



Small animal veterinarians' communication with pet owners from a Motivational Interviewing (MI) perspective

Smådjursveterinärers djurägarkommunikation med avseende på Motiverande samtal (MI)

Ebba Jennolf

Independent project • 30 credits
Swedish University of Agricultural Sciences, SLU
Faculty of Veterinary Medicine and Animal Science
Veterinary Medicine Programme
Uppsala 2021



Small animal veterinarians' communication with pet owners from av Motivational Interviewing (MI) perspective

Smådjursveterinärers djurägarkommunikation med avseende på Motiverande samtal (MI)

Ebba Jennolf

Supervisor: Karolina Enlund, Swedish University of Agricultural Sciences,
Department of Clinical Sciences
Assistant supervisor: Ann Pettersson, Swedish University of Agricultural Sciences,
Department of Clinical Sciences
Examiner: Catarina Svensson, Swedish University of Agricultural Sciences,
Department of Clinical Sciences

Credits: 30 credits
Level: A2E
Course title: Independent project in Veterinary Medicine
Course code: EX0869
Program/education: Veterinary Medicine Program
Course coordinating dept: Department of Clinical Sciences

Place of publication: Uppsala
Year of publication: 2021
Cover picture: Sara Höglund

Keywords: Motivation, Dog owner, Pet owner, Advisor-client, Dental home care, Tooth brushing

Swedish University of Agricultural Sciences
Faculty of Veterinary Medicine and Animal Science
Department of Clinical Sciences

Publishing and archiving

Approved students' theses at SLU are published electronically. As a student, you have the copyright to your own work and need to approve the electronic publishing. If you check the box for **YES**, the full text (pdf file) and metadata will be visible and searchable online. If you check the box for **NO**, only the metadata and the abstract will be visible and searchable online. Nevertheless, when the document is uploaded it will still be archived as a digital file.

If you are more than one author you all need to agree on a decision. Read about SLU's publishing agreement here: <https://www.slu.se/en/subweb/library/publish-and-analyse/register-and-publish/agreement-for-publishing/>.

YES, I/we hereby give permission to publish the present thesis in accordance with the SLU agreement regarding the transfer of the right to publish a work.

NO, I/we do not give permission to publish the present work. The work will still be archived and its metadata and abstract will be visible and searchable.

Abstract

Communication is a significant part of the veterinary profession. A veterinarian does not only need the skills to make the correct diagnosis, but also to communicate effectively for the treatment to be successful. In many cases, treatment plans require the pet owner to change their behavior, which places demands on veterinarians' ability to motivate clients to behavior change.

Veterinarians commonly adopt a paternalistic communication style which may be ineffective and even increase resistance to change in ambivalent clients. In contrast to paternalism, Motivational Interviewing (MI) is an evidence-based collaboration centered counseling style aiming to strengthen a person's inner motivation and commitment to change.

This study aimed to investigate the extent to which, and in what way, Swedish small animal veterinarians, without previous training or knowledge of the method, spontaneously use MI in their communication with dog owners regarding dental home care in dogs.

Audi-recorded role-play calls between eight veterinarians and a professional actor were coded by MIC Lab AB using Motivational Interviewing Treatment Integrity 4.2.1 (MITI 4.2.1), a behavioral coding system developed to evaluate MI-skills. During the conversations, the actor played an owner of a dog diagnosed with periodontitis. The veterinarians' task was to motivate the dog owner to start brushing his dog's teeth daily.

From the coding protocols, global scores of four variables on a five-point scale, and behavior counts of ten verbal behaviors were obtained. The results were presented as mean \pm standard deviation. The veterinarians' consultation approaches were predominantly characterized by Giving information, Persuasion, and Questions. In general, the veterinarians made few attempts to involve or affirm the dog owner, and none emphasized the dog owner's autonomy. The veterinarians had the majority of the speaking time and dominated the conversations, while the dog owner had a more passive role.

The results of the present study indicate that Swedish small animal veterinarians spontaneously use MI to a very small extent in consultations with dog owners regarding dental home care for dogs. Based on the results and the previous research that has shown MI to be an effective way to help people change their behavior, there are many reasons to consider implementing MI in veterinary practice.

Keywords: Motivation, Dog owner, Pet owner, Advisor-client, Dental home care, Tooth brushing

Table of contents

List of tables	9
Abbreviations	10
1. Introduction.....	11
2. Literature review	13
2.1. Veterinarian communication	13
2.1.1. Veterinarian-client-patient relationship	13
2.2. Motivational Interviewing	14
2.2.1. Key elements	14
2.2.2. Four processes	16
2.2.3. Core skills	20
2.2.4. Provide information and advice in the spirit of Motivational Interviewing	23
2.2.5. Motivational Interviewing Treatment Integrity 4.2.1	26
2.2.6. Other behavioral coding systems for Motivational Interviewing skills	27
2.3. Dental health in dogs.....	27
2.3.1. Periodontal disease	27
2.3.2. Quality of life	29
3. Material and methods.....	30
3.1. Participating veterinarians	30
3.2. The conversations	30
3.3. MITI coding	31
3.4. Data management	31
4. Results.....	32
4.1. Global scores and behavior counts, MITI 4.2.1	32
4.2. Written comments.....	33
5. Discussion.....	35
5.1. Characterization of Communication styles	35
5.2. Dental home care recommendations	38
5.3. Methodological considerations	39

6. Conclusions	40
References	41
Acknowledgements.....	45
Populärvetenskaplig sammanfattning	46
Appendix 1	48
Appendix 2	49
Appendix 3	50
Appendix 4	51
Appendix 5	52
Appendix 6	53

List of tables

Table 1. MI-adherent and MI-nonadherent assumptions of information exchange.	23
Table 2. Giving information using the strategy Elicit-Provide-Elicit.....	25
Table 3. Descriptive statistics of 14 variables (global scores and behavior counts)	33

Abbreviations

EPE	Elicit-Provide-Elicit
CLAMI	Client Language Assessment in Motivational Interviewing
CLEAR	Client Language Easy Rating
MI	Motivational Interviewing
MINT	Motivational Interviewing Network of Trainers
MITI	Motivational Interviewing Treatment Integrity
OARS	Open questions, Affirming, Reflective listening, Summaries
SDT	Self-determination theory
VHHM	Veterinary Heard Health Management

1. Introduction

Effective communication is an important skill in the veterinarian profession. In their professional role, veterinarians do not only need to be able to gather and provide information effectively but also to motivate animal owners to implement behavior changes when needed to improve the health of their animals (for example diet, exercise, medication, or home care).

Traditionally, the most common communication approach to medical visits is paternalism, in which the veterinarian sets the agenda for the appointment, assumes that the client's values are the same as the veterinarian's, and takes on the role of a guardian (Shaw *et al.* 2006). In such a relationship, the veterinarian does most of the talking, while the client has a more passive role. Notwithstanding, this persuasive approach has been proven to be ineffective and to increase resistance to change in ambivalent clients (Apodaca & Longabaugh, 2009).

In human health care, as well as in many other helping professions, the application of the evidence-based counseling method called Motivational Interviewing (MI) is increasing. In contrast to paternalism, MI is a collaboration centered counseling style aiming to strengthen a person's inner motivation and commitment to change (Miller & Rollnick 2013). Within MI, the clinician acts more of a guide than an advisor, helping the client to resolve how he or she should act instead of telling the client how to do. Studies have shown that this style of communication is an effective way to help people change their behavior (Rubak *et al.* 2005). In a systematic review and meta-analysis by Rubak *et al.* (2005) the effectiveness of MI, compared to traditional advice giving, in treatment of a broad range of behavior problems and diseases was evaluated. In this review, the term "traditional advice giving" was defined as a practitioner-centered approach, which implies that the practitioner defines the patient's problems from a biomedical perspective without taking the patient's perspective into account, thus gives advice accordingly. Rubak *et al.* (2005) found MI to outperform traditional advice giving in approximately 80% of the studies and showed that MI can be effective even in brief encounters of only 15 minutes.

The field of application for MI in veterinary practice is extensive. MI may be applied in every situation where a change in the behavior of the animal owner is

desirable, such as weight loss, medication, rehab, or dental home care. This study aimed to investigate the extent to which, and in what way, Swedish small animal veterinarians, without previous training or knowledge of the method, spontaneously use MI in their communication with dog owners regarding dental home care in dogs.

2. Literature review

2.1. Veterinarian communication

2.1.1. Veterinarian-client-patient relationship

According to Emanuel & Emanuel (1992), the relationship dynamic between veterinarian and client is based on three criteria:

1. Who sets the agenda for the appointment.

The veterinarian, the veterinarian and the client in negotiation, or the client.

2. The importance placed on the client's values.

The veterinary team assumes that the client's values are the same as the veterinarian's, the veterinary team explore the client's values with the client, or the veterinary team does not explore the client's values.

3. The functional role of the veterinary profession.

Guardian, advisor, or consultant.

Based on the mentioned criteria, three different models of veterinarian-client-patient relationships have been described (Roter 2000). Traditionally, the most common approach to medical visits is paternalism, in which the veterinarian sets the agenda for the appointment, assumes that the client's values are the same as the veterinarian's, and takes on the role of a guardian. In such a relationship, the veterinarian does most of the talking, while the client has a more passive role, and the main focus is the medical condition, diagnosis, treatment, and prognosis.

The opposite of paternalism is consumerism (Roter 2000). In the consumerism model the client sets the agenda for the appointment, the veterinarian takes on a role as a technical consultant, providing information and services based on the client's demands. According to the report by Shaw *et al.* (2006) consumerism is

infrequently used in veterinary medicine. Unlike paternalism, consumerism places great emphasis on the interests of the client which may limit the veterinarian's role.

In between paternalism and consumerism is relationship-centered care which is based on mutuality and characterized by negotiation between the veterinarian and the client (Tresolini & Pew-Fetzer Task Force 1994). In the relationship-centered model, the veterinarian and the client establish a partnership in which the veterinarian takes the role of an advisor. In the study made by Shaw *et al.* (2006) a relationship-centered approach was used by the veterinarian in 42% of all veterinary visits, and 69% of the wellness visits.

2.2. Motivational Interviewing

MI is a collaboration centered counseling style which aims to strengthen a person's inner motivation and commitment to change (Miller & Rollnick 2013). MI originates from experiences of alcoholism treatment and was first described by the clinical psychologist William R. Miller in 1983. Together with Stephen Rollnick, Miller developed his experiences into a coherent theory presented in 1991. Since then, MI has been used in many different contexts such as health care, addiction care, social services, schools, dental care, youth clinics, and correctional treatment (Socialstyrelsen, 2019). However, MI is still something new to veterinary medicine.

MI is learned through systematic training (Motivational Interviewing Network of Trainers 2020). In 1997, Miller and Rollnick incorporated the international non-profit charitable organization Motivational Interviewing Network of Trainers (MINT) for trainers in MI. The mission of MINT is to promote good practice in the use, research, and training of MI. The organization currently consists of 700 members from 35 different countries.

2.2.1. Key elements

In the spirit of MI, there are four key elements; *Partnership*, *Acceptance*, *Empathy*, and *Elicitation* (Miller & Rollnick 2013).

Partnership is an essential element of MI which can be described as an active collaboration, practiced *for*, and *with* the client (Miller & Rollnick 2013). The partnership is built on the idea that every human being is an expert on him- or herself. In MI, the role of the clinician is to create a positive relationship that facilitates change, without being compelling. This reflects MI as a method as it involves exploratory rather than admonition, and interest and support more than persuasion and arguments.

MI also includes *Acceptance* meaning that the clinician accepts what the client brings into the consultation, without necessarily being satisfied or agreeing with the actions or status quo of the client (Miller & Rollnick 2013). There are four different aspects of acceptance that are important in MI:

1. Absolute worth
2. Accurate empathy
3. Autonomy support
4. Affirmation

The ability to highly value the absolute worth and inner potential of every individual is fundamental to acquire acceptance (Miller & Rollnick 2013). This also applies to accurate empathy, which can be described as the ability to understand another person's inner frames of reference, and to reflect that through active listening. The opposite of empathy is to apply your own perspective to the situation, or even assume that the views of another person are irrelevant or wrong.

The third aspect of acceptance is about respecting and acknowledge the individual's rights and the capacity for self-determination (Miller & Rollnick 2013). The opposite of autonomy support is to make someone do something by using force or control. Limiting someone's choices in such a way has been shown to result in a very typical psychological backlash which is counterproductive. Lastly, acceptance implicates affirmation which means seeking and acknowledging another person's strengths and aspirations. Affirmation requires conscious communication that differs from the one commonly used while mapping where the clinician tries to identify the shortcomings in a person and tell how these should be fixed.

Empathy is another important element in the spirit of MI (Miller & Rollnick 2013). Showing empathy does not mean that one suffers with another person, but that one prioritizes the needs of the other person and makes it easier for him or her to feel good. Empathy may come more naturally to some than to others, but it is a skill that can be learned as well as measured.

The fourth and last key element is *Elicitation* in terms of elicitation of motivation to change (Miller & Rollnick 2013). Motivation is commonly misperceived as a quality you either have or not, but motivation is dynamic and can be affected through counseling. In many professional consultations regarding behavior change, the so-called shortage model is used. This model is based on the assumption that the person lacks something that needs to be put in place. Within the spirit of MI, the approach is different, based on the apprehension that people already possess what is required and that the professional task is to bring that out. Consequently,

the focus within MI is on the person's strengths and resources, rather than shortcomings. Elicitation may also refer to elicitation of arguments for change within an ambivalent person, in order to strengthen the motivation.

2.2.2. Four processes

MI can be described based on four overlapping processes; *Engaging*, *Focusing*, *Evoking*, and *Planning* (Miller & Rollnick 2013). In a sense, these four processes follow each other in this certain order, as one presupposes the other, but they do also overlap and recur.

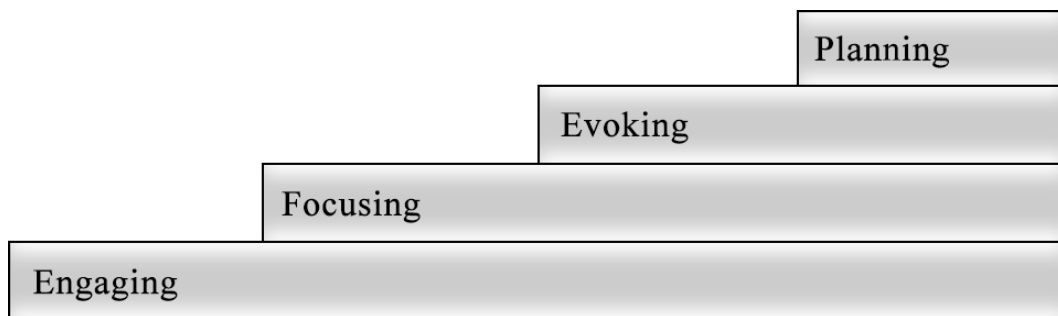


Figure 1. The four processes of MI. Illustration made by Alexander Häll Lanerfeldt, based on Box 3.1, "Fyra processer i MI" (Miller & Rollnick 2013).

Engaging

Engaging is the process in which a mutually trustful and respectful helping relationship is established between the clinician and the client (Miller & Rollnick 2013). During this process, the focus is on listening and exploring the client's values and goals to make the person feel comfortable and seen. This is achieved by showing interest, being curious, and actively listening to what the person has to say. At this point, the reflections that are made are usually not steering in any specific direction, however, autonomy is emphasized. The relationship and the engagement that is built in this process constitute a foundation for the remaining processes of MI.

Nevertheless, this process is full of potential traps for the clinician to fall into; the premature focus trap, the blame trap, and the expert trap (Miller & Rollnick 2013). The latter is one of the most common traps that a clinician needs to avoid. The expert trap means that the clinician communicates that he or she, based on their professional expert knowledge, has the answer to the other person's problems. To avoid this trap, the clinician needs to get rid of the assumption that he or she is supposed to have and be able to give all the right answers.

Focusing

While the engaging process sets the agenda, focusing is the process through which the conversation about change develops and continues in a specific direction (Miller & Rollnick 2013). It is during this process that the clinician and the client agree on the focus of the conversation and set the goals. Focusing is an ongoing process in which focus and direction are maintained and sought. There are three different sources from which the focus can derive; the client, the environment, and the clinician. Each source of focus gives rise to an agenda that does not necessarily correspond to the others.

Agenda mapping is a tool to more quickly agree on a focus and avoid confusion about the direction when there are several potential subjects to talk about (Miller & Rollnick 2013). To map an agenda means to take a step back from the conversation for a short while and try to get an overview of the potential topics and direction for the counseling. Such a conversation is called a meta-conversation. The possible topics can be compiled into a list, or visually illustrated in a mind map, for the clinician and the client to choose prioritized topics from. This tool may be useful in many different situations; for example when choosing a goal out of several possible, when a change of direction is needed, when the conversation does not move forward, or if a difficult topic needs to be brought up.

Evoking

The third process is about evoking and strengthening the client's motivation for change (Miller & Rollnick 2013). In order to do so, the clinician allows the client to express his or her own arguments for change. This strategy differs considerably from the traditional way of working where an expert identifies the problem, determines what is done wrong, and provides a solution to the problem. The expert didactic model may be successful when it comes to diagnosing and treating an infection, but a behavior change requires the client's active involvement over a longer time.

Most people who are going to implement a behavior change are ambivalent about it, which means that they can see benefits both from implementing change and from not doing so (Miller & Rollnick 2013). The evoking process is meant to facilitate the resolution of that ambivalence to achieve change. Ambivalence towards change is completely normal and a common part of the process of change. In fact, it is the most common state to get stuck in. Ambivalent people have both arguments for and against change within themselves and can express themselves in two different ways at the same time.

Statements that express the benefits of change are called *change talk* (Miller & Rollnick 2013). Change talk can be either preparatory or mobilizing. Preparatory

change talk is about expressing a desire for, ability to, reasons, or need for a change. For instance:

- “I wish I could brush my dog’s teeth every day” (desire)
- “I could probably brush my dog’s teeth daily” (ability)
- “It would probably be good for the dog if I brushed his teeth” (reasons)
- “I have to start to brush his teeth” (need)

Mobilizing change talk, on the other hand, is about commitment, activation, and taking steps (Miller & Rollnick 2013). For example:

- “I will start to brush his teeth daily” (commitment)
- “I am willing to start brushing his teeth” (activation)
- “I bought a toothbrush so I can start brushing my dog’s teeth now” (taking steps)

Mobilizing change talk, which usually is preceded by preparatory change talk, signals that the person is approaching a solution of the ambivalence in favor of a change (Miller & Rollnick 2013).

Change talk is most easily evoked by asking open questions regarding the client’s desire, ability, reasons, and need to make a change (Miller & Rollnick 2013). Another way to promote change talk is to ask the client to describe the extremes; the worst-case scenario if the current situation continues, respectively the best possible outcome of a change. Another possible technique for evoking change talk is to ask the client to either look back on the time before the problem occurred or imagine a changed, or unchanged, future.

The opposite of change talk is *status quo talk* which includes arguments for maintaining the current situation instead of changing it (Miller & Rollnick 2013). Status quo talk emphasizes the positive with the current situation and the reasons not to change it. Thus, status quo talk is strongly associated with non-change. However, depending on how the clinician responds to status quo talk, it can either significantly increase or decrease. To promote change, status quo talk should be softened. However, this does not mean that status quo talk should be neglected or ignored. Instead, status quo talk is softened by the clinician reflecting on what has been said, emphasizing autonomy, or suggesting a different perspective on the situation described.

By responding to the client’s statements in a way that promotes change talk, the clinician may increase the proportion of change talk in relation to the status quo

talk (Miller & Rollnick 2013). According to several studies performed on MI, an increased proportion of change talk is associated with a subsequent behavior change (Moyers & Martin 2006; Glynn & Moyers 2010).

Planning

When enough motivation has been built up and the client is ready to make a change, the planning process is entered (Miller & Rollnick 2013). Until then the conversation has been mostly about *why* the person should make a change, but from then on it is more about *how* change can be implemented.

There are some signs of readiness that the clinician should be aware of to be able to determine when the client is ready to move on from the evoking to the planning process (Miller & Rollnick 2013). First of all, increased frequency and strength of change talk is a sign of preparedness. The ratio of change talk and status quo talk can be used to assess whether the person is approaching change or not; when there is an overbalance of change talk there is a movement towards change.

Furthermore, signs of readiness could also be that the client begins to imagine what it would be like to make the change, or even takes small steps towards change (Miller & Rollnick 2013). At this stage, the clinician often experiences that the client exudes determination. Another common sign is that the client starts to ask questions while considering whether the change is possible or not; “What are the benefits of brushing the dog’s teeth daily?”.

To distinguish whether it is the right time for planning there is a routine that involves recapitulation and a key question (Miller & Rollnick 2013). Recapitulation is a summary of the client’s change talk. Recapitulation is then followed by a key question which seeks to elicit mobilizing change talk. A typical key question that is often used is “So what do you think you are going to do?”.

The planning process in MI is about going from discussing the significance of the change to developing a specific plan that the client is willing to implement (Miller & Rollnick 2013). Studies have shown that people are more likely to fulfill a change when they are equipped with a plan and express their intention to another person (Gollwitzer & Schaal 1998; Gollwitzer 1999). To be able to develop a change plan the goal has to be clear and specific (Miller & Rollnick 2013). When both parties agree on the goal, the clinician may start to discuss the possible ways to achieve it. Primarily, the client should suggest possible ways to implement change. In cases where the client has few or no ideas, the clinician can, with permission, offer a menu of possibilities. By discussing the advantages and disadvantages of each alternative, the client and clinician can decide where to begin. With the client’s permission, the clinician’s role in this process is to guide the client, recommending

healthy and evidence-based paths, as well as advising against paths that are unhealthy or do not lead to goal fulfillment.

Once a plan has been developed, the clinician offers a summary to ensure that both parties have understood and agreed on the plan (Miller & Rollnick 2013). If the plan is general or ambitious, it may be a good idea to break it down into smaller pieces. The change plan can be considered complete first when the client can say yes to the plan. To say yes may involve a lot of activation and commitment language which can be evoked by the clinician by asking questions such as:

- “Which steps are you willing to take this week?”
- “What part of this plan do you think you are willing to do?”

The routine of recapitulation and key question is also useful for consolidating commitment (Miller & Rollnick 2013). In this case, the recapitulation may involve the broader goal, specific steps that have been discussed, and some of the client’s own preparatory change talk as a reminder of why and how the change will be implemented. The following key question could be a closed or open question focusing on commitment or activation, for instance:

- “Is this what you will do?” (closed question, commitment)
- “Is this what you want to do?” (closed question, activation)
- “How prepared are you to do this?” (open question)

Once the commitment has been consolidated, the clinician and the client agree on when the change is going to be implemented and set a date (Miller & Rollnick 2013).

Research on MI has shown that some clients need little or no further help once they have decided to make a change (Lundahl *et al.* 2013). However, some people want continued support and guidance through the change process (Miller & Rollnick 2013). Sometimes the client needs to be reminded of why and how change should be implemented. In other cases, the circumstances may have changed which requires refocusing and the plan to be adapted. When there are signs of lack of commitment, the clinician may need to re-engage the client. Many changes require perseverance over time, which means that it can be valuable to have followed up-contact routinely at critical times.

2.2.3. Core skills

Four core skills in communication have been described as particularly important in counseling; Open questions, Affirming, Reflective listening, and Summaries

(OARS) (Miller & Rollnick 2013). These core skills are fundamental to achieve mutual understanding in the engaging process but serve as tools through all processes of MI.

Open questions

An open question is a question that does not limit the answer and stimulates reflection and exploration (Miller & Rollnick 2013). For example, an open question may begin with:

- “How..?”, “How do you feel about..?”
- “What..?”, “What do you think about..?”, “What do you know about..?”
- “In what way..?”

The opposite of an open question is a closed question which has a limited number of, usually short, answer options (Miller & Rollnick 2013). The answer to closed questions is often limited to “yes”, “no”, “maybe” or “do not know”, for example:

- “Have you..?”
- “Do you know..?”
- “Can you..?”

Affirming

Affirming is another important skill in MI (Miller & Rollnick 2013). To affirm means to recognize and accentuate what is positive as well as to support and encourage. In practice, affirmation is about to identify the client’s good qualities and reproduce them empathetically and genuinely. It can be about qualities such as:

- Knowledge; “You know a lot about...”
- Patience; “You have a lot of patience with...”
- Skills; “You are very good at...”
- Creativity; “You were very creative when...”
- Ability to handle things; “I am impressed by how you handle...”

Affirmation may have several positive effects in counseling (Miller & Rollnick 2013). First of all, people have been shown to be more willing to spend time and be open with, as well as trust and listen to, people who recognize and affirm their strengths. Furthermore, affirmation can also reduce defensiveness and make people more open to potentially threatening information (Sherman *et al.* 2000; Klein & Harris 2010).

Reflective listening

Reflective listening is a fundamental skill in MI which is used in all four processes (Miller & Rollnick 2013). This special type of active listening involves paying respectful attention to the content and feelings expressed in the communication of another person. Reflective listening is not only about hearing and understanding what the other person is communicating through words and body language, but also about letting the other person know that he or she is being heard and understood by reflecting on the thoughts and feelings that have been noticed.

Reflections can be divided into *simple* and *complex* reflections (Miller & Rollnick 2013). In a simple reflection, little or nothing is added beyond what the person has said. The content of the saying is repeated or easily rephrased. Making a simple reflection is a way of showing the other person that you have heard what has been said.

A complex reflection, on the other hand, adds meaning or emphasis to what the person has said, and guesses something that has not yet been said (Miller & Rollnick 2013). This type of reflection does not only show that you have heard but also understood what has been said. For example:

- “You mean that...”
- “You feel that...”
- “To you, this...”

A complex reflection could also include a hypothesis about what the person might come to say that leads forward in the conversation (Miller & Rollnick 2013). This sort of complex reflection is called a *continuation reflection* and can be used consciously to steer the person forward in the conversation. However, in the phase of ambivalence, a double-sided reflection could be particularly useful. Double-sided reflection is another type of complex reflection that takes more than one perspective into account. For example:

- “On one hand...”
- “On the other hand...”
- “At the same time as...”

In reflective listening, the tone of voice is particularly important (Miller & Rollnick 2013). The tone should go down at the end of the sentence, otherwise, the statement could easily be mistaken for being a question.

Summaries

A summary is mainly a reflection that summarizes several things that the other person had said (Miller & Rollnick 2013). Within Motivation Interviewing, summaries fill several functions and are used continuously as well as at the end of counseling. In the engaging and focusing process, summaries can improve understanding and show that the client has been carefully listened to. Furthermore, a summary may provide affirmation as it suggests that you remember what has been said and are willing to understand how it all is connected.

Moreover, in the evoking process change talk can be summarized in order to continue the process of change forward (Miller & Rollnick 2013). To summarize makes the client hear their own words which can initiate new thoughts and bring the conversation forward. It also allows the client to correct and complement if necessary. During the planning process, the client's motivations, intentions, and specific plans may be summarized. Regardless of the process, summaries can serve as a tool to either slow down or change the focus of the conversation.

2.2.4. Provide information and advice in the spirit of Motivational Interviewing

Providing information or advice in a conversation regarding behavior change is complex and requires skillful execution (Miller & Rollnick 2013). In MI, the primary purpose is not providing information or giving advice, but to facilitate change, hence information exchange in the spirit of MI differs from traditional counseling.

Table 1. MI-adherent and MI-nonadherent assumptions of information exchange, based on, box 11.1, chapter 11 (Miller & Rollnick 2013).

MI-adherent	MI-nonadherent
I have some expertise and clients are experts on themselves.	I am an expert on why and how clients should behave.
I find out what information clients want and need.	I gather information about the problems.
I match information with the client's needs and strengths.	I correct knowledge gaps.
Clients can tell me what kind of information is helpful to them.	Scary information is effective.
Advice that puts the client's needs and autonomy first is helpful.	I just need to tell them clearly what to do.

Within MI, there is a simple strategy for the exchange of information that is abbreviated EPE, which stands for Elicit-Provide-Elicit (Miller & Rollnick 2013). This strategy means that information is elicited before it is provided, and then elicited again. Elicitation before providing information has three important functions in the exchange of information; to ask for permission, to explore the client's previous knowledge, and to consider the interest in the information that can be provided. Each of these three parts of elicitation affects the outcome of the information exchange. By asking for permission to provide information, the clinician shows respect which may increase the client's willingness to take in the information. Furthermore, to explore the client's knowledge of the subject prevents the clinician from spending time telling things that the client already knows and makes it possible to fill in any gaps.

When information is to be provided, the clinician should prioritize what the client wants and needs to know, avoiding telling things that he or she already knows (Miller & Rollnick 2013). Additionally, it is important that the information is presented clearly and in small doses to make sure that the client understands. The language should be casual and adapted to the client to avoid confusion and misunderstandings. Moreover, the choice of words and tone of voice affects how the listener perceives the information. Depending on the words used, the information can either promote or undermine autonomy. For example, using compelling expressions such as "have to", "need to", "do not have any choice" or talking to a client like a parent talks to their child, is undermining the autonomy. Conversely, expressions such as "I wonder what you think about..." or "What do you think about..." promote autonomy and make the conversation more collaborative.

Finally, the third step in Elicit-Provide-Elicit is about ensuring that the client understands the information and to provide an opportunity to share interpretations and responses (Miller & Rollnick 2013). In order to do so, the clinician asks open questions and reflects on the client's reactions to the provided information.

Table 2. Giving information using the strategy EPE (elicit-provide-elicit). Based on box 11.2, chapter 11 (Miller & Rollnick 2013).

	Function	Application
Elicit	Ask for permission	<ul style="list-style-type: none"> • Would it be okay if I tell you some things that have worked for other people? • May I...? • Would you like to know something about...?
	Clarify the need/interest of information and fill in knowledge gaps	<ul style="list-style-type: none"> • Tell me what you already know about...? • What do think would be the biggest benefit if you...? • Is there any information I could help you with?
Provide	Prioritize	<ul style="list-style-type: none"> • What does the person primarily want and need to know?
	Be clear	<ul style="list-style-type: none"> • Use everyday language • Provide small pieces of information and then give time for reflection
	Autonomy support	<ul style="list-style-type: none"> • Tell what you know without valuing its importance to the client
	Do not decide what to answer	<ul style="list-style-type: none"> • Give space for a different opinion or to neglect the information
Elicit	Ask about the client's interpretation, apprehension, or answer	<ul style="list-style-type: none"> • Ask open questions • Reflect on the reactions that you perceive • Provide time for the process and the client's response

Likewise, EPE can be applied when giving advice (Miller & Rollnick 2013). In fact, advice is a specific type of information to some extent. Although, there are more aspects of advising than providing information. In contrast to providing information, giving advice also includes giving a recommendation that has a great tendency to trigger a counter-reaction and disapproval. In general, people do not appreciate getting advice, especially when they are not requested. For this reason, advice should be given in moderation.

Nevertheless, one way to avoid a counter-reaction is to offer a menu of choices rather than suggesting them one at a time (Miller & Rollnick 2013). In this way, the focus shifts from objecting to solitary suggestions to choosing from the menu of

options. Additionally, the menu of options promotes and affirm the client's autonomy.

2.2.5. Motivational Interviewing Treatment Integrity 4.2.1

Motivational Interviewing Treatment Integrity 4.2.1 (MITI 4.2.1) is a behavioral coding system that enables grading how well or poorly a clinician practices MI (Moyers *et al.* 2014). MITI provides an answer to the question; *How much does this counseling resemble MI?* Quality assurance of MI using MITI is made by coding laboratories, such as MICA (MICA 2020) and MIC Lab AB (MIC Lab AB 2020c).

The MITI consists of two main parts; the global scores and the behavior counts (Moyers *et al.* 2014). The global scoring is based on a five-point scale representing the coder's general impression and overall judgement regarding four different variables of technical and relationship components of MI.

1. Technical components: Cultivating Change Talk (1), Softening Sustain Talk (2)
2. Relationship components: Partnership (3), Empathy (4)

The five-point scale extends from a minimum of one to a maximum of five whereof three is considered a default score (Moyers *et al.* 2014).

To obtain the behavior counts, the coder counts the tally instances of ten specific behaviors during the conversation (Moyers *et al.* 2014). Each instance of the particular behavior is counted, without any further judgement. The behaviors included are:

1. Giving information
2. Persuade
3. Persuade with permission
4. Question
5. Reflection Simple
6. Reflection Complex
7. Affirm
8. Seeking Collaboration
9. Emphasizing Autonomy
10. Confront

Out of these behaviors, persuasion and confrontation are MI-nonadherent behaviors, while the others are more or less MI-adherent (Moyers *et al.* 2014). A random sample of the conversation lasting for at least 20 minutes is recommended for coding. Shorter or longer samples could be used but should be interpreted with caution.

2.2.6. Other behavioral coding systems for Motivational Interviewing skills

The client's language can be coded using Client Language Easy Rating (CLEAR) or Client Language Assessment in Motivational Interviewing (CLAMI) (MIC Lab AB 2020b). Both systems categorize different types of client statements for and against change. The statements are defined in six (CLEAR) and five (CLAMI) subcategories, respectively, and coded as frequency counts. It is also possible to code how the clinician's expressions are assumed to affect the client's expressions according to Motivational Interviewing Sequential Code for Observing Process Exchange (MI-SCOPE).

2.3. Dental health in dogs

Poor dental health is one of the most common health issues in small animal medicine. Several studies report that periodontal disease is the most common disease in dogs over three years of age, with a prevalence ranging between 80 % to 89% (Hamp *et al.* 1984; Kortegaard *et al.* 2008; Fernandes *et al.* 2012). The condition is particularly common in toy and small dog breeds (Hoffmann & Gaengler 1996), and the incidence increases with age (Stella *et al.* 2018). Due to a lack of outward clinical signs, and education to a certain extent, periodontal disease is a severely under-diagnosed and therefore undertreated condition in dogs, despite the high prevalence (World Small Animal Veterinary Association 2020). As a consequence, therapy is often initiated in a very late stage of the disease.

2.3.1. Periodontal disease

Periodontal disease is described as gingivitis and periodontitis (Quirynen *et al.* 2006). Gingivitis implicates inflammation confined to the gingiva which is initiated by oral bacteria that colonize the teeth and create a biofilm termed plaque. Plaque consists almost exclusively of oral bacteria organized in a matrix composed of salivary glycoproteins and extracellular polysaccharides. Plaque appears at clean teeth within 24 hours if no dental regimen is applied (Holcombe *et al.* 2014). Dental calculus, also called tartar, is created when plaque becomes mineralized and contri-

butes to the periodontal inflammation by working as a foundation for further plaque accumulation (Gelberg 2017).

Gingivitis is a reversible stage of the disease which may be reversed by thorough dental prophylaxis and regular dental home care (Fiorellini *et al.* 2006). Clinically, gingivitis can be observed as gingival erythema, edema, and halitosis. If gingivitis is left untreated the condition may proceed into periodontitis which is defined as an inflammatory disease of the deeper supporting structures of the tooth (the periodontal ligament, cementum, and alveolar bone) (Novak 2006). The inflammation leads to the progressive destruction of the periodontal tissues and attachment loss (Gelberg 2017). Attachment loss usually progresses to tooth exfoliation which causes permanent bone loss (World Small Animal Veterinary Association 2020).

Local and systemic consequences of periodontal disease

Periodontal disease may cause significant local consequences (World Small Animal Veterinary Association 2020). An oronasal fistula is the most common severe local consequence of periodontal tissue loss and results in communication between the oral and nasal cavities causing chronic nasal inflammation. Furthermore, periodontal disease may cause class II perio-endo lesions when bacteria gain access to the endodontic system as the periodontal loss progresses apically (Niemiec 2001). The mandibular tissue weakens as a result of chronic periodontitis, which increases the risk of pathologic fractures in the affected area, especially in small dogs (Hayashi *et al.* 2019).

Periodontitis is also the most common cause of oral osteomyelitis (Niemiec 2008). The definition of oral osteomyelitis is an area of non-vital infected bone which at that stage no longer can respond to antibiotic treatment and therefore requires extensive surgical debridement. In severe cases, untreated periodontitis can cause eye-related consequences such as exophthalmos, conjunctivitis, and periorbital abscess (Ramsey *et al.* 1996). Besides local consequences, periodontal disease has been associated with systemic diseases such as renal, hepatic, and cardiac diseases (DeBowes *et al.* 1996).

Dental home care for dogs

In dogs, as well as in humans, daily tooth brushing is considered the gold standard for the prevention of periodontal disease (Harvey *et al.* 2015). If performed daily or every other day, tooth brushing results in a significant reduction in mean mouth plaque and calculus scores in dogs with no signs of gingivitis. Less frequent tooth brushing, weekly, or every other week, has shown to be less effective with no significant reduction of dental plaque.

Despite daily tooth brushing being the gold standard, there are challenges associated with the method, of which owner and patient compliance is one (Allan *et al.* 2019). As a consequence, other passive methods of plaque control have been developed with published evidence that they may reduce the accumulation of plaque. Dental chews and specifically formulated dental foods are two examples. However, in a recent study by Allan *et al.* (2019) daily tooth brushing was shown to be more than three times as effective at controlling plaque accumulation compared to giving a daily dental chew or dental diet.

2.3.2. Quality of life

A part of the veterinary profession is to uphold animal welfare. Animal welfare is a wide term including physical, as well as mental well-being. The core of animal welfare assessment is the five freedoms, which include freedom from pain, injury, and disease by prevention or rapid diagnosis and treatment (Farm Animal Welfare Council 1979).

Since regular dental care is a requisite to sustain good dental health and prevent disease, dental home care is a question of animal welfare to the highest degree. In humans, it is well documented that dental conditions can be extremely painful (Figdor 1994; Estrela *et al.* 2011) and dental pain has been shown to be associated with decreased quality of sleep (Lavigne & Sessle 2016). In dogs, the behaviors that can be directly linked to pain in the oral cavity may be fewer, but dogs' experience of dental pain and infection is probably equally present (Niemi 2005). In many cases, the dog does not show the pain in such a way that the owner or veterinarian can easily notice and interpret the signs (Niemi 2005). However, the absence of behavioral changes is not equivalent to painless and cannot be used to determine the severity of the condition (World Small Animal Veterinary Association 2020).

Another aspect of quality of life is the ability to express normal behavior (Farm Animal Welfare Council 1979). Poor dental or oral health has been shown to potentially inhibit normal orofacial behaviors which are important not only for food intake but also for social interactions (Palmeira *et al.* 2017).

3. Material and methods

Telephone calls, reflecting a clinical scenario, between small animal veterinarians and a professional actor were recorded during September and October 2020. The audio files were sent to MIC Lab AB, Stockholm (<https://miclab.se>), for coding according to MITI 4.2.1.

3.1. Participating veterinarians

In this study, the participating veterinarians were recruited through convenience sampling. Without any particular selection strategy veterinarians in the author's and supervisor's circle of acquaintance were contacted via email and offered information about the study (Appendix 1.).

A total of eight veterinarians participated, seven women and one man with an average age of 41 years, ranging between 31-52 years. All participants graduated from the veterinary program during the period 2000-2018 and had been working as clinical small animal veterinarians for 10 years on average, ranging between 3-20 years. Three of the veterinarians had no further education in dentistry, while the other five had completed at least one course in odontology after completing veterinary education. None of the veterinarians had participated in any form of communication training.

3.2. The conversations

Each veterinarian participated in a recorded telephone call with a standardized client played by the same actor employed by MIC Lab AB. The actor was trained for this purpose and had experience in role-play scenarios using MI. The actor did not use a script but was provided with a client profile (Appendix 2.) with background information about the dog owner "Hans" that needed to start brushing the teeth of his dog "Laila" which has developed periodontitis. The client profile was developed in collaboration with Lars Forsberg at MIC Lab AB.

The conversations were scheduled through text message contact with the actor and the veterinarians who agreed to participate. General information about the study (Appendix 3.) and background information about the scenario (Appendix 4.) was sent to participating veterinarians via email the day before the conversation was scheduled.

Before each conversation, the actor telephoned the veterinarian to check that he or she was ready. The actor then telephoned again as the fictional dog owner and recorded the call using a digital voice recorder. After each conversation, the actor uploaded the audio file to the website of MIC Lab AB, from where the MITI-coder could access them. Finally, after the call, the veterinarians were sent an email with a few background questions to answer (Appendix 5.).

3.3. MITI coding

All conversations were coded at MIC Lab AB, a Swedish center of expertise for quality assurance, coding, and education in MI (MIC Lab AB 2020a). MIC Lab AB receives recorded calls for quality assurance through reliable coding and professional feedback of MI-execution. The coding is performed by professional coders who undergo regular training to maintain their reliability. The reliability of the coders is verified through regular controls. In this study, all conversations were coded by the same MITI-coder at MIC Lab AB according to the manual for MITI 4.2.1. In addition to the coding, written feedback from the coder was ordered for each conversation. The results were presented in coding protocols (Appendix 6.).

3.4. Data management

For each recorded call, a coding protocol was obtained from MIC Lab AB. Based on the obtained coding protocols mean values \pm standard deviation for the global scores and behavior counts were calculated. The coder's written comments were compiled by the author and presented in text.

4. Results

4.1. Global scores and behavior counts, MITI 4.2.1

Descriptive statistics (mean \pm standard deviation) of the global scores and behavior counts are presented in Table 3. The global scores were ≤ 3 in all coding protocols. *Cultivating Change Talk* was scored lowest possible (1) in all conversations. Regarding *Softening Sustain Talk*, the majority (6/8) of the veterinarians obtained a score of two. However, some (2/8) acquired a score of three. The *Partnership* scores were either two (6/8) or three (2/8). *Empathy* was equally scored two in all coding protocols.

In the present study, the veterinarians' consultation approaches were predominantly characterized by *Giving information*, *Persuasion*, and *Questions*. On a few occasions, the veterinarians used *Persuasion with Permission*. All veterinarians made at least one *Simple* or *Complex reflection* in response to client statements. The participants made few attempts to *Affirm* the client, and few were *Seeking Collaboration*. None of the veterinarians were *Emphasizing Autonomy* during the calls. The behavior *Confront* was not shown. Overall, the results were very similar for all veterinarians.

Table 3. Descriptive statistics (mean \pm standard deviation) of 14 variables (global scores and behavior counts) describing MI-skills according to MITI 4.2.1.

Variable	Mean (SD)
Global scores (1-5)	
Cultivating Change Talk	1 (\pm 0)
Softening Sustain Talk	2,25 (\pm 0,46)
Partnership	2,25 (\pm 0,49)
Empathy	2 (\pm 0)
Behavior counts	
Giving information	8,25 (\pm 2,12)
Persuade	6,50 (\pm 1,69)
Persuade with Permission	2,25 (\pm 1,16)
Questions	3,13 (\pm 1,25)
Simple Reflection	1,25 (\pm 0,71)
Complex Reflection	0,88 (\pm 0,64)
Affirm	0,75 (\pm 0,71)
Seeking Collaboration	0,63 (\pm 0,74)
Emphasizing Autonomy	0 (\pm 0)
Confront	0 (\pm 0)

4.2. Written comments

In the written comments, the coder noted both the clinical strengths of the veterinarians and potential areas for improvement in terms of MI. The coder identified that the majority of the veterinarians were asking *Questions* trying to understand the client's situation and thoughts. For example:

- “What do you think about that, may that work?”
- “Have you brushed her teeth...? Is it hard and troublesome to do so...?”
- “How is it going with the teeth brushing?”
- “Have you been able to start brushing her teeth?”
- “Does she think it is scary?”

Other clinical strengths that the coder noted in a few of the conversations were that the veterinarian *Affirmed* the dog owner by acknowledging the client's achievements and practiced reflective listening by making *Simple* or *Complex reflections*, such as "Just as you said, daily teeth brushing...".

The coder also suggested areas for improvement from a MI-perspective. Regarding *Cultivating Change Talk*, the score would have been higher if the veterinarians would have asked the client about the reasons why the change was needed.

The *Partnership* scores were adversely affected by the veterinarians giving advice without the client's permission. Additionally, the veterinarians dominated the conversations having the majority of the speaking time. The *Partnership* scores would have been positively affected if the veterinarians had involved the client more in the conversation and sought collaboration to a greater extent. In more than half of the protocols (6/8), the coder also mentioned that the veterinarian could have *Emphasized Autonomy* to strengthen the *Partnership* with the client.

Another common comment noted by the coder regarded the behavior *Affirm*. To achieve a higher score in *Partnership*, the veterinarians could have affirmed the client when expressing ambitions to make a change and acknowledged the client's efforts and achievements. To achieve a higher score in *Empathy*, the veterinarians could have made more *Simple* or *Complex reflections* on the client's utterances.

5. Discussion

5.1. Characterization of Communication styles

To the author's knowledge, this is the very first time that the degree of spontaneous use of MI in small animal veterinarians without prior training, has been investigated. In the present study, the global scores were consistently low (≤ 3). *Cultivating Change Talk* was scored lowest possible in all conversations which implies that the veterinarians showed no explicit attention to, or preference for, the client's language in favor of changing according to the MITI 4.2.1 manual (Moyers *et al.* 2014). Regarding *Softening Sustain Talk*, the majority (6/8) of the veterinarians mainly chose to explore, focus on, or respond to the client's language in favor of the status quo. However, some (2/8) of the participating veterinarians made attempts to shift focus away from the sustain talk. The scores would likely increase if the veterinarians became more aware of sustain talk and how to respond in favor of change.

Partnership and *Empathy* have been identified as critical elements of a relationship-centered consultation approach (Miller & Rollnick 2013). However, the veterinarians in the present study predominantly superficially responded to opportunities to collaborate, resulting in low *Partnership* scores. Although, some veterinarians (2/8) incorporated the client's contributions to some extent. Moreover, *Empathy* was equally scored two in all coding protocols meaning that the veterinarians only made sporadic efforts to explore the client's perspective. Since low advisor empathy has been identified as damaging to the advisor relationship and associated with poorer patient outcomes (Moyers & Miller 2013), the author suggests empathy is an area for improvement.

Based on the behavior counts, the conversations were dominated by the veterinarians relying predominantly on *Giving information*, *Persuasion*, and *Questions* in their communication with the dog owner. According to the MITI 4.2.1 manual, this implies that the veterinarians focused primarily on providing information and educating the client, making overt attempts to change the client's attitude, opinions, or behavior, and eliciting information by asking questions (Moyers *et al.* 2014).

Occasionally, the veterinarians used *Persuasion with Permission* which means that they included an emphasis on collaboration or autonomy support while persuading. This behavior is a MI-adherent behavior, in contrast to *Persuasion*. These results are in accordance with the findings of previous studies (Shaw *et al.* 2006; Bard 2018; Ritter *et al.* 2018; Svensson *et al.* 2019) and suggest that a paternalistic communication style was adopted by the participating veterinarians taking on the role of an expert paid to provide a service of advice and solutions. These results are not surprising since Shaw *et al.* (2006) have reported similar results. Shaw *et al.* compared the clinical interview process, the content of the medical dialog and emotional tone of the veterinarian-client interaction during wellness and health problem appointments in companion animal practice. In the report, a wellness appointment was defined as a veterinary encounter with a presumably healthy juvenile, adult, or geriatric dog, cat or small mammal that had been brought to the veterinary clinic for an annual examination. The definition of a problem appointment was a veterinary encounter with a dog, cat or small mammal experiencing a health-related issue. A random sample of 50 companion animal practitioners in southern Ontario and 300 clients participated in the study where six appointments (three wellness appointments and three problem appointments) for each practitioner were video recorded and analyzed using the Roter interaction analysis system. The result showed that 58% of the 300 recorded visits were characterized by paternalism. In terms of problem appointments, a paternalistic approach was used by the veterinarian in 85% of the cases.

The results presented in the present study indicate that the paternalistic communication style is frequently used also among Swedish small animal veterinarians, even though this persuasive approach has been proven to be ineffective and to increase resistance to change in ambivalent clients (Apodaca & Longabaugh 2009). Persuasion is more likely to elicit reactions against, rather than in favor of change (Dillard & Shen 2005). This phenomenon is known as psychological reactance and has been a frequent subject for research since the reactance theory was first described by Brehm (1966). In addition, studies in medical communication have shown a positive association between the use of relationship-centered care and aspects of clinical outcomes, such as patient satisfaction, patient health outcomes, physician satisfaction, and reduction of malpractice complaints (Shaw *et al.* 2006).

The veterinarians relied heavily on questions, but only one of the questions that the coder highlighted was an open question. The remaining were closed questions with limited answer options such as “yes”, “no”, “maybe” or “do not know” (Miller & Rollnick 2013). In contrast to closed questions, open questions stimulate reflection and exploration in favor of change. By reformulating the questions into open questions, there is a potential to evoke change talk, strengthen partnership, and thus, promote behavior change.

In general, the core skills of MI are not regularly used in professional conversations (Miller & Rollnick 2013), which was also true in the present study. The veterinarians practiced reflective listening to a very small extent. However, all of them made at least one *Simple* or *Complex reflection* in response to client statements. Likewise, the veterinarians made few attempts to *Affirm* the client by accentuating something positive about the client's strengths, efforts, intentions, or worth, genuinely. These results suggest that there is potential for improvement regarding several behaviors. Encouragingly, all these behaviors can be improved by MI-training.

Furthermore, few of the veterinarians were *Seeking Collaboration* which implies making attempts to share power or acknowledge the expertise of the client (Moyers *et al.* 2014). Without seeking collaboration, the veterinarian controls the conversation supposing and communicating to have the best solutions to the client's problems, resulting in unequal power distribution between veterinarian and client. Such an approach has been shown to be ineffective and to increase resistance to change in ambivalent clients (Apodaca & Longabaugh 2009). Contrary, a more client-centered communication style may be beneficial to achieve behavior change (Rubak *et al.* 2005). According to research guided by the Self-determination theory (SDT), autonomy is one of three innate psychological needs which when satisfied enhances self-motivation, and when thwarted lead to diminished motivation (Ryan & Deci 2000). When comparing people whose motivation is authentic with those who are simply externally controlled for action, the former, relative to the latter, typically have more interest, excitement, and confidence. This in turn leads to enhanced performance, persistence, and creativity. However, none of the veterinarians in the present study were *Emphasizing Autonomy* by making utterances that highlight the client's freedom of choice and right to make his own decisions about his dog.

Similar to the present study, a predominance of MI-nonadherent behaviors has been reported in studies of food safety, health and environmental inspectors (Forsberg *et al.* 2014) as well as cattle veterinarians (Bard 2018; Svensson *et al.* 2019). Thus, MI-training is required to be able to apply the method in professional counseling (Miller & Rollnick 2013). Studies have shown that considerable time is required to learn MI (Miller & Rollnick 2013; Forsberg *et al.* 2014). To read or hear about the method is seldom enough; to develop MI-skills, practical training, including feedback, is needed. However, communication training seems to be in demand among veterinarians. In a survey among veterinary practitioners in the United Kingdom and the United States in 2012/2013, 40% answered that they would be interested in further veterinary communication skills training, with the preferred methods being simulated consultations and online training (McDermott *et al.* 2015). In a recently published study, Svensson *et al.* (2020a) evaluated a 6-month training

program in MI for veterinarians involved in VHHM. After completing the training program, all participating veterinarians had significantly improved their MI-skills, at least regarding one parameter. Veterinarians with higher MI-skills have in turn been associated with increased expression of change talk from the client (Svensson *et al.* 2020b). Moreover, the participating veterinarians perceived their new skills and knowledge of MI as highly relevant in their work (Svensson *et al.* 2020a). Likely, MI-training of small animal veterinarians would have similar effects and facilitate behavior change.

Encouragingly, no veterinarians showed *Confronting* behaviors such as disagreeing, arguing, shaming, blaming, criticizing, moralizing, or warning the client which are considered MI-nonadherent behaviors.

5.2. Dental home care recommendations

The predominance of the paternalistic consultation approach among veterinarians, creating psychological resistance, may be contributing to the low uptake of dental home care recommendations reported. In a recent study, Enlund *et al.* (2020) investigated attitudes, opinions, and practices of Swedish dog owners, veterinarians, and veterinary nurses regarding preventative dental home care in dogs. The result of the study showed that less than 4% of Swedish dog owners brushed their dog's teeth daily. About half of the dog owners never brushed their dog's teeth and almost one-third brushed less frequently than once a week, or only on single occasions. Less than one-third of the dog owners considered tooth brushing very important for good dental health in dogs. However, the results of the study by Enlund *et al.* (2020) show that compliance is low, as many dog owners know that they should brush the teeth of their dog, and have been advised to do so, but still do not. Nevertheless, the majority of the dog owners who currently did not brush their dog's teeth daily answered that they might consider doing so indicating a great potential motivation to perform dental home care. As studies have shown that clients that are involved in decision-making are more likely to adhere to the recommendations given (Beck *et al.* 2002), MI may be a tool to improve compliance regarding dental home care.

The results of the present study support that there is a great potential to increase compliance among dog owners regarding daily tooth brushing by educating veterinarians in MI and implementing the spirit of MI in small animal veterinary practice. Since 2011, MI has been recommended as a method for effective communication in the national guidelines for Swedish adult dental care (Socialstyrelsen, 2011). However, implementation of MI in veterinary practice not only have the potential to increase compliance regarding dental home care but also

in other cases where behavior change is desirable, such as weight loss and rehabilitation. This implies that MI might be used as a tool for improved health and quality of life in the pet population in general.

5.3. Methodological considerations

In the present study, role-play scenarios with a professional actor have been used instead of realistic scenarios to standardize the degree of difficulty and conditions for practicing MI as far as possible. By using role-play scenarios with the same actor in all conversations, the variability was minimized, and the reliability increased. In turn, the validity of the obtained results increased. Moreover, all calls were coded by the same coder at MIC Lab AB to avoid the risk of inter-rater bias. The intra-rater reliability was considered high as the coders at MIC Lab AB undergo continuous training and regular controls (MIC Lab AB 2020a).

However, the MITI scores may not only vary depending on the external conditions but also on the veterinarian's daily form. This implies that the estimate of the veterinarians' true MI-skills would have been improved if multiple calls with each veterinarian would have been coded. Furthermore, the number of calls in this study was very limited, thus further studies with a larger scope are required to be able to characterize the communications styles of Swedish small animal veterinarians in general. In this study, the number of calls was limited partly by the budget and partly by difficulties in recruiting veterinarians. Several veterinarians who received the request expressed that they were not comfortable with being recorded and assessed, and therefore refused to participate.

In this study, the sample of veterinarians were not chosen at random which implies potential bias due to over- or under-representation of subgroups in the sample compared to the target population. For this reason, the sample of the present study is unlikely to be representative of the population of Swedish small animal veterinarians which should be taken into account when interpreting the results.

The dog owner profile was created in collaboration with the experienced MI-researcher Lars Forsberg at MIC Lab AB, based on the author's and supervisor's personal experiences and perceptions of what is common in Swedish veterinary clinics. The dog owner's willingness to start brushing his dog's teeth was scored nine on a ten-point scale, and his confidence in his ability to succeed was scored two on a ten-point scale. There is likely a variation in the veterinarian's communication depending on the pet owner, hence the results may have been different if the dog owner profile, or the actor, would have been another.

6. Conclusions

In the present study of small animal veterinarians' communication with a simulated dog owner, the veterinarians predominantly relied on *Giving information*, *Persuasion*, and *Question*. The veterinarians dominated the conversations and made minimal attempts to involve the dog owner resulting in a power imbalance between veterinarian and client. In accordance with previous studies, these results suggest that the small animal veterinarians adopted a paternalistic communication style which research have shown to be ineffective, or even counterproductive, when helping ambivalent clients to implement behavior change.

Given the results of the present study and the evidence of MI to be an effective way to help people change their behavior, the potential positive outcomes of implementing MI in small animal veterinary practice is striking. In modern small animal veterinary practice, investigations and treatment plans often suggest that the pet owner implement a behavior change. A behavior change could mean anything from maintaining a strict diet to including rehabilitation exercises in the daily schedule. MI can be applied in every such case and potentially improve compliance and thus patient health outcomes.

Besides the inclusion of MI in basic veterinary education, MI-training for veterinary clinicians have the potential to greatly improve the veterinarian-client communication in small animal practice.

References

- Allan, R. M., Adams, V. J. & Johnston, N. W. (2019). Prospective randomized blinded clinical trial assessing effectiveness of three dental plaque control methods in dogs. *Journal of Small Animal Practice*, 60, 212-217.
- Apodaca, T. R. & Longabaugh, R. (2009). Mechanisms of change in motivational interviewing: A review and preliminary evaluation of the evidence. *Addiction*, 104, 705–715. DOI: 10.1111/j.1360-0443.2009.02527.x
- Bard, A. (2018). Improving dairy cattle welfare: Examining motivational interviewing, veterinary communication and the herd health advisory paradigm. *PhD Thesis*. Bristol: University of Bristol Veterinary School.
- Beck, R. S., Daughtridge, R. & Sloane, P. D. (2002). Physician-patient communication in the primary care office: a systematic review. *The Journal of the American Board of Family Practice*, 15 (1), 25-38.
- Brehm, J. W. (1996). *A Theory of Psychological Reactance*. New York: Academic Press.
- Emanuel, E. J. & Emanuel, L. J. (1992). Four models of the physician-patient relationship. *JAMA*, 267 (16), 2221-2226. DOI: 10.1001/jama.1992.03480160079038
- Enlund, K. B., Brunius, C., Hanson, J., Hagman, R., Höglund, O. V., Gustås, P. & Pettersson, A. (2020). Dental home care in dogs - a questionnaire study among Swedish dog owners, veterinarians and veterinary nurses. *BMC Veterinary Research*, 16 (90). DOI: <https://doi.org/10.1186/s12917-020-02281-y>
- Estrela, C., Guedes, O. A., Silvia, J. A., Estrela, C. R. A. & Pécora, J. D. (2011). Diagnostic and clinical factors associated with pulpal and periapical pain. *Brazilian Dental Journal*, 22 (4), 306-311.
- DeBowes, L. J., Mosier, D., Logan, E., Harvey, C. E., Lowry, S. & Richardson, D. C. (1996). Association of periodontal disease and histologic lesions in multiple organs from 45 dogs. *Journal of Veterinary Dentistry*, 13 (2), 57-60.
- Dillard, J. P. & Shen, L. (2005). On the nature of reactance and its role in persuasive health communication. *Communication Monographs*, 72 (2), 144–168. DOI: 10.1080/03637750500111815.
- Farm Animal Welfare Council (1979). *Five Freedoms*. Farm Animal Welfare Council Press Statement. <https://webarchive.nationalarchives.gov.uk/20121010012427/http://www.fawc.org.uk/freedoms.htm> [2020-09-23]
- Fernandes, N. A., Borges, A. P. B., Reis, E. C. C., Sepúlveda, R. V. & Pontes, K. C. D. S. (2012). Prevalence of periodontal disease in dogs and owners' level of awareness - a prospective clinical trial. *Revista Ceres*, 59, 446–451.
- Figdor, D. (1994). Aspects of dentinal and pulpal pain. Pain of dentinal and pulpal origin - a review for the clinician. *Annals of the Royal Australasian College of Dental Surgeons*, 12, 131-142.

- Fiorellini, J. P., Ishikawa, S. O. & Kim, D. M. (2006). Clinical features of gingivitis. In: Newman, M.G., Takei, H. H, Klokkevold, P. R. & Carranza, F. A. (Eds.) *Carranza's Clinical Periodontology*. 10th ed. St. Louis: WB Saunders. 362-372.
- Forsberg, L., Wickström, H. & Källmén, H. (2014). Motivational interviewing may facilitate professional interactions with inspectees during environmental inspection and enforcement conversations. *PeerJ Computer Science*, 2:e508.
- Gelberg, H. B. (2017). Chapter 7: Alimentary system and the peritoneum, omentum, mesentery and peritoneal cavity. In: Zachary, J. F. *Pathologic Basis of Veterinary Disease* (6th ed). Missouri: Elsevier. 352.
- Glynn, L. H. & Moyers, T. B. (2010). Chasing change talk: The clinician's role in evoking client language about change. *Journal of Substance Abuse Treatment*, 39, 65–67.
- Gollwitzer, P. M. & Schaal, B. (1998). Metacognition in action: The importance of implementation intentions. *Personality and Social Psychology Review*, 2, 124-136.
- Gollwitzer, P. M. (1999). Implementation intentions: strong effects of simple plans. *American Psychologist*, 54 (7), 493-503.
- Hamp, S. E., Olsson, S. E., Farsomadsen, K., Viklands, P. & Fornell, J. (1984). A macroscopic and radiologic investigation of dental diseases of the dog. *Veterinary Radiology*, 25 (2), 86–92.
- Harvey, C., Serfilippi, L. & Barnvos, D. (2015). Effect of frequency of brushing teeth on plaque and calculus accumulation, and gingivitis in dogs. *Journal of Veterinary Dentistry*, 32 (1), 16-21.
- Hayashi, K., Schulz, K. S. & Fossum, T. W. (2019). Management of specific fractures. In: Fossum, T. W. *Small Animal Surgery* (5th ed). Philadelphia: Elsevier. 1036.
- Hoffmann, T. H. & Gaengler, P. (1996). Clinical and pathomorphological investigation of spontaneously occurring periodontal disease in dogs. *Journal of Small Animal Practice*, 37, 471-479.
- Holcombe, L. J., Patel, N., Colyer, A., Deusch, O., O'Flynn, C. & Harris, S. (2014). Early canine plaque biofilms: characterization of key bacterial interactions involved in initial colonization of enamel. *PLoS One*, 9 (12). DOI: e113744
- Klein, W. M. P & Harris, P. R. (2010). Self-affirmation enhances attentional bias toward threatening components of a persuasive message. *Psychological Science*, 20 (12), 1463-1467.
- Kortegaard, H. E., Eriksen, T. & Baelum, V. (2008). Periodontal disease in research beagle dogs - an epidemiological study. *Journal of Small Animal Practice*, 49 (12), 610–616.
- Lavigne, G. J. & Sessle, B. J. (2016). The neurobiology of orofacial pain and sleep and their interactions. *Journal of Dental Research*, 95 (10), 1109–1116.
- Lundahl, B., Moleni, T., Burke, B. L., Butters, R., Tollefson, D., Butler, C. & Rollnick, S. (2013). Motivational interviewing in medical care settings: A systematic review and meta-analysis of randomized controlled trials. *Patient Education and Counseling*, 93, 157–168.
- McDermott, M. P., Tischler, V. A., Cobb, M. A., Robbe, I. J. & Dean, R. S. (2015). Veterinarian–client communication skills: current state, relevance, and opportunities for improvement. *Journal of Veterinary Medical Education*, 42 (4), 305–314. DOI: 10.3138/jvme.0115-006R.

- McFadden, T. & Marretta, S. M. (2013). Consequences of untreated periodontal disease in dogs and cats. *Journal of Veterinary Dentistry*, 30 (4), 266-275.
- MICA (2020). *Coding & Coaching*. <http://micacoding.com> [2020-11-12]
- MIC Lab AB (2020a). *Om MIC Lab*. https://front.miclab.se/miclab_about.html#more, [2020-10-26]
- MIC Lab AB. (2020b). *Så går kodningen till*. <https://miclab.se/content/så-går-kodningen-till> [2020-10-26]
- MIC Lab AB. (2020c). *Välkommen till MIC Lab*. <https://miclab.se/node/12> [2020-11-12]
- Miller, W. R. & Rollnick, S. (2013). *Motiverande samtal: Att hjälpa människor till förändring*. 3. uppl. Stockholm: Natur & Kultur.
- Motivational Interviewing Network of Trainers. (2020). *About MINT: Motivational Interviewing Network of Trainers*. https://motivationalinterviewing.org/about_mint [2020-10-27]
- Moyers, T. B. & Martin, T. (2006). Therapist influence on client language during motivational interviewing sessions. *Journal of Substance Abuse Treatment*, 30, 245–251.
- Moyers, T. B. & Miller, W. R. (2013). Is low therapist empathy toxic? *Psychology of Addictive Behaviors*, 27 (3), 878–884. DOI: 10.1037/a0030274.
- Moyers, T. B., Manuel, J. K., & Ernst, D. (2014). *Motivational Interviewing Treatment Integrity Coding Manual 4.2.1*. [Unpublished manual] https://casaa.unm.edu/download/MITI4_2.pdf
- Niemiec, B. A. (2001). Treatment of mandibular first molar teeth with endodontic-periodontal lesions in a dog. *Journal of Veterinary Dentistry*, 18, 21-25.
- Niemiec, B. A. (2005). Fundamentals of endodontics. *Veterinary Clinics of North America: Small Animal Practice*, 35, 837-868.
- Niemiec, B. A. (2008). Periodontal disease. *Topics in Companion Animal Medicine*, 23, 72-80.
- Novak, M. J. (2006). Classification of disease and conditions affecting the periodontium. In: Newman, M.G., Takei, H. H, Klokkevold, P. R. & Carranza, F. A. (Eds.) *Carranza's Clinical Periodontology*. 10th ed. St. Louis: WB Saunders. 100-109.
- Palmeira, I., Fonseca, M. J., Lafont-Lecuelle, C., Pageat, P., Cozzi, A., Asproni, P., Requicha, J. & Oliveira, J. T. (2017). Pain assessment in cats with dental pathology: the accuracy of a behavioral observation-based scale. *European Congress of Veterinary Dentistry Proceedings*, 87.
- Quirynen, M., Teughels, W., Kinder Haake, S. & Newman, M. G. (2006) Microbiology of periodontal diseases. In: Newman, M.G., Takei, H. H, Klokkevold, P. R. & Carranza, F. A. (Eds.) *Carranza's Clinical Periodontology*. 10th ed. WB Saunders, St. Louis. 134-169.
- Ramsey, D. T., Marretta, S. M., Hamor, R. E., Gerding, P. A., Knight, B., Johnson, J. M. & Bagley, L. H. (1996). Ophthalmic manifestations and complications of dental disease in dogs and cats. *Journal of the American Animal Hospital Association*, 32, 215-224.
- Ritter, C., Adams, C. L, Kelton, D. F. & Barkema, H. W. (2018). Clinical communication patterns of veterinary practitioners during dairy herd health and production management farm visits. *Journal of Dairy Science*, 101, 10337–10350. DOI: 10.3168/jds.2018-14741

- Roter, D. L. (2000). The enduring and evolving nature of the patient- physician relationship. *Patient Education and Counseling*, 39 (1), 5–15. DOI: 10.1016/s0738-3991(99)00086-5
- Rubak, S., Sandbæk, A., Lauritzen, T. & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *British Journal of General Practice*, 55 (513), 305-312.
- Ryan, R. M. & Deci, E. L. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. (2000). *American Psychologist*, 55 (1), 68-78.
- Shaw, J. R., Bonnett, B. N. & Adams, C. L. (2006). Veterinarian-client-patient communication patterns used during clinical appointments in companion animal practice. *Journal of the American Veterinary Medical Association*, 228 (5), 714-721. DOI: <https://doi.org/10.2460/javma.228.5.714>
- Sherman, D. K. A., Nelson, L. D. & Steele, C. M. (2000). Do messages about health risks threaten self? Increasing the acceptance of threatening health messages via self-affirmation. *Personality and Social Psychology Bulletin*, 26 (9), 1046-1058. DOI: <https://doi.org/10.1177/01461672002611003>
- Socialstyrelsen. (2011). *Nationella riktlinjer för vuxentandvård 2011 – stöd för styrning och ledning*. <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/nationella-riktlinjer/2011-5-1.pdf> [2020-12-03]
- Socialstyrelsen. (2019). *MI (Motiverande samtal)*. <https://www.socialstyrelsen.se/utveckla-verksamhet/evidensbaserad-praktik/metodguiden/mi-motiverande-samtal/> [2020-10-27]
- Stella, J. L., Bauer, A. E. & Croney, C. C. (2018). A cross-sectional study to estimate prevalence of periodontal disease in a population of dogs (*Canis familiaris*) in commercial breeding facilities in Indiana and Illinois. *PLoS One*, 13 (1). DOI: e0191395.
- Svensson, C., Emanuelson U., Bard, A. M., Forsberg, L., Wickström, H. & Reyher, K. K. (2019). Communication styles of Swedish veterinarians involved in dairy herd health management: A motivational interviewing perspective. *Journal of Dairy Science*, 102, 10173-10185. DOI: <https://doi.org/10.3168/jds.2018-15731>
- Svensson, C., Wickström, H., Emanuelson, U., Bard, A. M., Reyher, K. K. & Forsberg, L. (2020a). Training in motivational interviewing improves cattle veterinarians' communication skills for herd health management. *Veterinary Record*, 187 (5). DOI: 10.1136/vr.105646
- Svensson, C., Forsberg, L., Emanuelson, U., Reyher, K. K., Bard, A. M., Betnér, S., von Brömssen, C. & Wickström, H. (2020b). Dairy veterinarians' skills in motivational interviewing are linked to client verbal behavior. *Animal*, 14 (10), 2167–2177. DOI: 10.1017/S175173112000107X.
- Tresolini, C. & Pew-Fetzer Task Force. (1994). *The Pew-Fetzer Task Force on Advancing Psychosocial Health Education*. San Francisco: Pew Health Professions Commission and the Fetzer Institute.
- World Small Animal Veterinary Association (2020). *World Small Animal Veterinary Association Global Dental Guidelines 2020*. <https://wsava.org/global-guidelines/global-dental-guidelines/> [2020-09-20]

Acknowledgements

First of all, I would like to thank all veterinarians who participated in the study. Without you this study would not have been possible. Secondly, I would like to thank my supervisor Karolina Enlund for the support and encouragement throughout the whole process from idea to final result. It has been incredibly valuable to have such a competent and committed supervisor.

In addition, I would like to thank Lars Forsberg and MIC Lab AB for a good collaboration and exchange of ideas while working on this study. I would also like to thank Martin Preisler for the contribution as the dog owner “Hans”.

Furthermore, I would like to thank my talented friend Sara Höglund for designing the illustration for the front page. Thank you for taking the time, it feels great that you are a part of this project. The same goes for my friend Alexander Häll Lanerfeldt, thank you for helping me design the figure of the four processes of MI.

Finally, I would like to thank my dear partner Gabriel Ekman. Thank you for your great support and endless patience with me.

Populärvetenskaplig sammanfattning

Att kommunicera på ett effektivt sätt är en viktig förmåga inom veterinäryrket. Veterinärer behöver inte bara kunna samla och ge information framgångsrikt, utan också motivera djurägare till att göra beteendeförändringar när så krävs för att förbättra djurets hälsa (exempelvis vid behov av viktnedgång, motion, medicinering eller hemvård).

Den vanligaste kommunikationsstilen vid medicinska besök är paternalism. Denna stil innebär att veterinären antar en expertroll, sätter agendan för besöket och antar att klientens värderingar är desamma som veterinärens. Trots att paternalism är vanligt förekommande, har denna övertalande kommunikationsstil visat sig vara ineffektiv och öka motståndet hos personer som upplever ambivalens inför en förändring.

Inom humanvården, liksom många andra hjälpande yrken, ökar tillämpningen av den evidensbaserade konsultationsmetoden Motiverande samtal (MI). Till skillnad från paternalism är MI en samarbetscentrerad konsultationsstrategi som syftar till att stärka en persons inre motivation och engagemang för förändring. MI har studerats i många olika sammanhang och visat sig vara ett effektivt sätt att hjälpa personer att förändra sitt beteende.

Syftet med denna studie var att undersöka i vilken utsträckning och på vilket sätt svenska smådjursveterinärer, utan föregående träning eller kännedom om metoden, spontant använder sig utav MI i deras kommunikation med hundägare angående hemtandvård hos hund.

Ljudinspelade telefonsamtal mellan åtta veterinärer och en professionell skådespelare kodades utav MIC Lab AB enligt beteendekodningssystemet Motivational Interviewing Treatment Integrity 4.2.1 (MITI 4.2.1), som är utvecklat för att utvärdera MI-färdigheter. Under samtalen agerade en professionell skådespelare ägare till en hund som diagnosticerats med parodontit (inflammation i tandens stödjevävnad). Veterinärernas uppgift var att motivera djurägaren till att börja borsta sin hunds tänder dagligen.

Från kodningsprotokollen erhöles övergripande skattningar av fyra variabler på en femsiffrig skala och frekvensberäkningar av tio verbala beteenden. Utifrån proto-

kollen beräknades medelvärden \pm standardavvikelse. Veterinärernas kommunikationsstilar karaktäriserades huvudsakligen av beteendena; Ge information, Övertalning och Frågor. Sammantaget gjorde veterinärerna få försök att involvera eller bekräfta hundägaren, och ingen betonade djurägarens rätt till egna beslut. Veterinärerna hade majoriteten av taltiden och dominerade således samtalen, medan djurägaren hade en mer passiv roll.

I enlighet med tidigare studier tyder dessa resultat på att svenska smådjursveterinärer använder MI spontant i mycket liten utsträckning i samtal om hemtandvård hos hund. Veterinärerna anammade en paternalistisk kommunikationsstil vilken forskning har visat är ineffektiv och till och med kan öka motståndet till förändring hos ambivalenta klienter som står inför en beteendeförändring. Baserat på resultaten i denna studie och forskning som visat att MI är ett effektivt sätt att hjälpa människor till beteendeförändring, finns det många anledningar att överväga implementering av MI i veterinär yrkesutövning.

Appendix 1



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Institutionen för kliniska vetenskaper

2020-06-12

Smådjursveterinärer sökes till studie om djurägarkommunikation

Institutionen för kliniska vetenskaper på SLU kommer under hösten 2020 att handleda ett examensarbete på veterinärprogrammet om kommunikationen mellan veterinär och djurägare. Arbetet syftar till att undersöka hur svenska veterinärer kommunicerar med djurägare vid en klinisk konsultation avseende tandvård hos hund. För att undersöka detta kommer samtal mellan veterinärer och en fiktiv djurägare, agerade av en professionell skådespelare, att spelas in och skickas för analys avseende särskilda variabler som används inom motiverande samtal (MI).

Med anledning av detta sökes nu smådjursveterinärer, med eller utan specialistutbildning inom tandvård, som kan tänka sig att medverka vid ett inspelat telefonsamtal med en skådespelare. Samtalet ska föras likt vid en vardaglig klinisk konsultation avseende tandhälsa hos hund och varar max 20 minuter. Samtalen bokas in under september/oktober 2020 enligt överenskommelse.

Kontaktperson: Ebba Jennolf, 070-753 91 27 ebbd0001@stud.slu.se

Appendix 2



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Institutionen för kliniska vetenskaper

2020-09-16

Information till skådespelare inför deltagande i studie

Skådespelaren (Martin) ringer upp och presenterar sig och berättar att samtalet ska spelas in. Läger därefter på, ringer upp på nytt och spelar in samtalet. Inleder samtalet med att fråga om medgivande till deltagande: *”Du har fått skriftlig information om en studie om djurägarkommunikation vid SLU. Det här är ett samtal i denna studie som spelas in för att undersöka hur veterinärer samtalar om tandvård med hundägare. Är det OK för dig att vara med i den studien?”*

Hans

Hans uppsökte veterinärkliniken för tandstansborttagning på sin cockerspanieltik, Laila. Han har en gång tidigare (2 år sedan) lämnat in Laila för tandstansborttagning på kliniken och fick då rekommendationen att börja borsta Lailas tänder. Det har dock aldrig blivit av som en regelbunden rutin. Hans försökte några gånger, men Laila var inte samarbetsvillig och Hans kände sig inte övertygad om att det var jätteviktigt, så det rann ut i sanden. Hans tycker att det borde räcka med tuggbenen som han ger till sin Laila eftersom det är ”det naturliga”, och så känner han att det är för svårt att borsta eftersom Laila bara försöker åla sig undan hela tiden när han försöker borsta hennes tänder. Hans har tänkt att han kanske skulle träna Laila att vara med på att borsta sina tänder, men vet inte riktigt hur man gör. Laila har haft dålig andedräkt senaste tiden och Hans undrar lite över det.

Vid tandtågärderna denna gång behövde veterinären dra ut flertalet tänder på Laila. Då veterinären inte hade möjlighet att tala med Hans då han hämtade Laila, blev Hans ombedd att ringa upp veterinären dagen därpå för att prata om hundens tandhälsa.

I sin roll på mottagningen ingår att veterinären ska påverka djurägare till hälsosam skötsel av sina djur. Med anledning av Lailas dåliga tandhälsa vill nu veterinären motivera Hans till daglig tandborstning av sin hund för att det inte ska uppstå nya problem inom kort.

- Man 66 år och singel efter skilsmässa för 10 år sedan. Har 3 vuxna barn.
- Söker veterinär för att ta bort tandsten på sin hunds tänder, en Engelsk cockerspanieltik på 6 år som heter Laila.
- Har misslyckats att borsta Lailas tänder enligt tidigare rekommendation från veterinär.
- Hans är fäst vid sin hund.

Postadress: Box 7054, 750 07 UPPSALA
Besöksadress: Ulls väg 26
Org nr: 202100-2817
www.slu.se

Tel: 018-67 10 00 (vx)
Direktnr: 018-67 13 45
Karolina.enlund@slu.se

Appendix 3



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Institutionen för kliniska vetenskaper

2020-09-16

Deltagande i studie om djurägarkommunikation

Institutionen för kliniska vetenskaper på SLU kommer under hösten 2020 att handleda ett examensarbete på veterinärprogrammet om kommunikationen mellan veterinär och djurägare. Arbetet syftar till att undersöka hur svenska veterinärer kommunicerar med djurägare vid en klinisk konsultation avseende tandvård hos hund. För att undersöka detta kommer samtal mellan veterinärer och en fiktiv djurägare, agerade av en professionell skådespelare, att spelas in och skickas för analys avseende särskilda variabler som används inom motiverande samtal (MI). Samtalen kan även komma att analyseras med avseende på andra kommunikationsvariabler.

I studien medverkar smådjursveterinärer, med eller utan specialistutbildning inom tandvård, vid ett inspelat telefonsamtal med en skådespelare. Samtalet ska föras likt vid en vardaglig klinisk konsultation avseende tandhälsa hos hund där veterinären vill motivera djurägaren till daglig tandborstning av sin hunds tänder. Inför samtalen kommer veterinärerna att delges bakgrundsinformation om patienten och scenariot. Samtalen varar max 20 minuter och bokas in under september/oktober 2020 enligt överenskommelse.

När du medverkar i vår studie innebär det att SLU behandlar dina personuppgifter. Att ge SLU ditt samtycke är helt frivilligt, men utan behandlingen av dina personuppgifter kan inte forskningen genomföras. Detta informationsblad syftar till att ge dig all information som behövs för att du ska kunna ta ställning till om du vill ge ditt samtycke till att SLU hanterar dina personuppgifter eller inte.

Du har alltid rätt att ta tillbaka ditt samtycke utan att behöva ge några skäl för detta. SLU är ansvarig för behandlingen av dina personuppgifter, och du når SLU:s dataskyddsombud på dataskydd@slu.se eller via 018-67 20 90. Din kontaktperson för detta arbete är: Ebba Jennolf: 070-753 91 27, ebba.jennolf@stud.slu.se.

Vi samlar in följande uppgifter om dig; ålder, kön, ort, år som verksam smådjursveterinär, år efter erhållen veterinärexamen samt eventuell utförd kommunikationsträning.

Ändamålet med behandlingen av dina personuppgifter är att SLU ska kunna genomföra forskning avseende kommunikationen mellan veterinär och hundägare vid konsultation beträffande tandhälsa hos smådjur.

Om du vill läsa mer information om hur SLU behandlar personuppgifter och om dina rättigheter kan du hitta den informationen på www.slu.se/personuppgifter.

Postadress: Box 7054, 750 07 UPPSALA
Besöksadress: Ulls väg 26
Org nr: 202100-2817
www.slu.se

Tel: 018-67 10 00 (vx)
Direktnr: 018-67 13 45
Karolina.enlund@slu.se

Appendix 4



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Institutionen för kliniska vetenskaper

2020-09-16

Inför deltagande i studie om djurägarkommunikation

Djurägaren Hans uppsökte din veterinärklinik för att en professionell tandrengöring (PTR) på hans cockerspanieltik, Laila. Han har en gång tidigare (2 år sedan) lämnat in Laila för tandstensborttagning på kliniken och fick då rekommendationen att börja borsta Lailas tänder.

Vid tandåtgärden denna gång behövde du extrahera flertalet tänder på Laila på grund av utbredd parodontit. Med anledning av detta vill du nu **motivera djurägaren till daglig tandborstning av Lailas tänder** för att förhindra att hundens tandhälsa försämras ytterligare.

Då du inte hade möjlighet att tala med Hans då Laila gick hem efter tandåtgärden, har du bett honom ringa upp dig dagen därpå för att prata om hundens tandhälsa.

Journalinformation

Ägare: Hans Svensson

Namn: Laila

Född: 2014-03-14

Ras: Engelsk cockerspaniel

Kön: Tik, okastrerad

Appendix 5

Slutligen skulle jag behöva följande uppgifter om dig:

Födelseår?

Examensår?

Hur många år som verksam smådjursveterinär?

Har du genomgått kommunikationsträning, vilken isåfall?

Har du vidareutbildning inom tandvård?

Appendix 6

Kodning av samtalsledarens yttranden i Motiverandesamtal 4.2

Inspelningsid: 46483467 **Samtal:** Example
Orderdatum: - **Kodat segment:** 0-20
Förändringsmål: Example

Övergripande skattning	
Tekniska komponenter	Skala 1 - 5
Främja förändringstal	----
Dämpa bibehållandet	----
Relationskomponenter	
Partnerskap	----
Empati	----

Frekvensberäkningar av beteenden	Totalt
Ge information	0
Övertala	0
Övertala med tillstånd	0
Fråga	0
Enkel reflektion	0
Komplex reflektion	0
Bekräfta	0
Söka samarbete	0
Betona autonomi	0
Konfrontera	0

Summering				
$\frac{\text{Enkla + Komplexa reflektioner}}{\text{Frågor}}$	=	0,00	(≥1.0)	(≥2.0)
$\frac{\text{Komplexa reflektioner}}{\text{Enkla + Komplexa reflektioner}}$	=	0,00	(≥0,40)	(≥0,50)
Totalt MI-förenliga (Söka samarbete + Bekräfta + Betona autonomi)	=	0,00	--	--
Totalt MI-oförenliga (Konfrontera + Övertala)	=	0,00	--	--
Teknisk komponent Främja förändringstal + Dämpa bibehållandetel $\frac{\quad}{2}$	=	0,00	(≥3.0)	(≥4.0)
Relationskomponent Empati + Partnerskap $\frac{\quad}{2}$	=	0,00	(≥3.5)	(≥4.0)