be implemented by owners over extended periods without direct professional oversight (Best, 2015; Kanara and Werner, 2012). However, these findings have not been sufficiently examined within the structurally different and more complex communication environment of equine care.

This structural distinction has two important consequences for understanding the research problem. First, the principles of effective communication identified in companion-animal research cannot be assumed to apply in equine practice without empirical validation in that context. Second, the multi-professional nature of equine laminitis care represents a different communication environment from the one examined in most prior veterinary research. The structure of equine care, in which veterinarians, farriers, and professional trainers all give advice to the same owner (Kanara and Werner, 2012; Kinnison, May and Guile, 2014), differs from companion-animal practice, where most consultations involve a single professional in a clinic setting (Coe, Adams and Bonnett, 2008; Pun, 2020). When the three professional groups give conflicting or inconsistent advice, owner compliance is reduced and welfare outcomes are negatively affected (Lynden, Hollands and Ogden, 2020).

In addition to the dynamics of professional communication, the broader information environment introduces further complexity to owner decision-making. A further dimension of the research problem concerns the role of industry marketing in the information environment that both professionals and owners navigate. The equine health industry, including feed manufacturers, pharmaceutical companies, supplement suppliers, and therapeutic equipment producers, actively markets its products to both professionals and horse owners. This marketing scope creates a landscape in which commercial messages intersect with clinical guidance, which can either reinforce or undermine

evidence-based care decisions (Gilberg, Bergh, and Sternberg-Lewerin, 2021; Gemmill et al., 2014.).

Kipperman, Kass and Rishniw (2017) have documented the influence of external commercial pressures on prescribing behavior in veterinary medicine, raising important questions about the degree to which professional endorsement of equine health products reflects genuine clinical judgment or commercially influenced preference. These questions remain largely unexamined in the equine-specific literature, representing a gap that this research addressed as part of its examination of the educational and informational environment in which professionals advise owners.

At the heart of this research problem lies the professional perspective, an aspect of equine health communication that remains underexamined in the existing literature. While prior research has examined how owners perceive their veterinarians (Rutherford and England, 2024), how they seek and evaluate health information (Pickering and Hockenhull, 2019), and how they make decisions under conditions of uncertainty (Cameron et al., 2025), far less is known about how veterinarians, farriers, and professional trainers evaluate their own communication practices. This evaluation would include how they assess their effectiveness, the adequacy of available educational resources, their credibility in the eyes of owners, and their ability to navigate conflicting professional advice. Without this professional perspective, the field lacks the complete picture necessary to design effective interventions, whether professional training, owner-education resources, or industry communication practices, that can meaningfully improve laminitis outcomes.

This study makes an original contribution by systematically examining equine laminitis communication through a multi-professional lens, placing veterinarians, farriers, and professional trainers within a unified analytical framework. In doing so, it shifts the

focus from isolated professional influence to the dynamics of coordinated or conflicting guidance within decentralized care environments.

1.3 Purpose of Research

This research investigated how equine professionals (veterinarians, farriers, and professional trainers) perceived their role in guiding horse owners' decisions about laminitis treatment and prevention. The study examined professionals' self-reported communication strategies, perceived credibility, educational practices, innovation facilitation behaviors, and collaborative approaches as factors theoretically linked to owner compliance and equine welfare outcomes. Owner compliance and welfare outcomes themselves were not directly measured in this study.

The study drew on two complementary theoretical frameworks, Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983), to examine the mechanisms through which professional influence is exercised and how the quality of that influence shapes owner behavior.

Beyond applying these frameworks, this study extended their use into a multi-professional, decentralized care context not previously examined in the literature. Specifically, it advances Source Credibility Theory by moving beyond single-source communication models to explore how credibility is constructed, reinforced, or undermined across multiple professionals interacting with the same decision-maker. This study also extended Diffusion of Innovations Theory by examining how innovation adoption occurs in an environment where authority is distributed among veterinarians, farriers, and professional trainers rather than centralized within a single professional role. In doing so, the study contributed a more contextually grounded understanding of how professional influence operates in complex, real-world equine care systems.

This overarching purpose is pursued through five specific research objectives, each of which translates one dimension of the broader problem into a focused, actionable line of empirical inquiry. These objectives ensure that the research addresses the full scope of the professional communication challenge in laminitis management, from the interpersonal dynamics of trust and credibility to the systemic challenges of interdisciplinary coordination and industry influence.

The first objective is to examine the communication strategies and trust-building practices employed by equine professionals when advising horse owners during laminitis cases. This objective includes assessing how professionals adjust their language, tone, and approach to enhance owner understanding and confidence, and how they perceive the degree to which owners trust their guidance in critical care situations (Rutherford and England, 2024; Kanji et al., 2012).

The second objective is to evaluate professional perspectives on the adequacy of available owner education and informational resources. This evaluation involves determining whether existing materials, produced by industry, professional associations, or clinics, are considered effective by equine professionals and identifying the gaps that hinder owner comprehension and compliance with laminitis management protocols (Marcella, 2004; Herbst et al., 2024; Golding et al., 2023).

The third objective is to explore professional views on decision-making support in high-stakes scenarios, particularly when euthanasia is being considered as a welfare option. This objective examines how veterinarians, farriers, and professional trainers perceive their role in helping owners navigate the emotional, ethical, and financial pressures that converge in these complex professional situations (Cameron et al., 2025; Burrell et al., 2024; Aleman et al., 2015).

The fourth objective is to assess the strategies professionals employ to encourage the adoption of preventive practices and innovative treatment tools and to identify the barriers they encounter when owners are resistant to change or slow to adopt new approaches. This objective draws directly on the Diffusion of Innovations framework, examining professionals' self-assessed effectiveness as opinion leaders in the adoption of innovations relevant to laminitis prevention and management (Rogers, 1983; Elte et al., 2021; Bamford, 2019).

The fifth objective is to identify opportunities for improved interdisciplinary collaboration among equine professionals, examining how inconsistency or conflict in the advice provided by different professional groups undermines owner confidence and compliance and how more coordinated, unified approaches might enhance the effectiveness of professional guidance in laminitis care (Abood, 2007; Lynden, Hollands and Ogden, 2020; Kinnison, May and Guile, 2014).

This study used a mixed-methods, cross-sectional survey design administered to equine professionals across the United States. The survey instrument comprised 24 quantitative Likert-scale items assessing five constructs (Trust and Communication, Owner Knowledge and Education, Decision-Making Support, Innovation Adoption, and Professional Collaboration), in addition to one open-ended qualitative question that invited professionals to share their experiences in their own words. This design followed the methodological framework established by Bronet (2024) for doctoral survey-based research. This approach provided both the statistical scope to identify patterns across professional roles and the qualitative depth to capture the professional narratives and experiences that gave those patterns meaning.

1.4 Significance of the Study

This research has significance on three levels (academic, applied, and equine welfare), each addressed by the study's findings.

1.4.1 Academic Significance

Academically, this study contributed to the veterinary communication literature. The existing body of scholarship on professional-client communication in veterinary medicine is dominated by companion-animal research and by studies that examine the owner or client perspective, leaving the professional perspective, and the equine professional context in particular, substantially underexplored (Abood, 2007; Pun, 2020). By directly surveying veterinarians, farriers, and professional trainers about their communication practices, perceived credibility, and collaborative behaviors, this study provided a professional perspective dataset with limited precedent in the equine laminitis literature.

Beyond filling a specific empirical gap, this research made a theoretical contribution by extending the application of Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983) into an equine-specific professional context. While both frameworks have been widely applied in human healthcare, agricultural extension, and technology adoption research, their systematic application to equine professional communication has remained largely theoretical and illustrative rather than empirically grounded (Flanagin and Metzger, 2007; Pickering and Hockenull, 2019). The use of a quantitative survey instrument explicitly designed around these frameworks, combined with qualitative thematic analysis, allowed their theoretical propositions to be empirically examined and further developed within an equine specific professional context.

The study also contributed to the growing literature on interdisciplinary professional communication in decentralized care environments (Kinnison, May and Guile, 2014), demonstrating how communication effectiveness is shaped not only by the individual professional but also by the relational structure of the care team in which they operate. In doing so, the study advanced existing communication and innovation frameworks by demonstrating how professional influence operates within decentralized, multi-professional care environments.

1.4.2 Applied Significance

This research generated findings directly applicable to equine professional training, the design of owner-education resources, and industry communication practices. By identifying the communication and collaborative factors that most strongly predict effective owner decision-making support across veterinarians, farriers, and professional trainers, the study provided a data-driven foundation for role-differentiated professional development interventions. These interventions have the potential to reduce the communication gaps identified in prior research as contributors to suboptimal laminitis outcomes (Lynden, Hollands and Ogden, 2020; Bard et al., 2017).

For the equine health industry, findings provide empirical guidance for developing marketing and educational materials that align with professional trust rather than competing with it, a distinction that White et al. (2024) identify as fundamental to ethical practice in veterinary product promotion. For equine veterinary and farrier professional associations, the study highlighted communication training gaps and interdisciplinary coordination needs that continuing professional development programs could directly address.

These contributions reflect the applied research principles that underpin the Doctor of Business Administration program, connecting academic inquiry to real-world

professional challenges in ways that generate actionable knowledge (Parnell, 2024; Farrugia et al., 2010).

1.4.3 Welfare Significance

At the most fundamental level, this research is important because the quality of professional communication in equine health care has measurable consequences for equine welfare. Instances of delayed owner action, inconsistent professional advice, or inadequate education that allow a laminitic horse to suffer unnecessarily can, in part, be understood as communication failures.

This study is motivated by the premise that improving professional communication can enhance owner decision-making and, in turn, support more consistent treatment compliance and more informed end-of-life decisions, ultimately improving welfare outcomes for horses. This premise is supported by epidemiological evidence indicating that laminitis remains a leading cause of equine euthanasia despite decades of scientific progress (Pollard et al., 2020; Moore, 2008), as well as by consistent findings across multiple studies that professional communication quality is a primary factor influencing whether owners act on professional advice (Coe, Adams and Bonnett, 2008; Rutherford and England, 2024).

The study is directly aligned with the United Nations Sustainable Development Goal 3 (Good Health and Well-being), which recognizes the interconnectedness of human, animal, and environmental health and the importance of investing in communication, education, and professional capacity to improve health outcomes across all dimensions of the One Health framework (United Nations, 2022).

1.5 Research Purpose and Questions

This study was guided by five research questions, each formulated in accordance with the methodological standard for quantitatively framed, statistically testable research

questions in doctoral survey-based research as described by Bronet (2024). As Bronet (2024) specifies, each research question must be directly answerable through the statistical methods employed in the study and must be accompanied by a directional hypothesis that specifies the expected outcome. This one-to-one mapping between research questions, hypotheses, and analytical methods ensures that the study's design is coherent, transparent, and fully aligned with its stated purposes. The five research questions, their corresponding hypotheses, and the analytical methods by which each is addressed are presented below and summarized in Table 1.1.

The first research question asks: How do equine professionals' self-reported scores on Trust and Communication, Owner Knowledge and Education, Decision-Making Support, Innovation Adoption, and Professional Collaboration differ across professional role groups (veterinarians, farriers, and professional trainers) in the context of laminitis management? This question was addressed through one-way analysis of variance (ANOVA) with Tukey HSD post-hoc comparisons, which enables the identification of statistically significant mean differences between role groups on each of the five survey constructs. The corresponding hypothesis (H1) proposes that veterinarians report significantly higher scores on Trust and Communication and Decision-Making Support than farriers and professional trainers, reflecting the differential communication training, clinical authority, and professional context of the veterinary role as documented by Rutherford and England (2024) and Pun (2020).

The second research question asks: To what extent is professional role associated with high versus low scores on communication-related constructs among equine professionals involved in laminitis care? This question was addressed through chi-square tests of independence, classifying respondents as scoring High (≥ 3.5) or Low (< 3.5) on each section composite mean, a threshold that represents the midpoint between the

Neutral and Agree response options on the five-point Likert scale and is consistent with the analytical framework described by Bronet (2024) and the Likert-scale measurement standards established by Norman (2010). The corresponding hypothesis (H2) proposes that professional role is significantly associated with the proportion scoring High on Trust and Communication, with farriers more likely than veterinarians and trainers to fall in the Low category, a prediction grounded in the documented absence of formal communication training in farriery education and the communication challenges identified by Lynden (2020) and Best (2013).

The third research question asks: What is the relationship between Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration among equine professionals in laminitis management? This question was addressed through Kendall's tau and Spearman rank-order correlation, examining all ten possible pairs of the five section constructs within each of the three professional role groups. Kendall's tau is used as the primary method because it is technically appropriate for Likert-scale data with tied ranks, as Bronet (2024) confirms.

Spearman's rho is computed as a complementary measure. The corresponding hypothesis (H3) predicts that significant positive correlations exist between Trust and Communication, Innovation Adoption, and Decision-Making Support across all three role groups, with the Section 3–Section 4 pair yielding the strongest and most consistent association, consistent with both the Source Credibility Theory premise that trust underpins compliance and the Diffusion of Innovations prediction that innovation-oriented professionals function more effectively as change agents across all communication contexts (Hovland, Janis and Kelley, 1953; Rogers, 1983).

The fourth research question asks: To what extent do Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration

predict equine professionals' capacity for Decision-Making Support in laminitis care? This question was addressed through multiple regression analysis with Decision-Making Support designated as the dependent variable and the four remaining constructs as predictors. Separate models are estimated for the full sample and for each of the three professional role groups, enabling examination of whether the predictive structure of the model differs by role, a theoretically important question given the structural differences between veterinary, farriery, and training roles in laminitis management. The corresponding hypothesis (H4) predicts that Trust and Communication and Innovation Adoption are the primary significant predictors overall but that the relative weighting of predictors differs meaningfully by professional role, consistent with the premise of both theoretical frameworks that communication effectiveness is context-dependent (Hovland, Janis and Kelley, 1953; Rogers, 1983).

The fifth research question asks: What themes emerge from equine professionals' open-ended descriptions of their experiences communicating with and supporting horse owners in laminitis cases, and at what point does thematic saturation occur across these narratives? This question was addressed through thematic analysis of the open-ended survey responses, following the six-phase framework of Braun and Clarke (2006), with saturation determined using the criterion established by Guest, Bunce and Johnson (2006) and Fusch and Ness (2015), the point at which additional responses yield no new thematic categories. The corresponding hypothesis (H5) predicts that professional narratives converge around themes of interprofessional collaboration, owner education gaps, communication clarity and honesty, and end-of-life decision support with saturation reached before the full sample of open-ended responses is exhausted, a prediction grounded in the demonstrated rapid saturation typical of professionally homogeneous survey samples documented by Guest, Bunce and Johnson (2006).

A structured overview of the anticipated themes and their alignment with the research question and hypothesis is presented in Table 1.1, providing a framework for interpreting qualitative findings and assessing thematic saturation.

Table 1.1
Research Questions, Hypotheses, Statistical Methods, and Constructs Addressed

RQ / H	Research Question / Hypothesis	Statistical Method	Construct(s) Addressed
RQ1 / H1	How do equine professionals' self-reported scores on Trust and Communication, Owner Knowledge and Education, Decision-Making Support, Innovation Adoption, and Professional Collaboration differ across professional role groups in the context of laminitis management? H1: Veterinarians report significantly higher scores on Trust and Communication and Decision-Making Support than farriers and professional trainers.	One-way ANOVA with Tukey HSD post-hoc comparisons	All five constructs (S1–S5)
RQ2 / H2	To what extent is professional role associated with high versus low scores on communication-related constructs among equine professionals involved in laminitis care? H2: Professional role is significantly associated with the proportion scoring high (≥ 3.5) on Trust and Communication, with farriers more likely than veterinarians and trainers to score in the Low (< 3.5) category.	Chi-square tests of independence (threshold ≥ 3.5 vs. < 3.5)	All five constructs (S1–S5)
RQ3 / H3	What is the relationship between Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration among equine professionals in laminitis management? H3: There are significant positive correlations between Trust and Communication, Innovation Adoption, and Decision-Making Support across all three role groups, with the S3–S4 pair	Kendall's tau and Spearman rank-order correlation	All section pairs (S1–S5)

RQ / H	Research Question / Hypothesis	Statistical Method	Construct(s) Addressed
	yielding the strongest and most consistent association.		
RQ4 / H4	To what extent do Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration predict equine professionals' capacity for Decision-Making Support in laminitis care? H4: Trust and Communication and Innovation Adoption are significant positive predictors of Decision-Making Support, with the predictive structure differing meaningfully by professional role.	Multiple regression analysis	S1, S2, S4, S5 as predictors; S3 as outcome
RQ5 / H5	What themes emerge from equine professionals' open-ended descriptions of their experiences communicating with and supporting horse owners in laminitis cases, and at what point does thematic saturation occur? H5: Responses converge around themes of interprofessional collaboration, owner education, communication quality, and end-of-life support, with saturation reached before the full sample of responses is exhausted.	Thematic analysis with saturation tracking	Open-ended qualitative responses

Note. S1–S5 refer to the five survey sections. RQ = Research Question; H = Hypothesis; ANOVA = Analysis of Variance. Hypotheses are directional and map one-to-one to research questions, consistent with Bronet (2024).

The research questions follow the sequential logic recommended by Bronet (2024) for survey-based doctoral research: the study first characterizes the landscape descriptively, then examines group differences comparatively, then explores relational patterns correlationally, then tests predictive relationships through regression, and finally deepens and contextualizes the quantitative findings through qualitative thematic analysis. This sequential structure ensures that each stage builds on the last, producing an integrated, multi-layered picture of professional communication in equine laminitis care that no single method could achieve alone.

The theoretical grounding of the research questions in Source Credibility Theory and Diffusion of Innovations Theory ensures that the constructs being measured are not merely descriptive but are theoretically meaningful and connected to established explanatory frameworks that have been validated across multiple professional and health communication contexts. Source Credibility Theory (Hovland, Janis and Kelley, 1953) provides the analytical lens for understanding how professionals' perceived expertise and trustworthiness shape their capacity to influence owner behavior, while Diffusion of Innovations Theory (Rogers, 1983) explains the mechanisms through which new practices, products, and behaviors spread through the equine professional community and are adopted or resisted by horse owners. Both frameworks are introduced here and developed in full in Chapter II, where their specific application to the constructs and findings of this study is elaborated.

Chapter II presents the comprehensive review of literature that provided the scholarly context for this research, examining the state of knowledge on equine laminitis management, veterinary-client communication and trust, owner educational needs, high-stakes decision-making, treatment compliance and innovation adoption, marketing and professional influence, and the theoretical frameworks that guided the study's design and interpretation. The methodology is described in Chapter III, the results are reported in Chapter IV, the findings are discussed in Chapter V, and Chapter VI presents the summary, implications, and recommendations that constituted the applied contribution of this research.

CHAPTER II: REVIEW OF LITERATURE

2.1 Introduction

The literature reviewed in this chapter provided the scholarly foundation for the empirical investigation that followed. It examines the existing state of knowledge across the domains most directly relevant to the research questions, including the medical nature and management complexity of equine laminitis; the dynamics of veterinary-client communication and professional trust; the educational and informational needs of horse owners; professional communication in high-stakes decision-making scenarios; the challenges of treatment compliance, preventive care, and innovation adoption; the role of marketing and commercial influence in the equine health sector; and the two theoretical frameworks, Diffusion of Innovations Theory and Source Credibility Theory, that guide the study's design and interpretation. The review also addresses the methodological literature relevant to survey-based doctoral research and concludes by identifying the specific gaps in the existing literature that this study addressed.

The review is organized thematically rather than chronologically, since the research questions benefit more from cross-field synthesis than from tracing any single line of inquiry. Where the equine-specific literature is limited, relevant evidence from companion-animal veterinary research and other professional communication contexts is included, with appropriate acknowledgement of the limitations of cross-domain extrapolation. Each section concludes by identifying the specific gap or question that the section's literature leaves open, together building the case for this study.

The review draws on peer-reviewed journal articles, doctoral dissertations, professional association publications, and methodological texts published primarily between 2003 and 2025, with foundational theoretical works included regardless of date.

Together, these areas provide the context for understanding the communication challenges inherent in equine laminitis management.

2.2 Equine Laminitis: Medical Context, Prevalence, and Management Complexity

Equine laminitis is characterized by inflammation and structural disruption of the sensitive laminae. These structures form the specialized interdigitating tissue that suspends the coffin bone, or distal phalanx, within the hoof capsule and bears the full weight of the horse. When the lamellar tissue is compromised, the mechanical connection between the hoof wall and the coffin bone is weakened, allowing the bone to rotate or sink within the hoof capsule under the weight of the animal. This progression can produce permanent structural deformity, chronic pain, and, in the most severe cases, penetration of the sole by the tip of the rotated coffin bone (Belknap and Geor, 2017; Van Eps et al., 2017).

The condition is not defined by a single cause. Laminitis may be triggered by endocrine dysfunction associated with Equine Metabolic Syndrome (EMS) or Pituitary Pars Intermedia Dysfunction (PPID), carbohydrate overload from excessive pasture access, systemic inflammatory conditions such as those arising from retained placenta or severe colic, or mechanical overloading of a supporting limb when the horse bears excess weight on one leg due to injury in the opposite limb (De Laat and Sillence, 2020; Witherow, 2022). This range of causes means that prevention and management require a tailored, case-specific approach that accounts for the underlying condition, the severity of structural damage already sustained, and the individual horse's response to treatment.

Given that laminitis management depends heavily on sustained owner implementation of professional guidance, the quality of communication between equine professionals and horse owners becomes a key factor influencing outcomes (Coe, Adams and Bonnett, 2008; Lynden, Hollands and Ogden, 2020).

The epidemiological burden of laminitis is substantial and is widely acknowledged to be underestimated by existing surveillance data. Pollard et al. (2020) tracked over one thousand horses and ponies enrolled in a laminitis cohort study in Great Britain and found that laminitis was the single most common reason for euthanasia in the cohort, accounting for approximately 24 percent of all euthanasia decisions, a proportion that exceeded colic, musculoskeletal injury, and all other single conditions. Moore (2008) similarly identified laminitis as responsible for a disproportionate share of premature mortality and euthanasia in horses in both leisure and performance populations, noting that the true prevalence is likely higher than clinical records suggest because many mild or moderate cases are managed at home without formal veterinary consultation. Ireland et al. (2012) confirmed this pattern in their comparison of owner-reported health problems with veterinary assessments of geriatric horses in the United Kingdom, finding significant underreporting of laminitis and other chronic conditions, pointing to the importance of professional proactive communication and owner education in identifying cases before they become severe.

In the United States, leisure horses and ponies, breeds with a genetic predisposition to endocrinopathic laminitis, represent a large and growing proportion of the horse population, and the increasing prevalence of equine obesity in Western management contexts has elevated the epidemiological risk accordingly (Rendle et al., 2018; Furtado et al., 2021). The intersection of genetic susceptibility, obesogenic management practices, and limited owner recognition of body condition scoring creates a risk environment in which laminitis cases are both frequent and, in many instances, preventable, provided owners receive the education and professional support necessary to recognize risk factors and act on them before the acute episode occurs.

The management complexity of laminitis is a central feature of its challenge as a welfare and communication problem. Standard of care for an acute or chronic laminitis case typically requires the sustained implementation of multiple interdependent management changes: dietary restriction to reduce nonstructural carbohydrate intake, enforced rest or carefully prescribed exercise, therapeutic farriery to provide hoof support and relieve pressure on the compromised laminae, pharmaceutical management of pain and, where appropriate, hormonal dysregulation, and regular veterinary monitoring to assess progression or recovery (Morrison, 2010; Van Eps et al., 2017; Orsini et al., 2010).

Critically, the implementation of this care plan occurs primarily in the owner's home environment, the horse's stable or paddock, over extended periods that may span weeks, months, or, in chronic cases, the remainder of the horse's life. The veterinarian and farrier are present only intermittently, leaving the owner as the primary implementer of care between professional visits. This structural reality means that the horse's welfare depends not only on what professionals prescribe but on the quality of the education and communication they provide to equip the owner for the sustained management role they must perform.

Morrison (2010) provides a comprehensive review of chronic laminitis foot management that illustrates the technical demands placed on both professionals and owners, documenting the evolution of therapeutic farriery approaches and the communication challenges inherent in translating complex biomechanical knowledge into practical guidance for diverse owner populations. Van Eps et al. (2017) describe the specific management changes required when laminitis is diagnosed, emphasizing that timely professional intervention combined with effective owner education produces substantially better outcomes than either element alone. Taylor et al. (2014) provided empirical support for this principle through a clinical cohort study of fourteen obese,

laminitic horses managed under a standardized rehabilitation protocol, demonstrating that the consistent application of an integrated, professionally guided regimen produced favorable clinical outcomes even in cases compounded by obesity-related metabolic risk, an outcome consistent with the broader argument that sustained owner implementation of coordinated professional guidance is the operative variable in laminitis recovery.

The welfare dimensions of laminitis management extend beyond the physical to the psychological. Long et al. (2024) found in a focus group study with equine stakeholders in Austria that owners managing chronically ill horses, including those with laminitis, often develop normalized perceptions of their horse's reduced quality of life over time, accommodating progressive deterioration into an adjusted baseline that may not reflect the animal's actual welfare status. This finding reflects the importance of professional communication that provides owners with objective, consistent welfare assessments rather than relying solely on owner self-report.

Golding (2025), in a doctoral investigation of owner knowledge, perceptions, and behavior in endocrinopathic laminitis, similarly found that owner psychological factors, including emotional attachment to the horse, guilt about dietary restriction, and the desire to avoid contributing to the animal's distress, create significant barriers to the consistent implementation of evidence-based management protocols. These barriers are not resolved by information provision alone but require empathetic, ongoing professional support that addresses both the emotional and practical dimensions of owner decision-making. The medical and management literature presents laminitis as a condition in which scientific understanding of pathophysiology and treatment has advanced more rapidly than the communication and education frameworks supporting its translation into consistent owner action (Coker, 2021; Furtado et al., 2022), a gap this study sought to inform through its examination of professional communication perspectives.

2.3 Veterinary-Client Communication and Trust

The relationship between communication quality and clinical outcomes in veterinary medicine has been the subject of growing scholarly attention since the early 2000s. The foundational work of Coe, Adams and Bonnett (2008) established through focus group research that both veterinarians and pet owners identify clear, empathetic communication as the primary determinant of client satisfaction and treatment compliance in companion-animal practice. Their findings, that clients are more likely to follow professional recommendations when the veterinarian actively listens, explains diagnoses in accessible language, demonstrates genuine concern for the animal's welfare, and invites client questions, have been replicated and extended across multiple subsequent studies (Kanji et al., 2012; Janke et al., 2021; Pun, 2020).

Pun (2020) conducted a comprehensive integrated review of communication in veterinary clinical practice across multiple settings, confirming that communication quality is consistently associated with client satisfaction and adherence across companion-animal, food-animal, and equine contexts, while simultaneously noting that equine-specific communication research remains less developed than its companion-animal counterpart.

In the equine-specific context, Rutherford and England (2024) provide the most comprehensive recent evidence. Their survey of 415 horse owners found that equine veterinarians were rated highly on credibility, reliability, and empathy, frequently more positively than professionals in other fields including human medicine. Owners who perceived their veterinarian as a skilled communicator, one who listened attentively, explained clearly, and followed up proactively, were substantially more likely to maintain compliance with care plans and less likely to seek conflicting advice from informal sources.

Rutherford and England (2024) found that communication style was a stronger predictor of perceived veterinarian credibility than clinical outcomes alone, suggesting that the interpersonal dimensions of professional interaction carry independent weight in the owner's evaluation of professional authority. This finding has direct theoretical resonance with Source Credibility Theory (Hovland, Janis and Kelley, 1953), which identifies trustworthiness, the perception that the source has the audience's best interests at heart, as a dimension of credibility distinct from and not reducible to technical expertise. These findings reinforce that communication effectiveness extends beyond technical competence, positioning interpersonal interaction as a critical determinant of professional influence.

Bard et al. (2017) and Scantlebury (2014) demonstrated in the context of veterinary client relationships that consistent communication across multiple professional encounters, specifically the maintenance of a coherent, predictable message over time, is especially important in building the trust that sustains long-term owner compliance in chronic care situations. In laminitis management, where the care relationship may extend over months or years, this longitudinal dimension of trust-building is particularly significant.

Keller et al. (2021) found that horse owners who doubted the expertise or commitment of their farrier were significantly less likely to follow hoof care recommendations and that this non-compliance sometimes led farriers to soften their recommendations to avoid conflict, a pattern of professional self-censorship that potentially compromises welfare outcomes and illustrates the real-world consequences of insufficient professional trust.

The farrier-client communication relationship has received limited but growing scholarly attention. Lynden, Ogden and Hollands (2018) explored the construction of the

farrier's role in supporting horse owners to prevent laminitis, finding that farriers navigate a complex relational territory that encompasses technical expertise, client education, and emotional support, a multi-role function that is rarely explicitly addressed in professional training or continuing education.

Lynden, Hollands and Ogden (2020) subsequently applied microlevel interaction analysis to a farrier-client consultation, demonstrating that farriers who employed a shared decision-making approach, treating the owner as a partner, using the horse's behavior and condition as reference points for discussion, and explicitly inviting owner input, achieved significantly better owner engagement and compliance than those who adopted a directive expert-centered model.

Lynden (2020), in a doctoral study, documented the considerable variation in communication approaches across the farriery profession and the absence of formal communication training in most farriery apprenticeship and qualification pathways, concluding that many farriers develop effective client communication skills through experience alone, highlighting a structural gap in professional education with direct relevance to laminitis outcomes.

The communication dynamics of professional trainers in the equine context remain the least studied of the three professional groups despite their substantial influence on daily management decisions. Best (2013) highlight that equine care involves a broader network of professional influencers than is typical in companion-animal practice, but their analysis focuses primarily on veterinarians and farriers, leaving the trainer's communication role largely unexamined. Scantlebury et al. (2014) examined veterinary experiences of managing laminitis in practice and found that communication challenges were a major source of professional stress and dissatisfaction. These challenges included coordinating consistent advice across professional disciplines and

managing owner expectations. Together, these findings point to an interdisciplinary communication issue that extends well beyond the individual professional's skill set.

Nankervis et al. (2024) examined interdisciplinary working from the perspective of qualified saddle fitters and identified patterns of collaborative consultation and professional boundary navigation similar to those hypothesized in this study among equine trainers. These patterns included seeking input from veterinarians and farriers before making management recommendations to owners. This behavior is consistent with epistemic humility and responsible professional practice in a domain where clinical boundaries are fluid.

Kinnison, May and Guile (2014) examined interprofessional practice in veterinary teams, finding that structured interprofessional learning experiences improve communication competencies and collaborative capacity across disciplines. Their framework for understanding how professionals negotiate role boundaries, share information, and coordinate care provides a useful model for the equine professional context examined in this study. Root Kustritz, Molgaard and Tegzes (2013) found that the frequency of interactions between veterinarians and other equine professionals was a significant predictor of collaborative communication quality, with more frequent interprofessional contact associated with more consistent owner guidance. The implication for the current study is that Professional Collaboration, as a survey construct, captures a measurable communication behavior with demonstrated consequences for owner outcomes.

Competing informal sources of information, including peer networks, online forums, and social media communities, further complicate the professional communication landscape. Pickering and Hockenhull (2019) found that equine stakeholders differ significantly in their information-seeking behavior and

communication channel preferences, with many owners relying heavily on online peer advice despite its variable quality and frequent inconsistency with professional recommendations.

Flanagin and Metzger (2007) demonstrated that information consistent with prior beliefs is more likely to be accepted regardless of source credibility, a pattern of motivated reasoning that can undermine professional authority when online communities reinforce management practices that professionals seek to change.

These findings highlight that owner acceptance of professional guidance is not driven by credibility alone but is also shaped by preexisting beliefs reinforced through external information sources. As a result, effective communication must extend beyond information delivery to include an educational role, equipping owners with the knowledge, confidence, and critical evaluation skills needed to manage laminitis over time.

2.4 Owner Educational and Informational Needs

Horse owners managing laminitis face a complex educational challenge. Unlike acute conditions that resolve with a short clinical intervention, laminitis requires owners to develop and apply knowledge across multiple interdependent domains simultaneously: understanding the disease process well enough to recognize early warning signs; implementing complex daily care protocols involving diet, housing, exercise, and hoof care; monitoring the horse's response and identifying signs of deterioration; and navigating a landscape of often-conflicting information from professional advisers, peer networks, and online sources (Marcella, 2004; Swirsley, Spooner and Hoffman, 2017). This demand is further complicated by the fact that many owners encounter laminitis for the first time without any prior preparation, often in circumstances where the horse is already in pain and decisions must be made quickly under emotional pressure.

Research consistently documents the depth and extent of owner knowledge gaps. Golding et al. (2023) surveyed horse owners in Ireland and found significant deficits in knowledge about the clinical presentation, risk factors, and management of laminitis, with many owners describing themselves as heavily reliant on professional guidance in the absence of confident self-knowledge. Heleski, Mertig and Zanella (2004) identified broader equine welfare and health management knowledge gaps among horse owners that were particularly pronounced among newer or less experienced owners. Marcella (2004) observed that while veterinarians frequently provided technically detailed information to clients, this information was often presented in clinical language that left owners feeling informed about the diagnosis but poorly equipped for the practical daily management that followed. That gap between clinical accuracy and practical utility remains relevant today.

Coker (2021), in a qualitative doctoral investigation of the gap between equine expert knowledge and general horse owner practice, found that this gap persists not because of owner unwillingness to learn but due to the absence of accessible, consistently formatted, and professionally endorsed educational resources. This finding reflects an infrastructural limitation that educational campaigns and continuing professional development may address but have not yet resolved.

The gap between information and action is a recurring theme in the owner education literature and represents one of the most significant practical challenges in laminitis management. Furtado et al. (2022) applied the Capability-Opportunity-Motivation-Behavior (COM-B) model to the challenge of equine obesity management, a primary risk factor for endocrinopathic laminitis, and found that behavior change required simultaneous intervention across all three dimensions of the model. Information provision alone (addressing Capability) was insufficient without addressing the practical constraints on owner behavior (Opportunity) and the motivational and emotional factors

that shape management decisions (Motivation). Lightfoot (2020), evaluating the impact of an educational campaign on horse owner behavior and knowledge transfer, similarly found that awareness campaigns increased knowledge of risk factors and early signs without consistently translating into changed management routines, consistent with the broader health communication literature's recognition that knowledge is a necessary but not sufficient condition for behavior change (Furtado et al., 2021). Together, these findings suggest that effective owner education must be embedded in an ongoing professional relationship that provides motivational support and practical problem-solving alongside informational content.

Educational interventions in equine laminitis management have ranged from campaign-based awareness programs to practice-level client education tools. The Boehringer Ingelheim "Talk About Laminitis" initiative (2013) provided professionals with client-facing materials designed to improve owner awareness, linking industry resources to professional endorsement as a distribution mechanism. Herbst et al. (2024) conducted a needs assessment survey of the equine community and found that horse owners expressed a strong preference for short, practical, professionally endorsed educational resources over lengthy clinical documents, with digital delivery formats and visual aids rated as particularly valuable.

Wells et al. (2025), evaluating the RAiSE (Recognizing Affective States in Equine) educational tool, found that structured, professionally endorsed resources produced measurable improvements in owner recognition of equine behavioral indicators, confirming that professional endorsement is a critical component of educational effectiveness, with direct implications for the survey construct of Owner Knowledge and Education examined in this study.

Preventive weight management represents a specific educational target with direct relevance to laminitis risk reduction. Furtado et al. (2021) found that many UK horse owners lacked the basic observational skills to accurately assess their horses' body condition and were reluctant to implement dietary restrictions perceived as depriving the horse of preferred food. Ward et al. (2023) found that owner confidence and experience level did not reliably predict the use of structured weight management approaches for native ponies, a particularly high-risk population, suggesting that professional guidance and motivational support, rather than owner knowledge alone, drive preventive behavior. Ross et al. (2024) examined horse owner perspectives on weight management in Prince Edward Island, finding that emotional attachment and concerns about horse behavior during dietary restriction were significant barriers to consistent preventive practice.

Hogg et al. (2025) identified structural and attitudinal barriers among UK horse owners to promoting positive equine mental states, including reluctance to impose restrictions perceived as reducing the horse's quality of life. These findings reinforced the importance of professional communication that frames restrictive management practices as welfare-supportive rather than unnecessarily restrictive. Smith et al. (2025) found that pain-related issues in horses were frequently encountered by owners in everyday interactions but were not always recognized as warranting professional consultation, highlighting the role of professional communication in establishing clear thresholds for when owner observation should prompt veterinary or farriery contact.

The challenge of online misinformation adds a further dimension to the owner education problem. Owners increasingly seek health information through online forums and social media communities where peer advice, personal testimonials, and unverified claims circulate alongside evidence-based guidance from professional sources (Pickering and Hockenhull, 2019). Flanagin and Metzger (2007) demonstrated that information

consistent with prior beliefs is perceived as credible regardless of actual evidence quality, a pattern that can lead owners to adopt management approaches endorsed by online communities even when these conflict with professional recommendations. Loerakker (2023) found that horse owners who had experienced negative outcomes or communication failures with professionals were significantly more likely to turn to online communities as primary information sources, highlighting the connection between professional communication quality and owners' information-seeking behavior. The implication for professional practice is that building and maintaining credible, accessible communication is not merely a secondary consideration but an essential component in an information environment increasingly shaped by peer-to-peer networks.

While education supports day-to-day management, the need for effective communication becomes even more critical in high-stakes scenarios where owners must make complex and emotionally charged decisions.

2.5 Decision-Making in High-Stakes Equine Scenarios

Few decisions in equine ownership carry as much emotional, ethical, and financial weight as those required when laminitis becomes severe or chronic. The literature on decision-making in high-stakes equine scenarios describes a complex situation. Owners are often deeply invested in their animals' wellbeing but underprepared for the decisions they must make, while professionals must balance clinical realities with relational considerations. When communication is effective, it supports informed decision-making and positive welfare outcomes; when it is ineffective, it can increase distress and delay timely action that horses require (Cameron et al., 2025; Burrell et al., 2024; Hernandez et al., 2018).

Pollard et al. (2020) established laminitis as the single most common reason for equine euthanasia in their large cohort study, accounting for approximately one-quarter of

all euthanasia decisions, reflecting the direct relationship between the quality of laminitis communication and the frequency with which owners and professionals must navigate end-of-life decisions. Cameron et al. (2022) conducted a scoping review of end-of-life decision-making models used across veterinary species including equids, finding that shared decision-making frameworks, in which the professional provides clinical guidance while the owner retains decision-making authority, are associated with better owner outcomes, including reduced long-term guilt and greater peace of mind, than either purely professional-directed or purely owner-directed approaches. Together, these findings demonstrate that because laminitis frequently necessitates end-of-life decisions, the use of shared decision-making frameworks plays a critical role in structuring communication around prognosis and euthanasia timing in ways that support both clinical outcomes and owner well-being.

Cameron et al. (2025) examined the experiences of equine veterinary and charity teams involved in end-of-life decision-making, finding that clear communication about prognosis, realistic presentation of treatment options and their limitations, and compassionate acknowledgement of the owner's emotional state are the most consistently identified features of effective end-of-life communication. Professionals who established open prognostic conversations early in the care relationship, before the situation became acute, reported significantly better experiences of decision-making than those who addressed end-of-life considerations only when euthanasia had become urgent. The implication is that professional preparation, including advance planning conversations similar to those now standard in human palliative care, is a communication practice with measurable welfare benefits for horses and emotional benefits for owners.

Burrell et al. (2024) examined decision-making among UK horse owners and veterinary practitioners during critical cases of equine colic, a condition that shares many

of the communicative challenges of severe laminitis, including time pressure, significant financial stakes, uncertain prognosis, and the need for rapid owner decision-making under emotional stress. Their findings reveal that owners frequently felt overwhelmed and underprepared when faced with acute decisions, even when they had discussed treatment plans in general terms with their veterinarians previously.

Critically, Burrell et al. (2024) identified a significant gap between veterinarians' and owners' perceptions of the role of financial factors in decision-making: veterinarians consistently overestimated the degree to which cost was the primary driver of owner decisions, when owners themselves reported that welfare considerations and confidence in the veterinarian's judgment were primary. This perception gap has direct implications for how professionals approach difficult conversations, suggesting that assumptions about owner motivation based on veterinary inference rather than direct communication can distort and impede the decision-making process.

Financial barriers to treatment and euthanasia decisions are nonetheless real and significant. Lesté-Lasserre (2025) documents the specific ways in which financial constraints shape equine euthanasia decisions, including cases where owners pursue treatment beyond the point of welfare benefit because they cannot afford the euthanasia procedure itself and cases where financial pressure leads to premature euthanasia before all reasonable options have been explored. Within the broader specialty of veterinary emergency and critical care medicine (Mathews, 2017), Auger (2025) discusses the communication challenges of this setting, identifying financial conversations as among the most technically and emotionally demanding aspects of professional practice. These findings support the inclusion of explicit training in financial communication as a component of professional education.

Anthony (2025) provides a philosophical and ethical analysis of the veterinarian's duties of care and guidance in equine welfare contexts, arguing that the professional's ethical obligations extend beyond technical competence to encompass active, principled guidance of owner decision-making toward welfare-preserving outcomes. Anthony (2025) identifies honesty about prognosis as a fundamental ethical duty, the obligation to provide owners with accurate, complete information even when that information is difficult to deliver or to hear, and positions the veterinarian's role as an advocate for the horse's welfare rather than a neutral facilitator of owner choice.

Hernandez et al. (2018) reinforce this framing, arguing that speaking up about welfare concerns in everyday professional practice is an ethical responsibility rather than an optional gesture and that professionals who routinely defer to owner preference in situations where welfare considerations counsel a different course of action are failing in their professional obligations.

Long et al. (2024) found in their focus group study that professionals and owners frequently diverge in their assessments of chronically ill horses' quality of life, with owners tending toward more optimistic evaluations and professionals observing signs of suffering that owners have normalized over time, a divergence that professional communication must navigate sensitively but honestly if the horse's welfare is to be protected.

Burrell et al. (2024) examined horse owners' and veterinary practitioners' experiences of decision-making for critical equine cases, confirming that the quality of pre-existing professional relationships was the single strongest predictor of decision-making quality in crisis moments, an argument for investing in the relational dimensions of professional communication throughout the care relationship rather than only when decisions become urgent.

Collectively, these findings demonstrate that effective professional communication is not only an ethical obligation but also a relational and educational process that shapes long-term treatment compliance, influences owner perceptions of welfare, and supports the adoption of appropriate management practices over time.

2.6 Treatment Compliance, Preventive Care, and Innovation Adoption

Compliance with laminitis treatment plans is one of the most frequently cited challenges in equine practice, reflecting the demanding nature of laminitis management and the multiple practical, psychological, and relational factors that determine whether owners consistently implement the care protocols their professionals prescribe. Ross and Dyson (2011) provide a comprehensive description of the management demands inherent in laminitis care, documenting the range of daily interventions required (dietary control, exercise management, hoof care scheduling, medication administration) and the sustained consistency with which they must be applied for treatment to be effective. Orsini et al., (2010) describe the specific demands of home care for horses with chronic laminitis, noting that successful home management requires owners to develop practical skills including appropriate bedding management, controlled feeding routines, and monitoring of hoof temperature and digital pulse, all skills that require professional instruction and ongoing support to develop reliably.

Trust in the professional providing recommendations is consistently identified as the primary predictor of owner compliance across equine and companion-animal research. Coe, Adams and Bonnett (2008) found that owners who trusted their veterinarians were significantly more likely to follow care plans, seek timely follow-up, and report concerns honestly. Keller et al. (2021) documented the consequences of insufficient trust in the farrier-owner relationship, finding that doubt about the farrier's expertise or commitment led to non-compliance with hoof care recommendations and, in

some cases, to farriers reducing the directness of their guidance to avoid conflict, a professional accommodation that protects the relationship at the expense of the horse's welfare. Bard et al. (2017) emphasize that trust is built not in single encounters but through accumulated positive interactions over time, and that, the sustained delivery of the same core recommendations across multiple visits is one of the most effective trust-building strategies available to professionals in chronic care relationships. These findings position professionals not only as clinical advisors but as key drivers of behavioral change.

Preventive care, particularly the management of obesity and metabolic risk factors before acute laminitis develops, represents a growing area of concern and a significant communication challenge. Rendle et al. (2018) documented the increasing prevalence of equine obesity in the United Kingdom and identified it as a primary modifiable risk factor for endocrinopathic laminitis, while acknowledging that existing educational and professional interventions have achieved limited success in reversing the trend. Elte et al. (2021) found in a systematic review of client satisfaction in equine veterinary practice that nearly half of horses in European equine practice populations were overweight, often without their owners recognizing or acknowledging the problem, with obvious implications for preventive communication.

Wynands et al. (2021) provide a valuable parallel from dairy cattle medicine, examining dairy farmer, hoof trimmer, and veterinarian perceptions of barriers and roles in lameness management. Their finding that multi-professional collaboration, in which farmers, hoof trimmers, and veterinarians share information and coordinate care plans, produces substantially better lameness outcomes than single-professional management offers an important cross-species argument for the interdisciplinary collaboration construct examined in this study.

The adoption of innovative treatments and preventive tools followed patterns described by Rogers' (1983) Diffusion of Innovations Theory, reviewed in detail in Section 2.8. Products and practices that are perceived as offering clear relative advantage over existing approaches, as compatible with established management routines, as achievable within typical owner constraints, and as producing observable results are adopted more readily than those that lack these attributes (Bamford, 2019; Elte et al., 2021). Bamford (2019) specifically notes that therapeutic hoof boots, innovations that offer immediate, visible pain relief and are relatively simple to implement, have achieved wide acceptance among laminitis owners precisely because they exhibit high scores on the observability and relative advantage dimensions of the diffusion framework. Morrison (2010) traces the evolution of therapeutic farriery techniques in chronic laminitis management, documenting how evidence-based innovations in hoof support have been adopted progressively within the farriery profession as the evidence base has grown and respected opinion leaders within the profession have endorsed them, a pattern of within-profession diffusion that parallels the professional-to-owner diffusion dynamics examined in this study.

Naveed et al. (2024) provide a compelling case study of innovation adoption in equine health through their examination of West Nile virus vaccine uptake, documenting how initial skepticism was overcome as scientific evidence accumulated and veterinary opinion leaders endorsed vaccination as standard practice, a process following Rogers' (1983) classic adoption curve from innovators through early adopters to the early and late majority. The relevance to laminitis management is direct: professionals who understand the diffusion dynamics at play can tailor their communication strategies to where individual owners are positioned in the adoption curve, framing new practices in terms of

their observable advantages and practical compatibility rather than abstract clinical evidence alone.

Practical barriers to compliance deserve emphasis alongside motivational ones. Many owners face genuine logistical challenges in implementing complex laminitis care protocols: limited time, shared facilities, constrained budgets, and the physical demands of deep bedding, frequent feeding schedules, and controlled turnout management can all make ideal care plans difficult to sustain consistently (Orsini et al., 2010). Professionals who acknowledge and proactively address these practical constraints, adjusting care plans to be realistic rather than theoretically ideal, achieve better compliance than those who prescribe without regard for feasibility (Coe, Adams and Bonnett, 2008). This finding suggests that professional communication that incorporates collaborative problem-solving in addition to clinical guidance is more effective than information provision alone. The finding also highlights the value of the practical expertise of farriers and trainers, whose sustained contact with owners in real management environments provides insight into practical barriers that veterinarians may not encounter. This expertise represents a resource that interdisciplinary communication can draw on to improve owner outcomes.

2.7 Marketing, Professional Influence, and Ethical Considerations

In addition to professional communication dynamics, the broader commercial environment introduces further complexity to equine health decision-making and owner behavior.

The equine health industry is a significant commercial sector covering pharmaceutical companies, feed manufacturers, supplement producers, and therapeutic equipment suppliers, all of whom actively market their products to both professionals and horse owners. The intersection of commercial influence with professional judgment

represents a significant and underexamined dimension of equine communication, with ethical implications that bear directly on the credibility and effectiveness of the professional voices this study examined (Acton, McLean and MacKay, 2024; Kipperman, Kass and Rishniw, 2017).

Frausto (2026) argue that ethical marketing in veterinary medicine requires a fundamental alignment between commercial persuasion and the commitment to client and patient welfare. Practices that violate this alignment, including direct-to-consumer marketing that bypasses professional oversight, marketing that creates unrealistic owner expectations about product efficacy, and promotional strategies that position commercial products in opposition to professional judgment, risk undermining the trust that sustains professional credibility and, by extension, owner compliance (Joshi, 2025). In the equine context, where horses' health decisions are heavily influenced by professional endorsement and where owners rely on trusted professionals to filter and evaluate the commercial information they encounter, the ethical dimensions of marketing are particularly consequential.

Kipperman, Kass and Rishniw (2017) examined factors influencing veterinary prescribing decisions and found that commercial pressures, including pharmaceutical representative relationships, sample provision, and sponsored continuing education, can subtly influence treatment recommendations in ways that diverge from purely evidence-based decision-making. These findings raise important questions about the degree to which professional endorsement of equine health products reflects genuine clinical judgment or commercially influenced preference.

Wild (2018), in a doctoral examination of evidence dissemination to equine practitioners, found that commercially produced educational materials distributed through industry channels were evaluated with significant skepticism by equine professionals,

who recognized the potential for commercial bias while simultaneously acknowledging the materials' value as accessible and practically focused resources in an information environment often lacking profession-specific evidence-based guidance. Bowden (2018) examined the impact of evidence-based medicine on equine health and welfare, finding that while evidence-based practice principles are widely endorsed within the equine veterinary community, commercially motivated advice sometimes fills gaps left by an insufficient primary evidence base for specific interventions, creating an information environment in which the credibility of commercial claims is difficult for both professionals and owners to evaluate. White et al. (2023) developed a practical guide to searching for veterinary evidence specifically designed for equine professionals, reflecting recognition within the profession that critical evaluation skills, particularly with respect to commercially produced information, are an essential component of modern professional competence.

Pyatt et al. (2017) examined stakeholder relationships in animal health services, mapping the commercial and professional interests that shape the information environment in which equine professionals and owners make decisions. Their analysis identifies equine professionals as occupying a pivotal intermediary position between the equine health industry and the horse owner, exercising influence over product adoption and practice change through both formal recommendation and informal modeling. This intermediary position carries ethical responsibilities that existing professional training and industry practice do not always adequately address.

Torell Palmquist et al. (2025) identified a significant role for European equestrian institutions in training professionals on horse welfare, including the critical evaluation of commercial claims about products and practices, arguing that equestrian education can serve as an important countervailing force to commercial marketing by equipping

professionals with the evidential literacy needed to evaluate and filter commercial information on behalf of their clients.

The potential of citizen science and systematic data collection by owners under professional guidance to bridge the gap between commercial marketing and evidence-based professional practice has been explored by Fenner et al. (2020), who argue that involving horse owners as active participants in evidence generation can simultaneously improve owner understanding, strengthen the evidence base for common management interventions, and build the relational capital between professionals and owners that facilitates better communication and compliance. Özçelik et al. (2021) demonstrated in a Swiss pilot study that community-based surveillance in equine health, using owner observations recorded under structured professional protocols, can produce population-level health data while also improving owner engagement and professional communication. Leighton et al. (2022) explored researcher-practitioner collaboration in human-animal interaction, finding that structured partnerships between research and practice can advance the evidence base while also improving practitioners' communication skills and evidence-based reasoning, a model potentially applicable to equine professional development in laminitis management. Horseman et al. (2016), in a survey of current welfare problems of horses in Great Britain, identified the disconnect between industry marketing claims and evidence-based welfare guidance as a recurring concern among equine stakeholders, reinforcing the importance of strong, trusted professional voices that can help owners navigate this complex information environment.

Understanding how professional influence operates within this complex communication and information environment requires a strong theoretical foundation, which is provided by the frameworks outlined in the following section.

2.8 Theoretical Framework

The study is grounded in two complementary theoretical frameworks that together provide a robust analytical foundation for understanding the dynamics of professional influence in equine laminitis management: Diffusion of Innovations Theory (Rogers, 1983) and Source Credibility Theory (Hovland, Janis and Kelley, 1953). These frameworks were selected because they each address a distinct dimension of the professional-owner communication challenge examined in this study. Diffusion of Innovations explains the behavioral mechanics through which new practices are adopted or resisted, while Source Credibility Theory illuminates the interpersonal dynamics through which professional authority is established and exercised. Together, they provide a dual-lens analytical structure that is both theoretically coherent and practically applicable to the research questions. Table 2.1 summarizes both frameworks and their specific application in this study.

*Table 2.1
Theoretical Frameworks Applied in This Study: Core Propositions and Laminitis-Specific Application*

Framework	Core Proposition	Key Constructs Applied	Relevance to Laminitis Communication
Diffusion of Innovations Theory (Rogers, 1983)	New ideas, practices, and products spread through social systems via communication channels over time, shaped by characteristics of the innovation and the social system.	Relative advantage, compatibility, complexity, trialability, observability; adopter categories; opinion leadership	Explains why some owners adopt evidence-based laminitis management practices (e.g., hoof boots, dietary management) quickly while others resist; positions professionals as opinion leaders whose endorsement accelerates or inhibits adoption.
Source Credibility Theory	The effectiveness of communication is determined by the	Expertise; trustworthiness; dynamic	Explains why owners comply with advice from some professionals but ignore

Framework	Core Proposition	Key Constructs Applied	Relevance to Laminitis Communication
(Hovland, Janis and Kelley, 1953)	perceived credibility of the source, comprising expertise and trustworthiness as two primary and distinct dimensions.	credibility; perceived competence; empathy	guidance from others; positions trust and perceived expertise as the primary determinants of whether veterinary, farriery, or training recommendations are acted upon in laminitis management.

Note. Both frameworks are applied jointly throughout the survey instrument design, analysis, and interpretation.

2.8.1 Diffusion of Innovations Theory

Diffusion of Innovations Theory was first developed by Rogers (1962) and further refined and extended through successive editions, with the third edition (Rogers, 1983) providing the formulation most widely applied in professional communication and health behavior research. The theory explains how innovations, defined as ideas, practices, or objects perceived as new by the adopting unit, spread through social systems over time through communication channels. Rogers (1983) identifies four primary elements that shape the diffusion process: the innovation itself; the communication channels through which information is transmitted; the time over which adoption occurs; and the social system within which diffusion takes place. In the context of equine laminitis care, innovations include new preventive practices (grazing muzzles, structured weight-monitoring programs, low-carbohydrate dietary management), novel therapeutic interventions (therapeutic hoof boots, cryotherapy, pharmacological hormonal management), and updated professional protocols (evidence-based shoeing techniques, structured exercise prescriptions, systematic body condition monitoring).

Rogers (1983) identifies five characteristics of innovations that determine their rate of adoption. Relative advantage refers to the degree to which an innovation is perceived as better than what it replaces; an owner is more likely to adopt a new laminitis

management protocol if they can see how it improves on what they are currently doing. Compatibility refers to the degree to which the innovation aligns with existing values, practices, and needs, such as a preventive feeding program compatible with the owner's established routines. This program will be adopted more readily than one that requires radical changes to the barn management schedule. Complexity refers to the degree to which the innovation is difficult to understand or implement. Simple, clearly explained therapeutic tools gain wider adoption than complex clinical protocols that demand significant technical knowledge. Trialability refers to the degree to which the innovation can be tested on a limited basis before full commitment. For example, professional demonstrations and trial periods for products such as therapeutic boots or dietary supplements enable owners to assess effectiveness before full adoption. Observability refers to the degree to which the results of the innovation are visible to others. Improvements in a horse's comfort and mobility following the introduction of therapeutic support are immediately observable and constitute powerful evidence for adoption (Rogers, 1983; Bamford, 2019; Elte et al., 2021).

Rogers' (1983) adopter category model classifies individuals by their relative speed of adoption: Innovators, the first 2.5 percent to adopt, are characterized by risk tolerance and enthusiasm for novelty; Early Adopters, the next 13.5 percent, are socially respected opinion leaders whose endorsement of an innovation significantly accelerates its broader diffusion; the Early Majority, representing 34 percent of the population, deliberates before adopting but does so ahead of the average; the Late Majority, also 34 percent, adopts only after most others have done so, often motivated by social normalization; and Laggards, the final 16 percent, are resistant to change and anchored in tradition.

Understanding where individual owners are positioned in this distribution has direct implications for professional communication strategy: messages emphasizing innovation, advantage, and early evidence may be most effective for Early Adopters, while messages emphasizing social normalization, established track record, and peer endorsement may be more persuasive for the Late Majority and Laggards. Professionals who can assess individual owners' adopter profiles and tailor their communication accordingly are better positioned to promote effective laminitis management practices across the full range of the owner population.

Particularly central to this study is Rogers' (1983) concept of opinion leadership, the informal social influence that certain individuals exert over others' adoption decisions. Veterinarians, farriers, and professional trainers function as opinion leaders in equine management contexts: their endorsement of a new product or practice substantially increases the likelihood of owner adoption, while their skepticism or silence about an innovation effectively suppresses it. The extent to which professionals perceive themselves as effective opinion leaders in the context of laminitis innovation adoption is directly assessed by the Innovation Adoption construct in this study's survey instrument. Prior equine research has invoked but not systematically tested the Diffusion of Innovations framework. Pickering and Hockenhull (2019) apply diffusion principles in explaining variation in equine welfare communication effectiveness, and Elte et al. (2021) reference Rogers' adopter categories in contextualizing patterns of equine weight management practice change. However, neither study employs the framework as an offeres one of the few systematic applications of Diffusion of Innovations Theory as an empirical framework in equine professional communication research, addressing a significant gap in both the equine and the veterinary communication literatures.

2.8.2 Source Credibility Theory

Source Credibility Theory was developed by Hovland, Janis and Kelley (1953) using research which examined the context of attitude change and persuasion. The theory proposes that the effectiveness of communication is determined not solely by the quality or content of the message but fundamentally by the perceived credibility of the source. Credibility is conceptualized as comprising two primary and empirically distinct dimensions. Expertise refers to the extent to which the source is perceived as knowledgeable, experienced, and competent in the relevant domain. Trustworthiness refers to the extent to which the source is perceived as honest, reliable, and motivated by the audience's genuine interests rather than self-serving ends (Hovland, Janis and Kelley, 1953). Both dimensions are necessary for maximum communication effectiveness: a highly expert source perceived as self-interested loses persuasive power, just as a sincere but unqualified source lacks the authority to influence decisions in complex, high-stakes domains.

In the equine professional context, Source Credibility Theory makes specific and testable predictions. Owners who perceive their veterinarian as highly expert, evidenced by accurate diagnosis, confident and current clinical knowledge, and consistent treatment recommendations, are more likely to follow veterinary advice. Similarly, owners who perceive their veterinarian as trustworthy, demonstrated through transparent communication about uncertainty, consistent follow-through on commitments, and visible commitment to the horse's welfare rather than commercial or logistical convenience, are more likely to maintain compliance over the extended timeframes that laminitis management requires (Rutherford and England, 2024).

Chapes (2018) provided cross-domain confirmation of these predictions in an agricultural extension context, finding that source credibility, regardless of the presenter's

formal credentials, was the primary determinant of producer compliance with new agricultural recommendations in online video training. The generalizability of credibility effects across professional domains supports the application of Source Credibility Theory to the equine professional context.

A critical dimension of Source Credibility Theory that is directly relevant to the present research is the dynamic nature of credibility. Credibility is a perception constructed through repeated interaction and continuously subject to revision. A veterinarian who provides an inaccurate initial diagnosis, who communicates inconsistently across visits, or who is perceived as prioritizing convenience over care quality may lose credibility that is difficult to rebuild. Conversely, a farrier or trainer who, through consistent, practical, empathetic engagement, demonstrates genuine commitment to the horse's welfare and the owner's understanding may achieve credibility that rivals or exceeds that of the formally credentialed veterinarian in terms of the owner's everyday management decisions (Lynden, Hollands and Ogden, 2020; Bard et al., 2017).

This dynamic conception of credibility is important for the present study, which examines professionals' self-assessed credibility not as a given but as something actively cultivated and maintained through the quality and consistency of their communication.

The challenge of competing information sources is particularly salient in the context of Source Credibility Theory. When horse owners receive conflicting advice from different professionals, from peer networks, or from online communities, they must evaluate the relative credibility of multiple competing sources and decide which to prioritize (Flanagin and Metzger, 2007; Pickering and Hockenhull, 2019).

Rogers et al. (2023) examined cross-cultural challenges in equine welfare communication and found that the perceived credibility of different professional voices

varies significantly across cultural and regional contexts and that communication strategies effective in one setting may be less effective in another. Luke et al. (2023) found that how equestrians conceptualize horse welfare, whether as primarily a professional or an owner responsibility, significantly influences which information sources they perceive as credible and whose guidance they act upon, adding individual variability that professionals must navigate.

Diffusion of Innovations Theory and Source Credibility Theory together provide a theoretically coherent and mutually reinforcing framework for examining professional communication in equine laminitis care. The former explains the mechanisms through which professional influence shapes the adoption of new management practices, while the latter explains the interpersonal conditions under which that influence is most effectively exercised. Both frameworks predict that communication effectiveness is not a simple function of professional qualifications or clinical accuracy but of the relational, motivational, and informational quality of the professional-owner interaction. This convergent prediction informs the survey instrument design and analytical plan of the present study.

2.9 Survey Methodology in Veterinary and Equine Research

The methodological literature relevant to this study focuses on the design and analysis of professional surveys in veterinary and related health research settings, with particular attention to Likert-scale measurement, survey length and quality, mixed-methods integration, and thematic analysis with saturation. These methodological standards provide the evidential basis for the design choices made in this research and are discussed in detail in Chapter III while this section reviewed the literature upon which those choices were grounded.

Likert-scale measurement is the most widely used approach for capturing professional attitudes and perceptions in survey research. Joshi et al. (2015) found that a comprehensive review of the Likert scale's development, properties, and appropriate applications, confirms that five-point formats offer an effective balance between response nuance and cognitive accessibility for professional respondents. Sullivan and Artino (2013) reported that the analysis and interpretation of Likert-type data in health professions research confirms that composite section scores derived from multiple Likert items are appropriately analyzed using parametric methods including ANOVA when distributions are approximately normal. Norman (2010) concluded that the statistical treatment of Likert data in health sciences education, finding that parametric analyses of Likert composite scores produce results consistent with non-parametric alternatives and are defensible in research practice, provided the researcher acknowledges the ordinal nature of the underlying data.

Survey length and response quality are related concerns with direct implications for the design of the survey instrument used in this study. Galesic and Bosnjak (2009) demonstrated through experimental research that as survey length increases beyond approximately 15 to 20 minutes, response quality deteriorates as participants rush through later items or abandon the survey entirely. Revilla and Ochoa (2017) confirmed that the median preferred survey length among respondents is approximately 10 minutes, with maximum tolerable length around 20 minutes. Kost and Correa Da Rosa (2018) found that shorter surveys achieve equivalent data quality to longer ones when items are carefully selected to address the research questions directly, without extraneous or redundant content.

Bronet (2024), which provides the doctoral methodological framework guiding this study, synthesizes these standards into a clear design principle: doctoral survey

instruments should contain only as many items as are strictly necessary to address the research questions, with a target of approximately 20 to 24 items and a completion time of under 10 minutes.

Hartmann, Liburt and Malinowski (2017) provide a directly relevant precedent through their equine community needs assessment survey conducted through the Rutgers Equine Science Centre. This survey demonstrated that structured professional surveys administered through equine networks can achieve adequate sample sizes and useful data quality when distributed through appropriate channels. Herbst et al. (2024) updated this work with a 2022 equine community needs assessment, confirming that online survey platforms represent an effective and accessible distribution channel for professional populations in the equine sector.

These precedents support the methodological choices made in this study and provide a comparative context for evaluating the achieved sample size and response patterns.

The integration of qualitative open-ended items within predominantly quantitative surveys (the mixed-methods approach adopted in this study) is supported by a substantial methodological literature. Rosala (2024) describes how open-ended questions within structured surveys allow participants to provide context, nuance, and unanticipated insights that fixed-response items cannot capture. Züll (2016) provides guidance on the design and placement of open-ended questions, recommending that a single final catch-all open question, inviting participants to share anything not captured by structured items, be included as standard practice. Stroud, Green and Cronje (2020) describe a revision process bridging qualitative and quantitative assessment, providing a model for the integration of mixed-methods data consistent with the analytical approach employed in this study.

Thematic analysis of open-ended responses followed the six-phase framework of Braun and Clarke (2006), whose systematic and reflexive approach to thematic analysis has become the standard reference in social science and health research. The criterion of thematic saturation, the point at which no new themes emerge from additional data, was established empirically by Guest, Bunce and Johnson (2006), who demonstrated through systematic experiment that saturation in professionally homogeneous samples typically occurs within the first 12 responses, with the majority of thematic content represented within 20. Fusch and Ness (2015) define saturation operationally as the point at which there is enough information to replicate the study, providing a practical standard for determining analytical completeness that is directly applied in this research.

2.10 Gaps in the Literature

The review presented in this chapter identifies five persistent and consequential gaps in the existing literature that the present study is designed to address. Taken together, these gaps define the intellectual space that this study occupies and justify the investment of doctoral-level inquiry.

First, the existing literature on veterinary-client communication is heavily dominated by companion-animal contexts and does not translate directly to equine practice. The decentralized care environment, the multi-professional advisory network, and the extended timeframes of equine laminitis management are structurally distinct from companion-animal clinical encounters, and the specific communication challenges they generate remain inadequately characterized (Lynden, Ogden and Hollands, 2018; Pun, 2020; Kanara and Werner, 2012). This study addressed this gap by collecting equine-specific data from professionals who practiced in the decentralized, multi-professional context that companion-animal research does not capture.

Second, existing research on equine professional communication has been conducted predominantly from the owner or client perspective, leaving the professional perspective (how veterinarians, farriers, and trainers themselves assess their credibility, evaluate educational resources, and perceive their communication effectiveness) largely unexamined (Janke et al., 2021; Rutherford and England, 2024). This gap is addressed directly by the present study's professional-perspective survey design, which places the perceptions and self-assessments of equine professionals at the center of the analysis.

Third, professional trainers are underrepresented in the equine communication literature despite their significant informal advisory influence on owner behavior (Lynden, Hollands and Ogden, 2020). Few prior studies have included trainers as a separate professional category in a quantitative survey of equine communication practices, leaving their specific communication challenges and contributions uncharacterized. This study included trainers as a full professional category alongside veterinarians and farriers, among the few comparative analysis of communication perceptions across all three major equine professional roles.

Fourth, the intersection of industry marketing with professional trust and owner decision-making in equine health remains empirically underexplored (Hockenhull and Antillón, 2026; Smith et al., 2024; Wild, 2018). How professionals evaluate and use industry-produced educational materials, how they navigate commercial pressures in their recommendations, and how owners' reliance on informal commercial information sources interacts with professional guidance are questions that this study addressed through its owner education and professional influence constructs.

Fifth, while Diffusion of Innovations Theory and Source Credibility Theory have been frequently invoked in discussions of equine professional communication, their application as systematic analytical frameworks for empirical data collection and analysis

in equine contexts remains limited and largely theoretical (Pickering and Hockenhull, 2019; Elte et al., 2021). This study is among the first doctoral studies to employ both frameworks jointly as the explicit theoretical basis for a survey instrument designed for equine professionals, contributing to the application and extension of both theories in a domain where their relevance is clear, but their empirical grounding remains underdeveloped.

2.11 Summary

The literature reviewed in this chapter established a substantial body of knowledge on which this study was built. Equine laminitis is documented as a condition of serious epidemiological and welfare significance whose management demands sustained, multi-component owner action under professional guidance. The literature on veterinary-client communication confirms that trust, clarity, and consistency are primary determinants of client compliance, while equine-specific research reveals the unique communication challenges of the decentralized, multi-professional care environment.

Research on owner educational needs documents persistent knowledge gaps, the inadequacy of information provision alone as an educational strategy, and the importance of professional endorsement in making educational resources effective. Studies of high-stakes decision-making illuminate the emotional and ethical dimensions of euthanasia communication and the value of proactive, advance planning conversations. Research on compliance, preventive care, and innovation adoption establishes the multiple barriers that prevent consistent owner action and the role of professional endorsement in facilitating adoption of new practices. The literature on marketing, professional influence, and ethical considerations highlights the commercial dimensions of the information environment in which both professionals and owners operate.

Diffusion of Innovations Theory and Source Credibility Theory provide complementary analytical frameworks for understanding how professional influence is exercised and how owner behavior is shaped by the quality and credibility of professional guidance. Survey methodology literature establishes the standards for instrument design, analysis, and saturation determination that guide the present study. The five gaps identified in Section 2.10 collectively define the academic contribution this research aimed to make: providing the first systematic, theory-driven, professional-perspective empirical investigation of equine communication in laminitis management, including trainers as a full professional category, and employing both theoretical frameworks as explicit analytical tools rather than illustrative references. Building on this foundation, Chapter III outlines the methodological approach used to address these gaps and examine the theoretical relationships identified in this review.

CHAPTER III: METHODOLOGY

3.1 Overview of the Research Problem

The preceding chapters established the clinical severity of equine laminitis, the critical role of professional communication in shaping timely, informed, and welfare-centered owner decision-making, and a gap in the academic literature regarding how equine professionals, including veterinarians, farriers, and professional trainers, perceived their own effectiveness in communication and decision-support. While the literature confirmed that communication quality was a primary driver of owner compliance (Coe, Adams and Bonnett, 2008; Rutherford and England, 2024), existing research examined this relationship primarily from the owner or client perspective, focused largely on companion-animal contexts that did not translate directly to equine practice, and omitted the professional trainer from empirical investigation. The methodological challenge addressed in this chapter was to design a research approach capable of capturing the professional perspective on equine laminitis communication, producing data suitable for both statistical and qualitative analysis.

This chapter describes the study methodology, including the research design, the operationalization of the theoretical constructs into measurable survey items, the research questions and hypotheses that guided the analysis, the population and sample, the participant selection strategy, the survey instrument design and pilot testing, the data collection procedures, the analytical plan, and the ethical considerations that governed the study's conduct. Each methodological decision was grounded in the relevant empirical and methodological literature, with particular reference to the doctoral survey-based research framework established by Bronet (2024), which provided the overarching methodological standard for this study. The chapter also discussed the study's limitations

as they arose from the research design, establishing the analytical boundaries within which the findings reported in Chapter IV should be interpreted.

3.2 Operationalization of Theoretical Constructs

The survey instrument was developed through a systematic process of theoretical operationalization, in which the abstract constructs of Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983) were translated into measurable survey items contextualized for the specific domain of equine laminitis professional communication. This process followed the approach described by Bronet (2024) for construct-driven survey design in doctoral research, in which every survey item had an explicit theoretical and empirical rationale and addressed at least one of the study's five research questions.

Five constructs were identified as the core theoretical units of measurement, each corresponding to one section of the survey instrument and one or more dimensions of the theoretical frameworks. Trust and Communication (Section 1) operationalized the Source Credibility Theory dimensions of expertise and trustworthiness as self-assessed by professionals, measuring both the degree to which professionals perceived themselves as trusted by owners and the degree to which they intentionally adapted their communication to enhance owner understanding. Owner Knowledge and Education (Section 2) operationalized the Diffusion of Innovations emphasis on information dissemination and the preparation of potential adopters for informed decision-making, measuring how professionals evaluated owner knowledge gaps and the adequacy of available educational resources. Decision-Making Support (Section 3) operationalized the convergence of both frameworks in the high-stakes communication moment, defined as the point at which professional credibility and innovation endorsement either equipped or failed to equip the owner to make welfare-centered decisions. For this reason, it was

designated as the primary dependent variable in the regression analysis on both theoretical and empirical grounds. Innovation Adoption (Section 4) operationalized the Diffusion of Innovations framework's emphasis on the professional as opinion leader, measuring how effectively professionals perceived their role in facilitating owner adoption of new preventive practices and therapeutic tools. Professional Collaboration (Section 5) operationalized the systemic dimension of both frameworks, measuring how professionals assessed the consistency and coordination of advice across the multi-professional care team that characterized equine laminitis management (Best, 2013; Kinnison, May and Guile, 2014).

Section 3 (Decision-Making Support) was designated as the dependent variable for the regression analysis for two independent reasons that converged on the same conclusion. Theoretically, Decision-Making Support represented the culminating professional capacity in the communication pathway, the point at which all prior communication quality, educational preparation, innovation readiness, and collaborative consistency either resulted or failed to result in an owner's capability to make timely, welfare-centered decision about their horse's treatment. This construct was most directly tied to the welfare outcomes driving the research.

Empirically, the preliminary theoretical analysis indicated that Decision-Making Support was the construct most likely to be predicted by the other four, a prediction that was confirmed by the correlation analysis in Chapter IV, where Section 3 emerged as the most consistently interconnected construct across all three role groups. Table 3.1 presents all five constructs with their definitions, theoretical grounding, and representative survey items and the full survey instrument is reproduced in Appendix A.

Table 3.1

Core Survey Constructs: Definitions, Theoretical Grounding, and Representative Items

Construct (Section)	Definition	Theoretical Grounding	Representative Survey Item
Trust and Communication (S1)	Professionals' perception of how they establish credibility and confidence with horse owners during laminitis management, including intentional adaptation of communication style.	Source Credibility Theory (Hovland et al., 1953); Rutherford and England (2024); Coe et al. (2008)	"Owners trust my recommendations during critical care decisions." "I intentionally adjust my communication style to ensure owners understand my care plans."
Owner Knowledge and Education (S2)	Professionals' assessment of horse owner knowledge deficits and the adequacy of available educational resources for laminitis management.	Diffusion of Innovations (Rogers, 1983); Marcella (2004); Herbst et al. (2024)	"Educational materials available from industry sources are effective in helping owners understand laminitis." "I provide additional explanations or demonstrations beyond standard materials."
Decision-Making Support (S3) Dependent Variable	Professional role in helping owners feel confident and informed during high-stakes treatment decisions, including end-of-life discussions regarding euthanasia.	Source Credibility Theory (Hovland et al., 1953); Cameron et al. (2025); Burrell et al. (2024)	"I believe I help owners feel more confident when deciding whether to continue treatment or consider euthanasia." "Clear, compassionate communication makes end-of-life decisions more manageable for owners."
Innovation Adoption (S4)	Professional strategies for encouraging owners to adopt new preventive practices, treatments, and management tools relevant to laminitis care.	Diffusion of Innovations (Rogers, 1983); Elte et al. (2021); Bamford (2019)	"Owners are more likely to adopt new management strategies when they see observable improvements in their horse's condition." "I introduce new products gradually to build owner confidence."

Construct (Section)	Definition	Theoretical Grounding	Representative Survey Item
Professional Collaboration (S5)	How consistency or conflict in advice among veterinarians, farriers, and trainers influences owner compliance and the effectiveness of the professional care team.	Best (2013); Lynden (2020); Kinnison et al. (2014)	“Conflicting advice among professionals creates barriers to owner compliance.” “Owners benefit when professionals present a unified, collaborative approach to laminitis management.”

Note. S1–S5 = Survey Sections 1 through 5. All items used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The full survey instrument is reproduced in Appendix A.

3.3 Research Purpose and Questions

This research investigated how equine professionals, including veterinarians, farriers, and professional trainers, perceived their role in guiding horse owners’ decisions about laminitis treatment and prevention. It also examined how their communication and collaborative practices were theoretically linked to owner decision-making and equine welfare outcomes; owner decision-making capacity and welfare outcomes themselves were not directly measured.

The study was guided by five research questions, each formulated in accordance with Bronet’s (2024) standard for quantitatively framed, statistically testable research questions in doctoral survey-based research. As Bronet (2024) specified, each research question needed to map directly and exclusively to one analytical method and to be accompanied by a directional hypothesis that predicted the expected outcome. The five research questions and their corresponding hypotheses were as follows.

RQ1: How do equine professionals’ self-reported scores on Trust and Communication, Owner Knowledge and Education, Decision-Making Support, Innovation Adoption, and Professional Collaboration differ across professional role groups in the context of laminitis management? Analytical Method: One-way ANOVA

with Tukey HSD post-hoc comparisons. H1: Veterinarians report significantly higher scores on Trust and Communication and Decision-Making Support than farriers and professional trainers.

RQ2: To what extent is professional role associated with high versus low scores on communication-related constructs among equine professionals involved in laminitis care? Analytical Method: Chi-square tests of independence (threshold ≥ 3.5 vs. < 3.5). H2: Professional role is significantly associated with the proportion scoring high (≥ 3.5) on Trust and Communication, with farriers more likely than veterinarians and trainers to score in the Low (< 3.5) category.

RQ3: What is the relationship between Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration among equine professionals in laminitis management? Analytical Method: Kendall's tau and Spearman rank-order correlation. H3: There are significant positive correlations between Trust and Communication, Innovation Adoption, and Decision-Making Support across all three role groups, with the Section 3–Section 4 pair yielding the strongest and most consistent association.

RQ4: To what extent do Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration predict equine professionals' capacity for Decision-Making Support in laminitis care? Analytical Method: Multiple regression analysis. H4: Trust and Communication and Innovation Adoption are significant positive predictors of Decision-Making Support, with the predictive structure differing meaningfully by professional role.

RQ5: What themes emerge from equine professionals' open-ended descriptions of their experiences communicating with and supporting horse owners in laminitis cases, and at what point does thematic saturation occur across these narratives? Analytical

Method: Thematic analysis with saturation tracking. H5: Responses converge around themes of interprofessional collaboration, owner education, communication quality, and end-of-life decision support, with saturation reached before the full sample of responses is exhausted.

These five research questions reflected the sequential analytical logic recommended by Bronet (2024): the study first characterized differences comparatively (RQ1 and RQ2), then examined relational patterns (RQ3), then tested predictive relationships (RQ4), and finally deepened and contextualized the quantitative findings through qualitative analysis (RQ5). This structure ensured that each analytical stage built on and was informed by the stages that preceded it, producing a coherent and integrated portrait of professional communication in equine laminitis care.

3.4 Research Design

This study employed a cross-sectional, mixed-methods survey design administered online to equine professionals across the United States. This design was selected as the most appropriate vehicle for the research questions for three interconnected reasons.

First, the cross-sectional design enabled the capture of professional perceptions, self-assessments, and communication practices at a single point in time across a diverse sample, supporting comparison between professional role groups on the constructs of interest. Farrugia et al. (2010) confirmed that cross-sectional survey designs were appropriate for studies that aimed to characterize the current landscape of professional attitudes and identify patterns and relationships within that landscape rather than to track change over time. Although longitudinal designs offered advantages for establishing temporal relationships, a cross-sectional approach was appropriate for the present study's primary purpose of establishing a baseline professional-perspective dataset where none

currently existed and was consistent with the practical constraints of doctoral research timelines (Creswell and Creswell, 2018).

Second, the mixed-methods design, combining 24 quantitative Likert-scale items with a single open-ended qualitative question, was chosen to leverage the complementary strengths of quantitative and qualitative inquiry. Quantitative items provided standardized, numerically comparable data that supported statistical analysis and group comparison. The open-ended qualitative item allowed participants to express perspectives and experiences that fixed-response scales could not capture, enriching the interpretation of quantitative patterns with professional narratives and contextual detail (Rosala, 2024; Stroud, Green and Cronje, 2020). Creswell and Clark (2017) described this integration of quantitative and qualitative methods within a single instrument as an explanatory sequential design, in which qualitative data collected in the same instrument provided depth and contextualization for the quantitative findings. The present study used one open-ended question at the end of the instrument, positioned to invite professional narratives that explained, extended, or challenged the patterns identified by the Likert-scale items (Züll, 2016). This placement followed the best-practice recommendation that open-ended questions appear at the end of structured survey instruments, where respondents could draw on the structured items to frame their responses without biasing the earlier quantitative data (Bronet, 2024).

Third, online survey administration using Microsoft Forms was selected for its accessibility, practical efficiency, and suitability for the target population of geographically dispersed equine professionals. Microsoft Forms is part of the Microsoft 365 suite and provided reliable and secure data collection for professional surveys, with a user interface familiar to respondents across organizational and academic contexts and automatic real-time response recording that eliminated manual data entry error. The

platform supported Likert-scale rating items, multiple-choice items, and long-form text responses in a single cohesive instrument. The platform also allowed branching logic for screening questions and was fully accessible on both desktop and mobile devices, an advantage for equine professionals who may have completed the survey in field settings (Herbst et al., 2024). Qualtrics and SurveyMonkey were also considered but Microsoft Forms was selected for its integration with the researcher's existing Microsoft 365 environment, the absence of respondent login requirements, its GDPR-compliant data storage, and the straightforward export of responses directly into Microsoft Excel for analysis using the Data Analysis ToolPak.

3.5 Population and Sample

The target population for this study comprised equine professionals who actively provided direct advice to horse owners about laminitis treatment or prevention as part of their professional practice in the United States. Three professional role groups were included: (1) licensed veterinarians with equine care as a primary or significant secondary focus of their practice; (2) practicing farriers who had regular contact with horses at risk of or diagnosed with laminitis; and (3) professional trainers who managed horses' daily care and regularly advised owners on management decisions. This three-group design was selected to provide among the first comparative analysis of communication perceptions across all three major equine professional advisory roles simultaneously, addressing a critical gap in the existing literature that had examined veterinarians and farriers in isolation while leaving professional trainers underrepresented from empirical investigation (Lynden, Hollands and Ogden, 2020; Kanara and Werner, 2012).

Sample size was determined using the standard formula for estimating proportions in large or unknown populations, as described by Bronet (2024). At a 95 percent

confidence level ($Z = 1.96$) with a maximum variance assumption ($p = 0.5$) and a target margin of error of 5 percent, the required sample size was calculated as follows:

$$n = Z^2 \times p(1-p) / MoE^2 = (1.96)^2 \times (0.5 \times 0.5) / (0.05)^2 = 3.8416 \times 0.25 / 0.0025 \\ = 384.16$$

Rounded up to ensure the minimum threshold was fully met, the target sample size for this study was 385 valid responses. As Bronet (2024) confirmed, this corresponds to the sample size required to achieve a 5 percent margin of error at the 95 percent confidence level, the accepted gold standard for survey-based doctoral research. This target was established prospectively and governed the methodology described in this chapter. The actual number of responses achieved, together with the corresponding margin of error, is reported in Chapter IV (Results), as directed by Bronet (2024). Bronet specified that the target belongs in the methodology, while the achieved result belongs in the results section, where it should be assessed transparently against the target with any gap attributed to clearly identified limiting factors.

The population of equine professionals who regularly advised horse owners on laminitis management across the United States was large but not formally enumerated, as no national registry provided a complete count of all practicing equine veterinarians, farriers, and trainers meeting the qualifying criterion. This absence of a known population size supported the use of the maximum variance assumption ($p = 0.5$) in the sample size calculation, which produced the most conservative (largest) required sample size and therefore the most defensible estimate in conditions of population uncertainty (Bronet, 2024). The use of the standard sample size formula for unknown population size is standard practice in professional survey research where no comprehensive sampling frame was available (Creswell and Creswell, 2018; Traina and Fracasso, 2016).

3.6 Participant Selection

A purposive sampling strategy, defined as the deliberate selection of participants who meet specific criteria relevant to the research purpose, was employed to recruit participants with the professional experience and domain-specific knowledge required to address the research questions. This approach was appropriate because the study sought professional expertise and situated knowledge rather than statistical representation of a general population (Creswell and Creswell, 2018; Farrugia et al., 2010). In this study, the qualifying criterion was direct current professional involvement in advising horse owners about laminitis treatment or prevention, confirmed through a screening question at the beginning of the survey instrument. Respondents who did not confirm this criterion were directed out of the survey without completing the instrument, ensuring that all responses in the analytic sample reflected relevant professional experience.

The survey was distributed through four primary channels designed to reach the target population across veterinary, farriery, and professional training networks. The first and primary channel was social media, specifically Facebook. The survey link was shared through equine professional Facebook groups dedicated to veterinarians, farriers, and horse trainers, as well as groups specifically focused on laminitis management and equine health. Posts were made at regular intervals throughout the data collection period to maintain visibility and encourage ongoing participation. Herbst et al. (2024) confirmed that social media distribution through equine professional communities was an effective and cost-efficient channel for reaching diverse professional populations in the equine sector, and Hartmann, Liburt and Malinowski (2017) documented similar use of online networks in equine community surveys with successful response outcomes.

The second channel involved direct distribution at three major equine events during the data collection period: the American Cup, the Arabian Horse Association

Judging School, and the Scottsdale Arabian Horse Show. These events were selected because they attracted concentrated populations of equine professionals, including veterinarians providing on-site coverage, farriers servicing show horses, and professional trainers competing or presenting, in a setting conducive to direct engagement and recruitment.

At each event, professionally printed flyers featuring a QR code linked directly to the Microsoft Forms survey were distributed to attendees and posted in high-traffic areas including veterinary stations, farrier areas, and trainer meeting rooms. The use of QR codes minimized participant friction by eliminating the need to type a URL manually, consistent with best practice for paper-to-digital conversion in field-based survey distribution (Dillman, Smyth and Christian, 2014). A copy of the survey distribution flyer, including the QR code and study description, is reproduced in Appendix B.

Participation was entirely voluntary and anonymous throughout the data collection process. No incentives of any kind were offered for survey completion. The survey introduction provided a clear description of the study's purpose, the voluntary nature of participation, the anonymity of responses, and the absence of any identifiable personal data collection, consistent with the ethical standards for professional survey research described by Bronet (2024). Respondents who chose to participate indicated their implicit consent by completing and submitting the survey. No participation required respondents to create an account or provide any information that could be used to identify them individually.

The purposive sampling strategy, while appropriate for the research purpose, produced a convenience sample that may not have been fully representative of the national population of equine professionals. This limitation, and its implications for the generalizability of findings, is discussed in Section 3.10.

3.7 Instrumentation

3.7.1 Survey Structure and Content

The final survey instrument consisted of 30 items in total: five demographic and screening items, 24 quantitative Likert-scale items organized across five thematic sections, and one open-ended qualitative question. This structure reflected the construct-driven design described in Section 3.2 and was finalized following two rounds of pilot testing. The full survey instrument as administered is reproduced in Appendix A.

The five demographic and screening items collected: (1) consent to participate: “Do you consent to participate in this study?”; (2) professional role: “Which best describes your role?”; (3) a qualifying screening question: “Do you currently provide direct advice to horse owners about laminitis treatment or prevention as part of your professional work?”. Respondents selecting “No” were directed out of the survey immediately, ensuring analytic sample quality; (4) years of experience: “How many years have you worked in the equine industry?”; and (5) approximate case volume: “Approximately how many laminitis cases have you been involved with in the past year?” The five-year experience brackets were selected because they reflect recognized career milestones in equine professional practice, enable comparison of early-, mid-, and late-career professionals, and are consistent with categorization conventions used in comparable equine professional surveys (Hartmann, Liburt and Malinowski, 2017; Herbst et al., 2024).

3.7.2 Likert-Scale Items and Scoring

The 24 quantitative items each presented a declarative statement about professional communication, education, decision-making, innovation, or collaboration behavior, and asked respondents to indicate their level of agreement on a five-point Likert scale with anchor labels of “Strongly Disagree,” “Disagree,” “Neutral,” “Agree,”

and “Strongly Agree.” The five-point format was selected over seven-point alternatives following a review of the methodological literature on Likert scale design. Joshi et al. (2015) confirmed that five-point Likert scales were among the most widely validated and widely used formats in professional attitude research, offering an effective balance between response nuance and cognitive accessibility.

Sullivan and Artino (2013) specifically recommended five-point formats for health professions research with professional respondents, noting that the additional response options in seven-point scales did not consistently improve measurement accuracy and may have introduced response fatigue for items where fine-grained distinctions were not meaningful. Traina and Fracasso (2016) confirmed that five-point scales were favored in professional survey applications for their simplicity, their preservation of a central neutral option, and their established track record in producing reliable and valid attitudinal data. Response options were presented as text labels only, without numerical anchors, consistent with Bronet’s (2024) guidance that omitting numbers from Likert response options reduced the risk of respondents treating ordinal options as equal-interval numeric values.

The instrument included reverse-coded items, defined as items worded in the direction opposite to the expected response, in three of the five sections. Reverse-coded items served two functions: they tested internal consistency by ensuring that respondents who scored high on positively worded items scored low on reverse-coded items, a pattern disrupted by careless or inattentive responding, and they guarded against acquiescence bias, which is the tendency to agree with survey statements regardless of content (Bronet, 2024; DeVellis, 2017).

Examples of reverse-coded items included: Q6 - “I focus more on giving information than on listening to owners’ concerns” (reversed within Section 1: Trust and

Communication); Q11 - “Many commonly used owner-education materials contain outdated or inconsistent information and can lead to misunderstanding” (reversed within Section 2: Owner Knowledge and Education); and Q20 - “Owners often wait to see successful results from other horse owners before trying a new product I recommend” (reversed within Section 4: Innovation Adoption). All reverse-coded items were recoded prior to analysis so that higher scores consistently indicated more positive professional self-assessments across all items and sections.

Section composite scores were computed as the arithmetic mean of all items within each section following reverse-coding, producing a continuous composite score on a 1–5 scale for each construct for each respondent. This approach to composite scoring was standard in Likert-scale survey research and was consistent with the analytical framework described by Sullivan and Artino (2013) and Norman (2010), who confirmed that parametric analysis of composite Likert scores was defensible in professional research contexts.

3.7.3 Open-Ended Qualitative Question

A single open-ended question was positioned at the end of the instrument as the final item: “Is there anything else you would like to share about your experiences working with horse owners affected by laminitis, particularly regarding how you communicate, educate, or support their decision-making?” This wording was designed to invite professional narratives that contextualized and extended the quantitative ratings, inviting respondents to describe their communication experiences, challenges, and insights in their own words and at whatever level of detail they chose to provide.

Positioning the open-ended question at the end followed the recommendation of Züll (2016), who demonstrated that catch-all open-ended items placed at the conclusion of structured surveys maximized response completeness and quality by allowing

respondents to draw on the context established by the preceding structured items. Completing an open-ended question earlier in the instrument risked biasing responses to subsequent closed items; placing it last avoided this contamination while still capturing the qualitative depth that structured items could not provide (Rosala, 2024; Stroud, Green and Cronje, 2020).

3.7.4 Pilot Testing and Instrument Reliability

The survey instrument underwent two rounds of pilot testing prior to full distribution. Following Bronet's (2024) recommendation, the primary purpose of pilot testing was to assess the time required for survey completion under realistic conditions and to identify any items that respondents found confusing or redundant. Bronet (2024) specifically advised conducting pilots with participants of varied demographic backgrounds, noting that older respondents typically took longer to complete surveys than younger ones, a pattern confirmed in the literature on survey response behavior (Galesic and Bosnjak, 2009).

The first pilot involved seven equine professionals representing all three professional roles and a range of age groups and experience levels. Based on their feedback, revisions were made to improve the clarity of the reverse-coded items, reduce redundancy between two pairs of items, and simplify demographic question wording. Cronbach's alpha was calculated for each section using the first pilot data to assess internal consistency. Following the revisions, a second pilot with five participants from varied demographic backgrounds was conducted to confirm item clarity, completion time, and the direction of the inter-item relationships in the revised instrument. The pilot Cronbach's alpha values reported below are used as early-stage diagnostics to guide item-wording decisions. Because the pilot sample was small ($n = 5$), these values are reported here for transparency rather than as evidence of final-instrument reliability. Final-

instrument reliability was reassessed on the full analytic sample ($N = 266$) and is reported in Chapter IV. Construct validity rests on the theoretical grounding of each section in Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983), expert review during instrument development, and the consistent pattern of inter-section correlations and regression results presented in Sections 4.4 and 4.5. Completion times in the second pilot were 8, 9, 15, 8, and 10 minutes, producing a mean completion time of 10 minutes. The longer completion by one participant (15 minutes) was consistent with Bronet's (2024) observation that older respondents typically required more time, and confirmed that the instrument fell within the recommended completion window of under 15 minutes for professional populations (Galesic and Bosnjak, 2009; Kost and Correa Da Rosa, 2018; Revilla and Ochoa, 2017).

Internal reliability for each section was assessed using Cronbach's alpha coefficient (α), which measured the average inter-item correlation within each construct scale. Values of $\alpha \geq 0.70$ were conventionally considered acceptable for established scales, while values in the range of 0.60–0.70 represented adequate reliability for exploratory and pilot-stage instruments (Bronet, 2024; DeVellis, 2017; Joshi et al., 2015). The results of the second pilot reliability analysis are presented in Table 3.2. Three of the five sections (Owner Knowledge and Education, $\alpha = 0.662$; Innovation Adoption, $\alpha = 0.766$; Professional Collaboration, $\alpha = 0.612$) yielded Cronbach's alpha values within or above the conventional 0.60–0.70 range for exploratory and pilot-stage instruments, with Innovation Adoption achieving the strongest pilot reliability ($\alpha = 0.766$). Trust and Communication ($\alpha = 0.568$) and Decision-Making Support ($\alpha = 0.581$) fell slightly below this threshold. Given the small pilot sample ($n = 5$), these values are reported as early-stage diagnostics rather than as definitive evidence of reliability, and final-instrument reliability was reassessed on the full analytic sample ($N = 266$) and is reported in Chapter

IV (Table 4.3), where all five sections met or exceeded $\alpha \geq .70$. The pattern of sub-threshold values for two sections did not require structural item changes; inter-item correlations and item content were judged sufficiently coherent for full-scale administration. No further revisions were required following the second pilot, and the instrument was approved for full distribution.

Table 3.2

Pilot-Stage Internal Reliability Coefficients (Cronbach's Alpha) by Survey Section

Code	Section Title	Items (k)	Σ Item Variances	Variance of Total Scores	Cronbach's α	Interpretation
CT	Trust and Communication	6	2.00	3.80	0.568	Moderate; acceptable for pilot testing
EE	Owner Knowledge and Education	5	3.20	6.80	0.662	Satisfactory; acceptable for pilot testing
IN	Innovation Adoption	5	2.00	4.70	0.766	Good internal consistency
EM	Decision-Making Support	4	2.30	4.30	0.581	Acceptable; improved after revision
CS	Professional Collaboration	4	2.10	4.00	0.612	Acceptable for pilot testing

Note. α = Cronbach's alpha internal consistency coefficient. k = number of items in the section. Values are from the second pilot ($n = 5$) and are reported as early-stage diagnostics only. Because the pilot sample was small, these values are not used as evidence of final-instrument reliability. Final-instrument reliability on the full analytic sample ($N = 266$) is reported in Chapter IV.

3.8 Data Collection Procedures

Data collection was conducted between November 2025 and March 2026, a five-month period that allowed sufficient time for distribution through multiple channels, follow-up promotion to maximize response accumulation, and the collection of responses

across the seasonal variation in equine professional activity. This period included the winter and early spring months, when major equine show events provided concentrated professional attendance opportunities.

Survey distribution proceeded through the two channels described in Section 3.6: social media (Facebook equine professional groups) and direct in-person distribution at the American Cup, the Arabian Horse Association Judging School, and the Scottsdale Arabian Horse Show. An example is shown in Appendix C. On Facebook, the survey link was posted in multiple professional groups at the beginning of the data collection period and re-promoted at regular intervals throughout. Group administrators were contacted directly in several communities by email to request permission to post and to provide context about the research. The template email used for these administrator contact requests is reproduced in Appendix D. On social media, the post described the study's purpose, specified the three qualifying professional roles, and included the direct survey link alongside a brief description of the expected completion time.

At each of the three equine events, printed flyers with QR codes were distributed in person and displayed in high-visibility locations. Interested professionals could scan the QR code with any smartphone camera and access the Microsoft Forms survey directly without entering a URL. The flyer text described the study in accessible language, identified the target professional roles, confirmed anonymity and voluntary participation, and provided the researcher's contact information for any questions. The flyer is reproduced in Appendix B.

Responses were recorded automatically in real time and linked to the Microsoft Forms account. Data were monitored periodically during the collection period to assess response rates across channels and professional role groups, to identify any technical issues with the survey instrument, and to plan follow-up promotion as needed. No

personal identifying information was collected at any stage: respondents were not asked for their name, email address, practice name, or any other identifier that could be used to trace a response to an individual (Bronet, 2024).

At the conclusion of data collection in March 2026, the raw response dataset was exported from Microsoft Forms to Microsoft Excel and reviewed for data quality. Incomplete responses, defined as submissions in which fewer than 80 percent of the 24 Likert-scale items were answered, were excluded from the analytic sample. Responses from individuals who indicated they did not currently advise horse owners on laminitis were likewise excluded at the screening stage. The data cleaning process produced the final analytic sample of 266 valid responses. The achieved sample size and corresponding margin of error are reported in Chapter IV.

3.9 Data Analysis

Data analysis followed the sequential plan established by Bronet (2024) for doctoral survey-based research in which each analytical stage corresponded directly to one research question and built on the findings of the preceding stages. The full analytical plan encompassed five stages: descriptive analysis, comparative analysis (ANOVA and chi-square), correlation analysis (Kendall's tau and Spearman's rho), multiple regression, and qualitative thematic analysis with saturation tracking. Quantitative analyses were conducted using Microsoft Excel with the Data Analysis ToolPak add-in, consistent with the tools demonstrated in Bronet's (2024) accompanying analytical workbook. Qualitative thematic analysis was conducted manually, following the six-phase framework of Braun and Clarke (2006).

3.9.1 Descriptive Analysis

Prior to any comparative or inferential testing, descriptive statistics were computed for all 24 Likert-scale items and for the five section composite scores.

Descriptive statistics included the arithmetic mean (M) and standard deviation (SD) for each item and composite, calculated for the full sample (N = 266) and separately for each professional role group (veterinarians, farriers, and professional trainers). Bronet (2024) recommended means as the primary descriptive statistic for Likert-scale composite data. Frequency distributions were also computed for demographic items to characterize the composition of the analytic sample. These descriptive findings provided the baseline characterization of the data from which all subsequent analytical stages proceeded.

3.9.2 Comparative Analysis: One-Way ANOVA

To address RQ1, one-way analysis of variance (ANOVA) was conducted for each of the five section composite scores with professional role (Veterinarian, Farrier, Professional Trainer) as the between-subjects factor. ANOVA was selected because it was the appropriate test for comparing means across three or more independent groups on a continuous outcome variable, and Bronet (2024) identified it as the primary comparative method in survey-based doctoral research with multiple professional groups.

The significance criterion was $p < .05$: as Bronet (2024) specified, if the p-value was less than the alpha level of .05, the null hypothesis that group means were equal was rejected, indicating that at least one group mean differed significantly from the others. Effect sizes were reported as eta-squared (η^2), where $\eta^2 = .01$ indicated a small effect, .06 a medium effect, and .14 a large effect (Cohen, 1988).

Where ANOVA indicated significant overall group differences, Tukey's Honestly Significant Difference (HSD) post-hoc test was applied to identify which specific pairwise comparisons between role groups reached significance. Item-level one-way ANOVA was additionally conducted for each of the 24 individual survey items to identify the specific items driving any section-level differences.

3.9.3 Comparative Analysis: Chi-Square Tests of Independence

To address RQ2, chi-square tests of independence were conducted to assess categorical associations between professional role and section score category. Prior to chi-square analysis, each respondent's composite section score was classified as "High" (≥ 3.5) or "Low" (< 3.5) using a threshold of 3.5, which represented the precise midpoint between the Neutral response (3) and the Agree response (4) on the composite section mean scale. This threshold was applied consistently with Bronet's (2024) analytical framework and was analytically meaningful: a composite mean at or above 3.5 indicated that the average response within a section tilted toward agreement, while a mean below 3.5 tilted toward neutrality or disagreement. Norman (2010) confirmed that the scale midpoint provided a theoretically appropriate and mathematically coherent threshold for classifying composite Likert-scale scores in categorical analysis. The threshold was applied uniformly across all five sections and all role groups to maintain analytical consistency.

3.9.4 Correlation Analysis

To address RQ3, correlation analysis examined the strength and direction of relationships between all ten possible pairs of the five section composite scores within each of the three professional role groups. Kendall's tau (τ) was used as the primary correlation method. As Bronet (2024) explained, Pearson's correlation was appropriate only for continuous, normally distributed data with a linear relationship, while Kendall's tau was appropriate for ordinal data with tied ranks, properties that align with Likert-scale composite scores. This guidance directly informed the selection of Kendall's tau as the primary method in this study.

Spearman's rank-order correlation (ρ) was computed as a complementary measure, consistent with Bronet's (2024) recommendation that running both analyses provided confirmatory evidence of relational patterns. Thirty correlation coefficients were generated for each method (ten section pairs $\times$ three role groups), with statistical significance evaluated at $p < .05$, $p < .01$, and $p < .001$.

3.9.5 Multiple Regression Analysis

To address RQ4, multiple regression analysis was conducted to examine the extent to which the four communication-related constructs jointly predicted scores on the designated dependent variable, Section 3 (Decision-Making Support). Bronet (2024) described multiple regression as extending linear regression by using more than one independent variable and as appropriate for predicting the value of a continuous dependent variable from a set of predictors.

Analyses were performed using the Microsoft Excel Data Analysis ToolPak regression function, generating unstandardized regression coefficients (β), standard errors, t-statistics, p-values, R-squared (R^2), adjusted R-squared, and the F-statistic for each model. Separate regression models were estimated for the full sample ($N = 266$) and for each of the three professional role groups (veterinarians $n = 90$, farriers $n = 68$, professional trainers $n = 108$), enabling examination of whether the predictive structure of the model differed by professional role. This distinction is theoretically important given the structural differences between veterinary, farriery, and training roles in equine laminitis management.

The rationale for designating Section 3 (Decision-Making Support) as the dependent variable is described in Section 3.2. The four independent variables, Trust and Communication (S1), Owner Knowledge and Education (S2), Innovation Adoption (S4), and Professional Collaboration (S5), represented the antecedent communication

dimensions that the theoretical frameworks predicted would collectively determine the professional's capacity to support owner decision-making. Section 3 was excluded from the set of predictors to avoid circular analysis. Where individual predictors contributed significantly to the overall model, their unstandardized beta coefficients were interpreted as the change in Section 3 score associated with a one-point increase in the predictor, holding all other predictors constant. R^2 was interpreted as the proportion of variance in Decision-Making Support scores explained by the predictor set. Assumptions of the regression model, including approximate linearity of relationships between predictors and the dependent variable, were assessed visually through residual plots and are acknowledged in Section 3.10.

3.9.6 Qualitative Thematic Analysis

To address RQ5, qualitative thematic analysis was applied to the open-ended responses collected through the final survey item. The analysis followed the six-phase framework described by Braun and Clarke (2006): (1) familiarization with the data through repeated reading of all responses; (2) generation of initial codes applied to each response; (3) searching for themes by grouping codes into broader thematic categories; (4) reviewing themes to confirm internal coherence and distinctiveness; (5) defining and naming themes with clear, descriptive labels; and (6) producing the report presenting and illustrating the themes with representative excerpts. Coding proceeded both deductively, using the five theoretical constructs as initial coding categories, and inductively, allowing new themes to emerge from the data that were not anticipated by the existing framework (Strauss and Corbin, 1998).

The criterion for analytical completeness was thematic saturation, defined operationally as the point at which additional responses yielded no new thematic categories, when the emerging thematic structure had stabilized and further data

contributed only confirmatory instances of already-identified themes (Guest, Bunce and Johnson, 2006; Fusch and Ness, 2015). This principle distinguished qualitative from quantitative stopping criteria and was fundamental to the validity of the thematic analysis reported in Chapter IV.

A saturation tracking procedure was applied across the 134 substantive open-ended responses: after coding each successive response, the cumulative number of distinct thematic categories was recorded, and the saturation curve was plotted to visualize the point of stabilization. This tracking method followed the procedure described by Guest, Bunce and Johnson (2006), who demonstrated empirically that saturation in professionally homogeneous samples typically occurred within the first 12 responses, with most thematic content represented within 20.

Fusch and Ness (2015) defined saturation operationally as the point at which enough information has been collected to allow the study to be replicated, a practical standard that was confirmed when the thematic structure had remained stable across a sufficient sequence of additional responses to establish confidence in its completeness. The saturation analysis results, including the saturation curve (Figure 4.5), are reported in Chapter IV.

3.10 Research Design Limitations

While the methodology described in this chapter was well suited to the research questions and represented a systematic and transparent approach to equine professional communication research, several limitations arose from the research design and must be acknowledged to properly contextualize the findings reported in Chapter IV. These limitations are organized into three categories: sampling limitations, survey method limitations, and analytical limitations.

3.10.1 Sampling Limitations

The most significant sampling limitation was the potential gap between the target sample of 385 valid responses (required for a 5 percent margin of error at the 95 percent confidence level) and the number of responses actually achieved within the five-month data collection window. As Bronet (2024) confirmed, a margin of error between 5 and 7 percent remained acceptable for doctoral survey-based research when time and resource constraints were identified as limiting factors and their impact on precision was transparently reported. The actual achieved sample and corresponding margin of error calculation are provided in Chapter IV, where they were assessed against the target with the limiting factors clearly identified.

The purposive sampling strategy, while appropriate for the research purpose, produced a convenience sample that may not have been fully representative of the national population of equine professionals. Respondents who actively engaged with equine professional Facebook communities or attended major national equine events may have been more digitally connected, more professionally engaged, and more interested in educational and communication topics than the broader population of equine professionals who practiced in more isolated or less visible settings (Creswell and Creswell, 2018). This selection bias may have meant that the study overrepresented professionals with more positive attitudes toward communication and collaboration, producing mean scores that were higher than would be found in a fully representative random sample. Readers should consider this possibility when assessing the generalizability of the findings.

The unequal sample sizes across professional role groups, particularly the smaller farrier subsample, may have reduced statistical power for detecting between-group differences involving farriers. Where between-group comparisons involving farriers approached but did not reach the significance threshold of $p < .05$, the possibility that

reduced power contributed to the non-significant result should be acknowledged. Future research with larger, more equally balanced samples across professional roles would strengthen the comparative findings.

3.10.2 Survey Method Limitations

The cross-sectional design of this study captured professional perceptions at a single point in time and did not establish causal relationships between constructs. The finding that Innovation Adoption predicted Decision-Making Support could reflect a causal process (innovation engagement enables effective decision support), a common underlying cause (higher general communication competence drives both), or a reverse causal process (confidence in decision support contexts motivates greater engagement with innovation). Longitudinal research tracking professional development over time would be needed to establish the direction of these relationships. Farrugia et al. (2010) and Creswell and Clark (2017) both acknowledged this constraint as an inherent limitation of cross-sectional survey designs in professional research.

All quantitative data were self-reported and subject to social desirability bias, defined as the tendency for respondents to present themselves and their practices more positively than actual behavior reflected (Podsakoff et al., 2003). In professional surveys where competence was closely linked to professional identity, this bias may have led to overestimation of communication effectiveness, trust, and collaborative practice. Reverse-coded items were included to partially mitigate this effect but could not fully eliminate it. Observational research, such as audio-recorded professional-client consultations, would provide complementary data less susceptible to self-report inflation. The inclusion of an open-ended question that invited candid professional narratives served as a partial corrective, as qualitative descriptions of challenges and frustrations were less susceptible to social desirability effects than structured Likert ratings.

3.10.3 Analytical Limitations

The use of Likert-scale composite scores as both predictor and outcome variables in the regression analysis involved assumptions about the approximate linearity and distributional properties of these variables that were not fully verifiable in the data. While Bronet (2024) and Norman (2010) confirmed that parametric analyses applied to composite Likert scores were analytically defensible and produced results consistent with non-parametric alternatives in most research contexts, this assumption should be acknowledged as a source of analytical uncertainty, particularly in the farrier subgroup where the small sample size may have reduced the reliability of regression coefficient estimates.

Thematic saturation, as the criterion for completeness of the qualitative analysis, involved a degree of analyst judgment that introduced subjectivity into the determination of when new thematic categories ceased to emerge. The six-phase framework of Braun and Clarke (2006) and the saturation tracking procedure drawn from Guest, Bunce and Johnson (2006) were applied to maximize transparency and consistency in this judgment, but replication of the thematic analysis by a second independent coder would have provided stronger evidence of the theme structure's reliability. Item-level ANOVA across 24 items and three role groups also carried some risk of Type I error accumulation, and item-level findings should be interpreted as exploratory and supplementary to the more robust section-level analyses rather than as primary findings.

3.11 Conclusion

This chapter provided a comprehensive description of the methodology employed in this study, establishing the rationale for each design decision in the relevant empirical and methodological literature and demonstrating the alignment between the research questions, the analytical plan, and the theoretical framework. The cross-sectional mixed-

methods survey design was well suited to the study's purpose of characterizing professional perspectives on communication and decision-support in equine laminitis management across three professional role groups simultaneously. The survey instrument, grounded in Source Credibility Theory and Diffusion of Innovations Theory, provided a theoretically coherent and empirically validated set of measures for the five constructs of interest. The pilot testing process, including Cronbach's alpha reliability assessment, confirmed that the instrument produced consistent and interpretable data. The analytical plan, covering descriptive statistics, ANOVA, chi-square, Kendall's tau and Spearman correlation, multiple regression, and thematic analysis with saturation tracking, addressed each of the five research questions using appropriate methods and followed the sequential logic recommended by Bronet (2024) for doctoral survey-based research.

The limitations identified in Section 3.10, including the potential gap between the target and achieved sample sizes, the self-report nature of the data, the cross-sectional design's limits on causal inference, and the analyst-dependency of thematic saturation, were inherent to the chosen research design and were acknowledged transparently to ensure that findings were interpreted within appropriate epistemic boundaries. These limitations did not negate the value or validity of the research but provided necessary context for their interpretation.

Chapter IV presents the results of the study in the sequence established by the analytical plan, reporting the findings beginning with respondent characteristics and margin of error and proceeding through descriptive analysis, comparative analysis, correlation, regression, and qualitative thematic analysis, in alignment with the five research questions. Interpretation of these results is reserved for Chapter V (Discussion), consistent with the methodological structure prescribed by Bronet (2024) for doctoral survey-based dissertations.

CHAPTER IV:

RESULTS

4.1 Introduction

This chapter presents the results of the study in the sequence established in Chapter III, with each section corresponding directly to a research question. It begins with a description of the achieved sample and the margin of error (Bronet, 2024), then proceeds through descriptive statistics, comparative analysis (ANOVA and chi-square), relational analysis (Kendall's tau and Spearman correlation), predictive analysis (multiple regression), and qualitative thematic analysis with saturation tracking. The chapter concludes with a summary of findings across all five research questions, a discussion of results limitations, and a brief transition to Chapter V. Results are reported descriptively and statistically without extended interpretation.

Prior to analysis, the raw dataset exported from Microsoft Forms to Microsoft Excel was reviewed for data quality. Five cases were excluded for failing the qualifying screening criterion. The final analytic sample included 266 valid responses. All analyses were conducted using Microsoft Excel's Data Analysis ToolPak, following the analytical procedures described in Chapter III and the methodological framework of Bronet (2024).

4.2 Research Question One

RQ1 asked: How do equine professionals' self-reported scores on Trust and Communication, Owner Knowledge and Education, Decision-Making Support, Innovation Adoption, and Professional Collaboration differ across professional role groups in the context of laminitis management? This section reports the sample composition, margin of error, descriptive statistics, and section-level and item-level ANOVA findings that address this question.

4.2.1 Sample Composition and Margin of Error

A total of 266 valid responses were collected from equine professionals across three professional role groups: veterinarians (n = 90), farriers (n = 68), and professional trainers (n = 108). All respondents confirmed through the qualifying screening question that they currently provide direct advice to horse owners about laminitis treatment or prevention as part of their professional work. The distribution of respondents by professional role is presented in Table 4.1.

Table 4.1
Distribution of Survey Respondents by Professional Role

Professional Role	n	% of Total	Professional Function in Laminitis Care
Veterinarian	90	33.8%	Clinical diagnosis, treatment planning, medical management, and welfare determination
Farrier	68	25.6%	Therapeutic trimming and shoeing, hoof monitoring, and hands-on rehabilitation support
Professional Trainer	108	40.6%	Daily management, exercise prescription, owner advising, and care coordination
Total	266	100%	

Note. Percentages may not sum to 100% due to rounding. All respondents confirmed active professional involvement in advising horse owners about laminitis treatment or prevention.

The margin of error (MoE) for the achieved sample was calculated using the standard formula for unknown populations at a 95 percent confidence level ($Z = 1.96$) with maximum variance ($p = 0.5$), as specified by Bronet (2024) for results-section reporting:

$$MoE = Z \times \sqrt{[p(1-p)/n]} = 1.96 \times \sqrt{[(0.5 \times 0.5)/266]} = 1.96 \times 0.03066 \approx 0.0601$$

(6.01%)

The achieved margin of error of 6.01 percent at the 95 percent confidence level fell within the acceptable range of 5 to 7 percent for doctoral survey-based research (Bronet, 2024). The target sample of 385 responses, required to achieve the gold-standard 5.0 percent margin of error, was not fully reached within the five-month data collection period. As Bronet (2024) explains, time and resource constraints are recognized limitations that, when transparently disclosed, do not invalidate a thesis. This limitation is addressed in Section 4.8.

4.2.2 Descriptive Statistics

Descriptive statistics, including arithmetic means (M) and standard deviations (SD), were computed for each of the five composite section scores for the full sample and by professional role. The means serve as the primary descriptive statistic for Likert-scale composite data. The results are presented in Table 4.2 and illustrated in Figure 4.1.

Table 4.2
Descriptive Statistics for Section Composite Scores by Professional Role (1–5 Scale)

Professional Role	S1: Trust & Communication		S2: Owner Knowledge		S3: Decision Support		S4: Innovation Adoption		S5: Professional Collaboration	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Overall (N = 266)	4.21	0.50	3.85	0.65	3.83	0.68	3.75	0.65	4.15	0.62
Veterinarian (n = 90)	4.31	0.47	3.86	0.65	3.97	0.69	3.75	0.63	4.13	0.63
Farrier (n = 68)	4.11	0.49	3.96	0.66	3.67	0.68	3.74	0.68	4.10	0.67
Professional Trainer (n = 108)	4.18	0.51	3.79	0.64	3.83	0.65	3.76	0.65	4.19	0.57

Note. *M* = mean; *SD* = standard deviation. Composite section scores represent the arithmetic mean of all items within each section following reverse-coding, on a 1–5 scale where higher scores indicate more positive professional self-assessments. Overall row = full sample (N=266). S1–S5 = Survey Sections 1 through 5.

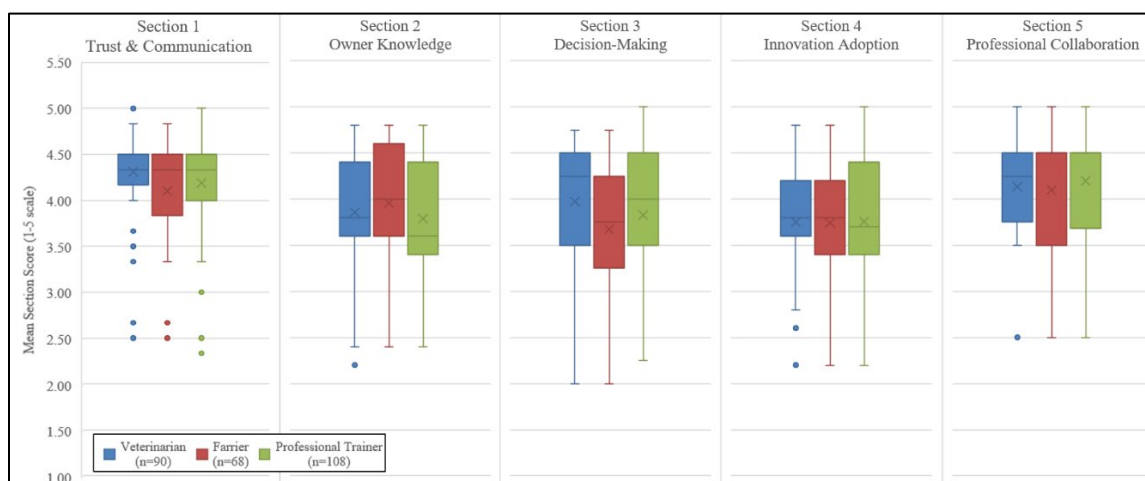


Figure 4.1

Side-by-Side Boxplot Comparison of Section Composite Scores by Professional Role

Figure 4.1: Side-by-side boxplot comparison of section composite scores by professional role (Veterinarian, Farrier, Professional Trainer). Boxes represent the interquartile range; horizontal lines indicate medians; whiskers extend to $1.5 \times \text{IQR}$. Scores are on a 1–5 scale.

As shown in Table 4.2, Section 1 (Trust and Communication) yielded the highest mean scores across all three professional role groups (overall $M = 4.21$, $SD = 0.50$), with veterinarians reporting the highest group mean ($M = 4.31$). Section 4 (Innovation Adoption) produced the lowest overall mean ($M = 3.75$, $SD = 0.65$), followed closely by Section 3 (Decision-Making Support, $M = 3.83$, $SD = 0.68$). Section 3 exhibited the greatest variability between role groups, with farriers reporting a notably lower mean ($M = 3.67$) than veterinarians ($M = 3.97$). Section 5 (Professional Collaboration) showed consistently high means across all groups (overall $M = 4.15$), with professional trainers reporting the highest group mean ($M = 4.19$). Distributions for Sections 1 and 5 were notably compact across all professional role groups, suggesting high internal consistency in these areas regardless of professional identity.

Internal consistency reliability for each of the five composite section scores was reassessed on the full analytic sample ($N = 266$) using Cronbach's alpha. Reliability values were $\alpha = .77$ for Trust and Communication (Section 1, $k = 6$), $\alpha = .76$ for Owner

Knowledge and Education (Section 2, $k = 5$), $\alpha = .71$ for Decision-Making Support (Section 3, $k = 4$), $\alpha = .73$ for Innovation Adoption (Section 4, $k = 5$), and $\alpha = .77$ for Professional Collaboration (Section 5, $k = 4$). All five sections met or exceeded the conventional threshold of $\alpha \geq .70$ for established scales (DeVellis, 2017), confirming that the section composite scores used in the subsequent ANOVA, correlation, and regression analyses had adequate internal consistency for the inferential procedures used. The full-sample reliabilities were also higher than the corresponding pilot-stage values reported in Section 3.7.4 for four of the five sections, consistent with the expected stabilization of reliability estimates as sample size increases. These results are summarized in Table 4.3, which presents the pilot-stage and full-sample reliability values side by side for comparison.

Table 4.3
Pilot vs. Full-Sample Cronbach's Alpha by Section

Section	Items (k)	Pilot α (n = 5)	Full Sample α (N = 266)	Interpretation
S1: Trust & Communication	6	.568	.770	Acceptable
S2: Owner Knowledge & Education	5	.662	.758	Acceptable
S3: Decision-Making Support	4	.581	.707	Acceptable
S4: Innovation Adoption	5	.766	.732	Acceptable
S5: Professional Collaboration	4	.612	.768	Acceptable

Note. All five sections exceed $\alpha = .70$ on the full sample. Three (S1, S2, S5) increased substantially with the larger sample size; S3 crossed the threshold; S4 dipped slightly but remained well above .70.

4.2.3 Section-Level ANOVA Results

One-way ANOVA was conducted for each of the five section composite scores with professional role as the between-subjects factor ($df = 2, 263$). The results are

presented in Table 4.3. Following Bronet's (2024) decision rule, if the p-value is less than the alpha level of .05, the null hypothesis that group means are equal is rejected. Effect sizes are reported as eta-squared (η^2), where $\eta^2 = .01$ represents a small effect, .06 a medium effect, and .14 a large effect (Cohen, 1988).

Table 4.4
One-Way ANOVA Results for Section Composite Scores by Professional Role

Section	SS	df	MS	F	p	Sig.	η^2
S1: Trust & Communication	1.702	2	0.851	3.530	.031	*	.025
S2: Owner Knowledge & Education	1.260	2	0.630	1.492	.227	ns	.011
S3: Decision-Making Support	3.506	2	1.753	3.929	.021	*	.029
S4: Innovation Adoption	0.015	2	0.008	0.018	.982	ns	.000
S5: Professional Collaboration	0.439	2	0.220	0.575	.564	ns	.004

Note. * $p < .05$. η^2 = eta-squared (effect size). SS = sum of squares; df = degrees of freedom; MS = mean square. Between-groups df = 2; within-groups df = 263; total df = 265. ns = not significant.

As shown in Table 4.4, statistically significant differences by professional role were found for Section 1, Trust and Communication ($F(2, 263) = 3.530$, $p = .031$, $\eta^2 = .025$), and Section 3, Decision-Making Support ($F(2, 263) = 3.929$, $p = .021$, $\eta^2 = .029$). Sections 2, 4, and 5 did not yield statistically significant differences across role groups. Effect sizes for both significant sections were small, consistent with survey-based professional group comparisons (Cohen, 1988).

As shown in Table 4.5, Tukey's HSD post-hoc comparisons were conducted for the two significant sections.

Table 4.5

Tukey's HSD Post-Hoc Pairwise Comparisons: Sections 1 and 3

Section / Comparison	Groups Compared	M (Group 1)	M (Group 2)	Mean Diff.	p	Sig.
Section 1: Trust & Communication — Overall ANOVA: $F(2, 263) = 3.53, p = .031$						
	Veterinarians vs. Farriers	4.31	4.11	0.20	.028	*
	Veterinarians vs. Professional Trainers	4.31	4.18	0.13	.174	ns
	Farriers vs. Professional Trainers	4.11	4.18	-0.07	.559	ns
Section 3: Decision-Making Support — Overall ANOVA: $F(2, 263) = 3.93, p = .021$						
	Veterinarians vs. Farriers	3.97	3.67	0.30	.019	*
	Veterinarians vs. Professional Trainers	3.97	3.83	0.14	.293	ns
	Farriers vs. Professional Trainers	3.67	3.83	-0.16	.283	ns

Note. M = mean section score (scale: 1–5 Likert). Mean Difference = M (Group 1) minus M (Group 2); p -values for all pairwise comparisons calculated using Tukey's HSD method (studentized range distribution, $k = 3$, $df = 263$). * Significant at $p < .05$ (two-tailed); ns = not significant. Sections 2, 4, and 5 did not yield significant ANOVA results; post-hoc testing was not conducted.

For Section 1, veterinarians ($M = 4.31$) scored significantly higher than farriers ($M = 4.11$, $p = .028$). No significant difference was found between veterinarians and professional trainers or between farriers and professional trainers. For Section 3, veterinarians ($M = 3.97$) scored significantly higher than farriers ($M = 3.67$, $p = .019$). No significant pairwise differences involving professional trainers reached the .05 threshold for Section 3.

4.2.4 Item-Level ANOVA Results

To supplement the section-level findings, one-way ANOVA with Tukey HSD post-hoc comparisons was conducted for each of the 24 individual survey items. Seven of

24 items yielded statistically significant differences by professional role. These are reported below in survey order and shown in Table 4.6.

Table 4.6
One-Way ANOVA Summary: Individual Survey Items by Professional Role

Q#	Survey Item	F(2, 263)	p	Sig.
Section 1: Trust & Communication				
Q1	Owners trust my recommendations during laminitis cases.	3.160	.044	*
Q2	I intentionally adjust my communication style based on the owner's level of knowledge.	3.134	.045	*
Q3	Owners are more receptive to treatment plans when I explain the reasoning behind them.	1.972	.141	ns
Q4	My credibility with owners depends as much on my communication style as on my technical expertise.	1.167	.313	ns
Q5	I routinely follow up with owners after a laminitis diagnosis to reassess the management plan.	2.580	.078	ns
Q6	I focus more on giving information than on verifying owner understanding during consultations.	4.451	.013	*
Section 2: Owner Knowledge & Education				
Q7	Owners often lack the foundational knowledge needed to make informed laminitis management decisions.	2.198	.113	ns
Q8	Educational materials from industry sources (e.g., associations, feed companies) are adequate for owner education.	0.083	.920	ns
Q9	I provide additional explanations or demonstrations when owners appear confused about treatment protocols.	0.203	.816	ns
Q10	Owners often seek advice from non-professional sources (e.g., social media, online forums) before consulting me.	0.829	.438	ns
Q11	Many commonly used owner-education materials on laminitis are outdated or inaccurate.	3.328	.037	*
Section 3: Decision-Making Support				
Q12	I believe I help owners feel more confident in their ability to manage a laminitic horse at home.	3.972	.020	*

Q#	Survey Item	F(2, 263)	p	Sig.
Q13	Emotional stress and financial concerns significantly affect owner decisions during laminitis cases.	0.723	.486	ns
Q14	Clear, compassionate communication from professionals reduces owner anxiety during laminitis treatment.	1.296	.275	ns
Q15	I provide written summaries or resources to owners following a laminitis consultation.	5.965	.003	*
Section 4: Innovation Adoption				
Q16	Owners are more likely to adopt new management practices when they come from a trusted professional.	0.055	.946	ns
Q17	I introduce new products or practices gradually, allowing owners time to adapt.	0.208	.813	ns
Q18	Owners are open to innovations when recommendations are supported by research or peer consensus.	1.711	.183	ns
Q19	Owners are less likely to try a new product or method if they have had a bad experience in the past.	0.727	.484	ns
Q20	Owners often wait to see successful results in other horses before adopting new laminitis treatments.	0.794	.453	ns
Section 5: Professional Collaboration				
Q21	Conflicting advice among professionals (veterinarians, farriers, trainers) confuses owners.	0.011	.989	ns
Q22	Owners benefit when professionals present a unified management plan for laminitis cases.	0.657	.519	ns
Q23	Continuing education in communication and owner education should be a professional requirement.	0.654	.521	ns
Q24	I regularly consult with other professionals (veterinarians, farriers, trainers) when managing laminitis cases.	4.058	.018	*

Note. One-way ANOVA with $df = (2, 263)$; F critical = 3.030 at $\alpha = .05$. N = 266 (Veterinarian n = 90, Farrier n = 68, Professional Trainer n = 108). * $p < .05$; ns = not significant.

Q1 - Owners trust my recommendations during critical care decisions: $F(2, 263) = 3.16$, $p = .044$, $\eta^2 = .024$. Veterinarians ($M = 4.38$) reported significantly higher perceived owner trust than farriers ($M = 4.10$, $p = .039$).

Q2 - I intentionally adjust my communication style to ensure owners understand care plans: $F(2, 263) = 3.13, p = .045, \eta^2 = .023$. Veterinarians ($M = 4.22$) reported significantly greater intentional communication adjustment than farriers ($M = 3.93, p = .035$).

Q6 - I focus more on giving information than on listening to owners' concerns (reverse-coded): $F(2, 263) = 4.45, p = .013, \eta^2 = .033$. Professional trainers ($M = 4.06$) scored significantly lower than veterinarians ($M = 4.37, p = .015$), indicating that trainers were less likely to characterize their communication approach as information-focused rather than listening-oriented. The farrier–trainer difference approached but did not reach significance ($p = .091$).

Q11 - Many commonly used owner-education materials contain outdated or inconsistent information: $F(2, 263) = 3.33, p = .037, \eta^2 = .025$. Farriers ($M = 3.79$) were significantly more likely than professional trainers ($M = 3.33$) to agree that owner-education materials are outdated or inconsistent ($p = .030$). Veterinarians ($M = 3.46$) did not differ significantly from either group.

Q12 - I believe I help owners feel more confident when deciding whether to continue treatment or consider euthanasia: $F(2, 263) = 3.97, p = .020, \eta^2 = .029$. Veterinarians ($M = 4.33$) reported significantly greater confidence in supporting owners through end-of-life decisions than farriers ($M = 4.02, p = .020$).

Q15 - I provide written summaries or resources to help owners make informed treatment decisions: $F(2, 263) = 5.96, p = .003, \eta^2 = .043$ — the strongest item-level effect observed. Veterinarians ($M = 3.69$) were significantly more likely to provide written summaries than both farriers ($M = 3.19, p = .004$) and professional trainers ($M = 3.33, p = .026$). No significant difference was found between farriers and trainers.

Q24 - I regularly consult with other professionals before finalizing laminitis management plans: $F(2, 263) = 4.06, p = .018, \eta^2 = .030$. Professional trainers ($M = 4.19$) reported significantly higher rates of inter-professional consultation than veterinarians ($M = 3.83, p = .017$). Farriers ($M = 3.94$) did not differ significantly from either group.

The remaining 17 items did not yield statistically significant differences across professional roles. Non-significant items included owner receptiveness to treatment explanations ($F(2, 263) = 1.97, p = .141$); the role of empathy and consistency in professional credibility ($F(2, 263) = 1.17, p = .313$); follow-up practices after treatment ($F(2, 263) = 2.58, p = .078$); the influence of emotional and financial stress on owner decision-making ($F(2, 263) = 0.72, p = .486$); owner adoption of new management strategies following observable improvements ($F(2, 263) = 0.06, p = .946$); the impact of conflicting professional advice on owner compliance ($F(2, 263) = 0.01, p = .989$); and the value of continuing education in communication ($F(2, 263) = 0.65, p = .521$).

The broad consistency of non-significant results across the majority of items is reported here and its implications are discussed in Chapter V. Figure 4.2a and Figure 4.2b together display these comparative findings visually: Figure 4.2a presents the mean section composite scores by professional role, with asterisks marking sections where ANOVA revealed significant differences. Figure 4.2b shows the proportion of each role group scoring High (≥ 3.5) on each section, with the significant chi-square association on Section 1 similarly indicated. Taken together, the two panels provide a concise visual summary of both the magnitude and categorical pattern of role-based differences across all five constructs.

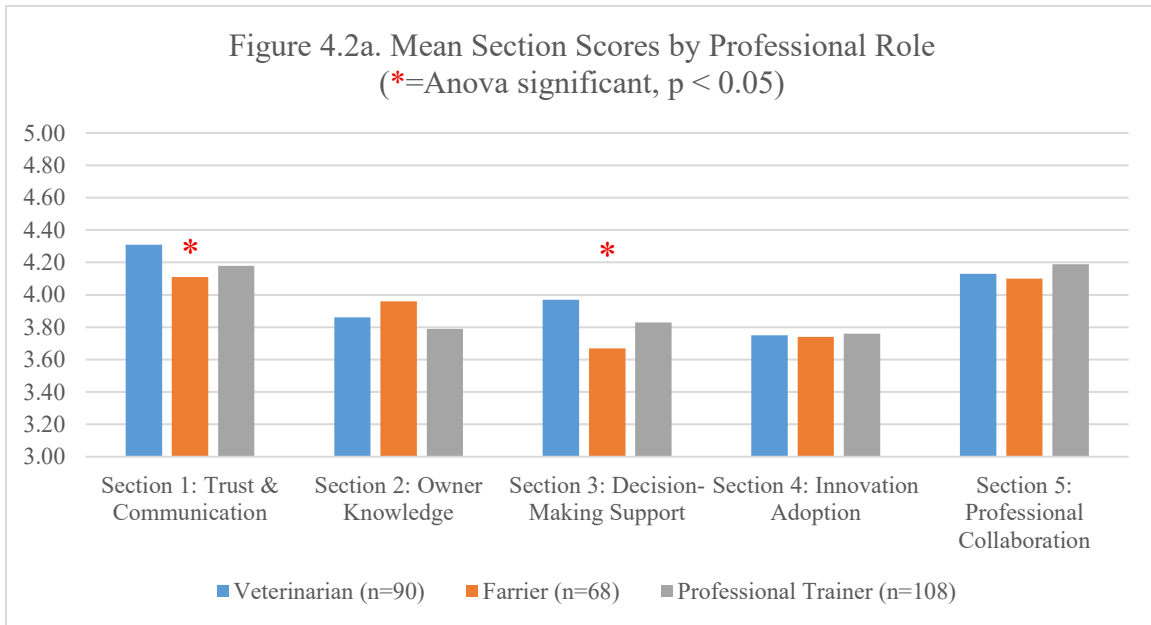


Figure 4.2a.
Mean Section Scores by Role

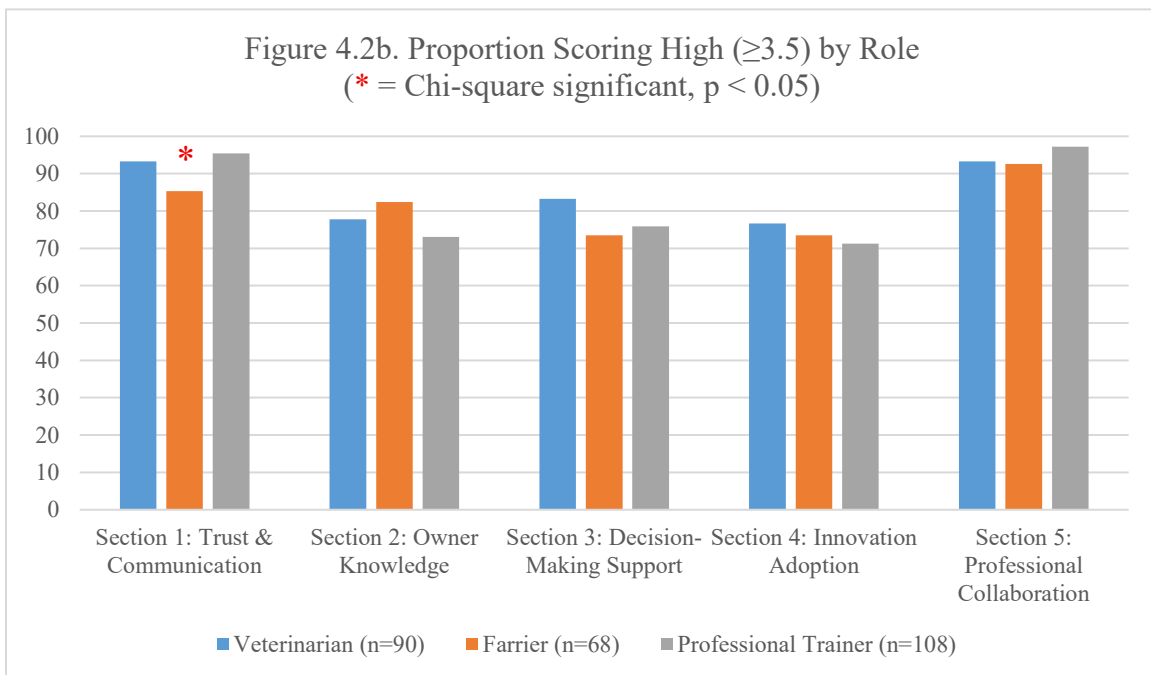


Figure 4.2b.
Proportion of High Scorers by Professional Role

Figure 4.2: Top panel (4.2a): Mean section composite scores by professional role; asterisk () denotes ANOVA significance ($p < .05$). Right panel (4.2b): Percentage of respondents scoring High (≥ 3.5) by professional role; asterisk (*) denotes chi-square significance ($p < .05$). Threshold: High ≥ 3.5 ; Low < 3.5 .*

4.3 Research Question Two

RQ2 asked: To what extent is professional role associated with high versus low scores on communication-related constructs among equine professionals involved in laminitis care? Chi-square tests of independence were conducted to assess categorical associations between professional role and section score category (High ≥ 3.5 ; Low < 3.5). As established in Section 3.9, the threshold of 3.5 represents the midpoint between the Neutral (3) and Agree (4) response options on the composite section mean scale and is consistent with the analytical framework described by Bronet (2024) and the Likert-scale measurement standard of Norman (2010). This threshold was applied uniformly across all five sections and all role groups. Results are presented in Table 4.7.

Table 4.7
Chi-Square Test Results by Section: High (≥ 3.5) vs. Low (< 3.5) Scores by Professional Role

Section	Veterinarian (n = 90)		Farrier (n = 68)		Trainer (n = 108)		χ^2	p	Sig.
	Low	High	Low	High	Low	High			
S1: Trust & Communication	6	84	10	58	5	103	6.11	.047	*
S2: Owner Knowledge	20	70	12	56	29	79	2.04	.361	ns
S3: Decision Support	15	75	18	50	26	82	2.53	.282	ns
S4: Innovation Adoption	21	69	18	50	31	77	0.73	.694	ns
S5: Collaboration	6	84	5	63	3	105	2.29	.318	ns

Note. * $p < .05$. High ≥ 3.5 ; Low < 3.5 . The 3.5 threshold represents the midpoint between the Neutral (3) and Agree (4) response options on the composite section mean scale, consistent with Bronet (2024, p. 107) and Norman (2010). $df = 2$ for all tests. ns = not significant.

As shown in Table 4.7, a statistically significant categorical association between professional role and section score category was found only for Section 1 (Trust and Communication), $\chi^2(2) = 6.11$, $p = .047$. Among respondents scoring High (≥ 3.5) on

Section 1, farriers had the lowest proportion ($58/68 = 85.3\%$) compared to veterinarians ($84/90 = 93.3\%$) and professional trainers ($103/108 = 95.4\%$), indicating that farriers were more likely to score in the Low (<3.5) category on this construct. Sections 2 through 5 did not show statistically significant categorical associations between professional role and score category. These chi-square findings are consistent with and complementary to the section-level ANOVA results reported in Section 4.2.3, which identified the same section as the only significant between-group difference. Interpretation of these findings is reserved for Chapter V.

4.4 Research Question Three

RQ3 asked: What is the relationship between Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration among equine professionals in laminitis management? Kendall's tau (τ) was used as the primary correlation method, with Spearman's rank-order correlation (ρ) computed as a complementary analysis. Both methods are appropriate for ordinal Likert-scale composite data, with Kendall's tau specifically recommended for data with tied ranks, as is the case with Likert-scale responses (Bronet, 2024). All ten possible section pairs were examined within each of the three professional role groups (30 coefficients per method).

4.4.1 Kendall's Tau Correlation Results

Kendall's tau coefficients for all ten section pairs within each role group are presented in Table 4.8.

Table 4.8
Kendall's Tau Correlation Coefficients for All Section Pairs by Professional Role Group

Section Pair	Veterinarian (n = 90) τ	Farrier (n = 68) τ	Prof. Trainer (n = 108) τ
S1 – S2	-0.077 ns	0.197*	0.036 ns
S1 – S3 ‡	0.430***	0.399***	0.448***

Section Pair	Veterinarian (n = 90) τ	Farrier (n = 68) τ	Prof. Trainer (n = 108) τ
S1 – S4 ‡	0.313***	0.423***	0.217**
S1 – S5	0.138 ns	0.147 ns	0.237**
S2 – S3	0.003 ns	0.171 ns	0.183*
S2 – S4	0.050 ns	0.205*	0.213**
S2 – S5	–0.118 ns	–0.146 ns	–0.094 ns
S3 – S4 ‡‡	0.392***	0.686***	0.474***
S3 – S5	0.070 ns	0.248**	0.286***
S4 – S5	0.230**	0.299**	0.140 ns

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant. ‡ = significant across all three role groups. ‡‡ = strongest and most consistent pair across all three role groups. S1=Trust & Communication; S2=Owner Knowledge & Education; S3=Decision-Making Support; S4=Innovation Adoption; S5=Professional Collaboration.

As shown in Table 4.8, three section pairs demonstrated statistically significant Kendall's tau correlations across all three professional role groups. Section 1 (Trust and Communication) with Section 3 (Decision-Making Support) was significant for veterinarians ($\tau = 0.430$, $p < .001$), farriers ($\tau = 0.399$, $p < .001$), and professional trainers ($\tau = 0.448$, $p < .001$). Section 1 (Trust and Communication) with Section 4 (Innovation Adoption) was similarly significant across all three groups, with veterinarians ($\tau = 0.313$, $p < .001$), farriers ($\tau = 0.423$, $p < .001$), and professional trainers ($\tau = 0.217$, $p < .01$) all demonstrating positive associations. Section 3 (Decision-Making Support) with Section 4 (Innovation Adoption) produced the strongest and most consistent correlations across all role groups, with veterinarians ($\tau = 0.392$, $p < .001$), farriers ($\tau = 0.686$, $p < .001$), and professional trainers ($\tau = 0.474$, $p < .001$). Taken together, the S1–S3, S1–S4, and S3–S4 pairs represent the three cross-group significant relationships identified in this analysis, and these pair designations are used consistently throughout the remainder of the results and discussion.

The S3–S4 pair was the most consistently strong association, with tau coefficients spanning a range from 0.392 to 0.686 across the three groups. The farrier coefficient for S3–S4 (0.686) represented the single strongest correlation found in the entire analysis. Section 2 (Owner Knowledge and Education) showed the fewest significant associations, with non-significant coefficients in the majority of pairs across all groups. Section 1 (Trust and Communication) with Section 4 (Innovation Adoption) was significant across all three role groups, representing a secondary cross-group association.

4.4.2 Spearman Rank-Order Correlation Results

Spearman’s rank-order correlation coefficients for all ten section pairs within each role group are presented in Table 4.9. As noted by Bronet (2024), running both Kendall’s tau and Spearman provides confirmatory evidence of relational patterns, and results from both methods are expected to be closely similar for Likert-scale data.

Table 4.9
Spearman Rank-Order Correlation Coefficients for All Section Pairs by Professional Role

Section Pair	Veterinarian (n = 90) ρ	Farrier (n = 68) ρ	Prof. Trainer (n = 108) ρ
S1 – S2	–0.098 ns	0.262*	0.048 ns
S1 – S3 ‡	0.516***	0.498***	0.549***
S1 – S4 ‡	0.392***	0.533***	0.272**
S1 – S5	0.170 ns	0.174 ns	0.290**
S2 – S3	0.018 ns	0.218 ns	0.238*
S2 – S4	0.065 ns	0.262*	0.283**
S2 – S5	–0.160 ns	–0.190 ns	–0.127 ns
S3 – S4 ‡‡	0.476***	0.816***	0.571***
S3 – S5	0.106 ns	0.305*	0.349***
S4 – S5	0.296**	0.359**	0.171 ns

*Note. * $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant. † = significant across all three role groups. †† = strongest and most consistent pair. Spearman coefficients confirm and reinforce the Kendall's tau findings in parallel throughout.*

As shown in Table 4.9, the Spearman results closely parallel the Kendall's tau findings. The S3–S4 pair was significant across all three role groups, with particularly strong coefficients among farriers ($\rho = 0.816$, $p < .001$), representing the largest correlation coefficient observed across all analyses. The S1–S3 pair was consistently significant across all role groups, and S1–S4 was also significant across all three groups. The near-identical significance patterns across two independent non-parametric methods strengthen the robustness of the relational findings and confirm that the patterns observed are not result of the specific correlation method employed. Figure 4.3, presents these correlation structures as a side-by-side heat map, allowing the reader to compare the pattern, direction, and relative strength of all ten section-pair associations simultaneously across the three professional role groups; pairs significant across all three groups are visually distinguished, confirming the S3–S4 and S1–S3 relationships as the most consistent and analytically central findings of the correlation analysis.

		S1 Trust	S2 Knowledge	S3 Decisions	S4 Innovation	S5 Collaboration
Veterinarian	S1 Trust	1.000	-0.077	0.430***	0.313***	0.138
	S2 Knowledge	-0.077	1.000	0.003	0.050	-0.118
	S3 Decisions	0.430***	0.003	1.000	0.392***	0.070
	S4 Innovation	0.313***	0.050	0.392***	1.000	0.230**
	S5 Collaboration	0.138	-0.118	0.070	0.230**	1.000
Farrier	S1 Trust	1.000	0.197*	0.399***	0.423***	0.147
	S2 Knowledge	0.197*	1.000	0.171	0.205*	-0.146
	S3 Decisions	0.399***	0.171	1.000	0.686***	0.248**
	S4 Innovation	0.423***	0.205*	0.686***	1.000	0.299**
	S5 Collaboration	0.147	-0.146	0.248**	0.299**	1.000
Professional Trainer	S1 Trust	1.000	0.036	0.448***	0.217**	0.237**
	S2 Knowledge	0.036	1.000	0.183*	0.213**	-0.094
	S3 Decisions	0.448***	0.183	1.000	0.474***	0.286***
	S4 Innovation	0.217**	0.213**	0.474***	1.000	0.140
	S5 Collaboration	0.237**	-0.094	0.286***	0.140	1.000
		S1 Trust	S2 Knowledge	S3 Decisions	S4 Innovation	S5 Collaboration

Figure 4.3

Kendall's Tau Correlation Heat Map for Section Pairs by Professional Role

Figure 4.3: Kendall's tau correlation heat map for all section pairs by professional role group. Shading intensity indicates correlation strength; direction (positive/negative) indicated by annotation. Significance markers: * $p < .05$, ** $p < .01$, *** $p < .001$.

4.5 Research Question Four

RQ4 asked: To what extent do Trust and Communication, Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration predict equine professionals' capacity for Decision-Making Support in laminitis care? Multiple regression analysis was conducted with Section 3 (Decision-Making Support) as the dependent variable and Sections 1, 2, 4, and 5 as predictors. As Bronet (2024) describes, multiple regression is appropriate for predicting a continuous dependent variable from a set of independent variables. Separate models were estimated for the full sample and each professional role group.

Section 3 was designated as the dependent variable on both theoretical and empirical grounds, as described in Chapter III. Theoretically, it represents the culminating professional capacity in the communication pathway from trust-building through education and innovation adoption to decision-making support. Empirically, the correlation analysis in Section 4.4 confirmed that Section 3 of the survey was the most consistently interconnected construct across all role groups, with S1–S3, S3–S4, and S1–S4 all reaching significance across all three groups simultaneously, and the S3–S4 pair producing the strongest individual coefficient in the entire analysis. Multiple regression coefficients for all models are presented in Table 4.10.

Table 4.10
Multiple Regression Coefficients Predicting Section 3 (Decision-Making Support) by Professional Role

Predictor	Overall (N = 266)		Veterinarian (n = 90)		Farrier (n = 68)		Trainer (n = 108)	
	β	Sig.	β	Sig.	β	Sig.	β	Sig.
S1 Trust & Communication	0.513	***	0.707	***	0.166	ns	0.466	***
S2 Owner Knowledge	0.117	**	0.147	ns	−0.011	ns	0.181	*

Predictor	Overall (N = 266)		Veterinarian (n = 90)		Farrier (n = 68)		Trainer (n = 108)	
	β	Sig.	β	Sig.	β	Sig.	β	Sig.
S4 Innovation Adoption	0.453	***	0.328	**	0.790	***	0.397	***
S5 Collaboration	0.127	**	0.080	ns	0.006	ns	0.226	**
R^2	0.577		0.541		0.766		0.556	
Adj. R^2	0.570		0.519		0.752		0.539	
F	88.95	***	25.00	***	51.66	***	32.29	***

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. ns = not significant. β = unstandardized regression coefficient. R^2 = proportion of variance in Decision-Making Support explained by the four predictors. Adj. R^2 = adjusted R-squared. F = overall model test statistic. Dependent variable: Section 3 (Decision-Making Support). Predictors: Sections 1, 2, 4, and 5.

4.5.1 Overall Regression Model (N = 266)

The overall regression model was statistically significant, $F(4, 261) = 88.95$, $p < .001$. The model explained 57.7 percent of the variance in Decision-Making Support scores ($R^2 = .577$, Adjusted $R^2 = .570$). Trust and Communication ($\beta = 0.513$, $p < .001$) and Innovation Adoption ($\beta = 0.453$, $p < .001$) were the strongest predictors of Decision-Making Support. Owner Knowledge and Education ($\beta = 0.117$, $p = .002$) and Professional Collaboration ($\beta = 0.127$, $p = .004$) also contributed significantly. All four predictors reached statistical significance in the overall model.

4.5.2 Veterinarian Model (n = 90)

The veterinarian model was statistically significant, $F(4, 85) = 25.003$, $p < .001$, $R^2 = .541$, Adjusted $R^2 = .519$. Trust and Communication was the dominant predictor ($\beta = 0.707$, $SE = 0.140$, $t = 5.039$, $p < .001$), indicating that a one-point increase in Section 1 scores was associated with a 0.707-point increase in Section 3 scores after controlling for other predictors. Innovation Adoption made a secondary significant contribution ($\beta = 0.328$, $SE = 0.100$, $t = 3.291$, $p = .001$). Owner Knowledge and Education ($\beta = 0.147$, $p =$

.068) and Professional Collaboration ($\beta = 0.080$, $p = .392$) did not reach statistical significance.

4.5.3 Farrier Model ($n = 68$)

The farrier model demonstrated the strongest model fit of the three role-specific analyses, $F(4, 63) = 51.661$, $p < .001$, $R^2 = .766$, Adjusted $R^2 = .752$. This substantial explanatory power was attributable almost entirely to a single predictor: Innovation Adoption ($\beta = 0.790$, $SE = 0.081$, $t = 9.726$, $p < .001$). Trust and Communication ($\beta = 0.166$, $p = .123$), Owner Knowledge and Education ($\beta = -0.011$, $p = .868$), and Professional Collaboration ($\beta = 0.006$, $p = .925$) were not statistically significant in the farrier model.

4.5.4 Professional Trainer Model ($n = 108$)

The professional trainer model was statistically significant, $F(4, 103) = 32.294$, $p < .001$, $R^2 = .556$, Adjusted $R^2 = .539$. In contrast to the veterinarian and farrier models, all four predictors reached statistical significance in the trainer model: Trust and Communication ($\beta = 0.466$, $SE = 0.091$, $t = 5.123$, $p < .001$); Innovation Adoption ($\beta = 0.397$, $SE = 0.072$, $t = 5.533$, $p < .001$); Professional Collaboration ($\beta = 0.226$, $SE = 0.081$, $t = 2.811$, $p = .006$); and Owner Knowledge and Education ($\beta = 0.181$, $SE = 0.070$, $t = 2.571$, $p = .012$).

The balanced predictive structure of the trainer model, in which no single predictor dominated, distinguished this role group from both veterinarians and farriers. Figure 4.4 presents the unstandardized regression coefficients (β) for each predictor across all four models side by side, providing a visual comparison of both the magnitude of each predictor's contribution and the striking heterogeneity in predictive structure across professional roles. The contrast between the near-exclusive dominance of

Innovation Adoption in the farrier model and the balanced multi-predictor structure in the trainer model is illustrated in this figure.

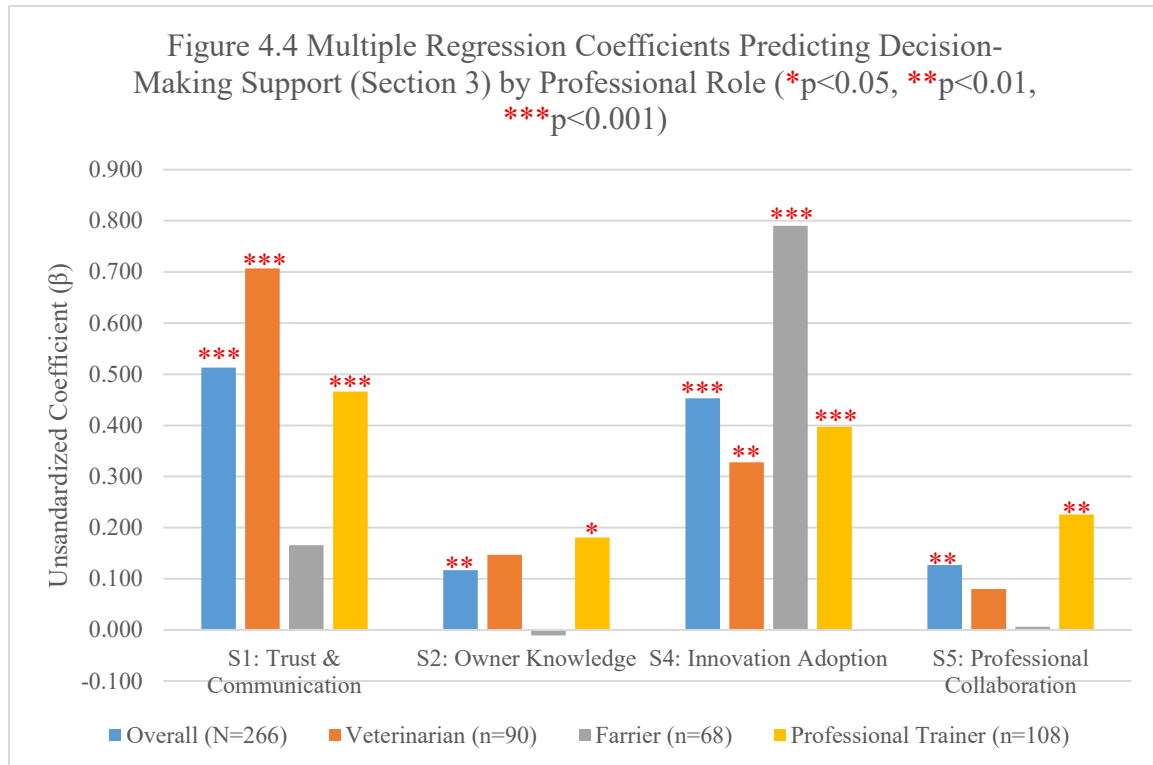


Figure 4.4
Multiple Regression Coefficients Predicting Section 3 (Decision-Making Support) by Professional Role
 Figure 4.4: Unstandardized regression coefficients (β) predicting Section 3 (Decision-Making Support) by professional role group. Significance markers shown at * $p < .05$, ** $p < .01$, *** $p < .001$. Note the contrast between the near-exclusive Innovation Adoption dominance in the farrier model vs. the balanced multi-predictor structure for professional trainers.

4.6 Research Question Five

RQ5 asked: What themes emerge from equine professionals' open-ended descriptions of their experiences communicating with and supporting horse owners in laminitis cases, and at what point does thematic saturation occur? Of the 266 valid respondents, 134 (50.4%) provided substantive written responses to the open-ended question: "Is there anything else you would like to share about your experiences working

with horse owners affected by laminitis, particularly regarding how you communicate, educate, or support their decision-making?” Responses ranged from one sentence to several paragraphs, with a mean length of approximately 47 words. Thematic analysis followed the six-phase framework of Braun and Clarke (2006), with saturation tracked using the procedure described by Guest, Bunce and Johnson (2006) and the operational definition provided by Fusch and Ness (2015).

4.6.1 Saturation Analysis

A saturation tracking procedure was applied sequentially across the 134 substantive responses. After coding each response, the cumulative number of distinct thematic categories was recorded. Theme emergence occurred as follows: Theme T1 (Interprofessional Collaboration) emerged at response 1; Themes T2 (Owner Education and Knowledge Gaps) and T3 (Communication Clarity and Honesty) both emerged at response 2; Theme T4 (End-of-Life Decision Support) emerged at response 5; Theme T5 (Owner Adherence and Consistency Challenges) emerged at response 6; and Theme T6 (Treatment Innovation and Adaptation) emerged at response 16.

No new thematic categories were identified across the remaining 118 responses (responses 17 through 134), confirming thematic saturation at response 16, which represented 11.9 percent of the total substantive responses.

This pattern of rapid saturation was consistent with Guest, Bunce and Johnson’s (2006) empirical demonstration that saturation in professionally homogeneous samples typically occurs within the first 12 responses, and with Fusch and Ness’ (2015) operational definition of saturation as the point at which the dataset is comprehensive enough to support replication. The 118 confirmatory responses following saturation provided strong evidence that the six-theme structure fully represented the range of professional perspectives expressed in the open-ended data.

Figure 4.5 presents the thematic saturation curve, plotting the cumulative number of distinct themes identified against successive response number. The step-function shape of the curve reached its final value of six at response 16 and remained flat across the subsequent 118 responses. This pattern indicates saturation and supports the analytical decision to conclude coding at that point.

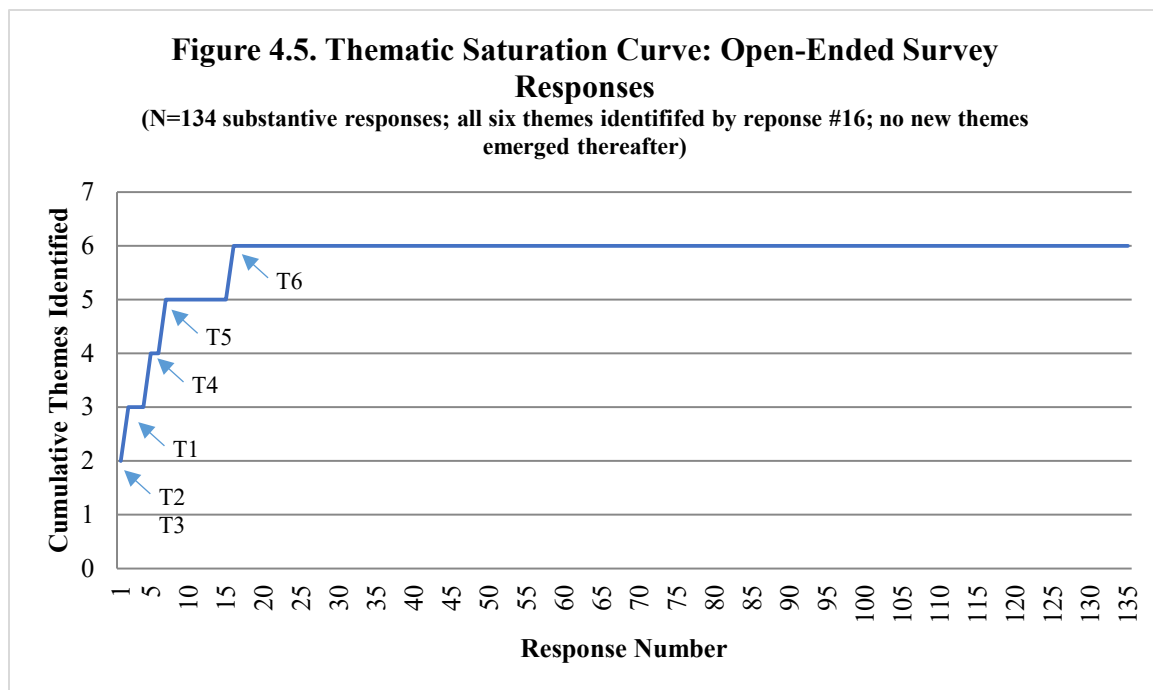


Figure 4.5

Thematic Saturation Curve: cumulative themes identified across 134 open-ended survey responses

Figure 4.5: Thematic saturation curve: cumulative number of distinct themes identified across 134 open-ended survey responses. The y-axis shows cumulative themes; the x-axis shows successive response number. All six themes were present by response 16 (11.9% of the sample), with no new themes emerging across the subsequent 118 responses.

4.6.2 Identified Themes

Six thematic categories were identified from the 134 substantive open-ended responses. Table 4.11 presents each theme with its code, frequency, proportion, and representative excerpts drawn from actual respondent statements. Themes are reported in

descending order of frequency. Responses were sometimes coded to more than one theme, so aggregate percentages exceed 100 percent.

Table 4.11
Thematic Analysis of Open-Ended Survey Responses: Theme Frequencies and Representative Excerpts

Code	Theme	Freq. (% of 134)	Representative Excerpts
T2	Owner Education and Knowledge Gaps	37 (27.6%)	“Not many owners see laminitis as a disease - they think it is just lameness.” (Vet) “Horse owners need more education on laminitis. Most don’t know it’s preventable.” (Trainer)
T3	Communication Clarity and Honesty	37 (27.6%)	“You have to communicate clearly. One step at a time - step by step and they handle it better.” (Farrier) “I communicate very matter of fact. I tell them exactly what they are up against.” (Vet)
T1	Interprofessional Collaboration	29 (21.6%)	“It’s important that vet, farrier, trainer and owner are all involved when making a case plan.” (Trainer) “The more people involved in the communication, the better.” (Farrier)
T4	End-of-Life Decision Support	25 (18.7%)	“Euthanasia is not giving up. It’s making the hardest, most humane decision when suffering is the only alternative.” (Vet) “Knowing when to let them go is our greatest responsibility.” (Trainer)
T5	Treatment Innovation and Adaptation	22 (16.4%)	“It is so important to always look at new innovations. New products are always being formulated.” (Vet) “New products designed to help laminitis - they need to get the word out.” (Farrier)
T6	Owner Adherence and Consistency Challenges	22 (16.4%)	“Owners need to stick to a plan and not change halfway through.” (Farrier) “The best plan is the one they can actually follow.” (Trainer)

Note. Responses could be coded to multiple themes; aggregate percentages therefore exceed 100%. Frequency = number of responses in which the theme was present. Percentage is of 134 substantive responses. Role of respondent is indicated in parentheses (Vet = Veterinarian; Trainer = Professional Trainer). Excerpts are lightly edited for clarity and anonymity without altering meaning.

4.6.3 Theme Descriptions

Theme T2 - Owner Education and Knowledge Gaps (n = 37, 27.6%): The most frequently coded theme across all three role groups was the professional perception that horse owners lack sufficient foundational knowledge about laminitis as a distinct medical condition with serious welfare implications. Respondents described owners failing to recognize early warning signs, underestimating the condition's severity and chronicity, and being vulnerable to misinformation from social media and peer networks. This theme was expressed consistently across all three professional groups, suggesting a cross-role consensus that the owner knowledge gap represented a systemic challenge in laminitis management.

Theme T3 - Communication Clarity and Honesty (n = 37, 27.6%): Respondents across all roles emphasized the central importance of clear, honest, and step-by-step communication in effective laminitis management. Farriers described systematic approaches to explaining causes, symptoms, treatment steps, and expected timelines. Veterinarians described calibrating communication style to the individual owner and rejecting false optimism as ultimately harmful to professional relationships. A recurring sub-theme was the professional obligation to communicate difficult prognoses honestly rather than deferring to owner emotional comfort (Anthony, 2025; Hernandez et al., 2018).

Theme T1 - Interprofessional Collaboration (n = 29, 21.6%): The value of unified and consistent communication across the full professional care team was the third most frequently coded theme. Respondents described conflicting or inconsistent advice among professionals as a significant and recurring barrier to owner adherence. Multiple respondents described the ideal management scenario as one in which the veterinarian, farrier, trainer, and owner were aligned and communicated a consistent message

simultaneously. Professional trainers were particularly likely to describe this theme, positioning themselves as facilitators of interprofessional coordination (Kinnison, May and Guile, 2014; Root Kustritz, Molgaard and Tegzes, 2013).

Theme T4 - End-of-Life Decision Support (n = 25, 18.7%): End-of-life communication emerged as a distinct and emotionally significant theme, with respondents across all groups describing euthanasia conversations as among the most challenging professional encounters in laminitis management. A notable sub-theme was the reframing of euthanasia as an act of welfare advocacy rather than a treatment failure, consistent with the professional ethics positions of Anthony (2025) and Hernandez et al. (2018). Professional trainers, in particular, described drawing on personal experience with equine loss as a communication resource for supporting clients facing similar decisions.

Theme T5 - Treatment Innovation and Adaptation (n = 22, 16.4%): Respondents across all roles described active engagement with emerging treatments, products, and techniques. Novel pharmacological agents, including Desmosphyrine, a topical product marketed for the early treatment of acute laminitis, which was independently referenced by two respondents, cryotherapy protocols, and therapeutic shoeing innovations were cited. Veterinarians were more likely to reference published clinical evidence, while farriers emphasized practical adaptability. A recurring sub-theme was the challenge of introducing innovations to change-resistant owners, with several respondents describing the need to establish trust before recommending unfamiliar products. This finding was consistent with the Diffusion of Innovations framework, which emphasizes trialability and trust in opinion leaders (Rogers, 1983; Bamford, 2019).

Theme T6 - Owner Adherence and Consistency Challenges (n = 22, 16.4%): All three professional groups reported substantial frustration regarding owner non-adherence

to prescribed management plans. Respondents described owners changing protocols prematurely, missing scheduled farrier appointments, and allowing financial or emotional barriers to interrupt consistent care. Several respondents described proactively adjusting management goals to accommodate real-world owner constraints, explicitly developing realistic rather than ideal care plans on the grounds that sustainable partial adherence is preferable to theoretical perfection applied inconsistently. This position was consistent with the communication flexibility advocated by Coe, Adams and Bonnett (2008).

4.6.4 Integration of Qualitative and Quantitative Findings

The six themes identified in the qualitative analysis demonstrate strong convergent validity with the quantitative results. Theme T2 (Owner Education and Knowledge Gaps) mirrored Section 2 (Owner Knowledge and Education), which showed the fewest significant correlations with other sections in the correlation analysis. This pattern suggested that owner knowledge challenges were experienced as a relatively independent domain that was not resolved by improvements in communication, innovation, or collaboration alone.

Theme T3 (Communication Clarity and Honesty) converged with Section 1 (Trust and Communication), where veterinarians scored significantly higher than farriers. This finding was consistent with qualitative descriptions of more adaptive, relationship-centered communication among veterinarians compared to more systematic but less flexible communication patterns among farriers.

Theme T1 (Interprofessional Collaboration) aligned with Section 5 (Professional Collaboration) and with the significant regression coefficient for Professional Collaboration specifically in the trainer model. This result confirmed quantitatively what trainers described qualitatively as their primary professional contribution to laminitis case management.

Theme T4 (End-of-Life Decision Support) directly contextualized the quantitative finding that veterinarians reported significantly greater confidence than farriers in supporting euthanasia decisions (Q12) and were more likely to provide written resources (Q15). This theme also added emotional and ethical dimensions that the Likert scale data could not capture.

Themes T5 (Innovation) and T6 (Adherence) collectively illuminated the behavioral dynamics underlying the S3–S4 correlation. This combined thematic insight confirmed that the statistical relationship between innovation adoption and decision-making support reflected real, describable professional experiences rather than a statistical anomaly.

4.7 Summary of Findings

Across all five research questions, the data generated a detailed picture of professional communication in equine laminitis management, characterized by broad professional agreement on most dimensions of owner communication alongside meaningful role-based differences in trust, communication adaptation, and decision-making support. Table 4.12 presents a consolidated summary of each research question, its corresponding hypothesis, the statistical method employed, the key result, and the hypothesis decision.

Table 4.12
Summary of Research Questions, Hypotheses, Statistical Methods, and Outcomes

RQ / H	Research Question / Hypothesis	Key Statistical Result	Analytical Method	Decision
RQ1 / H1	Do section scores differ significantly by professional role?	S1: $F(2, 263) = 3.53, p = .031, \eta^2 = .025$; S3: $F(2, 263) = 3.93, p = .021, \eta^2 = .029$. Veterinarians scored significantly higher than farriers on both.	One-way ANOVA + Tukey HSD	Supported

RQ / H	Research Question / Hypothesis	Key Statistical Result	Analytical Method	Decision
RQ2 / H2	Is professional role associated with high/low score categories?	S1 only: $\chi^2(2) = 6.11$, $p = .047$. Farriers: 85.3% High; Veterinarians: 93.3% High; Trainers: 95.4% High.	Chi-square (≥ 3.5 threshold)	Supported
RQ3 / H3	What are the relationships between the five constructs?	S3–S4 significant across all 3 groups ($\tau = 0.392$ – 0.686 , all $p < .001$); S1–S3 also consistently significant across all groups.	Kendall's τ + Spearman ρ	Supported
RQ4 / H4	Do S1, S2, S4, and S5 predict Decision-Making Support (S3)?	Overall $R^2 = .577$, $F(4, 261) = 88.95$, $p < .001$. S1 $\beta = .513^{***}$ and S4 $\beta = .453^{***}$ primary predictors. Farrier $R^2 = .766$; Trainer: all 4 significant.	Multiple regression	Supported
RQ5 / H5	What themes emerge from open-ended responses and when does saturation occur?	6 themes identified across 134 responses. Saturation confirmed at response 16 (11.9% of sample); 118 confirmatory responses followed.	Thematic analysis + saturation tracking	Supported

*Note. All five hypotheses were supported by the data. β = unstandardized regression coefficient. τ = Kendall's tau. χ^2 = chi-square statistic. F = ANOVA test statistic. *** $p < .001$.*

In summary: RQ1 was addressed through ANOVA, which identified significant role-based differences for Trust and Communication ($F(2, 263) = 3.53$, $p = .031$) and Decision-Making Support ($F(2, 263) = 3.93$, $p = .021$), with veterinarians scoring significantly higher than farriers on both; H1 was supported. RQ2 was addressed through chi-square tests, confirming a significant categorical association for Trust and Communication only ($\chi^2(2) = 6.11$, $p = .047$), with farriers showing the lowest proportion of High scorers (85.3%); H2 was supported. RQ3 was addressed through Kendall's tau and Spearman correlation, confirming that the S3–S4 pair (Decision-Making Support – Innovation Adoption) was the most robust and consistent association across all three role groups ($\tau = 0.392$ – 0.686 , all $p < .001$); H3 was supported. RQ4 was addressed through multiple regression, confirming that the four predictors collectively explained 57.7

percent of variance in Decision-Making Support ($R^2 = .577$) and revealing that the predictive structure differed substantially by role; H4 was supported. RQ5 was addressed through thematic analysis, identifying six themes with saturation confirmed at response 16 of 134 substantive responses; H5 was supported.

4.8 Results Limitations

Several limitations arising from the data, rather than from the research design as discussed in Section 3.10, should be acknowledged when interpreting these results.

First, the achieved sample of 266 responses yielded a margin of error of 6.01 percent rather than the 5 percent gold standard associated with the target of 385 responses. This slightly reduced level of precision means that differences or relationships that narrowly missed the significance threshold of $p = .05$ in this sample, such as the farrier–trainer difference on Section 1 ($p = .091$) and the veterinarian Owner Knowledge coefficient in regression ($p = .068$), might have reached significance with a larger sample. Conversely, some findings that reached significance might not replicate in a different sample drawn from the same population.

As Bronet (2024) confirms, a margin of error between 5 and 7 percent remains acceptable for doctoral thesis research, and the results are reported with this precision acknowledged. Field, A., Miles, J., and Field, Z. (2012) similarly note that statistical power in ANOVA and regression analyses is a function of both sample size and effect size and that the small-to-moderate effect sizes observed in this study ($\eta^2 = .011-.043$) are typical of professional group comparison studies where within-group variability is substantial.

Second, the unequal sample sizes across professional role groups, particularly the smaller farrier subsample ($n = 68$) relative to veterinarians ($n = 90$) and professional trainers ($n = 108$), may have reduced statistical power for farrier-specific analyses. The

farrier regression model, while producing the highest R^2 of the three role-specific models (.766), was based on the smallest subgroup. The single-predictor dominance of Innovation Adoption in the farrier model should be interpreted with this in mind, as the stability of highly simplified regression solutions is sensitive to sample size (Field, A., Miles, J., and Field, Z., 2012). Replication with a larger and more balanced farrier sample is recommended.

Third, all quantitative data in this study were self-reported, making them subject to social desirability bias, defined as the tendency for respondents to report more favorable professional behaviors than may reflect actual practice (Podsakoff et al., 2003). The consistently high mean scores on Sections 1 and 5 (Trust and Communication, $M = 4.21$; Professional Collaboration, $M = 4.15$) were noteworthy in this context. While these patterns may accurately reflect strong professional self-efficacy in communication and collaboration, they may also reflect a tendency to present professionally desirable attitudes in a survey context. The open-ended qualitative data, in which professionals candidly described frustrations with owner non-adherence, inadequate educational materials, and conflicting professional advice, provided a partial corrective by capturing perspectives less susceptible to social desirability inflation.

Fourth, the cross-sectional design meant that the correlations and regression relationships identified in Sections 4.3 and 4.4 reflected associations at a single point in time and did not establish causal direction. The finding that Innovation Adoption predicted Decision-Making Support could not distinguish between a causal relationship, a reverse causal relationship, or a shared underlying factor. Similarly, the thematic saturation analysis confirmed that six themes fully represented the content of the open-ended data collected but did not establish that these themes were exhaustive of all

possible professional perspectives on laminitis communication across the full range of equine professional contexts in the United States.

4.9 Conclusion

The results presented in this chapter addressed all five research questions and supported all five directional hypotheses. The quantitative findings revealed both a substantial foundation of shared professional values across veterinarians, farriers, and professional trainers and meaningful role-based differences concentrated in Trust and Communication and Decision-Making Support. The overall regression model explained 57.7 percent of the variance in Decision-Making Support. Role-specific models revealed that this aggregate predictive structure masked substantial heterogeneity, with veterinarians relying predominantly on trust-based communication, farriers relying almost exclusively on innovation adoption, and professional trainers demonstrating a balanced combination of all four constructs.

The qualitative thematic analysis, which achieved saturation at response 16 of 134 substantive responses, identified six themes that directly converged with and contextualized the quantitative patterns. Together, these findings provided a mutually reinforcing mixed-methods picture of professional communication in equine laminitis management.

The results limitations acknowledged in Section 4.7, including the 6.01 percent margin of error, unequal subgroup sizes, susceptibility to social desirability bias, and the limits of cross-sectional design for causal inference, provided the necessary analytical context for interpreting these findings. Chapter V (Discussion) develops the interpretation of these results in relation to the two theoretical frameworks, the existing literature, and the research questions, drawing out the theoretical and practical implications of both the shared professional values and the role-based differences identified in this chapter.

CHAPTER V: DISCUSSION

5.1 Discussion of Results

This chapter interprets the findings reported in Chapter IV using Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983), as well as the broader scholarly literature on veterinary-client communication, equine professional practice, and owner decision-making in laminitis management. Consistent with Bronet's (2024) structural guidance for doctoral survey-based research, the discussion follows the sequence of the five research questions, addressing each in turn before integrating the findings in Section 5.7 to identify the study's broader theoretical implications. No new data were introduced in this chapter; all empirical claims referenced findings reported in Chapter IV.

The results of this study are consistent and internally aligned. Across the three equine professional groups there was substantial agreement on most dimensions of communication, education, and collaboration, reflecting a shared foundation of professional values that supports the development of interdisciplinary frameworks. Within this shared foundation, however, meaningful and theoretically significant role-based differences emerged, indicating how the structural position of each professional in the care system shapes both the communication resources they use and the pathways through which they support owner decision-making.

The single most important finding was that the predictors of Decision-Making Support differed fundamentally by professional role. Veterinarians relied primarily on trust-based communication, farriers relied almost exclusively on innovation adoption, and professional trainers drew on all four constructs simultaneously. This pattern was not only a result of practical importance but also represented a theoretical contribution. It

advanced understanding of how Source Credibility Theory and Diffusion of Innovations Theory operated differently within the same care ecosystem, depending on the structural role of the professional.

5.2 Discussion of Research Question One

Research Question One examined how equine professionals' self-reported scores on the five survey constructs differed across professional role groups. The ANOVA findings showed that significant role-based differences existed only for Trust and Communication (Section 1) and Decision-Making Support (Section 3), with veterinarians scoring significantly higher than farriers on both. These findings were meaningful and well-grounded in the existing literature, but they required careful interpretation that goes beyond simply noting the direction of the differences.

5.2.1 The Veterinarian Communication Advantage: Structural Authority and Training

The finding that veterinarians reported higher trust and more intentional communication adjustment than farriers (Q1 and Q2) was consistent with the predictions of Source Credibility Theory and with the existing equine communication literature. Rutherford and England (2024) found that equine owners rated veterinarians highly on both expertise and trustworthiness, consistently more favorably than other professional advisers.

The veterinarian occupies a structurally privileged position in the equine laminitis care system. Their clinical authority is formally legitimized through professional registration, their diagnoses and treatment recommendations carry legal weight, and their clinical encounters provide a structured setting for communication. These encounters provided a structured setting that enabled veterinarians to approach communication more deliberately, including planning how information was presented and adapting messages in response to owner understanding (Coe, Adams and Bonnett, 2008; Pun, 2020). The

familiar consultation model used in human healthcare, where the professional has time allocated to explain, listen, and advise, is more closely approximated in veterinary consultations than in farriery or training contexts. This structural feature plausibly contributes to veterinarians' higher self-assessed communication intentionality.

The veterinarians' reporting of significantly higher confidence in supporting euthanasia decisions (Q12) and greater likelihood of providing written resources (Q15) are also consistent with structural role expectations. Veterinarians carry the primary legal and ethical responsibility for welfare determinations in equine care, including authorization of euthanasia and their clinical judgment carries the weight of professional accountability (Anthony, 2025). This accountability creates both the necessity and the institutional expectation of proactive, comprehensive communication about end-of-life decisions, including the provision of written information that supports owner recall and informed consent.

Cameron et al. (2025) found that veterinarians who regularly discussed prognosis and end-of-life scenarios proactively, rather than deferring until crisis, reported significantly better experiences and outcomes in euthanasia communications, consistent with the higher overall Decision-Making Support scores among veterinarians in the present study.

5.2.2 The Farrier Communication Gap: Training, Context, and Opportunity

The significantly lower scores of farriers on Trust and Communication and Decision-Making Support, as well as the lower proportion of farriers scoring High on these constructs, should not be interpreted as evidence of poor professional practice. Instead, they reflect a structural gap arising from a professional formation pathway that has historically emphasized technical competence over communication skill.

Lynden (2020), in a doctoral study of farrier-client communication, documented that most farriers developed their client communication skills through experience and trial-and-error rather than formal instruction, with communication training either entirely absent from or given limited emphasis in most farriery qualification pathways. Kirker-Head and Krane (2010) similarly identified a significant gap between the communication demands placed on farriers in equine health management and the training infrastructure available to support them. These structural deficits, rather than any deficit in professional commitment or capability, most plausibly explain the pattern of lower Communication and Decision-Making Support scores among farriers.

Importantly, the absolute mean scores for farriers on both sections remained above 4.0 on the five-point scale. These scores indicated that farriers did not lack effective client communication skills but rather self-assess those skills with somewhat less confidence than their veterinary colleagues. Bard et al. (2017) found that professionals who had received formal communication training reported higher self-efficacy in client communication contexts, precisely the pattern that the farrier data reflected in inverse.

This interpretation was further supported by the farrier qualitative data in Theme T3 (Communication Clarity and Honesty), where farriers described structured, step-by-step communication approaches that are entirely consistent with effective practice. The ANOVA gap, therefore, reflected variation in confidence and formalization rather than differences in communication quality. The implication is not that farriers communicate poorly but that targeted professional communication development would likely produce measurable improvements in both self-assessed and observed communication effectiveness, consistent with Root Kustritz, Molgaard and Tegzes's (2013) finding that

interprofessional communication training produces significant gains in communication confidence across veterinary professional groups.

5.2.3 The Trainer's Listening Orientation and Consultation Pattern

Two item-level findings for professional trainers deserve further discussion. First, the significantly lower score of trainers on Q6, the reverse-coded item assessing information-giving versus listening orientation, indicated that trainers were less likely than veterinarians to describe their communication style as primarily information-focused.

This finding was theoretically important and practically illuminating. The trainer-owner relationship was ongoing and embedded in the daily routines of horse management, providing more opportunities for dialogue and active listening. This type of communication is the kind of iterative, responsive communication that the literature consistently identifies as most effective in driving behavior change (Coe, Adams and Bonnett, 2008; Street et al., 2009). Veterinary consultations, by contrast, were often more episodic and time-constrained, creating structural pressure toward directive information delivery that may inadvertently crowd out active listening. The trainer's lower information-focus score likely reflected not a communication deficit but a different, relationship-embedded communication model that draws on ongoing contact rather than discrete clinical encounters to build owner understanding.

Second, trainers reported significantly higher rate of interprofessional consultation (Q24) than veterinarians. Trainers were more likely to consult with other professionals more frequently than veterinarians before finalizing laminitis management recommendations. This pattern was consistent with their less formally defined clinical authority. However, this pattern is coherent when understood in the context of the trainer's less defined formal mandate. As Kinnison, May and Guile (2014) observed in

their study of interprofessional practice in veterinary teams, professionals who operate at the boundaries of formally codified clinical authority tend to rely more heavily on collaborative input to validate their recommendations.

This pattern reflected professional responsibility rather than uncertainty. Nankervis et al. (2024) found analogous patterns among saddle fitters, who routinely sought veterinary and physiotherapy input before making recommendations that touched on health-related issues. The trainer's high consultation rate should therefore be understood as a professional strength. Formalizing this collaborative behavior into structured care protocols could substantially improve the consistency and quality of laminitis management advice across the care team.

5.2.4 The Meaning of Non-Significant Differences

The absence of significant differences across Sections 2, 4, and 5, (Owner Knowledge and Education, Innovation Adoption, and Professional Collaboration), as well as across 17 of 24 individual items, deserves equal interpretive attention. Statistically non-significant findings in professional survey research are often under-discussed, but in this study, they carried substantive meaning.

The uniformity of professional perceptions across role groups on most dimensions of owner education, innovation, and collaboration suggested a coherent cross-professional consensus on the challenges and responsibilities of equine laminitis communication. This consensus provided a solid foundation for the development of interdisciplinary educational frameworks and professional development programs. When veterinarians, farriers, and professional trainers agree in their perceptions of owner knowledge deficits, their commitment to innovation adoption, and their valuation of collaborative practice, those shared values constitute a platform for intervention design that does not need to start from the position of negotiating fundamental disagreements.

The significant findings identify where role-specific approaches are warranted; the non-significant findings identify where unified, cross-professional approaches are not only possible but evidentially appropriate.

5.3 Discussion of Research Question Two

Research Question Two asked whether professional role was associated with the proportion of professionals scoring High (≥ 3.5) or Low (< 3.5) on communication-related constructs. The chi-square analysis found a significant categorical association only for Section 1 (Trust and Communication), $\chi^2(2) = 6.11$, $p = .047$, with farriers showing the lowest proportion of High scorers (85.3%) compared to veterinarians (93.3%) and professional trainers (95.4%). This finding reinforced the ANOVA results discussed in Section 5.2 and added a categorical dimension to the mean-difference result.

The absolute figures here are instructive. Even the farrier group, with the lowest High proportion, shows 85.3 percent of respondents scored at or above the 3.5 threshold on Trust and Communication. This proportion indicated that farriers generally perceived themselves as trusted and communicatively effective in their laminitis-related work. This pattern is not a picture of widespread communication failure among farriers but of a meaningful gap between their communication self-assessments and those of veterinarians and trainers.

This gap of approximately 8 to 10 percentage points, was modest in absolute terms but statistically reliable and practically meaningful when considered across the entire population of practicing farriers. It is significant that 14.7 percent of farriers rated themselves below the midpoint threshold on communication because this outcome represents a non-trivial subset of a professional group that interacts closely with laminitic horses on a regular and intimate basis throughout the rehabilitation process.

The practical implication is not to stigmatize farrier communication but to identify a targeted professional development opportunity. Lynden (2020) documented the absence of formal communication training in most farriery qualification pathways and called explicitly for the integration of client communication competencies into farriery education at the certificate, diploma, and continuing professional development levels. Keller, Hudders and Decloedt (2022) reinforced this call, arguing that the equine communication literature has paid insufficient attention to the non-veterinary professional groups whose communication with owners shapes compliance as substantially as veterinary advice.

The present study provided empirical support for both arguments. The chi-square findings quantified the communication gap, while qualitative findings from Theme T3 (Communication Clarity and Honesty) indicated that many farriers already practice systematic, clear communication through informal approaches. This evidence suggested that formal training would build on existing capability rather than initiating it from scratch. Bard et al. (2017) found that structured communication training for veterinary practitioners, another professional group whose communication role had been historically under-formalized, produced significant improvements in both self-assessed and objectively measured communication competence over the course of a brief, structured training program. This evidence suggested that similar gains would be achievable for farriers.

5.4 Discussion of Research Question Three

Research Question Three asked about the relationships between the five survey constructs. Three section pairs were significant across all three professional role groups: Section 1 (Trust and Communication) with Section 3 (Decision-Making Support), and Section 3 with Section 4 (Innovation Adoption). The S3–S4 pair was the most

consistently strong association across all groups, with Kendall's tau coefficients ranging from 0.392 to 0.686 and Spearman coefficients reaching 0.816 for farriers. These relational findings are among the most theoretically important in the study.

5.4.1 Trust as the Platform for Decision-Making Support

The consistent, cross-group significance of the S1–S3 pair indicated that professionals who reported higher Trust and Communication scores also reported higher capacity to support owner decision-making. This finding provided direct empirical support for the core proposition of Source Credibility Theory. Hovland, Janis and Kelley (1953) identified credibility as the fundamental mediator between message and attitude change: messages from highly credible sources are more likely to be accepted, acted upon, and retained.

In the specific context of laminitis decision-making support, this theoretical proposition translated into the empirically confirmed finding that a professional's perceived trustworthiness and communication effectiveness formed the necessary platform on which all other forms of decision-making support depended. An owner who did not trust their professional was unlikely to feel effectively supported through a difficult treatment decision, regardless of the quality of the information provided.

Cameron et al. (2025) found in their qualitative investigation of end-of-life veterinary communication that the quality of the pre-existing professional relationship was the single strongest predictor of owner satisfaction with euthanasia communications. This finding supported a finding that directly validates the S1–S3 correlation as reflecting a real and consequential causal pathway rather than a purely statistical association.

The cross-group consistency of this correlation is notable. Whether the professional was a veterinarian, a farrier, or a professional trainer, the association between perceived trust and decision-making support was present and significant at $p <$

.001. This cross-group consistency suggested that trust is not a domain-specific professional asset confined to the formal clinical relationship but a prerequisite for communication effectiveness that operates across the full range of equine professional roles.

Burrell et al. (2024), examining decision-making in equine critical care, similarly found that owners' confidence in their professional advisers across all multiple roles was a key determinant of decision-making quality. The practical implication was that trust-building communication investments by any professional in the care team produced returns in the form of enhanced owner decision-making capacity across the management timeline.

5.4.2 Innovation Adoption as a Cross-Group Predictor

The cross-group significance of the S3–S4 pair, that Innovation Adoption was consistently correlated with Decision-Making Support across all three role groups, was perhaps the most theoretically unexpected finding in the correlation analysis, and it deserves careful consideration. The Diffusion of Innovations framework (Rogers, 1983) positions innovation adoption facilitation as a specific professional behavior: helping owners adopt new products, practices, and management approaches. One might therefore expect the S3–S4 correlation to reflect a relatively narrow relationship between two specific professional capacities.

Instead, the data suggested that Innovation Adoption is associated with Decision-Making Support not only because both involve persuasion and facilitation but because professionals who are more open to and engaged with innovation appear to possess a broader communicative resource repertoire that extends beyond product adoption to encompass general decision facilitation.

Professionals who actively engaged with evidence-based innovations, followed current research, and demonstrated forward-looking clinical practice appeared to possess a wider communicative resource base. This broader communication extended beyond innovation-specific communication to general decision facilitation. Innovation-oriented professionals likely projected expertise-based credibility, which Rogers (1983) termed the Early Adopter's respected opinion leadership. This form of credibility increased owner responsiveness and confidence across a broad range of communication contexts, not only those directly involving product adoption.

The particularly striking S3–S4 Spearman coefficient for farriers ($\rho = 0.816$) was consistent with this interpretation. For a professional group whose credibility is rooted in demonstrated technical expertise rather than formal clinical authority, staying current with and actively applying the best available therapeutic interventions, whether hoof boots (Bamford, 2019), therapeutic trimming techniques (Morrison, 2010), or emerging biomechanical research (Van Eps et al., 2017), may be the primary means through which clients' perception of credibility is constructed and maintained.

An innovation-oriented farrier is one who demonstrated ongoing expertise development, and this demonstration of expertise was, per Source Credibility Theory, what elevated perceived competence and generated the trust that makes decision-making support effective. The S3–S4 relationship among farriers, therefore, represented the intersection of both theoretical frameworks in action: diffusion engagement (DIT) producing expertise-based credibility (SCT) that translates into decision-making support capacity.

5.4.3 Section 2 and the Independence of the Educational Challenge

The relative absence of significant correlations involving Section 2 (Owner Knowledge and Education) across most role groups was a finding that was less dramatic

than the S3–S4 pattern, but still has important practical implications. The pattern suggested that the challenge of owner education and knowledge gaps was perceived by equine professionals as a relatively independent domain, one that was not automatically resolved by higher trust, better collaboration, or stronger innovation adoption but required dedicated, sustained educational effort that goes beyond the communication dynamics that drive decision-making support.

This pattern was consistent with the information-action gap documented by Furtado et al. (2022), who found using the COM-B framework that knowledge provision was necessary but insufficient for sustained owner behavior change in equine weight management, and with Golding et al. (2023), who demonstrated that even owners engaged with professional advice about endocrinopathic laminitis often failed to translate that knowledge into consistent management practice due to motivational and attitudinal barriers that information alone cannot address. The near-independence of Section 2 from the other constructs argues for treating owner education as a distinct strategic intervention target, one that requires the development of specifically designed educational tools, behavioral support structures, and professionally endorsed resources rather than the assumption that improved communication quality will automatically raise owner knowledge levels.

5.5 Discussion of Research Question Four

Research Question Four asked which constructs predict Decision-Making Support. The multiple regression findings, including an overall R^2 of .577 with role-specific models ranging from .541 to .766, represented the most practically significant results of the study. Interpretation of these findings required careful attention to both the shared and divergent patterns across the three professional role groups.

5.5.1 The Overall Model: Trust and Innovation as Joint Drivers

The overall regression model ($N = 266$, $R^2 = .577$) demonstrated that the four predictor constructs together explain 57.7 percent of the variance in Decision-Making Support, which is a strong result for survey-based professional research (Field, A., Miles, J., and Field, Z., 2012). The two dominant predictors, Trust and Communication ($\beta = 0.513$, $p < .001$) and Innovation Adoption ($\beta = 0.453$, $p < .001$), aligned directly with the two theoretical frameworks.

Source Credibility Theory predicted that trust is the primary mechanism of professional influence (Hovland, Janis and Kelley, 1953), while Diffusion of Innovations Theory predicted that professionals who engage proactively with innovation function as effective opinion leaders (Rogers, 1983). The convergence of these two frameworks' predictions in a single regression model, where both are simultaneously confirmed as independent predictors, was methodologically and theoretically significant: this convergence demonstrated that trust and innovation orientation are complementary, not redundant, pathways to effective decision-making support. A professional with high trust but low innovation orientation, or high innovation orientation but low trust, were likely to be a less effective decision-support provider than one who scores highly on both.

5.5.2 Veterinarians: Trust as the Dominant Mechanism

For veterinarians, Trust and Communication emerged as the overwhelmingly dominant predictor of Decision-Making Support ($\beta = 0.707$, $p < .001$), explaining a substantially larger share of variance than any other predictor. Innovation Adoption made a meaningful secondary contribution ($\beta = 0.328$, $p = .001$), while Owner Knowledge and Professional Collaboration were not significant predictors.

This pattern reflected the structure of the veterinary professional relationship with particular clarity. The veterinarian's authority and effectiveness in laminitis management was fundamentally relational and depended on the owner's trust in their clinical

judgment, their diagnostic accuracy, and their commitment to the animal's welfare.

Rutherford and England (2024) found that equine owners who perceived their veterinarian as empathetic and effective communicators were substantially more likely to follow recommendations and seek follow-up care.

The large Trust beta coefficient for veterinarians supports this finding within a professional self-assessment framework. Veterinarians who rated themselves highly on communication and trust-building also reported higher levels of decision-making support. The strength of this association indicates that, for this professional group, trust is a primary driver of effective decision-making support. Kanji et al. (2012) reached a similar conclusion in their observational study of veterinary consultations, finding that client-centered communication approaches, characterized by active listening, empathetic engagement, and collaborative goal-setting, were the most reliable predictors of client compliance with treatment recommendations.

5.5.3 Farriers: Innovation as the Credibility Mechanism

The farrier regression model differs from the other two role-specific analyses. With Innovation Adoption as the primary significant predictor ($\beta = 0.790$, $p < .001$) and Trust and Communication as non-significant, the farrier model challenges the assumption that communication effectiveness in equine professional practice follows the trust-centered pathway described by Source Credibility Theory in its classic formulation.

The finding is counterintuitive if one assumes that trust and innovation adoption are independent but coherent if one recognizes that for farriers, innovation engagement may be the primary means through which trust is constructed and credibility is demonstrated. For a professional whose expertise was evaluated largely through observable outcomes, including the condition of the hoof, the horse's comfort, and the visible progress of the rehabilitation, staying at the forefront of therapeutic technique and

evidenced-based practice was the primary signal of competence that generates owner trust. A farrier who was demonstrably current in their knowledge of therapeutic shoeing innovations, who uses the best available materials and techniques, and who can explain the evidence basis for their technical choices is effectively building the expertise component of Source Credibility Theory through the medium of innovation adoption rather than through explicit communication about the relationship itself (Werner, 2012; Lynden, Ogden and Hollands, 2018).

The high R^2 of the farrier model (.766) was both notable and subject to cautious interpretation. A single predictor accounting for the majority of variance in the dependent variable within a relatively small subgroup ($n = 68$) may reflect a genuine structural simplicity in the farrier communication pathway, but it may also reflect sampling constraints. Field, A., Miles, J., and Field, Z. (2012) caution that overly simplified models in small samples may be less stable than their R^2 values suggest, and replication in a larger farrier sample is warranted before the single-predictor structure is treated as a settled finding. The conceptual interpretation, however, was theoretically coherent and aligns with the qualitative Theme T5 (Treatment Innovation and Adaptation), where farriers described active engagement with new products and techniques as central to their professional identity and their effectiveness with clients.

5.5.4 Professional Trainers: A Balanced Multi-Dimensional Pathway

The trainer regression model, in which all four predictors reached statistical significance and no single construct dominated, reflected the sustained, multi-role nature of the trainer-owner relationship in laminitis management. Trainers who managed horses' daily care over extended periods were positioned to deploy all four communication dimensions simultaneously and iteratively. They built trust through consistent, attentive daily interaction, they facilitated innovation adoption through regular observation and

recommendation, they contributed to owner education through sustained informal coaching, and they derived significant decision-making support capacity from professional collaboration ($\beta = 0.226$, $p = .006$), consistent with their significantly higher rates of interprofessional consultation (Q24).

The significance of Collaboration as a unique predictor for trainers, but not for veterinarians or farriers, suggested that trainers decision-making support effectiveness is partly constituted by their role as interprofessional coordinators, a function that Kinnison, May and Guile (2014) identify as a distinct and valuable form of professional contribution in multi-disciplinary care environments.

The balanced predictive structure of the trainer model had direct implications for professional development: interventions that target only one or two dimensions will produce less improvement for trainers than for veterinarians or farriers. Multi-component training programs that addressed communication skills, innovation literacy, owner education strategies, and interprofessional coordination would likely be more effective for trainers than single-focus interventions. Cornell et al. (2019), evaluating a practice-level communication training program delivered to entire veterinary teams, demonstrated that a multi-component intervention combining intensive training with structured follow-up produced concurrent gains in team communication confidence, client satisfaction, and practice performance, a pattern Pun (2020) attributes to the heterogeneous agendas inherent in veterinary communication, which require training across multiple dimensions rather than narrow single-skill instruction. This principle applies with particular force to the trainer group identified in the present study.

5.6 Discussion of Research Question Five

Research Question Five asked what themes emerged from equine professionals' open-ended descriptions of their laminitis communication experiences and at what point

thematic saturation occurred. The six themes identified (Owner Education and Knowledge Gaps, Communication Clarity and Honesty, Interprofessional Collaboration, End-of-Life Decision Support, Treatment Innovation and Adaptation, and Owner Adherence and Consistency Challenges) collectively provided a rich professional narrative that contextualized, extended, and in several instances, challenged the patterns identified in the quantitative analysis.

5.6.1 Thematic Saturation at Response 16: Methodological Significance

The confirmation of thematic saturation at response 16 of 134 substantive responses, representing 11.9 percent of the qualitative sample, carried both methodological and substantive implications. Methodologically, early saturation was consistent with Guest, Bunce and Johnson (2006), who demonstrated that professionally homogeneous samples with similar experiential contexts tend to converge thematically within the first 12 to 20 responses.

The consistency of laminitis communication challenges across veterinarians, farriers, and professional trainers, all of whom navigated similar owner education deficits, care coordination difficulties, and welfare decision pressures, provided exactly the kind of experiential coherence that drives rapid saturation. Substantively, the presence of 118 confirmatory responses following saturation provided strong evidence for the robustness and stability of the six-theme structure. Not only did these themes emerge quickly, but they were also consistently reinforced across the entire sample without exception. Fusch and Ness (2015) noted that the combination of early saturation and abundant confirmatory instances represented the highest-confidence form of thematic completeness in qualitative research. This pattern was observed in the present study.

5.6.2 Theme T2: Owner Education and Knowledge Gaps: A Cross-Role Consensus

The emergence of Owner Education and Knowledge Gaps as the most frequently coded theme (n = 37, 27.6%), shared across all three professional roles, reflect a strong cross-professional consensus that aligns with and extends the research literature. Golding et al. (2023) documented significant deficits in owner knowledge about laminitis clinical presentation, risk factors, and management among Irish horse owners, while Heleski, Mertig and Zanella (2004) identified broader welfare knowledge gaps among American horse owners. Marcella (2004) specifically noted the disconnect between veterinary information provision and practical owner management capability.

The professionals in this study confirmed and contextualized these findings from their practice perspective, describing owners who failed to recognize laminitis as a distinct medical condition, who are vulnerable to online misinformation, and who lack the observational skills to detect early warning signs. The consistency of this theme across roles reinforced the quantitative finding that Section 2 (Owner Knowledge) operated independently of other constructs. Owner education is experienced as a systemic, independent challenge that persisted regardless of communication quality, collaboration, or innovation orientation. Resolving it requires structural investment in accessible, evidence-based, professionally endorsed educational resources, not merely improvements in how professionals communicate.

5.6.3 Theme T3: Communication Clarity and Honesty: The Professional Obligation

The prominence of Communication Clarity and Honesty emerged as the second most frequent theme (n = 37, 27.6%) reflecting a greatly held professional value that emerges with particular force in the equine laminitis context. Professionals emphasized honest, direct, and structured communication and explicitly rejected false optimism. This finding aligned with the ethical position articulated by Anthony (2025), who argued that

the veterinarian's duty of care requires honest communication about prognosis even when that communication is emotionally difficult. Hernandez et al. (2018) similarly argued that speaking up about welfare concerns is a professional responsibility rather than an optional gesture. The qualitative data extended these arguments to farriers and trainers as well. All three professional groups described honesty as a central professional value, and many described the damage done by false reassurance to the professional relationship when reality was eventually revealed through the horse's worsening condition.

The farrier communication approach described in this theme, systematic, sequential, and explicit, was coherent with the Diffusion of Innovations framework's emphasis on reducing complexity as a barrier to adoption. By breaking down treatment protocols into clear, sequential steps with explicit rationale, farriers reduce the perceived complexity of the management demands placed on owners, one of Rogers' (1983) five characteristics that determine adoption rate. The qualitative evidence thus illuminated a mechanism through which farriers' innovation adoption orientation (Section 4) may translate into effective decision-making support: by presenting both innovations and complex management protocols in accessible, step-by-step terms, farriers deploy the communication strategy most likely to overcome the cognitive and motivational barriers that stand between owner knowledge and owner action (Furtado et al., 2022).

5.6.4 Theme T1: Interprofessional Collaboration: Trainers as Coordinators

Interprofessional Collaboration was the third most frequent theme (n = 29, 21.6%), with professional trainers particularly prominent in describing its importance and their role within it. The professionals' description of inconsistent or conflicting advice as a primary barrier to owner adherence is consistent with the literature on multi-professional equine care and with the findings of Horseman et al. (2016), who identified inter-professional communication failures as a recurring contributor to equine welfare

problems in Great Britain. Mohite et al. (2019) examined interdisciplinary collaboration in healthcare more broadly and found that structured communication protocols that define clear roles, establish communication channels, and outline decision-making pathways for each professional, substantially reduced conflicting advice and improved patient outcomes. The application of such protocols to equine laminitis care, where the care team may include a veterinarian, a farrier, a trainer, and possibly a nutritionist or specialist, would address the barriers identified in this theme.

The positioning of trainers as interprofessional facilitators in the qualitative data converges with the regression finding that Collaboration was a significant unique predictor of Decision-Making Support for trainers but not for veterinarians or farriers. Professional trainers, by virtue of their daily contact with both the horse and the owner, may be uniquely positioned to function as care coordinators, synthesizing information from veterinary and farriery sources, translating it into practical daily management guidance, and communicating progress back to the clinical professionals. This coordination role is currently informal and unrecognized by most professional frameworks, but the present data argue for its formalization as a legitimate and valuable component of the laminitis care team structure.

5.6.5 Theme T4: End-of-Life Decision Support: Euthanasia as Welfare Advocacy

End-of-Life Decision Support (n = 25, 18.7%) emerged as the fourth most frequent theme and by far the most emotionally charged in the qualitative data. Respondents across all three professional groups consistently reframed euthanasia as an act of welfare advocacy rather than treatment failure. This reframing reflects an ethically coherent professional position that aligns with the welfare-centered frameworks of Anthony (2025) and Cameron et al. (2025).

Long et al. (2024) found that professionals and owners often diverge in their assessments of chronically ill horses' quality of life, with owners tending toward more optimistic evaluations that may reflect emotional attachment rather than objective welfare assessment. The professionals in this study perceived this divergence in their own practice and described the challenge of guiding owners toward welfare-centered decisions when attachment-driven optimism or financial constraints create resistance. This divergence is precisely the context in which the communication quality findings of Section 5.2 become most consequential: a veterinarian who has invested in trust-building communication throughout the care relationship was substantially better positioned to guide an owner through a euthanasia discussion than one who enters that conversation without a relational foundation (Cameron et al., 2025; Burrell et al., 2024).

5.6.6 Themes T5 and T6: Innovation and Adherence as Complementary Challenges

Treatment Innovation and Adaptation (T5, n = 22) and Owner Adherence and Consistency Challenges (T6, n = 22) emerged with equal frequencies and are best understood as complementary dimensions of the same underlying challenge: getting owners to adopt and sustain evidence-based management changes over time.

Theme T5 confirmed that all three professional groups maintain an active, proactive engagement with emerging treatments, consistent with the Diffusion of Innovations framework's characterization of professionals as opinion leaders whose endorsement accelerates owner adoption. The finding that introducing innovations requires an established trust foundation before owners will engage, explicitly described by multiple respondents, confirms the interdependence of Source Credibility Theory and Diffusion of Innovations Theory that the regression findings suggested: trust enables innovation adoption, and innovation adoption reinforces trust. Together, they create a reinforcing cycle in which the most effective professionals are both highly trusted and

innovation-oriented, a profile associated with stronger Decision-Making Support capacity.

Theme T6 (Adherence Challenges) added the important practical insight that the most theoretically optimal care plan has no value if owners cannot or will not implement it. The professionals' proactive adjustment of goals to accommodate real-world constraints, what Coe, Adams and Bonnett (2008) term collaborative goal-setting, represents a pragmatic communication strategy that prioritizes sustainable partial adherence over perfect adherence inconsistently applied, and is consistent with the COM-B framework's recognition that behavior change requires simultaneous attention to capability, opportunity, and motivation (Furtado et al., 2022).

5.7 Integrated Discussion and Theoretical Implications

The findings of this study, considered as a whole, made both confirmatory and additional contributions to the theoretical frameworks that guided its design. Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983) were each confirmed as explanatory frameworks relevant to equine professional communication in laminitis management. Their core propositions received quantitative support across all three professional role groups. The study also revealed additional dimensions of how these frameworks function in practice in this specific context that constituted genuine theoretical extensions rather than simple confirmation.

5.7.1 Theoretical Confirmation: Both Frameworks Validated

Source Credibility Theory's core proposition, that perceived expertise and trustworthiness are primary determinants of communication effectiveness, received strong support from the consistent cross-group significance of the S1–S3 correlation, the significant ANOVA findings for Trust and Communication (S1), and the dominance of

Trust and Communication as a regression predictor for veterinarians. These findings validated the theory's application to the equine professional context and confirmed that the mechanisms identified by Hovland, Janis and Kelley (1953) operated within the relationship-based environment of equine laminitis management.

Diffusion of Innovations Theory was similarly supported. Its proposition that professionals who engage proactively with innovation function as effective opinion leaders was reflected in the cross-group S3–S4 correlation, the near-exclusive predictive role of Innovation Adoption in the farrier model, and the qualitative findings of Theme T5 (Treatment Innovation and Adaptation). Together, these results established a clear empirical foundation for both theories in an equine-specific professional communication context, extending prior research that had suggested but not demonstrated these relationships (Pickering and Hockenhull, 2019; Elte et al., 2021).

5.7.2 Theoretical Extension: Role-Specific Mechanisms

The most significant theoretical contribution of the study was the demonstration that the relative weight of Source Credibility Theory and Diffusion of Innovations Theory mechanisms varied systematically by professional role, reflecting the structural position of each professional within the care system.

For veterinarians, the Source Credibility Theory pathway was dominant. Trust was the primary driver of decision-making support, with innovation orientation serving as a meaningful secondary influence.

For farriers, a distinct finding emerged. Innovation Adoption appeared to function not only as a separate communication behavior but as the primary mechanism through which technical credibility was constructed and deployed. This integration combined Diffusion of Innovations and Source Credibility mechanisms into a single pathway, through which demonstrated expertise generated trust that enabled decision support.

For professional trainers, both theories operated simultaneously and in parallel with a collaboration mechanism. This approach resulted in a balanced, multi-dimensional model that reflected the trainer's unique structural position as a sustained daily presence connecting clinical professionals and horse owners.

This role-specific variation challenges universal models of professional communication that assume a single pathway from credibility to influence. The data instead support a role-differentiate theoretical model. In this model, the pathways through which professional influence is exercised are shaped by the structural characteristics of the professional role, including its authority basis, temporal relationship with the client, technical content, and formal mandate in the care system.

This theoretical advance also had methodological implications. Research on professional communication effectiveness should be stratified by professional role rather than aggregated across roles, as aggregation may obscure the mechanisms that make communication effective for each specific group.

5.7.3 The Convergent Validity of the Mixed-Methods Design

A final theoretical and methodological contribution of the study was the demonstration of strong convergent validity between the quantitative and qualitative findings. Each analytical component reinforced and extended the other, producing a more comprehensive understanding than either approach could have achieved alone.

The six qualitative themes are mapped directly onto the survey constructs. Role-based differences identified through ANOVA were supported by qualitative narratives in Themes T1 and T3. The regression finding of Innovation Adoption dominance for farriers was clarified by the Theme T5 descriptions of farriers' technical engagement, and the weak quantitative profile of Section 2 was explained by the cross-role Theme T2 narrative of owner education as a systemic, independent challenge.

This convergence was not coincidental but intentionally designed. The survey instrument was grounded in the same theoretical constructs as the qualitative question, and the open-ended item invited respondents to describe the lived experiences that the Likert items measured structurally. The result was a mixed-methods triangulation in which qualitative depth reinforces quantitative scope. This approach aligned with Creswell and Clark (2017), who identified such integration as the highest-quality application of an explanatory sequential design.

Chapter VI synthesizes the study's contributions, identifies their practical implications for professional development, owner-education resource design, industry practice, and equine welfare policy, and offers recommendations for future research that would build on, challenge, and extend the findings of this investigation.

CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

This study investigated how equine professionals, veterinarians, farriers, and professional trainers, perceived their role in guiding horse owners' decisions about laminitis treatment and prevention. It examined professionals' self-reported communication strategies, perceived credibility, educational practices, innovation facilitation behaviors, and collaborative approaches as factors theoretically linked to owner decision-making and equine welfare outcomes. Owner decision-making capacity and welfare outcomes themselves were not directly measured in this study and are addressed only through professional self-report.

Grounded in Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983), a mixed-methods cross-sectional survey was developed and administered to 266 equine professionals across the United States between November 2025 and March 2026. This sample size yielded a margin of error of 6.01 percent at the 95 percent confidence level, which fell within the acceptable range for doctoral survey-based research as defined by Bronet (2024).

The survey instrument measured five theoretically grounded constructs: Trust and Communication (Section 1), Owner Knowledge and Education (Section 2), Decision-Making Support (Section 3, designated as the primary dependent variable), Innovation Adoption (Section 4), and Professional Collaboration (Section 5). Twenty-four quantitative Likert-scale items were supplemented by a single open-ended qualitative question that generated 134 substantive responses. These responses were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase framework, with saturation confirmed at response 16.

Five research questions guided the analytical plan, each addressed by a specific statistical method and accompanied by a directional hypothesis. All five hypotheses were supported by the data.

RQ1, addressed through one-way ANOVA with Tukey HSD post-hoc tests, found statistically significant role-based differences for Trust and Communication ($F(2, 263) = 3.53, p = .031, \eta^2 = .025$) and Decision-Making Support ($F(2, 263) = 3.93, p = .021, \eta^2 = .029$), with veterinarians scoring significantly higher than farriers on both. Item-level ANOVA identified seven significant items: perceived owner trust (Q1), intentional communication adjustment (Q2), information-giving versus listening orientation (Q6, where trainers scored lowest), perceived accuracy of owner-education materials (Q11), euthanasia decision confidence (Q12), provision of written resources (Q15), and interprofessional consultation rates (Q24, where trainers scored highest). The remaining 17 items and three sections showed no significant differences, reflecting a broad cross-professional consensus on most dimensions of owner communication.

RQ2, addressed through chi-square tests of independence, found a significant categorical association between professional role and High versus Low scores (≥ 3.5 vs. < 3.5 threshold) for Trust and Communication only ($\chi^2(2) = 6.11, p = .047$), with farriers showing the lowest proportion of High scorers (85.3%) compared to veterinarians (93.3%) and professional trainers (95.4%).

RQ3, addressed through Kendall's tau and Spearman correlation, identified three section pairs as significant across all three role groups: Trust and Communication with Decision-Making Support (S1–S3: $\tau = 0.399\text{--}0.448$, all $p < .001$), Trust and Communication with Innovation Adoption (S1–S4: $\tau = 0.217\text{--}0.423$, $p < .01$ to $p < .001$), and Decision-Making Support with Innovation Adoption (S3–S4: $\tau = 0.392\text{--}0.686$, all $p < .001$). The S3–S4 pair represented the strongest and most consistent relational finding in

the study. Taken together, the S1–S3, S1–S4, and S3–S4 pairs reflect a coherent pattern in which trust, decision-making support, and innovation adoption are meaningfully interconnected across all three professional role groups. Section 2 (Owner Knowledge and Education) showed the fewest significant associations, suggesting that owner education represented an independent challenge not automatically resolved through improvements in trust, collaboration, or innovation.

RQ4, addressed through multiple regression, found that the four predictor constructs explained 57.7 percent of the variance in Decision-Making Support across the full sample ($R^2 = .577$, $F(4, 261) = 88.95$, $p < .001$), with Trust and Communication ($\beta = 0.513$) and Innovation Adoption ($\beta = 0.453$) as the dominant overall predictors. Role-specific models revealed substantial heterogeneity: Trust and Communication dominated for veterinarians ($\beta = 0.707$); Innovation Adoption was the near-exclusive predictor for farriers ($\beta = 0.790$, $R^2 = .766$); and all four predictors reached significance for professional trainers, reflecting a balanced multi-dimensional pathway.

RQ5, addressed through thematic analysis with saturation tracking, identified six themes across 134 substantive open-ended responses: Owner Education and Knowledge Gaps (T2, 27.6%); Communication Clarity and Honesty (T3, 27.6%); Interprofessional Collaboration (T1, 21.6%); End-of-Life Decision Support (T4, 18.7%); Treatment Innovation and Adaptation (T5, 16.4%); and Owner Adherence and Consistency Challenges (T6, 16.4%). Saturation was confirmed at response 16, with 118 subsequent responses providing confirmatory instances without generating new categories. The qualitative findings demonstrated strong convergent validity with the quantitative results, with each theme mapping directly and coherently onto the corresponding quantitative patterns.

Taken together, these findings confirmed both theoretical frameworks in an equine-specific professional communication context and advanced theoretical understanding by demonstrating that the mechanisms through which professional influence operated differ systematically by professional role. This finding has important implications for both theory and practice, which are developed in the sections that follow.

6.2 Implications

6.2.1 Theoretical Implications

This study made five interrelated theoretical contributions to the veterinary communication, professional communication, and equine health literatures. These contributions extended both existing theory and applied understanding.

First, the study provided the first systematic empirical demonstration of the applicability of both Source Credibility Theory (Hovland, Janis and Kelley, 1953) and Diffusion of Innovations Theory (Rogers, 1983) to an equine professional communication context. Both theories have been widely applied in human healthcare, agricultural extension, and technology adoption research and have been referenced in equine communication discussions without systematic empirical grounding (Pickering and Hockenull, 2019; Elte et al., 2021). The present study's survey instrument operationalized both frameworks as empirically testable constructs and demonstrated their predictive validity in a professionally diverse equine sample, establishing an evidential foundation for their continued and more systematic application in equine research.

Second, the role-specific regression findings challenged the assumption that professional communication effectiveness followed a universal pathway from credibility to influence that applies equally across all professional roles. The finding that Innovation Adoption was the near-exclusive predictor for farriers, while Trust and Communication

dominated for veterinarians and a balanced four-predictor model applied for professional trainers, represented a theoretical advance. It demonstrated that the pathways through which professional influence operated were structurally determined by the professional role's authority basis, temporal relationship with the client, and functional position within the care system. This finding supported the need for role-differentiated theoretical models of professional communication that account for structural variation rather than assuming a single universal mechanism. Rogers et al. (2023) found similar cross-contextual variation in equine welfare communication effectiveness, and the present study specified the within-context structural factors that shaped this variation.

Third, the cross-group significance of the S3–S4 correlation, Innovation Adoption with Decision-Making Support, extended the Diffusion of Innovations framework beyond its traditional focus on product adoption. The finding that innovation orientation predicted broader communicative effectiveness suggested that Rogers' (1983) concept of opinion leadership functioned as a more general communicative resource. Professionals who actively engaged with emerging evidence and practices appeared to generate credibility and influence across a wide range of communication contexts, not solely in innovation-specific interactions. This finding represents an original theoretical contribution that warrants further empirical investigation.

Fourth, the unique significance of Professional Collaboration as a predictor of Decision-Making Support specifically for professional trainers and its non-significance for veterinarians and farriers, identified collaboration as a role-specific mechanism rather than a universally applicable communicative resource. This finding extended Kinnison, May and Guile's (2014) theoretical framework for interprofessional practice by demonstrating that the communicative value of collaboration depends on the structural position. Professionals operating at the boundary of formal clinical authority gained

greater benefit from collaborative engagement than those whose authority is more formally established.

Fifth, the strong convergent validity between quantitative and qualitative findings provided methodological evidence for the value of mixed-methods survey designs that integrate open-ended qualitative data within primarily quantitative instruments. Each qualitative theme confirmed, contextualized, and extended a corresponding quantitative finding, demonstrating the explanatory value that Creswell and Clark (2017) described as the primary rationale for mixed methods approaches. This contribution established a replicable design model for future equine communication research and for professional survey research in related fields.

6.2.2 Practical Implications for Professional Education and Development

The most pressing practical takeaway of this study was the need for role-differentiated professional development in equine communication. The finding that predictors of effective decision-making support differed fundamentally by professional role indicated that a one-size-fits-all training approach would not address the specific gaps and opportunities identified for each group. Professional development investment should be targeted as follows.

For veterinarians, formal communication training in client-centered consultation skills was most likely to produce meaningful improvements in Decision-Making Support capacity. These skills included active listening, empathetic engagement, transparent prognostic communication, and proactive end-of-life planning discussions. The finding that veterinarians intentionally adjusted their communication style (Q2) more than farriers suggested that communication adaptation was already recognized as valuable. Structured training programs, such as the Calgary-Cambridge consultation model or veterinary-specific equivalents, would strengthen and standardize this capacity (Greenhill

et al., 2011; Janke et al., 2021). The finding that veterinarians' confidence in supporting euthanasia decisions (Q12) and provision of written resources (Q15) were both significantly higher than farriers' underlines the importance of maintaining and extending these capabilities through continuing professional development, particularly as equine practice increasingly encounters the emotional and financial pressures documented by Cameron et al. (2025) and Lesté-Lasserre (2025).

For farriers, the priority was the formalization of communication training as a recognized competency within farriery qualification pathways and continuing professional development programs. Lynden (2020) documented the near-total absence of structured communication training in farriery education, and Lynden, Ogden, and Hollands (2018) identified the significant gap between the communication demands placed on farriers in equine health management and the training infrastructure available to support them. The present study quantified the consequences: a significant gap in Trust and Communication self-assessment relative to veterinarians that was consistent across both section-level and item-level analyses.

Root Kustritz, Molgaard and Tegzes (2013) found that structured interprofessional communication training produced rapid gains in communication confidence for professional groups with limited prior formal training, precisely the profile that characterizes farriers. Programs developed in collaboration with farriery professional organizations, the American Farriers Association, and veterinary schools that already deliver client communication curricula would provide the institutional framework for this development. Additionally, the near-exclusive importance of Innovation Adoption in the farrier regression model argues for continued investment in evidence-based continuing education on therapeutic farriery techniques, as technical currency appears to be the

primary vehicle through which farriers construct the credibility that enables effective owner decision-making support.

For professional trainers, a multi-component approach to professional development was indicated by the balanced four-predictor regression model. Communication skills development, innovation literacy, owner education strategies, and interprofessional coordination training should all be addressed, with particular attention to formalizing the coordination and facilitation role that trainers already informally occupy in the laminitis care team.

End-of-life communication training warrants specific attention for all three professional groups: Theme T4 data revealed that euthanasia conversations are among the most emotionally demanding professional encounters in laminitis management, and structured training in proactive end-of-life communication, including advance planning conversations, quality-of-life assessment frameworks, and grief support resources, would benefit owners and professionals alike (Anthony, 2025; Cameron et al., 2025; Hernandez et al., 2018).

6.2.3 Practical Implications for Owner-Education Resource Design

The cross-role consensus represented by Theme T2 (Owner Education and Knowledge Gaps) and the weak correlational profile of Section 2 in the quantitative analysis, together argue for dedicated, strategic investment in owner-education resource design as a distinct intervention priority. This investment should not be treated as a secondary outcome of improved communication but as a distinct priority.

The existing landscape of owner-education materials was perceived by professionals across all three role groups as inadequate, inconsistent, and in some cases outdated (Q11), consistent with Coker (2021), Herbst et al. (2024), and Marcella (2004).

The need was not for additional materials but for better-designed, evidence-based resources that addressed both informational and behavioral barriers to owner compliance.

Furtado et al.'s (2022) application of the Capability-Opportunity-Motivation-Behavior (COM-B) model to equine obesity management provides a useful design framework. Effective owner-education resources must address all three components of the model simultaneously. This framework includes building owner Capability through accurate, accessible clinical information about laminitis recognition, risk factors, and management requirements; creating Opportunity by providing practical, structured tools such as feeding calculators, body condition scoring guides, management checklists, and hoof-care scheduling aids that make evidence-based care achievable within typical owner constraints; and supporting Motivation by framing management tasks within a welfare-centered narrative that aligns with owners' emotional commitment to their horses' wellbeing rather than presenting compliance as an externally imposed constraint.

Resources designed within this framework and professionally endorsed by veterinarians, farriers, and trainers, consistent with the professional co-endorsement model demonstrated by Wells et al. (2025) and the campaign architecture of the British Horse Society and University of Nottingham's REACT Now to Beat Colic campaign (Burford et al., 2017; Bowden et al., 2020), are most likely to achieve the behavior change that information provision alone has consistently failed to deliver.

Digital delivery formats are an important consideration. Herbst et al. (2024) found that horse owners strongly preferred short, practical, visually oriented digital resources. QR code-linked tools, integration into professional networks, and distribution through equine social media communities where owners already seek information (Pickering and Hockenhull, 2019). Such strategies encompassed short-form video tutorials, downloadable care guides, and interactive feeding calculators accessible on mobile

devices. The integration of owner education into telehealth platforms, increasingly common in equine veterinary practice following the expansion of remote consultation models documented by Lesté-Lasserre (2025) and Diez and Wohllebe (2025), provided a further scalable delivery channel that could substantially expand the reach of evidence-based laminitis owner education.

6.2.4 Practical Implications for Industry and Marketing Practice

The equine health industry, including feed manufacturers, pharmaceutical companies, supplement suppliers, and therapeutic equipment producers, played an often underappreciated role in the information environment that both professionals and owners navigate. Smith et al. (2024) argued that ethical equine health marketing required a fundamental alignment between commercial messaging and professional trust.

The present study provided empirical support for both sides of this argument: professionals who endorse innovation, including commercially available therapeutic products, are more effective at supporting owner decision-making, but this effectiveness depends on the endorsement being credible and the products being evidence-based. Commercial marketing that positions products in opposition to professional judgment, creates unrealistic owner expectations, or circulates misinformation through peer networks actively undermines the professional credibility that drives effective owner decision-making support (Flanagin and Metzger, 2007; Kipperman, Kass and Rishniw, 2017).

The practical implication for industry was to invest in professional co-development of educational materials and product information. Materials that are developed in collaboration with veterinarians, farriers, and trainers, whose endorsement the present study confirmed was a critical driver of owner adoption decisions (Bamford, 2019; Naveed et al., 2024), are both more ethical and more commercially effective than

materials that bypass professional channels. Torell Palmquist et al. (2025) found that European equestrian institutions, when supported by industry partnership, can deliver evidence-based professional training that simultaneously improves communication quality and builds professional credibility for evidence-based products. Pyatt et al. (2017) similarly identified co-production between industry stakeholders and equine professionals as the most effective model for translating commercial product development into professionally endorsed, owner-adopted practice change. Transparency about the evidence base for commercial claims, and the honest acknowledgement of evidence limitations where they exist, was a critical prerequisite for the kind of professional endorsement that the present study identified as a powerful driver of owner behavior (White et al., 2023; Wild, 2018).

6.2.5 Practical Implications for Equine Welfare Policy and Professional Organizations

The findings of this study carried clear implications for equine welfare policy and professional governance at both organizational and regulatory levels. The cross-role consensus that interprofessional consistency is a critical determinant of owner compliance, captured in quantitative Theme T1 and reflected in the significance of Section 5 (Professional Collaboration) as a unique predictor for trainers, argues for the development of structured interdisciplinary communication protocols for laminitis case management.

Such protocols should define communication roles and responsibilities for veterinarians, farriers, and trainers in a laminitis case and establish clear channels for information sharing and consistent messaging would directly address the source of conflicting advice that professionals and research consistently identify as a barrier to owner adherence (Horseman et al., 2016; Mohite et al., 2019). The American Association of Equine Practitioners, the American Farriers Association, and relevant trainer

credentialing organizations were positioned to develop and endorse such protocols jointly, modeling the interdisciplinary collaboration at the policy level that the study recommends at the clinical level.

Shared resource libraries, accessible to veterinarians, farriers, and trainers and providing consistent, evidence-based, professionally endorsed owner-education materials, would address the resource quality concerns documented in Theme T2 and Q11 by providing a single curated evidence-based source that all professional groups can draw on and direct owners to. The Boehringer Ingelheim “Talk About Laminitis” program (2013) demonstrated the feasibility of industry-supported, professionally distributed educational resource libraries at scale; a cross-organizational, multi-professional equivalent would extend this model to encompass the full professional care team rather than veterinarians alone.

The alignment of these interventions with the United Nations Sustainable Development Goal 3, Good Health and Well-being, including within the One Health framework that recognizes the interconnection of human, animal, and environmental health, provided an ethical and policy foundation for public and institutional investment in equine communication infrastructure beyond purely commercial motivations (United Nations, 2022).

As Parnell (2024) and Farrugia et al. (2010) both argue, applied research that generates actionable knowledge for professional development represented one of the most important contributions the Doctor of Business Administration program can make to professional practice, and it was in this spirit that the present study’s practical implications were offered.

6.3 Recommendations for Future Research

This study established a professional-perspective empirical baseline for understanding communication in equine laminitis management. This baseline invited, and in several respects required, follow-up investigation to address its limitations and extend its contributions. Seven specific recommendations for future research are offered here.

First, longitudinal studies are needed to establish the directionality of the relationships identified in the regression analysis. The cross-sectional design of the present study confirmed that Trust and Communication, Innovation Adoption, and, for trainers, Professional Collaboration were associated with Decision-Making Support capacity. However, it could not determine whether these variables functioned as causal antecedents, consequences, or products of a shared underlying factor such as general professional competence (Farrugia et al., 2010; Creswell and Clark, 2017). A longitudinal panel study tracking professionals' self-assessed scores over time combined with targeted professional development interventions, would ideally provide the causal evidence needed to guide investment decisions in professional training programs.

Second, observational and audio-recorded consultation studies are needed to validate the self-report findings. All quantitative data in the present study were based on professional self-assessment, which is susceptible to social desirability bias (Podsakoff et al., 2003). Observational research, using the audio-recorded consultation analysis methods such as those employed by Coe, Adams and Bonnett (2008) in companion-animal settings and by Lynden, Hollands, and Ogden (2020) in farriery, would provide objective data on actual communication behaviors to complement and test the self-assessed patterns identified here. The extent to which professionals' self-perceptions of their communication effectiveness corresponded to observed practice remains an empirical question of considerable importance for professional training design.

Third, future surveys should target a larger and more balanced sample across the three professional role groups, with particular emphasis on increasing the farrier subsample. The farrier regression model, while theoretically coherent and statistically significant, rests on the smallest subgroup ($n = 68$). The stability of its single-predictor structure would benefit substantially from replication with a farrier subsample of at least 150 to 200 responses. Field, A., Miles, J., and Field, Z. (2012) recommend substantially larger subgroup sizes when interpreting regression models with few predictors. Targeted distribution through the American Farriers Association membership database, farriery trade journals, and certification programs would be the most efficient route to an sufficiently large farrier sample. Concurrent recruitment at the International Hoof-Care Summit and comparable professional events would further support data collection.

Fourth, cross-cultural replication of the study in equine professional contexts with different professional structures and regulatory frameworks, including the United Kingdom, Australia, continental Europe, and major equine-producing regions of South America, would establish the generalizability of the findings beyond the United States context and test whether the role-specific predictive patterns hold across different professional formation systems, liability frameworks, and care delivery models. Rogers et al. (2023) found significant cross-cultural variation in equine welfare communication effectiveness. The present study's regression framework provides a theoretically grounded comparative structure for investigating these differences systematically.

Fifth, a complementary owner-perspective survey would provide the demand-side validation of the professional self-assessment findings. The present study intentionally placed the professional perspective at the center, a necessary first step given the gap in the literature, but a full understanding of laminitis communication effectiveness requires data from the owners themselves about how they experience the trust, educational

support, and decision-making guidance they receive from each professional group. Rutherford and England's (2024) owner-perspective work, when combined with the findings of this study, would provide a comprehensive view of communication dynamics in equine practice, enabling examination of how professional self-perceptions align or diverge from owner experiences.

Sixth, intervention studies testing the effectiveness of role-specific professional development programs are needed to translate the study's recommendations into evidence-based practice. Randomized or quasi-experimental designs in which farriers assigned to a communication training program are compared with a control group on communication self-assessment, client-reported satisfaction, and owner compliance outcomes would provide a more rigorous evidence base for professional development investment that currently does not exist for farriery communication. Analogous studies for veterinarians (focusing on end-of-life communication training) and trainers (focusing on interprofessional coordination protocols) would complete a program of applied evaluation research directly connected to the present findings.

Seventh, the design and rigorous evaluation of digital owner-education tools, including apps, interactive management planners, and QR-code-linked clinical information resources, represents an important area for applied research that this study directly motivates. The persistent owner knowledge gaps documented by Theme T2 and the Section 2 correlational findings are not adequately addressed by existing educational materials. New tools designed around the COM-B framework (Furtado et al., 2022), co-developed with equine professional input and rigorously evaluated through efficacy trials, would contribute to improved equine welfare outcomes. Fenner et al.'s (2020) citizen science framework and the telehealth platform expansion documented by Lesté-Lasserre (2025) provided infrastructure models that researchers could adapt and build upon.

6.4 Conclusion

This study was motivated by a central observation: laminitis is a leading cause of euthanasia in horses and a major welfare concern, and equine professionals, veterinarians, farriers, and professional trainers, sit at the center of how owners receive guidance about it. Laminitis accounts for approximately one quarter of equine euthanasia decisions (Pollard et al., 2020). The study examined professionals' self-reported communication, credibility, education, innovation, and collaboration as factors theoretically linked to owner decision-making and equine welfare outcomes; those outcomes themselves were not directly measured and are addressed only through professional self-report. Within that frame, the surveyed professionals described decisions frequently navigated alongside limited owner knowledge, inconsistent professional guidance, and insufficient preparation for emotionally weighted conversations. The findings indicate that targeted communication training, owner-education resources, end-of-life conversation preparation, and structured interprofessional coordination would expand professionals' self-reported capacity to provide decision-making support in laminitis care. The findings of this study support this conclusion.

The equine professionals who participated in this study demonstrated a clear commitment to their clients and to the animals in their care. Their open-ended responses reflected both frustration and dedication. They described barriers that impeded effective communication, including knowledge gaps, conflicting advice, resource inadequacy, owner resistance, and the emotional weight of end-of-life conversations for which many had not received formal preparation. At the same time, they demonstrated a consistent desire to support owners and improve outcomes. These are not professionals who need to be told to communicate better. They are professionals who need the training, tools, and

collaborative infrastructure to do what they already strive to do, with greater clarity and confidence.

The findings of this study established that the role of equine professionals as trusted voices in treatment is both an accurate description and a theoretically grounded characterization of a professional relationship that carries real weight in how professionals describe their role in supporting owner decision-making. Source Credibility Theory explains that trust is the mechanism through which professional knowledge translates into owner action (Hovland, Janis and Kelley, 1953). Diffusion of Innovations Theory explains that professionals who model engagement with the best available evidence are more effective opinion leaders across all dimensions of their professional influence, not just in the adoption of specific products (Rogers, 1983). Together, these frameworks describe the kind of professionals that horses with laminitis require: credible, informed, honest, collaboratively minded, and prepared to support owners through some of the most difficult decisions they will face.

The title of this study, *Trusted Voices in Treatment*, reflects both what equine professionals are and what they are called to be. The findings in this study confirm that many are already fulfilling this calling with considerable skill and dedication. The ambition of the research, and the recommendations that follow from it, is to ensure that all equine professionals are equally equipped to do so. This effort matters for the horses, for the owners, and for the professional community that serves them both. The horses cannot speak for themselves. The responsibility to advocate for their welfare rests with their trusted voices.

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APPENDIX A:

FULL SURVEY INSTRUMENT

This appendix presents the complete survey instrument used in this study to examine equine professionals' perceptions of their role in guiding horse owners through laminitis treatment and prevention. The instrument was designed in alignment with the study's theoretical framework, drawing on Source Credibility Theory and Diffusion of Innovations Theory to operationalize key constructs related to communication, trust, education, decision-making support, innovation adoption, and professional collaboration.

The survey consisted of structured Likert-scale items organized into conceptually distinct sections, along with demographic and professional background questions to contextualize responses across veterinarians, farriers, and professional trainers. Each item was intentionally developed to capture self-reported behaviors, perceptions, and experiences that influence owner compliance and equine welfare outcomes. In addition, the instrument included a final open-ended question to allow respondents to provide qualitative insights into their lived experiences supporting horse owners in laminitis cases, contributing depth and context to the quantitative findings.

The full survey was administered electronically and designed to be completed within approximately five minutes in order to encourage participation while maintaining sufficient depth for meaningful analysis. As outlined in Chapter III, the instrument underwent careful development to ensure clarity, construct alignment, and applicability across professional roles. The complete set of survey questions is presented below in tabular format for reference and transparency, supporting the replicability and methodological rigor of this study.

Table A.1
Full Survey Instrument by Section and Construct

Section	Construct	Q #	Survey Item
	Consent		Do you consent to participate in this study?
	Professional Background		Which best describes your role?
			Do you currently provide direct advice to horse owners about laminitis treatment or prevention as part of your professional work?
			How many years have you worked in the equine industry?
			Approximately how many laminitis cases have you been involved with in the past year?
Section 1	Trust and Communication (Source Credibility Theory)	1	Owners trust my recommendations during critical care decisions.
		2	I intentionally adjust my communication style to ensure owners understand care plans.
		3	Owners are more receptive to treatment plans when I explain the reasons behind each recommendation.
		4	My credibility with owners depends as much on empathy and consistency as on technical expertise.
		5	I routinely follow up with owners after treatment to confirm they understood my recommendations.
		6	I focus more on giving information than on listening to owners' concerns. (<i>reverse-coded</i>)
Section 2	Owner Knowledge and Education	7	Owners often lack the foundational knowledge to recognize early signs of laminitis.

Section	Construct	Q #	Survey Item
Section 3	Decision-Making Support (Emotional/Ethical Guidance)	8	Educational materials from industry sources often require clarification before owners can apply them effectively.
		9	I provide additional explanations or demonstrations beyond standard materials to improve owner understanding.
		10	Owners often seek advice from non-professional sources (e.g., peers, social media) that conflict with my recommendations.
		11	Many commonly used owner-education materials contain outdated or inconsistent information and can lead to misunderstanding. (<i>reverse-coded</i>)
		12	I believe I help owners feel more confident when deciding whether to continue treatment or consider euthanasia in laminitis cases.
		13	Emotional stress and financial concerns often influence owners more than medical facts in decision-making.
		14	Clear, compassionate communication from professionals makes end-of-life decisions more manageable for owners.
Section 4	Innovation Adoption (Diffusion of Innovations Theory)	15	I provide written summaries or resources to help owners make informed treatment decisions.
		16	Owners are more likely to adopt new management strategies when they see observable improvements in their horse's condition.
		17	I introduce new products or practices gradually to build owner confidence.
		18	Owners are open to innovations when recommended by a trusted professional, even if the product is unfamiliar.

Section	Construct	Q #	Survey Item
Section 5	Professional Collaboration (Interdisciplinary Coordination)	19	Owners are less likely to try a new product or treatment if they think it seems complicated to use.
		20	Owners often wait to see successful results from other horse owners before trying a new product I recommend. (<i>reverse-coded</i>)
		21	Conflicting advice among professionals (vets, farriers, trainers) creates barriers to owner compliance.
		22	Owners benefit when professionals present a unified, collaborative approach.
		23	Continuing education in communication and client service would improve my ability to guide owners.
		24	I regularly consult with other professionals before finalizing laminitis-management plans.
	Qualitative Reflection		Is there anything else you would like to share about your experiences working with horse owners affected by laminitis, particularly regarding how you communicate, educate, or support their decision-making?

Note. Likert-scale items were measured on a five-point scale ranging from *Strongly Disagree (1)* to *Strongly Agree (5)*. Questions 6, 11, 20 were reverse-coded prior to analysis. Constructs were developed based on Source Credibility Theory and Diffusion of Innovations Theory and operationalized as described in Chapter III.

Figure A.1
Full Survey Instrument from Microsoft Forms

4/24/26, 11:37 AM

Trusted Voices in Treatment: Professional Guidance in Laminitis

Trusted Voices in Treatment: Professional Guidance in Laminitis

* Required

Survey Introduction

You are invited to participate in a research study about the role of equine professionals in guiding horse owners through laminitis treatment and prevention. Your insights will help improve owner education, professional collaboration, and equine welfare.

This survey should take approximately **5 minutes** to complete. Responses are anonymous. No identifying information will be collected or reported. Results will be presented only in aggregate form for academic purposes in the thesis and may be used in related academic publications or presentations.

Please answer every question to the best of your ability. For open-ended questions, if you have nothing to add, please type **"N/A."**

This survey is part of a doctoral thesis project at the Swiss School of Business and Management (SSBM Geneva). Your participation is entirely voluntary. There are no foreseeable risks to participating in this survey. By proceeding, you confirm that you are 18 years of age or older and consent to take part in this study.

For questions about the research, please contact:

Researcher: Ally Hubbard, hubbard.research@outlook.com

4/24/26, 11:37 AM

Trusted Voices in Treatment: Professional Guidance in Laminitis

Section 1: Consent to Participate in Research

1. Consent to Participate in Research

Please read the statement below carefully before proceeding.

I have read and understood the information provided in the introduction of this survey.

I understand that my participation is voluntary, my responses are anonymous, and I may withdraw at any time before submission.

I confirm that I am at least 18 years of age and agree to take part in this research study conducted by Ally Hubbard as part of her Doctorate of Business Administration at the Swiss School of Business and Management (SSBM Geneva).

Do you consent to participate in this study? *

☐ Yes, I consent to participate.

☐ No, I do not consent to participate.

Section 2: Background Information

2. Which best describes your role? *

- ☐ Veterinarian
- ☐ Farrier
- ☐ Professional Trainer
- ☐ Other

3. Do you currently provide direct advice to horse owners about laminitis treatment or prevention as part of your professional work? *

- ☐ Yes
- ☐ No

4. How many years have you worked in the equine industry? *

- ☐ 0-5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21 or more

5. Approximately how many laminitis cases have you been involved with in the past year? *

- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10 or more

Section 3: Communication and Trust (Source Credibility Theory)

Please indicate your level of agreement with each statement below.

(Strongly Disagree → Strongly Agree)

6. Owners trust my recommendations during critical care decisions. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

7. I intentionally adjust my communication style to ensure owners understand care plans. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

8. Owners are more receptive to treatment plans when I explain the reasons behind each recommendation. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

9. My credibility with owners depends as much on empathy and consistency as on technical expertise. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

10. I routinely follow up with owners after treatment to confirm they understood my recommendations. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

11. I focus more on giving information than on listening to owners' concerns. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

Section 4: Education and Owner Engagement (Owner Knowledge/Communication Effectiveness)

Please indicate your level of agreement with each statement below.
(Strongly Disagree → Strongly Agree)

12. Owners often lack the foundational knowledge to recognize early signs of laminitis. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

13. Educational materials from industry sources often require clarification before owners can apply them effectively. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

14. I provide additional explanations or demonstrations beyond standard materials to improve owner understanding. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

15. Owners often seek advice from non-professional sources (e.g., peers, social media) that conflict with my recommendations. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

16. Many commonly used owner-education materials often contain outdated or inconsistent information and can lead to misunderstanding. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

Section 5: Professional Support in High-Stakes Decision-Making (Emotional/Ethical Guidance)

Please indicate your level of agreement with each statement below.
(Strongly Disagree → Strongly Agree)

17. I believe I help owners feel more confident when deciding whether to continue treatment or consider euthanasia in laminitis cases. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

18. Emotional stress and financial concerns often influence owners more than medical facts in decision-making. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

19. Clear, compassionate communication from professionals makes end-of-life decisions more manageable for owners. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

20. I provide written summaries or resources to help owners make informed treatment decisions. *

☐ Strongly Disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly Agree

Section 6: Innovation and Adoption (Diffusion of Innovations)

Please indicate your level of agreement with each statement below.
(Strongly Disagree → Strongly Agree)

21. Owners are more likely to adopt new management strategies when they see observable improvements in their horse's condition. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

22. I introduce new products or practices gradually to build owner confidence. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

23. Owners are open to innovations when recommended by a trusted professional, even if the product is unfamiliar. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

24. Owners are less likely to try a new product or treatment if they think it seems complicated to use.
*

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

25. Owners often wait to see successful results from other horse owners before trying a new product I recommend. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

Section 7: Collaboration and Professional Roles (Interdisciplinary Coordination)

Please indicate your level of agreement with each statement below.
(Strongly Disagree → Strongly Agree)

26. Conflicting advice among professionals (vets, farriers, trainers) creates barriers to owner compliance. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

27. Owners benefit when professionals present a unified, collaborative approach. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

28. Continuing education in communication and client service would improve my ability to guide owners. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

29. I regularly consult with other professionals before finalizing laminitis-management plans. *

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Neutral
- ☐ Agree
- ☐ Strongly Agree

Section 8: Final Reflection

30. Is there anything else you would like to share about your experiences working with horse owners affected by laminitis, particularly regarding how you communicate, educate, or support their decision-making? If not applicable or if you have no comment, please write "N/A." *

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

 Microsoft Forms

APPENDIX B:

SURVEY DISTRIBUTION FLYER

This appendix presents the survey distribution flyer used to recruit participants for this study. The flyer was designed to communicate the research purpose and encourage participation in a concise, accessible format. The content emphasizes the importance of professional guidance, communication, and collaboration in equine laminitis care, aligning directly with the study's research objectives and theoretical framework.

The flyer specifically targeted equine professionals including veterinarians, farriers, professional trainers, and other individuals involved in equine care and decision-making. It was developed to provide a brief overview of the study, explain its relevance to improving owner education and equine welfare outcomes, and highlight the value of participant insight in advancing industry understanding.

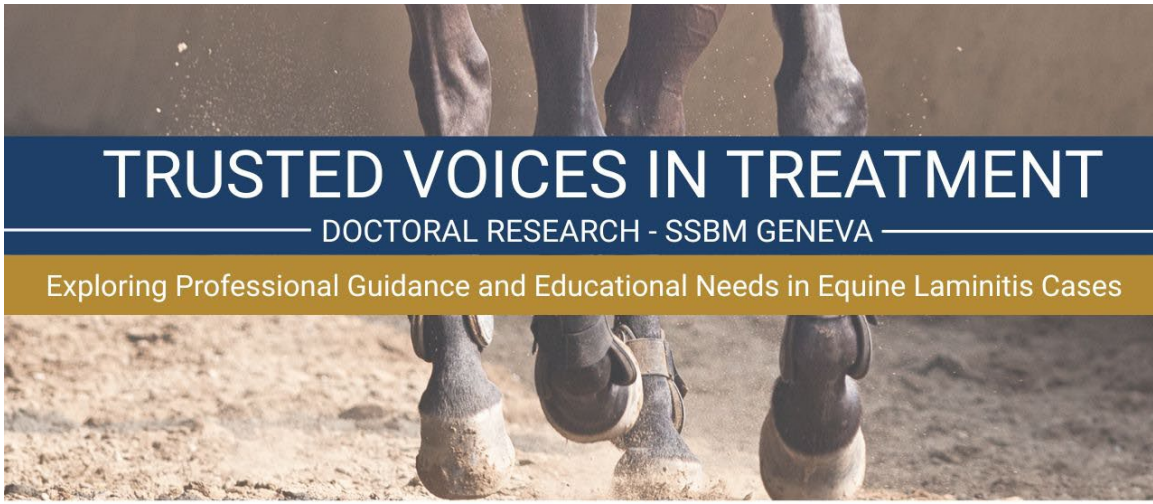
The flyer was distributed across equine industry settings and professional networks. In-person distribution occurred at major equine events including the American Cup, the Arabian Horse Association Judging School, and the Scottsdale Arabian Horse Show. These venues provided access to a diverse population of experienced professionals actively engaged in equine management and care. In addition, the flyer was shared digitally through professional connections and industry channels to further expand participation.

The flyer includes a Quick Response (QR) code linking directly to the online survey instrument, allowing participants to access and complete the survey efficiently using a mobile device. This approach reduced barriers to participation for busy, field-based professionals.

The flyer balances clarity, professionalism, and engagement. Key elements include a concise explanation of the research purpose, identification of the target

audience, and a clear call to action encouraging participation. Equine imagery and structured sections were included to enhance readability.

The front and back versions of the survey distribution flyer are reproduced below for reference.



TRUSTED VOICES IN TREATMENT

DOCTORAL RESEARCH - SSBM GENEVA

Exploring Professional Guidance and Educational Needs in Equine Laminitis Cases





WHAT?

Horse owners rely on equine professionals (veterinarians, trainers, farriers, etc.) when facing complex care decisions such as laminitis treatment.

Join our efforts to improve owner education and foster professional collaboration in equine laminitis care.



WHY?

This doctoral research at SSBM Geneva explores how equine professionals guide owners, communicate recommendations, and collaborate across disciplines.

Insights from this study will deepen understanding of how professionals guide owner choices and strengthen communication and teamwork in laminitis care.

Your input helps advance research that benefits horses, owners, and the equine industry as a whole.



WHO?

Are you a(n):

- Veterinarian
- Farrier
- Equine Trainer
- Equine Professional that helps make lifestyle decisions

We need your insight!
Scan the QR code to take the survey now!



Share your voice. Strengthen collaboration in equine laminitis care.
Questions or to request results: hubbard.research@outlook.com

Figure B.1
Survey Distribution Flyer (Front)



Figure B.2
Survey Distribution Flyer (Back)

APPENDIX C:

EXAMPLE SURVEY DISTRIBUTION

This appendix provides an example of the survey distribution as it appeared on social media platforms. This format was used to engage equine professionals in a natural, industry-relevant communication environment where veterinarians, farriers, trainers, and other stakeholders regularly interact. The post includes the study overview, participation criteria, and direct access to the survey link, along with an example of the accompanying comment used to introduce and contextualize the research within the discussion thread. This appendix demonstrates how the study was positioned to encourage participation, establish credibility, and facilitate broad outreach across the equine professional community.

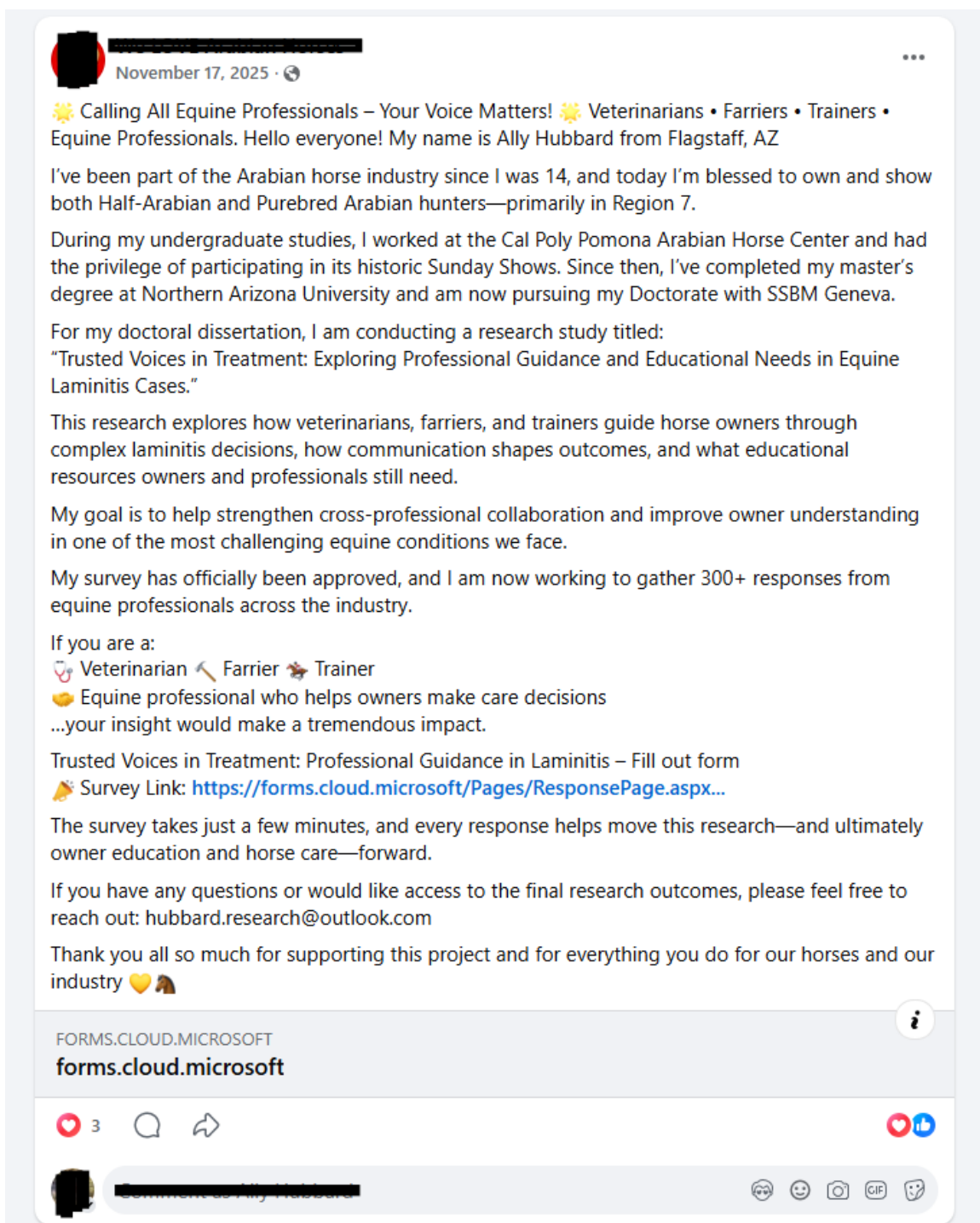


Figure C.1
 Sample Post

APPENDIX D:

ADMINISTRATOR CONTACT REQUEST EMAIL TEMPLATE

This appendix presents the template email used to contact administrators, organizations, and industry groups to request assistance in distributing the survey associated with this study. The purpose of these communications was to expand the reach of the survey by drawing on established equine industry networks, including professional associations, event organizers, and community platforms with direct access to veterinarians, farriers, trainers, and other equine professionals.

The email communicates the research purpose in a professional, personalized tone appropriate for the equine industry. It included a brief introduction of the researcher, an overview of the doctoral study, and a clear explanation of how the organization's support could contribute to meaningful participation. The email emphasized the practical value of improving collaboration, communication, and educational resources in laminitis care.

Additionally, the email provided a direct link to the survey instrument and included a distribution flyer containing a QR code for ease of access. Multiple suggested methods of sharing the survey were offered, including social media posts, newsletter inclusion, and direct outreach to affiliated professionals. This approach minimized effort for administrators while broadening reach.

Administrator contact requests were central to reaching a broad sample of professionals across regions and disciplines. By engaging trusted organizations and industry leaders, this strategy supported the study's goal of obtaining a representative and meaningful dataset reflective of real-world professional experiences.

A copy of the email template used for these administrator contact requests is reproduced below.

Dear {Organization Name},

My name is Ally Hubbard, and I am a Doctor of Business Administration (DBA) candidate at the Swiss School of Business and Management Geneva (SSBM Geneva). I am also an active member of the equine community and have been involved in the industry for several years through both professional and academic work.

I am writing to respectfully request your assistance in distributing a research survey as part of my doctoral dissertation titled:

“Trusted Voices in Treatment: Exploring Professional Guidance and Educational Needs in Equine Laminitis Cases.”

This study conceptualizes how equine professionals—including veterinarians, farriers, and trainers—guide horse owners through laminitis treatment and prevention, how communication influences decision-making, and where gaps in owner education may exist. The goal of this research is to strengthen interdisciplinary collaboration and improve educational resources that support better outcomes for horses and their owners.

The survey has been fully approved, and I am currently working to collect responses from equine professionals across the industry. Given your organization’s network and engagement with the equestrian community, your support would provide meaningful reach to professionals who regularly assist horse owners in care decisions.

For your convenience, the survey link is provided below: [Survey Link]

A flyer is also attached, which includes a QR code and a brief overview of the study.

If you are willing to assist, potential distribution methods could include:

- Sharing a post on your social media platforms
- Including the survey in an upcoming newsletter

- Distributing the flyer to affiliated professionals, trainers, or farms
- Any additional outreach methods you believe appropriate

I would be sincerely grateful for your consideration. I would also be happy to share study updates or a summary of findings upon completion.

Please feel free to contact me directly at [email] with any questions or if additional information is needed.

Thank you for your time and for your continued support of the equine community. Your assistance would contribute meaningfully to research aimed at improving communication, collaboration, and care within the industry.

Warm regards,

Ally Hubbard

Doctor of Business Administration (DBA) Candidate

Swiss School of Business and Management Geneva (SSBM)

Equine Laminitis Research | Trusted Voices in Treatment

Figure D.1
Administrator Contact Request Email Template