

## REVIEW

# Client satisfaction in equine veterinary practice: A structured review and qualitative synthesis

Yteke Elte<sup>1</sup>  | Inga Wolframm<sup>2</sup> | Mirjam Nielen<sup>3</sup> | René van Weeren<sup>4</sup>

<sup>1</sup> Faculty of Veterinary Medicine, Department of Clinical Sciences, Utrecht University, Utrecht, The Netherlands

<sup>2</sup> Faculty of Veterinary Medicine, Utrecht University, Utrecht, The Netherlands

<sup>3</sup> Faculty of Veterinary Medicine, Department of Population Health Sciences, Utrecht University, Utrecht, The Netherlands

<sup>4</sup> Faculty of Veterinary Medicine, Department of Clinical Sciences, Utrecht University, Utrecht, The Netherlands

## Correspondence

Yteke Elte, Faculty of Veterinary Medicine, Department of Clinical Sciences, Utrecht University, Yalelaan 112, Utrecht, 3584 CM, The Netherlands.  
Email: [y.elte@uu.nl](mailto:y.elte@uu.nl)

## Abstract

**Background:** The pressure on equine veterinarians to provide services that meet with a client's demands, that is, realizing client satisfaction, is considerable.

**Aim:** The aim of this paper is to analyze existing literature, with a view to distill the most relevant components for client satisfaction in equine veterinary practice.

**Materials and Methods:** A structured literature search was conducted. Included papers were systematically organised and analysed using an inductive approach.

**Results:** Seven components relevant to client satisfaction in equine veterinary practice were identified: quality of care, quality of service, horsemanship of the veterinarian, costs of service, interpersonal skills, professional attitude and transfer of knowledge.

**Discussion:** The limited amount and variable quality of available records regarding client satisfaction in equine veterinary practice are the main limitations of this study.

**Conclusion:** The seven categories identified are likely to play a fundamental role in achieving client satisfaction in equine veterinary practice. Additional research is required to validate these categories and relate them to different types of clients as well as map their needs and expectations, so that they can be used to assist equine veterinary professionals in tailoring customer experience to the individual client.

## INTRODUCTION

The equine industry is a multi-billion-dollar business that tailors to the needs of horse owners and caretakers ranging from leisure horse owners to Olympic competitors.<sup>1</sup> Whenever these horses require veterinary care, owners or caretakers are likely to seek the services of a veterinary professional. These professionals not only have a duty of care towards the horse but also towards the owner or caretaker.<sup>2</sup> The UK Royal College of Veterinary Surgeons highlights this in their Code of professional conduct: '*Veterinary surgeons must be open and honest with clients and respect their needs and requirements*'.<sup>3</sup>

At its core, client satisfaction is centred on how clients *perceive* a particular service from a cognitive, emotional and behavioural perspective, and how such perceptions might shape subsequent customer

experiences.<sup>4</sup> Service quality is considered to be an essential ingredient to successful business relations in animal health care.<sup>5</sup> Therefore, any discrepancies between clients' initial expectations and perceptions of the service are likely to distort subsequent levels of client satisfaction.<sup>6</sup> Horses are animals with generally high emotional and/or monetary value, and levels of expectation regarding the quality of service are likely to be equally high.<sup>7</sup> The pressure on the veterinarian to meet with a client's demands and expectations, that is, realizing client satisfaction, is therefore considerable.<sup>8</sup>

Several studies have examined the various components contributing to customer experience and client satisfaction in equine veterinary practice. However, at present no comprehensive theoretical foundation exists that outlines the interaction between horse owners and veterinary practitioners. The current paper synthesises the existing literature on client satisfaction

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in equine veterinary practice, with the aim to map and define potential categories that underpin equine veterinary client satisfaction. These categories will provide a starting point for further research.

## METHODOLOGY

A structured literature review was performed in order to ensure a transparent, comprehensive literature search and the subsequent conceptual synthesis of findings from qualitative, quantitative and mixed method studies, in a multi-disciplinary field with a limited knowledge base, as is the case with client satisfaction in equine veterinary practice. What is more, a structured review has been shown to be less prone to reviewer bias than a traditional review.<sup>9</sup> While a true systematic review would have been a more rigorous option, the available body of literature is not, as yet, sufficiently evidence-based to provide robust answers to a highly focussed research question.<sup>10</sup>

### Search strategy

A structured literature search was conducted using the search terms determined by consensus between authors prior to the search (client OR customer OR owner) AND (satisfaction AND veterinary). The search to identify studies with relevant data was conducted in August 2020, using the electronic databases Scopus and CAB Abstracts as relevant sources for veterinary sciences.<sup>11</sup> The combination of Scopus and CAB Abstracts ensured the inclusion of a broad selection of relevant papers from the field of veterinary medicine, equine science as well as from the social sciences, due to the multi-disciplinary aspect of Scopus.<sup>12</sup> No ethical approval was required for this study.

### Inclusion criteria

Criteria for inclusion and exclusion were determined by all authors prior to the search. Studies eligible for inclusion focused on client (owner and/or caretaker) satisfaction in general equine veterinary care or equine veterinary practice. More specifically, this meant that articles would be excluded if they focused on client satisfaction in a veterinary field other than equine, or if they addressed client satisfaction with the treatment of a specific disease or health-related issue. As referral care is considered an extension of service of the referring veterinarian, relevant papers were included.<sup>13</sup> Studies that were published in both peer-reviewed journals and grey literature in the English language were eligible, as were relevant conference proceedings.<sup>14</sup> Qualitative and quantitative studies were eligible for inclusion, as were studies that used a combined method.

## Study collection and evaluation

The first author extracted and evaluated all records against the inclusion criteria based on title and/or abstract. For example, if the title of a study suggested focus on a very specific ailment in dogs, the article would be excluded. However, if the title indicated the article might contain information pertaining to the inclusion criteria, the abstract would be screened in more detail. Once the abstract seemed relevant, the full text of selected papers would be read and screened independently by the first and second author for relevant information pertaining to aspects of client satisfaction in equine veterinary practice.

### Results from the literature search

The literature search resulted in 425 records. Figure 1 shows an overview of the search strategy and results. Ten records were included in the final analysis. Reference lists from included studies were checked for any additional eligible studies, but added no extra records. One survey report was identified through a relevant equine veterinary organisation and included. Furthermore, two eligible PhD theses were identified through the first author's personal network. Following agreement between all authors, these three records were included in the final analysis. Table 1 shows an overview and description of all eligible records.

### Inductive analysis

The general inductive approach as outlined by Thomas offers a generic strategy to analysing qualitative data.<sup>15</sup> The general inductive approach is used frequently in health and social science research and evaluation, and allows to 'develop a model or theory about the underlying structure of experiences or processes that are evident in the text data'.<sup>15</sup> Therefore, the general inductive approach was considered to be the most appropriate strategy to distil relevant principles or categories on client satisfaction in equine veterinary practice from the existing literature.

### The coding process

All coding was conducted manually by the first and second author. Both have extensive experience at various levels of the equine industry, in addition one of the coders is an experienced equine veterinarian and university lecturer, the second coder is a former lecturer in equine science and holds a PhD in (equine) sports psychology. As a first step, the first author read through all the papers and identified all relevant statements, including phrases or sentences that related to the subject of client satisfaction from the results and/or discussion section. They then discussed whether each of those statements should be included in the analysis.

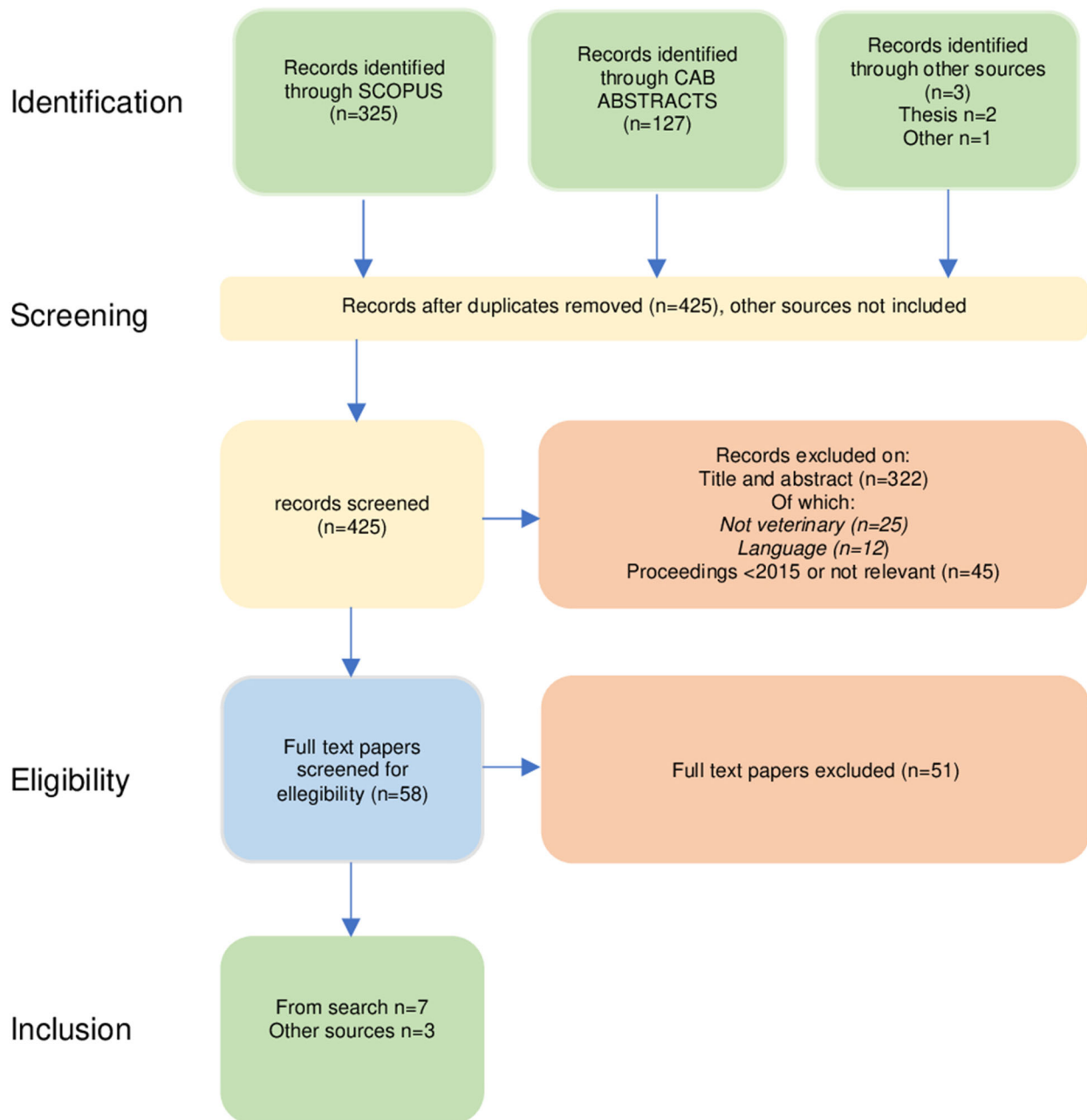


FIGURE 1 Visual overview of the search strategy

The included results in 256 statements were listed in a transcript in an Excel-based table (supplementary information, Table S2).

During the subsequent phases of the coding process, the first and second author independently read the data transcript and examined each statement for underlying categories relating to client satisfaction, giving it a preliminary label. These labels were then discussed by both authors until consensus was reached on which label to be used, allowing for subsequent categorisation. For example, the statement 'Clients wish me to take control of the situation', was initially labelled as 'situational skills' by the first author and 'ability to handle the situation' by the second author. Having discussed it, authors agreed on 'situational handling skills'. This is substantially different to merely summarizing the statement, that is, 'take control of the situation' and allows for a more structured

approach in analyzing the information. This process of coding was repeated for all 256 statements.

In the next step, these labels were examined for similarities and underlying defining characteristics, and grouped together into sub-categories. Every sub-category was subsequently given a representative title. For example: 'the veterinarian's horse sense' and 'horses handled well by vet' were considered to both relate to the same sub-category entitled 'horsemanship of the veterinarian'.

In the last stage of the coding process, characteristics and similarities of the sub-categories, as well as their differences were identified and grouped into overarching categories.<sup>15</sup> For example: the sub-categories 'value for money' and 'accuracy of cost estimate' were included in the categories 'cost of service'. Once again, all sub-categories and the way they were coded into categories were cross-checked for

**TABLE 1** Overview and description of the eligible records used to identify the aspects of client satisfaction in equine practice

Year	Author	Title	Type of publication	Focus	Method	Sample size
2018	Best et al	Referring equine veterinarians' expectations of equine veterinary specialists and referral centers	1	The relationship between referring equine veterinarians and specialists and referral centers	Qualitative, focus group based study, referring veterinarians	6 focus groups, 48 referring veterinarians
2018	Best et al	Survey of equine referring veterinarians' satisfaction with their most recent equine referral experience	1	The relationship between referring equine veterinarians and specialists and referral centers	Survey referring veterinarians and specialists	187 referring veterinarians 92 specialists (referral care providers)
2018	Hughes et al	Care about my animal, know your stuff and take me seriously': United Kingdom and Australian clients' views on the capabilities most important in their veterinarians	1	Clients' views on the capabilities most important in their veterinarians	Survey clients different species	1446 clients (441 equine owners)
2017	Pyatt	Service provision in the animal health sector	2	Service provision in the animal health sector	Literature review Interviews Survey questionnaire	
2015	Best	Exploring the role of interpersonal relationships in equine veterinary practice	2	Exploring the role of interpersonal relationships in equine veterinary practice	Literature review Focus groups Survey questionnaire	* 9 caretaker focus groups (total 46 horse caretakers, 3 equine industry sectors), 4 independent equine veterinarian focus groups (total 25 veterinarians) * Focus groups: 46 horse caretakers, 25 veterinarians * Two publications 2018 (see above)
2012	American Association Equine Practitioners (AAEP)	Equine owner/trainer vision on veterinary services	3	Equine owner/trainer vision on veterinary services	Survey horse owners and clients	6148 completed surveys
2011	Mellanby et al	Perceptions of clients and veterinarians on what attributes constitute 'a good vet'	1	Perceptions of clients and veterinarians on what attributes constitute 'a good vet'	Survey small animal (SA) clients, SA vets and non-SA vets	Small animal clients 407 Small animal vets 243 Non-small animal vets 61
2009	Blach	Customer service in equine veterinary medicine	3	Aspects of veterinary care important to horse owners, and what veterinarians think is important	Survey equine clients and veterinarians	Horse owners: 1273 Veterinarians (AAEP members): 598
2009	Loomans et al	Quality of equine veterinary care. Part 2: Client satisfaction in equine top sports medicine in The Netherlands	1	Client satisfaction in equine top sport medicine in the Netherlands	Survey with 3 different questionnaires: equine sportsmen and -women, team coaches and team vets	216 equine sportsmen and -women selected by the Royal Dutch Equine Sports Federation (KNHS), 78 responses. Team coaches 10/11 responses. Team vets 7/7 responses

(Continues)

TABLE 1 (Continued)

Year	Author	Title	Type of publication	Focus	Method	Sample size
2008	Loomans et al	Quality of equine veterinary care: Where can it go wrong? A conceptual framework for the quality of equine healthcare, based on court cases against equine practitioners in The Netherlands	1	Evaluation of disciplinary cases against equine practitioners in the Netherlands	Analyses of disciplinary cases against equine practitioners in the Netherlands (1992-2004)	Total: 831 disciplinary cases Equine: 110 disciplinary cases

1. Peer reviewed journal  
2. PhD thesis  
3. professional journal/website

inconsistencies and discussed between the first and second author until agreement was reached. All coding, sub-categories and categories were continuously evaluated and re-evaluated until no new relevant information was left, the categories were well developed, and the relationships between the categories were well established. Upon completion of the coding, the third and fourth author reviewed the process for any inconsistencies. The complete analysis is given in the supplementary information (Table S2).

## RESULTS FROM THE CODING PROCESS

As a result of the coding process (Table S2, supplementary information) seven categories were identified, all contributing towards client satisfaction in equine veterinary practice:

1.	Quality of care	(68 sub-categories in 10 records)
2.	Quality of service	(33 sub-categories in 9 records)
3.	Horsemanship of the veterinarian	(13 sub-categories in 8 records)
4.	Costs of service	(14 sub-categories in 8 records)
5.	Interpersonal skills	(57 sub-categories in 9 records)
6.	Professional attitude	(54 sub-categories in 10 records)
7.	Transfer of knowledge	(14 sub-categories in 7 records)

### Categories

#### 1. Quality of care

The category *Quality of care* includes all sub-categories relating to all activities that are specific to both the animal, that is, the horse and the veterinary profession, such as knowledge and treatments or techniques, hence excluding interpersonal skills such as communication.

#### 2. Quality of service

This category includes all aspects related to a professional service provided between individuals, such

as availability, duration of consultation, ease of making an appointment, etcetera.

#### 3. Horsemanship of the veterinarian

The category *Horsemanship* incorporates all non-veterinary aspects of knowledge and/or practical skills specifically related to the animal species, that is, the horse, such as skills and abilities relating to the caring for, handling and management of the horse.

#### 4. Costs of service

In the category *Costs of service* all financial aspects of veterinary care and service are included, such as accuracy of cost estimations, clarity of invoicing and value for money.

#### 5. Interpersonal skills

The category *Interpersonal skills* includes communication, compassion and empathy, teamwork, inter-collegiate relationships.

#### 6. Professional attitude

The category *Professional attitude* relates to how veterinarians present themselves to their clients, such as attire and cleanliness as well as characteristics such as honesty, trust and respect.

#### 7. Transfer of knowledge

The category *Transfer of knowledge* includes all sub-categories relating to the transfer of knowledge, such as the acquisition and dissemination of relevant knowledge and skills within the context of continued professional development, between veterinarians and from veterinarian to client.

## DISCUSSION

A number of authors have repeatedly stressed the importance of client satisfaction in equine veterinary

practice.<sup>8,16–19</sup> These findings are mirrored in studies focused on small animal practice.<sup>20–23</sup> However, the field of veterinary practice is highly diverse and tailors its services to the needs of different species and their owners. After all, people have different reasons for owning different types of animals. While dogs, cats or other pets are kept primarily to keep their owners company and are often considered part of the family, horses are more often viewed as a means to pursue recreational or competitive activities with.<sup>1,24,25</sup> Even though horse owners might also own a dog or cat, their reasons for owning a particular animal and the nature of their relationship with that animal might differ. It could therefore be argued that generalisation of pet and horse owners is undesirable and that the way in which they relate to, and are satisfied with, their veterinary practitioner should be investigated separately. However, the limited number of studies combined with the methodological diversity and diversity in scientific quality makes the structuring of information into a cohesive framework regarding client satisfaction in equine veterinary practice challenging.

The current study seeks to provide the veterinary community with a valid starting point for future discussion and investigation, by focusing on the core elements of client satisfaction in equine veterinary practice. The structured analysis and subsequent coding of the existing literature on client satisfaction in equine veterinary practice as performed in this study revealed seven distinct categories, which may be considered fundamental to client experience. The following discussion will provide a critical appraisal of the analysed records and will focus on how the seven categories comprise the various interactions between equine clients and veterinary practitioners as supported by the literature currently available, as well as how they might be applied in practice, and what additional research on the subject is needed.

## SEVEN CATEGORIES ON EQUINE VETERINARY CLIENT SATISFACTION

### Quality of care

The individual sub-categories underlying the category 'quality of care' were repeatedly identified as fundamental to equine veterinary client satisfaction and reflect the findings from the survey conducted in 2012 by the American Association of Equine Practitioners (AAEP). The study gauged owners' attitudes and perceptions regarding equine veterinarians. Findings clearly stressed the importance of quality of equine care, which was one of the key criteria for rating a veterinary consult as meeting or exceeding expectations.<sup>26</sup> This survey has the largest number of respondents (6148) of all the records included in the analysis. While the published report did not contain the full data set or questionnaires, meaning that the quality of the data set could not be evaluated, additional studies have confirmed their conclu-

sion, namely the importance of a treating veterinarian appearing knowledgeable, competent and possessing the relevant skills to treat a horse.<sup>6,17–19</sup> Even though veterinarians may be sceptical of horse owners' abilities to judge a veterinarian's competence,<sup>17</sup> it needs to be borne in mind that it is the client's *perception* of how these qualifications translate into quality of care that are likely to determine their level of satisfaction. This notion has been supported by studies on small animal veterinary services as well as human health care.<sup>17,23,27</sup>

Some of the reasons for lodging a complaint against a veterinarian in court are not providing care in time or at the appropriate level, and/or failure to refer to a specialist (thus also failing to provide the relevant care at an appropriate level).<sup>16</sup> While the majority of veterinarians undoubtedly believe themselves to be providing the best quality of care, they should bear in mind that, once again, it is the client's perception of that care which plays a major role in determining the level of customer satisfaction. Future research should focus on gathering empirical data on pre- and post-service perception of quality of care in equine veterinary practice.

### Quality of service

The way customers are being treated – both in actual terms as well as how such treatment is being perceived – has been found to greatly affect levels of satisfaction. It can be argued that *the way* in which services are provided, more than the actual quality of such services, is essential in determining how these services are perceived.<sup>28</sup> This might include the manner in which clients are being welcomed, the time it takes for them to get an appointment, the availability of their preferred veterinarian, or whether the veterinary practice is easily accessible and maintained to a high hygienic standard.<sup>17</sup> These findings have been supported by studies in both the veterinary field and human health care.<sup>22,29</sup> An interesting finding in the paper by Blach is that clients say they believe it is more important that equipment and facilities are clean than technologically advanced and new.<sup>17</sup> Studies by Pyatt and Best confirm these findings.<sup>6,30</sup> Furthermore, responding late to an emergency is one of the reasons for veterinarians to be called before a disciplinary board.<sup>16</sup> Service quality can thus be described as the ability of the service provider to meet or exceed their clients' expectations.<sup>4,6</sup>

### Horsemanship of the veterinarian

When looking at client perceptions and what is important to them, horsemanship is considered a valuable attribute for any equine veterinarian. The manner in which veterinarians handle a client's horse, in addition to having a thorough understanding and knowledge of the equine industry, is of great importance to horse owners and/or caretakers.<sup>6,8,17,26</sup> Blach (2009)

found that the category 'How they handled my horse' came second only to 'competence in veterinary skills', demonstrating the importance horse owners attach to it. It seems clear that equine veterinarians with good horsemanship skills and relevant knowledge of the equine industry have an advantage when it comes to client satisfaction. These findings are mirrored in small animal practice, where pet handling skills have been shown to be an important indicator of client satisfaction levels.<sup>18,19,29</sup> It must be borne in mind however, that the reasons for owning a horse as opposed to a pet can be different, and therefore the relationship between the client and the animal are highly diverse.<sup>1,24</sup> As such, the levels of expectations of clients towards their veterinarian might also vary. As Loomans and others point out 'a lack of knowledge or 'horsemanship' on the client side can also lead to client dissatisfaction. Studies such as the AAEP and the paper by Visser and Van Wijk-Jansen already indicate the need for differentiating between different types of horse owners. Additional research is needed to develop a better understanding of such differences and how to interpret and subsequently integrate these into client-centred communication techniques.

## Cost of service

Several studies agree that the amount of money veterinarians charge for their services is not a primary factor determining the level of client satisfaction, compared to other criteria.<sup>6,17,26</sup> Blach rates cost of service 21st out of 24 items and the thesis by Best shows similar findings. A number of authors agree that receiving *value for money* is much more important to a client than the actual costs.<sup>6,26,30</sup> This is not only true in veterinary care but for a wide variety of customers within different types of service industries: when clients are satisfied with the level of service they are willing to pay a fair price.<sup>7,20,29</sup> At the same time, veterinarians should take into account that clients do not appreciate being confronted with unexpected costs.<sup>5</sup> Therefore, veterinarians should notify their clients of expected costs before treatment, to help them make an informed decision about treatment options, without making assumptions on whether a client is able or willing to pay for treatment.<sup>6,17,30,31</sup> Referring veterinarians consider it important that referral hospitals are transparent about costs to their client and work cost-effectively.<sup>13,30</sup> Even though the price does not seem to be the most important factor for the majority of clients, there are clients that appear to be more sensitive to the financial implications of a service. In the AAEP survey these clients were described as individuals with low income and those who train horses for others. However, at this point there is not enough information available to clearly identify these 'cost sensitive' clients, or if there are services that are more prone to cost sensitivity. Additional research is warranted to determine to what extent a

horse owner's or caretaker's financial or social position impacts on their customer experience, as well how veterinarians should address the monetary issue in order to optimise client satisfaction.

## Interpersonal skills

Interpersonal skills such as 'communication with clients' and 'listening skills of the veterinarian' were at the top of the list of criteria for client satisfaction.<sup>17</sup> The AAEP reported 43% of the respondents agreeing that their primary veterinarian is 'a good friend of mine.'<sup>26</sup> This suggests that clients see the relationship with their (primary) veterinarian as more than just a business arrangement. In the same survey more than half of the respondents indicated that they had been using the same veterinarian for at least 6 years, with an average of 9 years.<sup>26</sup> As multiple studies note, clients value being educated on what to expect, being listened to, being communicated to clearly and that they expect to be respected by the veterinarian.<sup>8,17,30,32</sup> This is one of the reasons to advocate the integration of evidence-based communication techniques into veterinary training.<sup>32-35</sup>

Furthermore, (interdisciplinary) teamwork appears to be important to horse owners. Research suggests that owners appreciate it when equine professionals such as farriers, physical therapists and osteopaths work together with their own treating veterinarian as a team.<sup>6,8,26</sup> Interestingly, the intercollegiate relationships between a referring veterinarian and the receiving specialist are equally important, both to the client *and* to referring veterinarians.<sup>13,36</sup> As Best points out, how the horses (and client) are treated at the referral hospital is important to the referring veterinarian, as referral is seen as an extension of service.<sup>13,36</sup>

## Transfer of knowledge

There is a lack of transfer of scientific knowledge to the equestrian world, despite an interest from at least a part of the industry.<sup>8</sup> Clients wish to be educated about the condition of their horse, or other animals, in a manner they can understand.<sup>19</sup> Not providing clients with the appropriate information, or sharing incomplete information has led to cases before a disciplinary board.<sup>16</sup> It can be argued that the client-veterinarian dialogue could be improved significantly if publicly available communications on veterinary matters were written in a style accessible to horse owners with diverse educational backgrounds.<sup>37</sup> Transfer of knowledge seems to be equally important for referring veterinarians, who wish to be further educated by specialists.<sup>13,36</sup>

Providing accessible information to horse owners at their level could arguably improve levels of client satisfaction. Further research is necessary to evaluate the information preferences of horse owners to date.

## Professional attitude

Mossop and Cobb argue that veterinary professionalism is multifaceted and thus difficult to define. They emphasise that veterinarians must balance priorities related to animal welfare, client satisfaction, societal pressures and their own set of values.<sup>38</sup> As such, it can be argued that appropriate levels of communication are a key to a professional attitude. As the failure to provide clients with the appropriate information leads to more complaints being put to a disciplinary board than actual failures of veterinary technique.<sup>16,32</sup> Such findings underline the notion that most people are willing to forgive human error, but do not look kindly upon a failure to communicate. How veterinarians present themselves professionally includes, at a minimum, keeping up to date with appropriate knowledge and skills, having good intercollegiate relations and treating clients with respect.<sup>8,17,19,32</sup> Cleanliness is another important aspect, as clients rate the cleanliness of facilities and equipment above quality of equipment.<sup>17</sup>

## The equine veterinary client experience

The structured analysis of the data emerging from the systematic search clearly shows that the 'equine veterinary client experience' is composed of several overarching categories. How each of these categories is perceived, and to what extent this perception aligns with, or even surpasses, prior expectations will determine levels of client satisfaction in equine veterinary practice. Horse owners frequently do not know what to expect from their veterinarian and therefore allow their expectations to be influenced by their peers, trainers or the internet.<sup>16</sup> In the paper by Loomans (2009), 64% of the respondents reported using multiple equine veterinarians, therapists and other professionals, depending on what ails their horses. This suggests that at least some horse owners believe that not one veterinarian or equine professional is able to meet all of their horses' needs when it comes to veterinary care. It should be noted that the paper by Loomans (2009) only questioned 216 equine sportsmen and -women in the Netherlands. Further research, on a more differentiated group of horse owners is needed to see if – and why – horse owners might be inclined to use more than one (equine) veterinarian.

The seven categories as identified in the current paper are a first step towards providing the equine veterinary profession with a theoretical foundation on which to build an optimal equine client experience. However, the horse industry is highly diverse, and a 'one size fits all' approach to equine veterinary service is unlikely to result in optimal client experiences.<sup>1,19,26,39</sup> What is more, due to the nature of the current investigation and the methodology employed, certain limitations will need to be considered. Studies included in the current study are

both peer-reviewed and not peer-reviewed. It includes qualitative studies (e.g., focus groups) that aim to provide a deeper understanding of a subject, and quantitative studies (e.g. surveys) that focus on objectivity and quantifying samples, and studies that use a combined method.<sup>40</sup> The records included are diverse in their target groups, sample size and quality, and are performed in different countries. The identified categories therefore will need further validation to confirm their validity.

With the exception of the AAEP (2013) survey and the study by Blach (2009), all studies rely on small subject groups, with a limited number of equine clients involved. Loomans and others (2009) focus only on equestrians selected by the Royal Dutch Equine Sports Federation, the team coaches and vets. Mellanby (2011) includes predominantly small animal clients from five veterinary practices while Best and others (2018a,b) focus only on referral care, with also merely a limited number of participating veterinarians. The two studies that include a large number of client responses, that is, the studies by Blach (2009) and AAEP (2013), are difficult to analyse in detail because the original questionnaires and data (analysis) are not available, and study quality cannot be determined. Lastly, the study by Loomans and others (2008) does not include actual clients and focuses primarily on dissatisfaction.

In order to be representative of the general horse owner population, future research on equine veterinary client satisfaction should ensure a sufficiently broad and varied group of subjects.

What is more, future studies should also aim to investigate clients' beliefs and perceptions, and their differences, related to equine veterinary service provision. Underlying principles and patterns of equine veterinary care from a veterinarian's perspective should be identified, as well as any potential discrepancies between veterinary and client perceptions and expectations. The limited number of identified studies on the subject of client satisfaction in equine veterinary practice, of which three records were included that did not come up in the search, but from the first authors personal network, means that the data show an inherent, yet unavoidable selection bias. Highly selective search terms were used in order to identify papers with a specific focus on client satisfaction in equine veterinary client satisfaction. It could be argued, however, that broader search terms, including wildcards might have identified more papers, as could have a different combination of literature databases.

The structured review allowed for a transparent, comprehensive literature search, with the aim of decreasing researcher bias. It could be argued that a more traditional review could have included more papers, and therefore more information, yet such an approach would also have increased researcher bias. Structuring and analyzing the available information using coding by definition depends on the interpretation of the coders and any grouping of the sub-categories and categories remains partly subjective.

Initially, the distinction between the categories 'Quality of care' and 'Quality of service' was less clear. That meant that every time such conceptual overlap was encountered, the first and second author discussed the issue at hand until an agreement could be reached. Even though the third and fourth author reviewed the coding for any inconsistencies, the lack of a third external reviewer might be considered a limitation. Ultimately, these conceptual discussions resulted in the seven categories presented in the current paper, which will need to be validated through additional research.

Lastly, it should be noted that this study only focuses on the *nature of* themes contributing towards client satisfaction in equine veterinary practice. It does not, however, identify which (combination of) categories are most important or effective in order to attain optimal levels of client satisfaction for each individual client. Further research is necessary to validate current findings and identify the level of importance of each category to the individual client.

## CONCLUSION

Four decades after the first publication on the subject of client views and perceptions in veterinary medicine, research on client satisfaction in the equine veterinary field is still scarce and, up to now, has failed to provide a firm theoretical basis that is applicable to equine veterinary practitioners.<sup>35</sup> The current analysis of existing information on equine veterinary client satisfaction reveals that the numerous aspects relating to client satisfaction can be captured in seven categories: quality of care, quality of service, horsemanship of the veterinarian, costs of service, interpersonal skills, professional attitude and transfer of knowledge. Future research should aim to expand the theoretical foundation as outlined in this paper, as well as establishing an evidence-based theoretical framework on client satisfaction in equine veterinary practice. Research efforts should focus on investigating underlying beliefs, concerns and perceptions related to equine veterinary service provision, as well as how equine veterinary professionals can work towards a more client-centred approach.

## CONFLICT OF INTEREST

Authors have no conflict of interest to declare.

## ORCID

Yteke Elte  <https://orcid.org/0000-0002-9633-9871>

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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